

Metro North Hospital and Health Service
Putting people first

RBWH 2010

RESEARCHREPORT



Queensland
Government

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EXECUTIVE DIRECTOR'S MESSAGE



Dr David Rosengren
Executive Director
Royal Brisbane and Women's Hospital

To be a world leader in healthcare delivery, it is essential to find a balance between the relentless demand for clinical excellence, the need to continually probe and challenge with cutting edge research and the need to identify and educate the best fit-for-purpose workforce of the future.

Royal Brisbane and Women's Hospital has an extraordinary legacy in all three pillars of excellence and as our research report for 2019 demonstrates we are continuing our pursuits of research excellence with gusto.

There are many traditional performance metrics associated with research. Publications, research funding, fellowships and higher degree qualifications are but some of the metrics which are showcased in this report. We have delivered outstanding results in all of these metrics.

Great research, however, has little impact if we cannot translate the outcomes into clinical practice improvements. It is essential that the research we undertake drives better patient outcomes and ultimately, a more sustainable health system for the future. It is this continued pursuit of implementation and transformation that will truly shape RBWH as the world leader in healthcare we strive to be.

We all know that we cannot respond to the demand and complex challenges we are facing by simply working harder. We need to find ways to work smarter and our extraordinary team at RBWH are doing just that.

The intellect, ingenuity, passion and persistence of our workforce never ceases to amaze me. As you turn the pages that follow, prepare to be amazed.

RBWH FOUNDATION



Simone Garske
Chief Executive Officer
RBWH Foundation

Being a part of Royal Brisbane and Women’s Hospital, and helping it to be the best it can be, is a privilege. We are honoured to support some of the country’s most brilliant researchers as well as work with extremely generous individuals and businesses in the community through our fundraising activities.

The generosity of these people and organisations is humbling and we are truly grateful to them for their conviction to invest in the advancement of medical research in order to further improve patient outcomes at our Hospital. RBWH Foundation, and its many supporters, understand that funding is an ongoing issue for researchers. We are, therefore, committed to assisting our researchers in their endeavours by providing funds needed to sustain existing projects and seed funding for the establishment of new projects so the evidence can be gathered to support applications to larger funding bodies.

In the 2018/2019 financial year, the support we received through donations, sponsorships, bequests and participation at our various events, enabled RBWH Foundation to distribute \$3,742,072 to a range of different research and patient care initiatives at the Hospital. 2019 was a momentous year for the RBWH Foundation. We were incredibly proud to award \$1,337,000 at the Research Grant Awards. A further \$920,000 was provided to support research salaries and wages and \$307,000 for research project and infrastructure support. The Foundation has also proudly supported the

financial administration of clinical trials on campus for many years, and this service is now transitioning back to the Hospital in the coming year. The year also saw a brand-new look for the RBWHF brand including a redesigned logo taking inspiration from nature and symbolising growth, change and giving life. Even our signature purple colour was given a fresh new tone.

Our inaugural 2019 Royal Giving Day was a great success. We were overwhelmed by the generosity from across Australia that resulted in over \$524,942 in funds being raised. This amazing contribution will ensure Queenslanders will continue to receive the best possible care and treatment. Throughout the year the RBWH Foundation has supported several events to raise funds for a variety of causes. These include the ‘QSuper Butterfly Ball’ supporting the RBWH Neonatal Unit and mothers and babies research, the ‘Royal Daytime Do’ for Motor Neuron Disease research and the ‘Master Stroke Business Lunch’ for stroke research.

2020 marks the 35th anniversary of the establishment of the RBWH Foundation. We thank all our donors, sponsors and event participants for their magnanimous support and we thank the researchers for allowing us to be part of their journey of discovery. We are committed to continuing to build awareness for the incredible research conducted at RBWH and, of course, continuing to grow our support.



The RBWH Foundation Board

BRISBANE DIAMANTINA HEALTH PARTNERS



Wound Care Committee, National Wound Care Workshop 24 September 2019

Brisbane Diamantina Health Partners (BDHP) brings together leading universities, research institutions and healthcare providers focusing on the underpinning of research, education and collaboration for better clinical care and health outcomes.

The partnership has expanded since its establishment in 2014, and currently incorporates Metro North Hospital and Health Service; Metro South Hospital and Health Service; Children's Health Queensland Hospital and Health Service; West Moreton Hospital and Health Service, Mater Misericordiae Ltd; The University of Queensland; Queensland University of Technology; Translational Research Institute; QIMR Berghofer Medical Research Institute; Brisbane South PHN; and Queensland's Department of Health.

As an accredited National Health and Medical Research Council (NHMRC) Advanced Health Research and Translation Centre (AHRTC), BDHP has attracted significant funding from the Federal Government, through several successful grant applications for Medical Research Future Funds (MRFF).

In 2019, BDHP was awarded \$4.1 million in funding over three years 2019 – 2021 facilitating funding support for six translational research projects that align with both BDHP, Queensland Health sector and national priorities. This follows its successful bid in late 2018, for over \$2M which facilitated the commencement of nine translational research projects. All projects will ensure knowledge is translated with tangible impact for health services and/or patient outcomes and will lead to better models of care and improved clinical practice.

During 2019, BDHP continued to evaluate the BDHP Research Passport Agreement, working closely with legal representatives and Ethics and Governance End Users to improve access to and use of the Agreement across the partnership, to further streamline and harmonise the research process across the partnership.

Throughout 2019, BDHP has continued to work closely with the other NHMRC AHRTCs through the Australian Health Research Alliance on several national initiatives including Health Systems Improvement and Sustainability (HSIS) Framework; Data Drive Healthcare Improvement; Indigenous Research Network and Capacity Building; Community Involvement in Health Research; and a national approach to Wound Care. A National Wound Care Workshop was held in September with representatives undertaking to build on existing achievements and advance the wound care agenda, by working towards a national, integrated approach to wound care that aligns with agreed best practice premised by evidenced costings and robust collaborative research.

BDHP continues to support the AHRA Aged Care Research Translation and Impact network assisting with the preparation of a submission to the Aged Care Safety and Quality Commission and the development of a program proposal which would provide the evidence-based research to inform and guide key reforms necessary to improve Aged Care.

BDHP activities are arranged around nine Themes – Ageing; Brain and Mental Health; Cancer; Chronic Disease; Evidence and Innovation in Clinical care; Immunity, Inflammation, Infection; Maternal and Child Health; Skin and Skin Cancer; and Trauma, Critical care and Recovery. These themes are collaborations between researchers, health professionals and educators who come together to provide innovative solutions to clinical problems. The work of the BDHP Themes progressed further in 2019 with three of the themes hosting events to bring together clinicians and researchers. The nine Themes have collaborated to explore common areas and enablers including data collection, linkages and analytics; clinical research facilitation; implementation and consumer and community involvement.

In summary during 2019, BDHP has encouraged collaboration by:

- Pursuing joint funding opportunities and economies of scale
- Working towards removing or reducing the barriers to collaboration. See [research facilitation](https://brisbanediamantina.com/research-and-facilitation/research-passport-services/): <https://brisbanediamantina.com/research-and-facilitation/research-passport-services/>
- Engaging with a diverse range of stakeholders, including communities and consumers, to share discoveries and establish areas for future investigation
- Using education to build workforce skills and knowledge
- Providing a direct line of communication with the other Advanced Health Research Translation Centres across Australia and the government
- Advocating for system changes and resources to support translational research
- Showing how collaborative research can succeed in the Queensland health system.

Further information about BDHP is available on the BDHP website: www.brisbanediamantina.com.

GRIFFITH UNIVERSITY



Prof. Paul Scuffham
Director, Menzies Health
Griffith University

The Menzies Health Institute Queensland (MHIQ) at Griffith University and the Royal Brisbane Women's Hospital (RBWH) have continued to maintain a strong collaboration throughout 2019 and appreciate the opportunity to contribute to enhancing the strong research culture of the RBWH. Innovative clinical research continues to form the foundation of this partnership with clinical trials and joint staff appointments in place to support improvements in patient care across the hospital. Together, the partnership works collaboratively to advance research, clinical care and education across Brisbane and our extended communities.

2019 highlights:

2019 proved to be another exceptional year, with a number of key awards and achievements highlighting the partnership's success. Dr Nicole Marsh was a real star in 2019.

Some of the highlights included:

- HDR completion: Nicole Marsh (May 2019); Supervised by Claire Rickard, Marie Cook and Joan Webster
- AVATAR 2018 Teacher of the Year: Nicole Marsh
- Nicole Marsh, Best poster award "How often are patients experiencing local and catheter-related bloodstream infections within an adult population? A systematic review of peripheral venous catheter complications and failure." 7th International Australasian College for Infection Prevention and Control Conference 2018, Brisbane
- Nicole Marsh, Claire Rickard. Service Line Award, Royal Brisbane and Women's Hospital, Quality Awards Recognising Remarkable Initiative and Excellence in Service (Quarrie Award). Advancement in RBWH Nursing Research. Understanding vascular access outcomes at RBWH
- Nicole Marsh Best paper prize and Best oral presentation at the Australian Vascular Access Society (AVAS) 2019 National Scientific Meeting, Sydney Dr. Nicole Marsh won the prize for her presentation of a Pilot Randomised Controlled Trial of Two Peripheral Intravenous Catheter Insertion Models (Expert Versus Generalist)
- Keith Grimwood "Preventing recurrent respiratory-related hospitalisations in young Indigenous children through regular azithromycin: a multi-centre randomised controlled trial" NHMRC Project Grant \$2.78m
- Keith Grimwood. "Improving outcomes of children and young adults with primary ciliary dyskinesia: a multi-centre, double-blind, double-dummy, 2x2 factorial, randomised controlled trial (RCT)" MRFF, \$2,375m Als: Rickard CM, Marsh N.

AVATAR

The partnership between MHIQ and the RBWH founded the Alliance for Vascular Access Teaching and Research (AVATAR) group in 2007. AVATAR continues to conduct world-leading research improving access to veins and arteries for medical treatment.

As a result of this alliance, AVATAR has achieved more than \$11 million in research funding, 400+ publications including many large randomised controlled trials, more than 20 honours, masters or PhD completions, and numerous clinical nurses and doctors participating in the research. This work is referenced in global clinical practice guidelines such as those of the USA's Centers for Disease Control, the UK's NHS Infection Prevention Guidelines and the international Standards of Infusion Therapy.

Key highlights:

- NHMRC Partnership Grant. \$1,497,197.00. Rickard C, Ullman A, Marsh N, Kleidon T, Keijzers G, Schults J, Cooke M, Byrnes J, Ware R, Cullen L. Difficult peripheral intravenous catheter insertion: Australian considerations for sustainable implementation of ultrasound guided procedures
- Health Service and Implementation Research Award, Metro North 2019 Research Excellence Awards. Nursing and Midwifery Research Centre Vascular Access Research Team: Marsh N, Webster J, Rickard C, Larsen E, August D, Flynn J, Corley A.

ASSOCIATE PROFESSOR KATRINA CAMPBELL

- The RBWH and MHIQ continue to jointly support the appointment of Associate Professor Katrina Campbell in her lead role as the strategic health service-wide conjoint in Health Services Research (Allied Health). In this role, she supports Allied Health practitioners build health services research capacity and leads pragmatic clinical and implementation trials measuring patient, health service and economic outcomes.

Current projects include codesign and implementation of nutrition interventions adopting mHealth strategies, including following bariatric surgery at RBWH, developing guiding principles for patient reported measures and core outcome sets in rehabilitation; and leading clinical trials in the area of gut health and kidney disease.

WOUND CARE

Our strong shared interest in wound care continues to flourish, with the following 2019 achievements:

- Completion of the NHMRC-funded “Adding negative pRESSure to improve healing (the DRESSING trial)” (Gillespie B, Chaoyer W, Webster J et al). This trial is the largest in its field and has recruited 2,033 participants
- A new NHMRC funded trial, “Efficacy and Effectiveness of Prophylactic fOam dressings in the prevention of saCral pressure injuries in at-risk hospitalised patients (The EEPOC Trial)” (Gillespie B, Walker R, Chaboyer W et al). This trial is the largest in its field, is poised to commence in early 2020, and will recruit 1,380 participants over 2.5 years
- Both trials will contribute to informing clinical practice.

Griffith University’s MHIQ will continue to collaborate with the RBWH to generate translatable research outcomes that improve health and wellbeing for patients and communities alike. The Institute looks forward to working with the Hospital in 2020 to further deliver improvements in research, clinical care and education.

Left to Right: Prof Claire Rickard (School of Nursing and Midwifery (SONM)), Dr Nicole Marsh (Nursing and Midwifery Director, Research), A/Prof Amanda Ullman (SONM), Dr Gillian Ray Barruel (Senior Research Fellow), Jessica Schults (Research Fellow), A/Prof Andrew Bullmer (School of Medical Science), Emily Larsen (Research Fellow), A/Prof Joshua Byrnes (School of Medical Science), Prof Marie Cooke (SONM), Tricia Kleidon (Research Fellow), Dr Jacob Horobin (Research Fellow)



PATHOLOGY QUEENSLAND



Prof. Sunil Lakhani
Executive Director Research
Pathology Queensland

The Pathology Queensland Research Office with Professor Sunil Lakhani as Executive Director Research and Dr Irma Gresshoff as Principal Research Officer is establishing the governance processes. The PQ research strategy has been endorsed and in 2020, the process of implementation will begin. PQ will continue to work with its Health and University partners to develop joint academic activities.

Collaborative initiatives within PQ and its partners include (but are not limited to):

ANATOMICAL PATHOLOGY:

Breast Cancer (Sunil Lakhani) project in collaboration with RBWH Breast Surgery, Neurosurgery, Oncology and Radiology. The work is supported by NHMRC Program and Project grants to UQ/QIMR collaborative. A pilot clinical trial to test a PET-drug conjugate uptake in Brain Metastases is ongoing at The Herston Imaging Research Facility (HIRF). A genomic innovation project, Q-Improve, to establish pipelines for whole genome sequencing in breast cancer is also under development in conjunction with the breast multidisciplinary team.

Lung cancer (Mahendra Singh, Laxmi Nandkumar and Cytology Department with David Fielding and Peter Simpson) have funding from Cancer Council QLD, Cancer Australia and Australian Genomics to develop next generation sequencing analysis of cytology smears from endoscopic aspirates. The work is ongoing with high impact publication in 'Respiration' in 2019.

CHEMICAL PATHOLOGY:

The Chemical Pathology R&D Unit (Dr Jacobus Ungerer and colleagues) supports collaborative research to improve patient care. Activities include diagnostic testing, data acquisition, laboratory bench work and development of new test methodologies. Core technologies include mass spectrometry and immunochemistry. We collaborate locally, nationally and internationally in the fields of cardiology, emergency medicine, intensive care, renal medicine, gastroenterology, endocrinology and Indigenous Health medicine. Our research has resulted in peer-reviewed publications and changes to clinical practice.

MICROBIOLOGY:

The Microbiology group (Graeme Nimmo and colleagues) participate in the Australian Group on Antimicrobial Resistance surveillance programs for Staphylococcus aureus, Enterococcus and gram-negative bacteraemia – these are a major component of Australia's response to antimicrobial resistance; <http://www.agargroup.org/>. Prof Nimmo is a member of the editorial boards of Pathology, the European Journal of Clinical Microbiology and Infectious Disease and the Global Journal of Antimicrobial Resistance. Prof Nimmo and David Whiley also oversee an extensive research and development program focusing on microbial diagnostics. This is a joint initiative of PQ and UQ. A key focus is rapid detection of antimicrobial resistance and personalised antimicrobial therapy. The program is supported by various organisations including the NHMRC and the Sasakawa Memorial Fund of the Children's Hospital Foundation. Dr Patrick Harris holds an NHMRC Early Career Research Fellowship and is co-director, with Prof David Paterson, of the Antimicrobial Resistance Centre and MERINO Clinical Trial group at UQCCR. The group work closely with Pathology Queensland in the areas of antimicrobial resistance, genomics for infection control surveillance, rapid diagnostics and clinical trials for patients with bloodstream infections.

HAEMATOLOGY:

The Pathology Qld Transfusion Haematology department (John Rowell and colleagues) is assisting with two studies (FEISTY, PROPHICCY) that measure coagulation status using viscoelastic haemostatic assays, which are performed on ROTEM machines. Further investigations involving the application of ROTEM technology in pregnancy and preclampsia and pre hospital trauma are ongoing. ROTEM testing has been provided by the transfusion laboratory (Blood Bank) at RBWH since June 2014. The Transfusion Unit continues with contribution to Massive Transfusion Registry.

GENETIC PATHOLOGY:

Molecular Genetics has been involved in the following:

- Pathology Queensland has been designated as the service provider for QGHA round 2/3 projects which will facilitate the building of capacity and capability in Genomics within Queensland
- The Molecular Diagnostic Unit is involved in several projects including Lung Cancer Project led by QUT. The unit is also collaborating with Immunology in 'Genetic diagnosis of Severe Combined Immunodeficiency (SCID)'. These projects will further cement the role that pathology plays at the RBWH and across Queensland. New emerging project will include Q-Improve, lymphoma panel testing and rare cancers as part of the inter-state, MoST trial.

IMMUNOLOGY:

Immunopathology has a major ongoing collaboration with James Scott (UQCCR), in autoimmunity and mental health, exploring the role of autoantibodies in first episode psychosis.

QIMR BERGHOFFER MEDICAL RESEARCH INSTITUTE



Dr Frank Gannon
Director and
Chief Executive Officer
QIMR Berghofer
Medical Research Institute

It is a pleasure to contribute to the RBWH Annual Research Report. The timeline for this production means that I am writing this message late in 2019. This will be my last occasion to do so as I retire at the end of the year. Having been the Director of QIMR Berghofer for nine years, it is timely to use this as an opportunity to reflect on changes in that time in this location.

At a physical infrastructure level there have been some changes (e.g. our building was completed) but basically, apart from The Herston Quarter, which will soon impact the ecosystem and increase its capacity, the same potential and teams are in place. What has changed however is the extent to which the Herston Precinct is acting in a coordinated manner. Each partner always had their specific role to play. Today this is enriched by an awareness of the benefits of the synergistic collaboration. At QIMR Berghofer our research activities are deeply entwined with those of the hospital. Three of our Programs are headed by clinicians in Metro North and ten of the 68 research groups in QIMR Berghofer are led by neighboring clinicians. In addition, the RBWH conjoint laboratories are housed in our Institute. A significant development for us in 2019 was a search for a new Head of our Mental Health Program which culminated with the appointment of Professor James Scott to that position. James is, of course, a very active clinician in the RBWH.

Our collaboration in the rapidly expanding area of cell therapies has also been significant. Our investment in the Q-Gen Cell Therapy Manufacturing Suite means that GMP facilities for cell therapies are available onsite. Our collaborations with the oncologists in RBWH are very close and we anticipate that our joint efforts to deliver cell therapies to Queensland through RBWH will grow from the initial treatments in 2019 to being a renowned Centre for CAR-T and other Cell Immunotherapies in the future. We also appreciated the fact that our Biostatistics Group provides dedicated, high-quality consulting services to clinical researchers at the RBWH. This is an example of avoiding duplication and making full use of the capacities that are available in Herston. Our Biostatistics Group, led by Dr Gunter Hartel, has the in-depth skill and experience to ensure that the research projects in the clinic are based on solid foundations. In the past year we were also pleased to be able to provide guidance related to the requirements of containment and safety aspects in specialist laboratories at the hospital. The continued discussions between our Ethics Committees and those of the hospital are designed to minimize administrative barriers and alternative interpretations. This is an area of great importance and occasional delicacy. Both parties are committed towards achieving a minimal bureaucracy in the joint activities that we engage in.

Our discussions with the RBWH (and UQ and QUT) in the context of the Herston Precinct Group Board also point to the future. Our involvement in the RBWH Health Care Symposium was another opportunity for us to deepen our engagement. Topics such as the Queensland Genetics Institute are clearly of relevance to QIMR Berghofer given our skills and track record in the area of genetics and the analysis of whole genome sequencing. As a component of the discussions on the multi model cancer centre we bring to the community our immune and cellular therapy skills. Our involvement in the Herston Imaging Research Facility (HIRF) builds on multiple successful grant applications which our researchers have made, and which are delivered through HIRF.

Collectively therefore this is much to celebrate in the research collaborations between QIMR Berghofer and the RBWH. Many examples of these are included in the report. I look forward to monitoring the continued success of our collaborations and Herston in the future.

QUEENSLAND UNIVERSITY OF TECHNOLOGY



Prof. Ross Young
Executive Dean
Faculty of Health QUT Institute

The strong partnership between Queensland University of Technology (QUT) and the Royal Brisbane and Women's Hospital (RBWH) continues to produce tangible service and technological innovations, and policy recommendations with international implications.

The **Cancer Nursing Professorial Precinct** undertook projects involving the vascular access devices registry, proactive palliative care, and care model evaluation. Distinguished Professor Patsy Yates, Director of the **Centre for Palliative Care Research and Education** and Chief Investigator for the NHMRC End-of-Life Care Centre of Research Excellence, continued work to enhance palliative care services.

The **Stroke Nursing Professorial Unit** completed three studies related to: Nurse Practitioner role evaluation, physical activity required to elevate LG3 peptide, image-based tablet app to support communications for patients with aphasia; and produced the eStrokeNav app in partnership with MNHHS and The Stroke Foundation. The **Intensive Care Nursing Professorial Unit** completed studies on incontinence-associated dermatitis and pressure injuries, and participated in national and international prevalence studies. The **Renal Nursing Professorial Unit** collaborated on an evaluation of a General Practitioner-led CKD management program. QUT continues to partner with the NHMRC Chronic Kidney Disease Centre of Research Excellence and the CKD registry.

Team capacity for health services research and workforce development expanded in 2019 with the joint appointments of Nursing Chair, Professor Clint Douglas, and Nursing and Midwifery Director of Education, Professor Robyn-Louise Fox. Major projects included a NHMRC funded trial (ENCORE) to transform nursing assessment protocols, and the RN4CAST Australia study evaluating legislated nurse-to-patient ratios in public hospitals, in collaboration with the University of Pennsylvania.

The **Australian Centre for Health Services Innovation** (AusHSI) continued to provide research, consultancy, training and education on health economics, health systems and services. In 2019 AusHSI developed a toolkit for outcomes-focussed funding decisions, led analysis that saw improved after-hours care, and partnered with QUT's Australian Centre for Health Law Research (ACHLR) on a NHMRC project to support clinical decision-making for care of older people. Seven RBWH staff completed the co-designed Graduate Certificate in Health Science (Health Services Innovation).

The **Jamieson Trauma Institute** (JTI), based at RBWH, involves multiple university, health service and industry partners to advance trauma prevention, research, systems, and clinical management. JTI-QUT links were enhanced in 2019 through the joint appointments of Dr Victoria McCreanor, health economist, and Associate Professor Cate Cameron, injury epidemiologist.

Six new projects commenced research on traumatic brain injury, digital health markers to predict post-traumatic amnesia emergence, personal mobility device injuries, alcohol and injury prevalence at RBWH Emergency Department, prevalence and impact of trauma-related opioid use, and fracture aftercare using digital innovation.

The **Herston Biofabrication Institute** partnership between MNHHS and QUT continued development of its clinical research programs in preparation for its early 2020 opening. The Institute will advance knowledge and technology in 3D scanning, modelling and printing of bone, cartilage and other human tissue to repair tissue that is lost or damaged.

A new joint appointment in 2019 saw Professor Kevin Laupland join the ICU as Director of Research, where he is developing a research program to examine outcomes of critical illness with focus on severe infections. An award-winning interprofessional education and practice program received ongoing commitment in collaboration with QUT Health Clinics to deliver multidisciplinary support to Type 2 diabetes clients, spanning dietetics, exercise physiology, nursing, social work and psychology.

We look forward to ongoing collaborations that advance research innovations, knowledge translation and transfer that continue to strengthen our longstanding partnership with RBWH in 2020 and beyond.

THE UNIVERSITY OF QUEENSLAND



Prof. Elizabeth Eakin
Associate Dean (Research)
Faculty of Medicine
The University of Queensland

The University of Queensland strongly values its multiple active collaborations with RBWH, many of which are realised through the two health-focused Faculties, Health and Behavioural Sciences (HaBS) and Medicine. UQ is committed to interprofessional and interdisciplinary scholarly activity, as well as to increasing integration between research, teaching, clinical practice, and integrated care. Our partnerships with RBWH are valuable aspects of this commitment.

The School of Dentistry, the School of Clinical Medicine, and the School of Public Health all emphasise research-infused, translational clinical and health promotion education in collaboration with many valued conjoint academics, Academic Title Holders, and other colleagues from RBWH.

Research centres with a strong translational focus include the UQ Centre for Clinical Research; the Burns, Trauma and Critical Care Research Centre; the Perinatal Research Centre; the Centre for Youth Substance Abuse Research; and the RECOVER Injury Research Centre. All these centres focus on developing, evaluating, enhancing and translating evidence-based best practice into standard practice. Funding comes from UQ and from RBWH, as well as from competitive grants, Queensland and Commonwealth Departments of Health, generous philanthropists, and statutory bodies such as the Motor Accident Insurance Commission.



Prof. Christina Lee
Associate Dean (Research)
Faculty of Health and Behavioural Sciences
The University of Queensland

UQ is also a partner with QUT, Queensland Health, and QIMR Berghofer in the Herston Imaging Research Facility (HIRF) located in the CCR building and used by researchers from across Brisbane to support cutting-edge investigation in oncology, clinical neurosciences, musculoskeletal injury and related fields through world-class imaging services.

With the STARS (Surgical Treatment and Rehabilitation Service) building rising out of the ashes of the old Children's Hospital, UQ is an active partner in the development of a world's best practice facility for rehabilitation and day surgery, in which clinical services, clinical education for medical, nursing and allied health professions, and applied research meld seamlessly into a patient-focused, research-infused interprofessional approach to optimal patient wellbeing.

In addition to a number of current and planned research conjoint positions across multiple health disciplines, both Faculties are actively engaged in the MNHHS Clinical Fellowship Program, supporting the research development of clinical staff.

The University looks forward to continuing to strengthen its relationship with RBWH, with the aspiration of working collaboratively with the hospital and within the Brisbane Diamantina Health Partners to achieve evidence-based improvements in research, clinical care and education.

SUCCESSFUL PHD CANDIDATES IN 2019

ALLIED HEALTH PROFESSIONALS



Dr Angela Byrnes

PhD Title: Investigating the nutritional status and care of older (≥ 65 years) patients on two general surgical wards: A multiphase, action research study.

Month Completed: February 2019.

Summary: Older adults, who are more vulnerable to the deleterious effects of hospitalisation, are increasingly undergoing surgery. The aim of Dr Byrnes thesis was to improve perioperative nutrition care of older general surgical patients by increasing adherence to Enhanced Recovery After Surgery evidence-based practice guidelines. Mixed methods were used in this pragmatic, multiphase Action Research study, which was prospectively informed by an implementation framework. Dr Byrnes thesis outlines new knowledge generated about validity and practicality of measures to assess impact of nutrition interventions in this patient group (handgrip strength, oral intake). Application of implementation theory in practice resulted in improved perioperative nutrition care.



Dr Kylie Matthews

PhD Title: Refeeding syndrome in acute care: Is there a dietetics role?

Month Completed: February 2019.

Summary: With limited research within the field of refeeding syndrome (RFS), dietitians are relying on non-evidenced based recommendations to treat patients. The aim of my thesis was to examine the dietitian's role regarding RFS within acute care. Six studies were conducted, including a cross-sectional survey, a semi-structured interview, a feasibility study for a randomized control trial, a retrospective observational study, a pre-test-post-test study and a case histories study. Overall, this thesis found that adverse outcomes were rare. Therefore, patients at risk of RFS should be treated as patients with malnutrition and provided with higher energy intakes to enhance nutritional rehabilitation.



Dr Julie Adsett

PhD Title: Exercise rehabilitation for people with heart failure.

Month Completed: May 2019.

Summary: Julie completed her PhD studies through Griffith University in 2019. Titled, "*Exercise rehabilitation for people with heart failure*," this body of work explored concepts relating to exercise adherence in people with stable heart failure. Whilst it is known that exercise training and regular physical activity is beneficial for people with heart failure, recent studies suggest that fewer than 40% of people with heart failure meet recommended guidelines.

Initial studies in Julie's thesis investigated variables associated with exercise participation and exercise outcomes in people recently hospitalised with heart failure. These studies identified potentially vulnerable groups who are less likely to attend exercise rehabilitation programmes and to meet physical activity guidelines, thus presenting opportunity for clinicians to tailor services for best effect. Follow-up

studies subsequently examined aquatic exercise training as a potential alternative to traditional land-based (gymnasium) exercise approaches. Results from these studies suggest that in appropriately selected patients, this mode of exercise training is safe, effective and acceptable for people with stable heart failure, thus providing a viable option for assisting these individuals to meet physical activity targets. This body of work has informed clinical practice and has contributed to national guidelines for aquatic physiotherapy. Julie is enormously grateful to her supervisors Prof Norm Morris, Prof Alison Mudge, Dr Jenny Paratz and Dr Suzanne Kuys for their support, guidance and wisdom throughout her candidacy.

SUCCESSFUL PHD CANDIDATES IN 2019 (CONT)

CANCER CARE SERVICES



Dr Nicole Gavin

PhD Title: The effect of parenteral nutrition on microbial growth and its influence on catheter-related infection in patients with a central venous access device.

Month Completed: February 2019.

Summary: The overarching aim of this research was to assess the influence of parenteral nutrition (PN) on microorganism growth and infection risk in patients with a central venous access device. New evidence that patients receiving PN containing intravenous fat emulsions (IVFE) are not at higher risk of central line associated bloodstream infection (CLABSI) than patients not receiving PN. This finding is incongruent with previous research suggesting PN is an independent risk factor for CLABSIs. In fact, once mucosal barrier injury laboratory confirmed bloodstream infection cases were removed and survival analysis performed, there were significantly fewer CLABSI in the PN containing IVFE group.



Dr Victoria Ling

PhD Title: Factors that regulate response to chemotherapy in myelodysplastic syndromes and acute myeloid leukaemia.

Month Completed: June 2019.

Summary: Acute myeloid leukaemia (AML) and myelodysplastic syndromes (MDS) are potentially fatal, haematological malignancies derived from abnormal haematopoietic stem cells with enhanced self-renewal and defective differentiation. These diseases are genetically characterised by recurrent chromosomal and molecular driver aberrations, which define disease biology, as well as being prognostically significant by regulating response to therapies. pre-clinical modelling of these genetic mutations in vitro and in vivo, mainly murine, models have shed much light on the biological consequences of these mutations when they occur in humans and their impact on response to conventional or novel treatments. Over the last 5-10 years, clustered regularly interspaced short palindromic repeats (CRISPR) genome editing has improved customisability and efficiency of editing endogenous alleles in order to generate models that more accurately reflect human disease. The work described in this thesis utilises conventional and novel CRISPR models to determine the biological consequences of common mutations in AML and MDS and identify mutations that mediate resistance to chemotherapy in AML. Significantly, a genome-wide CRISPR screen identified defects in the DNA damage response pathway converging on cell cycle arrest as being common mediators of chemoresistance to cytarabine and doxorubicin. This work further provides preliminary evidence that therapeutically enforcing G1/S cell cycle arrest using cell cycle inhibitor, palbociclib, synergises with cytotoxic chemotherapy, with potentially translatable implications to address chemoresistant disease.



Dr Andrea Henden

PhD Title: Anti-leukaemia effects of type I and type III Interferons.

Month Completed: May 2019.

Summary: Interferons are pleiotropic cytokines forming an integral part of innate immune responses, and also shaping adaptive immunity. This thesis demonstrates important and clinically translatable roles for type I and type III Interferons in the context of bone marrow transplantation. In murine models type III Interferons are shown to protect from severe graft-versus-host disease through effects on natural killer cells and by protecting intestinal stem cells. Type I Interferons are shown to be an effective and safe adjunct to maximize the immunotherapeutic effect of transplantation in the clinical context of post-transplant relapse.

SUCCESSFUL PHD CANDIDATES IN 2019 (CONT)

CANCER CARE SERVICES



Dr Nienke Zomerdijk

PhD Title: The psychosocial impact of donating haematopoietic stem cells on adult related donors.

Month Completed: December 2019.

Summary: Novel innovations in haematopoietic stem cell transplantation have increased the number of siblings who may be eligible to donate and extended the possibility of donation by parents and children, fueling the enthusiasm of transplant physicians and their patients for finding a family donor wherever possible. Despite well-documented physical effects of stem cell donation, far less attention has been focused on the psychosocial impact for family donors. This PhD featured four multi-centre studies which progress understanding of the psychosocial issues raised by family stem cell donation and their needs for information and supportive care. Additionally, this research made an initial step toward generating an evidence-based psycho-educational resource for family stem cell donors.



Dr Diana Whaites
(Nee Binny)

PhD Title: Radiotherapy quality assurance using statistical process control.

Month Completed: July 2019.

Summary: The work presented in this thesis was a step forward in applying statistics to the important problem of monitoring machine performance and quantifying optimal treatment quality assurance in radiotherapy. This research investigated the use of an analytical decision making tool known as Statistical Process Control (SPC) that employs statistical means to measure, monitor and identify random and systematic errors in a process based on observed behaviour. In this research, several treatment machine and planning system parameters were investigated and a method of calculating SPC based tolerances to achieve optimal treatment goals was highlighted in this study.

INTERNAL MEDICINE SERVICES

Dr Anna Weis

PhD Title: Investigating the potential of circulating microRNAs as non-invasive biomarkers in cirrhosis and hepatocellular carcinoma.

Month Completed: May 2019, *University of Queensland*.

Summary: This thesis has identified several differentially-expressed miRNA candidates across a clinically relevant spectrum of CLD and assembled promising panels of miRNAs that warrant further investigation for their diagnostic potential. Preliminary efforts to explore the possible functional roles of two candidates in HCC were unrewarding but further studies can build on these findings by optimising experimental conditions, validating identified miRNA candidates, and testing the prognostic potential of validated miRNAs as clinically-useful non-invasive biomarkers.

SUCCESSFUL PHD CANDIDATES IN 2019 (CONT)

INTERNAL MEDICINE SERVICES

Dr Becker Law

PhD Title: Functional characterisation of innate lymphocyte subsets in human kidney disease.

Month Completed: 24th September 2019, *Queensland University of Technology.*

Summary: Chronic kidney disease (CKD) is a complex syndrome characterised by gradual loss of kidney function over time. Irrespective of the initial kidney insult, CKD involves unsuccessful repair of existing injury and exhibits pathological features including tubulointerstitial fibrosis, lymphocyte infiltration, proximal tubular atrophy and hypoxia. For more than a decade there have been no advances in CKD therapeutic options despite our accumulating understanding of lymphocyte-mediated pathogenesis from animal models of kidney disease. This research shifts our focus back on to human lymphocytes, and uncovers several novel immune signature molecules and cellular targets for future development as potential therapeutics and diagnostics in human CKD.

NURSING & MIDWIFERY SERVICES



Dr Nicole Marsh

PhD Title: Prevention of Peripheral Intravenous Catheter Failure.

Month Completed: May 2019.

Summary: This PhD research has revealed the high rate of peripheral intravenous catheter (PVC) failure in acute care hospitals, and extends existing evidence related to PVC failure and identified modifiable risk factors. These results, which include several newly identified risk factors for PVC failure, will inform education programs to improve inserter skill development and clinician management of PVCs to reduce catheter failure. This PhD work has confirmed the feasibility and need for a large, multi-centre randomised controlled trial to test PVC insertion models and provides the first randomised data to support the vascular access specialist model as preferable to the generalist inserter model.

SURGICAL & PERIOPERATIVE SERVICES



Dr Bilal Zahoor
MBBS MPH PhD

PhD Title: Extra-peritoneal Pelvic Packing for Haemorrhagic Pelvic Fracture: A Cohort of Pelvic Injury at a Single Australian Tertiary Referral Center 2010-2016.

Month Completed: December 2019, *University of Queensland.*

Summary: Extra-peritoneal Pelvic Packing (EPPP) is an effective means to stem unrelenting haemorrhage resultant from severe pelvic injury. The mortality benefit of EPPP has been demonstrated in prior studies; a comprehensive qualitative analysis of outcomes concerning EPPP is additionally warranted. Our aims were several-fold: 1) to describe the epidemiology of pelvic fracture managed with EPPP, 2) to investigate the biomarker concentration (serum lactate and base excess) associated with recovery in patients who underwent EPPP and 3) to analyze the mortality benefit of Tranexamic acid as well as rotational thromboelastometry (ROTEM) guided blood transfusion in patients who had their pelvic injury managed with EPPP, at the Royal Brisbane and Women's Hospital (RBWH) in Brisbane, Queensland, Australia. From 2010 to 2016, 39/422 patients admitted to the RBWH for severe pelvic injury were managed with EPPP. Eleven (28%) underwent additional salvage angio-embolization to achieve haemostasis. A Pelvic C-1 fracture was the predominant type of injury observed (49%) with road accidents being the most common cause (41%). Sacral fractures were present in 64.5% of patients. The mean serum lactate decreased by 41% and 56%, at 24-hours and 48-hours post admission, respectively; 59% and 67% of patients had a serum lactate ≤ 2 mmol/L at 24-hours and 48-hours post-admission, respectively. The mean serum Base Excess decreased by 55% and 64% at 24-hours and 48-hours post admission. ROTEM statistically significantly reduced blood products use. In the same cohort, Tranexamic Acid did not demonstrate any mortality benefit. Overall, a low mortality (18%) was observed amongst patients who underwent EPPP for the management of their severe pelvic injury.

SUCCESSFUL PHD CANDIDATES IN 2019 (CONT)

WOMEN'S & NEWBORN SERVICES

Dr Naomi Achong

PhD Title: Insulin requirements in pregnancy and breastfeeding in type 1 diabetes.

Month Completed: March 2019.

Summary: *Not available.*

Dr Kate Goasdoue

PhD Title: Blood-brain barrier disruption in a model of neonatal hypoxic-ischaemic encephalopathy.

Month Completed: September 2019.

Summary: Hypoxic Ischaemic Encephalopathy (HIE) is a serious complication in the period surrounding birth. HIE occurs in 1 to 5 per 1000 live term births in the developed world and can result in death in up to 20% of cases and poor long-term outcomes such as cerebral palsy in 25% of surviving infants. HIE occurs due to an insufficient supply of oxygenated blood delivery to the brain. This initiates an evolving cascade of biochemical events that leads to brain injury. In summary, this thesis has addressed several knowledge gaps regarding the evolution of BBB-disruption following neonatal HI, how BBB-disruption is related to seizures in this syndrome, and if the current standard of care (hypothermia) is attenuating BBB-disruption all in a clinically relevant model of neonatal HIE. Increasing our understanding of the pathological processes that occur following neonatal HI is essential in developing new treatments to improve the outcomes of our vulnerable newborns. Investigating the BBB is a major untapped area of research and a potential avenue for novel treatments.

Dr Annice Kong

PhD Title: The relationship between brain structure assessed using diffusion MRI and function assessed using dense array EEG of very preterm infants and the ability to predict neurodevelopmental outcomes.

Month Completed: November 2018.

Summary: Very preterm infants are at risk of neurodevelopmental impairments including visual and cognitive deficits. Early identification and prognostication of at-risk infants may enable early intervention and support, thus optimising outcomes. Electroencephalography (EEG) and Magnetic Resonance Imaging (MRI) are methods sensitive to aspects of brain maturation and may provide potential predictive biomarkers of deficits.

Aims: To investigate the associations between EEG or MRI at term equivalent age (TEA) and: 1) visual function at TEA; 2) visual function at three months corrected age (CA); and 3) cognitive function at 12 months CA.

Conclusions: EEG and MRI may inform outcomes in very preterm infants. Parietal EEG power and occipital PDC measures are particularly informative on visual outcome at three months CA and dMRI measures (FA and MD) at CC on cognitive outcome at 12 months CA.

Although qEEG and dMRI measures for prognostication remain research tools, future research using larger sample sizes with various EEG and MRI parameters would enable prognostication of outcomes. This would allow accurate early identification of at-risk infants and early intervention and family support.



RESEARCH SERVICES

RESEARCH EXECUTIVE DIRECTOR REPORT



Merrilyn Banks
Executive Director
Research Services

Research at the Royal continues to grow as demonstrated in this review of the outcomes from 2019. There were 476 staff that identified as having a research role at RBWH, leading close to 700 individual research projects and collaborating in another 500 research projects. Over 300 students undertaking research projects at an honours, masters or doctorate level were supervised, and 16 staff completed their PhDs!

Our researchers received \$40 million for conducting research in 2019. Over 900 research articles were published in peer reviewed journals and our researchers presented over 1000 oral or poster presentations at national and international conferences.

Research Services is committed to working with our clinician researchers to continue to further grow research capacity and capability through making research processes easier and improving access to resources to conduct research. The RBWH Research Council is made up of key Service Line and individual researchers who provide advice on improving research at the Royal.

RBWH RESEARCH COUNCIL



Back row (L-R): Emma Raymond (*Research Services*), Sunil Lakhani (*Pathology Qld*), Gordon McGurk (*HREC*), Leah Hoppe (*Research Services*), Jye Smith (*Nuc.Med*), Marita Prior (*Med. Imaging*), Ian Parker (*Allied Health*), Robert Tindle (*Research Advisor*), Niall Higgins (*Mental Health*), Nicole Marsh (*Nursing*)

Front row (L-R): Louise Cullen (*Emergency Medicine*), Leonie Callaway (*Women's and Newborn*), Merrilyn Banks (*Research Services – Chair*), Victoria Eley (*Anaesthetics*), Helen Healy (*Renal Medicine*)

Absent: Jeff Lipman, David Cavallucci, David Paterson, Adrienne Young, Tara McCurdie, Katie Foxcroft, Steven Lane, Therese Starr, Kevin Laupland, Michael Schuetz, Callum Tear, Kaelah Bosanquet, Rebekah Steele

RESEARCH ETHICS & GOVERNANCE

The RBWH Human Research Ethics Committee (HREC) is one of 50 HRECs in Australia whose processes have been certified by the National Health and Medical Research Council to review in a wide range of research categories. These categories include clinical trials, interventional and qualitative research. The HREC can also review in the categories of research involving First Nations Peoples; Data Linkage; and paediatric research, by virtue of having or having access to the required expertise.

The HREC has around 35 members from a variety of backgrounds whose diverse expertise allows a rigorous yet practical review of applications. The HREC is constantly improving its review processes and is currently trialing a dynamic review process which will minimise the number of comments that need to be considered post-meeting. The Committee uses research expertise from within the RBWH to assist with reviewing low risk applications, thereby building the expertise and capacity of hospital researchers.

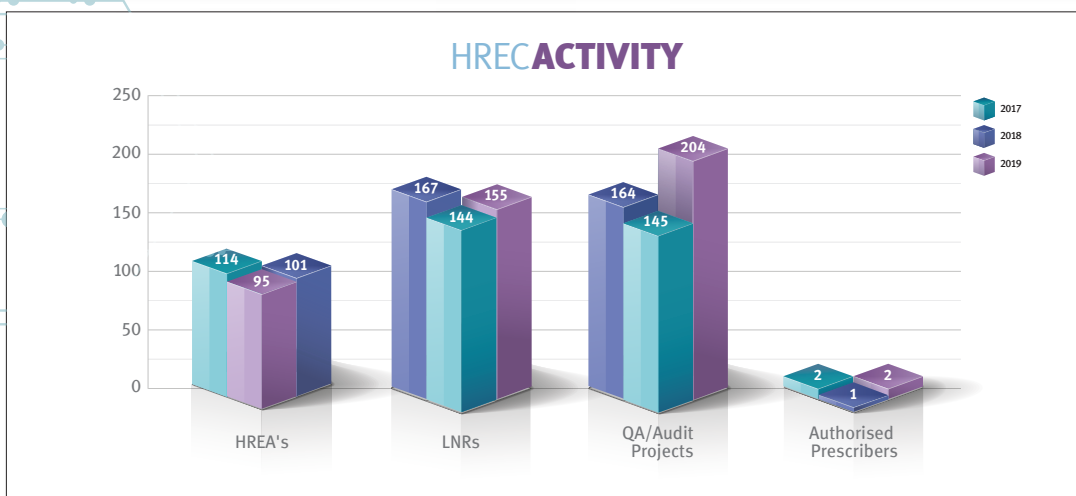
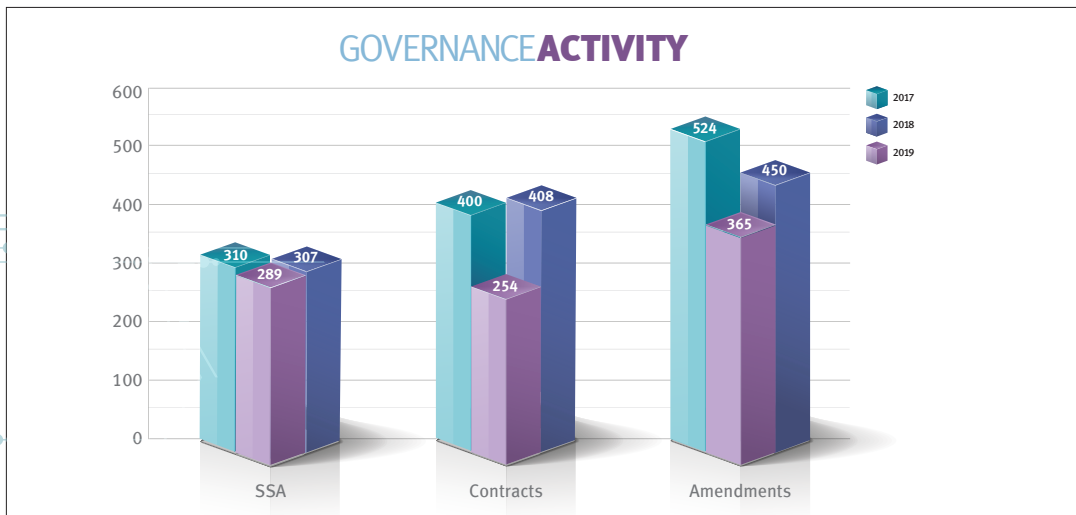
The mean approval times are well within the timeframe of 30 days which is accepted round Australia as the gold standard. Further changes to processes will decrease this time further. The HREC welcomes input into how to make processes more efficient to meet the needs of patients, participants in research and researchers.

HREC Members for 2019

Name	Role	Name	Role
Dr Gordon McGurk	Chairperson	A/Prof Jeremy Cohen	Practitioner
Ms Lorelle Whittaker	Layperson	A/Prof Glen Kennedy	Practitioner
Ms Lauren Milner	Layperson	Dr Akwasi Amoako	Practitioner
Mrs Lorna Heaslop	Layperson – Retired Practitioner	Dr Thangeswaran Rudra	Practitioner
Ms Glenys Frederiksen	Layperson	Ms Erika Vardanega	Research Nurse – Clinical Trial Coordinator
Mr John McDonnell	Layperson	Ms Ngaire Latch	NUM, Sexual Health and HIV Service
Mr Sumit Desai	Layperson	Most Rev William Morris	Religious Representative
Dr Kylie Wall	Speech Pathologist	Rev/Dr Mervyn Lander	Religious Representative
Prof Pauline Ford	Dentist	Mr Shane Evans	Alternate Lawyer
Ms Okgi Sargent	Registered Nurse	Ms Sonja Read	Alternate Lawyer
Adj A/Prof Angela White	Clinical Psychologist	Mr Edward Hooper	Alternate Lawyer
Ms Patricia Cabrera	Lawyer	Ms Nicole Morgan	Alternate Lawyer
Ms Champika Pattullo	Pharmacist and Researcher	Ms Kristi Geddes	Alternate Lawyer
Ms Emma Savage	Researcher	Ms Cara Black	Lawyer
Ms Kate Lingard	Researcher	Ms Lisa Pomery	IT Expert
Dr Rodney Cusack	Researcher	Dr Peter Glazebrook	Science Advisor

Research governance is the process whereby institutions ensure that research conducted under their auspices are properly accounted for and governed. At the Royal Brisbane and Women's Hospital we review nearly 300 site specific assessment applications each year. Due to the breadth and depth of the research conducted at our institution, our governance reviews are often large, complex, and involve multiple institutions.

Our team includes a full-time Research Governance Manager, 0.5 FTE Research Support Officer and full-time Administration Officer. We support research by facilitating research agreements with collaborators, providing one-on-one research governance advice, as well as offer research ethics and governance clinics where we provide advice to researchers about ethics and governance requirements. We encourage parallel submission for research ethics and governance applications and work closely with the Ethics team and researchers to ensure timely processing and approval timeframes.



RESEARCH SERVICE TEAM



Left-Right: Emma Raymond (*Business Manager*), Tayler Griffin (*Administration Officer, HREC*), Rebekah Steel (*Research Governance Manager*), Ann-Maree Gordon (*Coordinator, HREC*), Mamta Tanwar (*Assistant Coordinator, HREC*), Monique Johnson (*Administration Officer, RGO*), Merrilyn Banks (*Executive Director, Research*), Therese Starr (*Research Coordinator*), Janani Balakrishnan (*Research Support Officer*), Leah Hoppe (*Executive Support Officer*)

Absent: Professor Jeffrey Lipman (*Research Ambassador*), Gordon McGurk (*Chairperson HREC*), Marita Prior (*Research Coordinator*)

RBWH & RBWH FOUNDATION RESEARCH ADVISORY COMMITTEE

The 2019 Membership included:




Prof Gerard Byrne – Chair	Internal	Dr Rachel Walker	External
Adjunct Professor Merrillyn Banks	Internal	Prof Claire Rickard	External
Adjunct Associate Prof Ian Coombes	Internal	Prof Joan Webster	External
Prof Sandra Capra	External	Prof Helen Healy	Internal
Prof Grant Ramm	External	Prof Jeff Lipman	Internal
Prof Robert Ware	External	Prof Frank Gardiner	External
Prof David Paterson	Internal / External		

In 2019 the RBWH received an astounding \$2,400,000.00 towards scholarships, project grants and fellowships, including \$1,500,000.00 received via the Private Practice Trust fund and \$900,000.00 from the RBWH Foundation.

Scholarships are awarded on a competitive basis to clinicians undertaking a research higher degree and are awarded for three years with renewals dependant on successful progress. In 2019, 14 new and 19 renewal scholarships were awarded.

Project grant funding of up to \$40,000 was awarded to ten early career researchers and 15 experience researchers after a competitive grant application process that had over 140 applications. Three fellowships of \$50,000 for two years were also awarded to researchers who recently completed their PhD's.

RBWH Foundation Robert and Janelle Bird Post-Doctoral Fellows (2019-2020):

Name	Title	Summary
 Elise Button	IDENTIFY Study Identifying people with a haematological malignancy who are at risk of deteriorating and dying	People with haematological malignancies often experience suboptimal care near the end of life due to an unpredictable illness trajectory. This research will help us to understand who is at risk of dying and explore the provision of best-practice care near the end of life. A prospective prognostic study will validate previously developed clinical indicators that identify risk of deteriorating and dying in people with a haematological malignancy.
 Jill Campbell	Towards improved understanding of incontinence in the acute care setting; A multisite exploratory study	The research program will provide foundation data to address gaps in understanding the burden and predictors of incontinence, hospital-acquired incontinence and incontinence-associated complications within the hospital setting. In addition, the research program will explore the continence care experience of older inpatients. The results of these studies will inform a larger multicomponent intervention trial with the aim of advancing the provision of gold standard continence care in the hospital setting.
 Victoria Eley	Improving the accuracy of perioperative bloodpressure monitoring in obese patients	Standard rectangular blood pressure cuffs are the wrong size and shape for obese patients. Use of these cuffs can provide inaccurate measurements and compromises the perioperative care of obese patients. The ClearSight™ finger cuff avoids the problems of arm shape but has not been tested in obese patients. The equipment requires validation in obese patients prior to clinical use. The projects undertaken during this Fellowship aim to validate the ClearSight™ finger cuff in obese pregnant and non-pregnant patients. Translation into clinical practice will improve the perioperative care of obese patients who make up an increasing proportion of surgical patients at the RBWH. By providing funding for these two projects, The Robert and Janelle Bird Post-Doctoral Fellowship was instrumental in facilitating A/Prof Eley being awarded \$100 000 from the Australian and New Zealand College of Anaesthetists in the form of an Academic Enhancement Grant, to further expand this program of research.

HERSTON STATE OF THE ART HEALTHCARE SYMPOSIUM

The annual healthcare symposium was in its 28th year and was an opportunity to showcase the facilities strengths in both research and innovation. It was a time to strengthen partnerships and reinforcing the commitment to provide a wealth of opportunities for physicians, nurses, health professionals, researchers and students. 2019 saw the symposium work closely with our academic and research partners, The University of Queensland, Queensland University of Technology, QIMR Berghofer Medical Research Institute and Griffith University. The RBWH Foundation also played a huge part, not only with financial support, but also providing the opportunity to liaise with RBWH consumers. The vision for 2019 Symposium was to showcase the facilities and potential of Herston as a Campus as we move into the future.

The Symposium was a huge success, with over 3000 registrations over the four days. It showcased the advancements and innovations of technology and how it could assist in health care.

As a novel way of presenting all the posters were an electronic format, with abstract Q&A sessions and orals presented via the online portal ZOOM with the ability to ask questions via Slido. A record breaking 194 abstracts were submitted with 28 selected for online oral presentations accompanying its ePoster. These were designed to showcase just some of the research projects that have been underway across the campus and highlight the advancements of which both the Herston Campus and our partners are making. Social media was also utilised for the event, with promotion occurring on both Facebook and Twitter as well as through the RBWH/Metro-North Communications Team.

A final new achievement was through a Digital signage that was placed throughout the hospital displaying the ePosters and broadcasting the online component of the program.

This year seven awards were given to staff for the following categories:

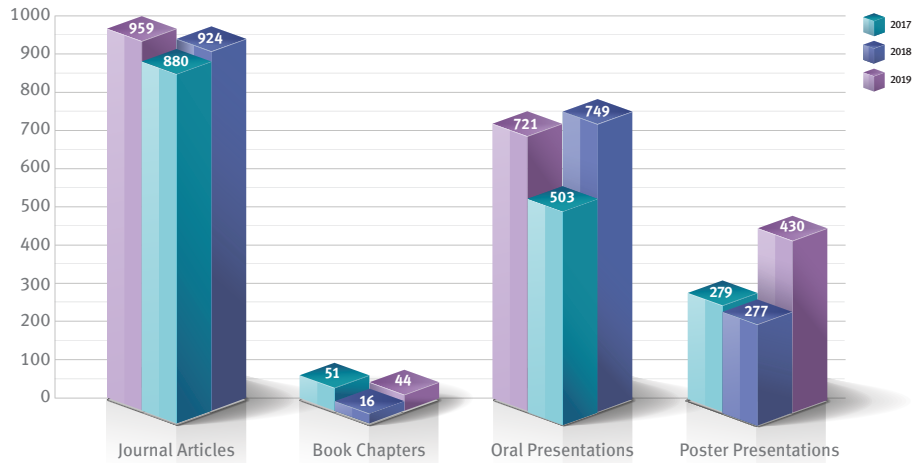
- **RBWH Foundation Best overall** – *Dr Andrew Redmond*: Penicillin allergy need not be forever
- **Discovery and Innovation Research Award** – *Suzanne Parker*: Translating innovation in microsampling into a clinical pharmacokinetic study of vancomycin in critically ill patients
- **The Professor Lawrie Powell AC Early Career Research Award** – *Martha Druery*: Health-Related Quality of Life outcomes post-major burn injuries in adults – a longitudinal exploratory study
- **Health Practitioners Research Award** – *Anna Edwards*: Nutrition outcomes post implantation of a pre-treatment model of care for patients with head and neck cancer receiving chemoradiotherapy.
- **Dr Stephen Morrison Clinical Research Award** – *Cathy Liu*: Gestational age at diagnosis of asymptomatic short cervix and preterm birth risk
- **Nursing Research Award** – *Dr Nicole Gavin*: Estimating Prevalence of Impaired Skin surrounding Devices in cancer care: the preliminary results of a prospective study
- **The Professor William Egerton Award for Medical Research** – *Maggie Keys*: The volume of polyethylene terephthalate plastic – PET – accumulated in one day of surgical operations at RBWH: a pilot audit.

SYMPOSIUM 2019

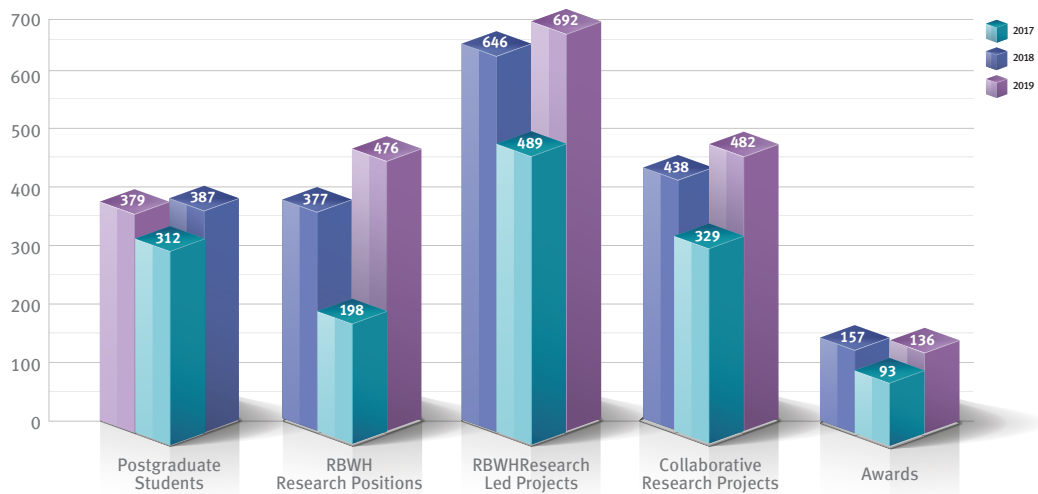


RBWH RESEARCH OUTPUT

PUBLICATIONS



RESEARCH ACTIVITY



PUBLICATIONS/PRESENTATIONS SUMMARY TABLE 2019

Research Group / Department	Publications		Presentations National and International	
	Journal Articles	Books and Chapters	Invited/Oral	Posters
ALLIED HEALTH PROFESSIONALS				
Centre for Allied Health Research	2	0	4	1
Department of Nutrition and Dietetics	20	1	28	17
Department of Occupational Therapy	7	0	8	5
Department of Physiotherapy	20	0	13	6
Department of Psychology	1	0	0	0
Department of Rehabilitation Engineering, Orthotics and Prosthetics	0	0	0	2
Department of Social Work	4	0	4	1
Department of Speech Pathology and Audiology	10	0	9	6
CANCER CARE SERVICES				
Allied Health Professions	9	0	18	13
Cancer Nursing Professorial Precinct	15	0	21	11
Haematology and Bone Marrow Transplant	31	0	29	8
Haemophilia Centre	2	0	1	5
Medical Oncology	51	0	20	49
Radiation Oncology	34	0	47	13
CRITICAL CARE AND CLINICAL SUPPORT SERVICES				
Emergency and Trauma Centre	25	0	7	3
Genetic Health Queensland	29	1	31	7
Hyperbaric Medicine Services	0	0	0	1
Intensive Care Services	61	0	18	0
Professor Tess Craymond Multidisciplinary Pain Centre	4	0	1	0
Skin Integrity	6	8	4	1
INTERNAL MEDICINE SERVICES				
Department of Cardiology	33	1	51	9
Department of Clinical Immunology and Allergy	0	0	0	0
Department of Clinical Pharmacology	8	0	11	6
Department of Endocrinology and Diabetes	23	1	3	4
Department of Gastroenterology and Hepatology	32	2	18	14
Department of Infectious Diseases	44	0	11	10
Internal Medicine Research Unit	18	5	15	2
Kidney Health Service	53	5	42	40
Neurology – Epilepsy	21	0	2	0
Neurology – Motor Neurone Disease	24	1	4	3
Neurology – Stroke	12	0	8	0
Nuclear Medicine Department	8	0	13	0
Palliative and Supportive Care	2	0	5	0
Pharmacy	70	0	40	41
Department of Rheumatology	5	0	0	0

PUBLICATIONS/PRESENTATIONS SUMMARY TABLE 2019 (CONT)

Research Group / Department	Publications		Presentations National and International	
	Journal Articles	Books and Chapters	Invited / Oral	Posters
INTERNAL MEDICINE SERVICES <i>(cont)</i>				
QLD State-wide Antimicrobial Stewardship	2	0	1	0
Department of Thoracic Medicine	11	5	4	2
MEDICAL IMAGING				
Medical Imaging	12	6	34	13
MEDICAL SERVICES				
Quality, Innovation & Patient Safety	2	0	0	0
MENTAL HEALTH SERVICES				
Metro North Mental Health Services	69	2	47	6
NURSING AND MIDWIFERY SERVICES				
Nursing & Midwifery Research Centre	31	1	16	12
RBWH RESEARCH SERVICES				
Herston Imaging Research Facility	26	0	8	10
Jamieson Trauma Institute	24	0	41	10
Centre for Palliative Care Research and Education	30	2	23	7
SURGICAL AND PERIOPERATIVE SERVICES				
Department of Anaesthesia and Perioperative Medicine /Research Interest in Anaesthesia (RIGA)	28	2	48	14
Department of General Surgery – Unit 1 Breast /Endocrine	3	0	1	0
Department of General Surgery – Unit 2 Hepato-Pancreatic Biliary (HPB)	1	0	9	0
Department of General Surgery – Unit 3 Colorectal	14	1	10	5
Department of General Surgery – Unit 4 Upper Gastrointestinal /Bariatric	3	0	5	6
Department of General Surgery – Unit 5 Acute Surgical Unit (ASU)	0	0	0	2
Department of Ophthalmology	8	0	22	3
Department of Oral & Maxillofacial Surgery	10	0	7	0
Department of Orthopaedic Surgery	15	2	82	0
Department of Otolaryngology, Head and Neck Surgery <i>(Ear, Nose and Throat)</i>	7	0	11	0
Department of Plastic and Reconstructive Surgery	0	0	4	0
Department of Urology	41	0	2	4
Department of Vascular Surgery	6	0	6	7
Kenneth G Jamieson, Department of Neurosurgery	10	0	5	3
Professor Stuart Pegg Burns Centre	0	2	17	0
Trauma Service	0	0	5	1
WOMEN'S AND NEWBORN SERVICES				
Grantley Stable Neonatal Unit	8	0	7	9
Obstetrics and Gynaecology	28	0	8	44
Obstetric Medicine	12	0	15	24
Perinatal Research Centre	11	0	16	10
Queensland Centre for Gynaecological Cancer	7	0	6	1

THE CENTRE FOR PALLIATIVE CARE RESEARCH & EDUCATION



Patsy Yates
Distinguished Professor
Centre for Palliative Care Research
and Education

The primary role of the Centre for Palliative Care Research and Education (CPCRE) is to enhance palliative care services in Queensland through research and education endeavours. To achieve these aims, CPCRE operates as a 'centre without walls', committed to building and fostering partnerships with the palliative care community in its endeavours.

Highlights of 2019:

The Clinical Research Program Leader Prof Janet Hardy was successful in obtaining funding in 2018 for a world-first clinical trial "*To evaluate benefits of medicinal cannabinoids for symptom relief in cancer patients receiving palliative care*". The multi-centre trial funded by the landmark Medical Research Future Fund is progressing well in 2019, with medicinal cannabinoids trials open and recruiting well, across 5 sites in Queensland. CPCRE staff have continued research projects funded by National Health and Medical Research Council (NHMRC), Australian Research Council (ARC), Mater Medical Research Institute (MMRI), Department of Health (DOH), Cancer Australia, Cancer Council NSW, and the Australian Government. Research projects are multi-disciplinary and are across institutions, and results have been published in national and international peer reviewed publications. CPCRE staff hold appointments on state, national and international Palliative Care/Oncological and Nursing, Medical and Indigenous advisory boards/reference groups.

CPCRE education activities include: The General Practice Palliative Care Education Program; The Program of Experience in the Palliative Approach; The Evidence Based Palliative Care Strategy; The Queensland Palliative Care Research Group and Workforce Development Programs. The Centre disseminates pertinent palliative care education and research information to health professionals via: the CPCRE Website, CPCRE Newsletter (quarterly), CPCRE Calendar (biannually), Monthly E-Bulletins, the Annual Research Conference and the Annual Update Symposium (topic rotates three yearly between general medicine, oncology and supportive care); the Annual Master Class and the Annual Nurse Practitioner Symposium.

Benefits for clinical practice:

The Centre's work focuses on:

- Developing the capacity of the palliative care workforce to provide quality palliative care
- Improving the links between research and practice in palliative care
- Undertaking research to enhance the quality of palliative care
- Providing information which supports the delivery of palliative care services.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Vanessa Brunelli	PhD, QUT (2013-2019)	Development of a model of engagement designed to enhance specialist cancer nurse abilities to support people living with lung cancer in self-management	Patsy Yates , Carol Windsor
Doreen Tapsall	Professional Doctorate, QUT (2011-2019)	Factors influencing Nurses engagement in continuing professional development in cancer nursing	Patsy Yates , Kimberly Alexander
Alison Bowers	PhD, QUT (2016-2020)	Paediatric life-limiting conditions: prevalence and palliative care needs	Patsy Yates , Raymond Chan
Rae Blades	Masters by Research, QUT (2016-2020)	The prevention and treatment of radiation dermatitis in patients with head and neck cancer using StrataXRT, is more cost effective than standard care during and post radiotherapy	Patsy Yates , Raymond Chan, Steven McPhail
Cara Cabilan	Masters by Research, QUT (2014-2019)	The physical activity, sedentary behaviour, functional status, and quality of life of colorectal cancer patients within six months after curative treatment	Kimberly Alexander, Patsy Yates , Sonia Hines
Piyada Chaisri	PhD, QUT (2018-2022)	Health related quality of life in children with cancer in Thailand	Patsy Yates , Natalie Bradford
Dianne Legge	Masters by Research, QUT (2015-2019)	Supportive care needs of people diagnosed with low-grade glioma (LGG) in the 3 years post diagnosis	Patsy Yates , Danette Langbecker
Robyn Matthews	Masters by Research, QUT (2016-2021)	The preparedness of novice cancer nurses in delivering end-of-life care in the acute oncology hospital setting	Patsy Yates , Elise Button, Raymond Chan
Carla Thamm	PhD, QUT (2012-2021)	An investigation of how sociocultural factors influence health care professionals' and patients' experience of head and neck cancer and its treatment	Patsy Yates , Sandie McCarthy
Alisha Wintour	Masters by Research, QUT (2016-2020)	Evaluation of an information pamphlet for HPV positive oropharyngeal cancer patients	Patsy Yates , Kimberly Alexander
Cynthia Akuoko	PhD, QUT (2017-2021)	Achieving health services and supportive care needs of women with advanced breast cancer in Ghana	Patsy Yates , Shirley Chambers
Wendy O'Dea	Masters of Philosophy, QUT (2018-2022)	What is the preparedness of cancer nurses caring for patients receiving immunotherapy	Raymond Chan, Patsy Yates
Theodora Ogle	PhD, QUT (2017-2023)	Self-initiated comfort strategies for chemotherapy-induced peripheral neuropathy	Kim Alexander, Patsy Yates , Chris Miaskowski
Clare Quaglia	Masters of Philosophy, QUT (2018-2022)	The use of comprehensive smart phone applications to improve continuity of care and quality of life in patients undergoing treatment for cancer	Kimberly Alexander, Patsy Yates
Porawan Witwaranukool	PhD, QUT (2017-2021)	Implementing evidence based physical activity and exercise guidelines by oncology nurses in Thailand	Patsy Yates , Raymond Chan
Saroeun Ven	Masters of Philosophy, QUT (2019-2023)	Unmet needs of informal carers of people living with life-limiting illness and receiving palliative care	Shirley Chambers, Patsy Yates , Jason Mills
Alana Delaforce	PhD, University of Newcastle (2018-2020)	A theoretical analysis of the barriers and facilitators to implementing patient blood management guidelines: a mixed methods restricted review	Jed Duff, Judy Munday, Janet Hardy
Thomas Dilana	PhD, University of Queensland (2018-2020)	Patient attitudes towards medicinal cannabis	Janet Hardy , Rebecca Olson, Phillip Good

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
John Haberecht	Visiting Fellow	In kind	Palliative Care	Queensland University of Technology (2016-current)
Patsy Yates	Honorary Fellow	In kind	Faculty of Business	University of Wollongong (2019-current)

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Hardy, J., Yates, P	Hardy, J. , Good, P., Lintzeris, N., Martin, J., Yates, P. , Chye, R., Haywood, A., Olsen, R	Medicinal cannabinoids to relieve symptom burden in the palliative care of patients with advanced cancer
Yates, P	Yates, P. , Mitchell, G., Currow, D., Eagar, K., Edwards, H., Gardner, G., Willmott, L., Bonner, A., Clark, R., Tieman, J	Centre for Research Excellence in End of Life Care
Yates, P	Yates, P. , Carter, R	TrueNTH Solutions: an integrated multi-component intervention to improve the lives of men with prostate cancer in Australia
Yates, P	Yates, P. , Alexander, K., Miaskowski, C., Chan, R., McCarthy, A., McPhail, S., Wyld, D., Skerman, H	A sequential multiple assignment randomized trial (SMART) of nursing interventions to reduce pain associated with chemotherapy induced peripheral neuropathy

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Danby, S., Ekberg, S., Rendle-Short, J., Yates, P. , Herbert, A., Bradford, N., Bluebond-Langner, M	Yates, P	Extraordinary yet mundane talk: children navigating palliative care
Bradford, N., Yates, P. , Chan, R. and Tjondronegoro, D.	Yates, P	RESPONse: Remote Symptom Management in Paediatric Oncology
Juraskova, I., Butow, P., Laidsaar-Powell, R., Boyle, F., Yates, P. , Schofield, P., Kay, J. and Costa, D	Yates, P	Empowering the clinician-patient-carer TRIO: RCT of novel online education modules to facilitate effective family carer involvement in oncology
Hoy, W., Healy, H., Connelly, L., Mitchell, G., Panaretto, K., Endre, Z., Coombes, J., Gobe, G., Bonner, A., Fassett, R., White, B., Douglas, C. , Nelson, C., Leon, D., Waugh, D., Kulkarni, H., Tan, K.-S., Brown, M., Jose, M., Yates, P	Yates, P	Chronic Kidney Disease Centre for Research Excellence

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Hardy, J. , Good, P., Lintzeris, N., Martin, J., Yates, P. , Chye, R., Haywood, A., Olsen, R	Centre for Palliative Care Research and Education	Medicinal cannabinoids to relieve symptom burden in the palliative care of patients with advanced cancer	The Commonwealth of Australia, Department of Health, Medical Research Future Fund	\$1,363,040	\$356,000	2018-2021
Danby, S., Ekberg, S., Rendle-Short, J., Yates, P. , Herbert, A., Bradford, N., Bluebond-Langner, M	Centre for Palliative Care Research and Education	Extraordinary yet mundane talk: children navigating palliative care	Australian Research Council Discovery Grant	\$588,592	\$154,434	2018-2021
Bradford, N., Yates, P. , Chan, R., and Tjondronegoro, D	Centre for Palliative Care Research and Education	RESPONse: Remote Symptom Management in Paediatric Oncology	Children's Health Foundation Queensland	\$255,370	\$78,609	2018-2020
Juraskova, I., Butow, P., Laidsaar-Powell, R., Boyle, F., Yates, P. , Schofield, P., Kay, J. and Costa, D	Centre for Palliative Care Research and Education	Empowering the clinician-patient-carer TRIO: RCT of novel online education modules to facilitate effective family carer involvement in oncology	Cancer Australia and Cancer Council NSW	\$593,202	\$197,065	2018-2020

Research Grants (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Yates, P. , Mitchell, G., Currow, D., Eagar, K., Edwards, H., Gardner, G., Willmott, L., Bonner, A., Clark, R., Tieman, J	Centre for Palliative Care Research and Education	Centre for Research Excellence in End of Life Care	National Health and Medical Research Council	\$2,495,543	\$0.00	2013-2019
Hoy, W., Healy, H., Connelly, L., Mitchell, G., Panaretto, K., Endre, Z., Coombes, J., Gobe, G., Bonner, A., Fassett, R., White, B., Douglas, C. , Nelson, C., Leon, D., Waugh, D., Kulkarni, H., Tan, K.-S., Brown, M., Jose, M., Yates, P	Centre for Palliative Care Research and Education	Chronic Kidney Disease Centre for Research Excellence	NHMRC CRE in Health Services	\$2,496,981	\$23,454	2014-2019
Yates, P. , Carter, R	Centre for Palliative Care Research and Education	TrueNTH Solutions: an integrated multi-component intervention to improve the lives of men with prostate cancer in Australia	The Movember Group–True NTH	\$1,365,755	\$41,818	2014-2019
Yates, P. , Alexander, K., Miaskowski, C., Chan, R., McCarthy, A., McPhail, S., Wyld, D., Skerman, H	Centre for Palliative Care Research and Education	A sequential multiple assignment randomized trial (SMART) of nursing interventions to reduce pain associated with chemotherapy induced peripheral neuropathy	National Health and Medical Research Council	\$713,418	\$209,990	2017-2021
Hardy, J., Yates, P. , Miakowski, C., Good, P., Skerman, S	Centre for Palliative Care Research and Education	Assessing the influence of genetic variation on symptom clusters in men with castrate resistant prostate cancer	Mater Medical Research Institute Seeding Grant	\$20,000	In kind	2015-2020
Hardy, J. , Good, P., Olsen, R	Centre for Palliative Care Research and Education	Talking about death: A study into palliative care communication	Mater Medical Research Institute Seeding Grant	\$19,320	In kind	2016-2020
Good, P., Sullivan, K., Woodward, N, Hardy, J	Centre for Palliative Care Research and Education	An open label pilot study of oral water-soluble contrast (Gastrografin) in addition to conservative management for the resolution of malignant bowel obstruction in adult patients	Mater Medical Research Institute Seeding Grant	\$20,000	In kind	2015-2020
Hardy, J. , Olsen, R., Good, P	Centre for Palliative Care Research and Education	A qualitative study of cancer patients' perceptions and attitudes toward use of medicinal cannabinoids in palliative care.	Mater Medical Research Institute Seeding Grant	\$19,496	\$7,496	2017-2020
Good, P., Hardy, J	Centre for Palliative Care Research and Education	Assessing physical activity as an outcome of pain management in patients with advanced cancer	Mater Medical Research Institute Seeding Grant	\$20,000	In kind	2017-2020
Cross, J., Good, P., Hardy, J. , Martin, J., Galettis, P., Zeng, L	Centre for Palliative Care Research and Education	Exploring potential anti-inflammatory effects of medicinal cannabis	Mater Medical Research Institute Seeding Grant	\$20,000	\$5,000	2018-2020
Richard, E., Mitchell, G., Nikles, J., Good, P., Senior, H., Steadman, K., Hardy, J	Centre for Palliative Care Research and Education	Oral pilocarpine tablets for xerostomia	Mater Medical Research Institute Seeding Grant	\$19,947	\$9,947	2018-2020
Good, P., Hardy, J. , Philip, J., Weil, J., Crawford, G., McNeil, R., Yates, P	Centre for Palliative Care Research and Education	A randomised, controlled, double blind study of ondansetron versus olanzapine versus haloperidol in patients with cancer and nausea not related to anticancer therapy. A pilot study (Nausea 4 study)	University of Technology Sydney	\$19,947	\$9,947	2018-2020
Hardy, J	Centre for Palliative Care Research and Education	Research into prostate cancer	Mater Medical Research, Bill Siganto Award	\$10,000	In kind	2018-2020

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Hardy, J. , Kindl, K., Tapuni, A., Kingi, N., Good, P., Prasad, S	Centre for Palliative Care Research and Education	The prevalence of QTc prolongation in patients with cancer	Mater Palliative Care Research Fund	Student Project	In kind	2014-2019
Good, P., Hardy, J. , Sullivan, K., Syrmis, W., Woodward, N	Centre for Palliative Care Research and Education	An open label pilot study of oral water soluble contrast (Gastrografin) in addition to conservative medical management for the resolution of malignant bowel obstruction in adult patients	Mater Medical Research Institute Seeding Grant	\$19,230	\$5,000	2015-2020
Hardy, J. , Pinkerton, E., Russell, E., Kindl, K., Good, P	Centre for Palliative Care Research and Education	Quality use of medicine: The use of oral corticosteroids in patients with advanced cancer	Mater Palliative Care Research Fund	Student Project	In kind	2016-2019
Chan, R., Yates, P. , Emery, J., Koczwara, B., Mann, G., Eakin, E., Turner, M., Krishnasamy, M., Gordon, L. & Skerman, H	Centre for Palliative Care Research and Education	Implementation of a nurse-enabled, shared-care follow-up model for early Breast cancer survivorS (The IBIS-Survivorship Study). (APP1170519)	NHMRC Partnership Project	\$1,444,032	\$68,980	2019-2024

2019 Research Publications

Journal Articles

- Ekberg, S., Danby, S., Rendle-Short, J., Herbert, A., Bradford, N. & **Yates, P.** Discussing death: making end of life implicit or explicit in paediatric palliative care consultations. *Patient Education and Counseling*, (2019), 102(2), 198-206
- Button, E., Gavin, N., Chan, R., Connell, S., Butler, J. & **Yates, P.** Harnessing the power of clinician judgement. Identifying risk of deteriorating and dying in people with a haematological malignancy: A Delphi study. *Journal of Advanced Nursing*, (2019), 75(1), 161-174
- Button, E., Gavin, N., Chan, R., Chambers, S., Butler, J. & **Yates, P.** Clinical indicators that identify risk of deteriorating and dying in people with a hematological malignancy: a case-control study with multivariable analysis. *Journal of Palliative Medicine*, (2019), 21(12), 1729-1740
- Tindle, D., Windsor, C. & **Yates, P.** Centralizing temporality in adolescent and young adult cancer survivorship. *Qualitative Health Research*, (2019), 29(2), 173-183
- Chan, R., Gordon, L., Tan, C., Chan, A., Bradford, N., **Yates, P.**, Agbejule, O. & Miaskowski, C. Relationships between financial toxicity and symptom burden in cancer survivors: A systematic review. *Journal of Pain and Symptom Management*, (2019), 57(3), 646-660
- Hudson, A.P., Spooner, A.J., Booth, N., Penny, R.A., Gordon, L.G., Downer, T.-R., **Yates, P.**, Henderson, R., Bradford, N., Conway, A., 'Donnell, C., Geary, A. & Chan, R. Qualitative insights of patients and carers under the care of nurse navigators. *Collegian*, (2019), 26(1), 110-117
- Spooner, A., Booth, N., Downer, T.-R., Gordon, L., Hudson, A., Bradford, N., O'Donnell, C., Geary, A., Henderson, R., Franks, C., Conway, A., **Yates, P.** & Chan, R. Advanced practice profiles and work activities of nurse navigators: An early-stage evaluation. *Collegian*, (2019), 26(1), 103-109
- Gordon, L.G., Spooner, A.J., Booth, N., Downer, T.-R., Hudson, A., **Yates, P.**, Geary, A., O'Donnell, C. & Chan, R. Do nurse navigators bring about fewer patient hospitalisations? *Journal of Health Organization and Management*, (2019), 33(1), 51-62
- Northfield, S., Button, E., Wyld, D., Gavin, N., Nasato, G. & **Yates, P.** Taking care of our own: A narrative review of cancer care services-led models of care providing emergent care to patients with cancer. *European Journal of Oncology Nursing*, (2019), 40, 85-97
- Shahid, S., Ekberg, S., Holloway, M., Jacka, C., **Yates, P.**, Garvey, G. & Thompson, S. Experiential learning to increase palliative care competence among the Indigenous workforce: an Australian experience. *BMJ Supportive & Palliative Care*, (2019), 9, 158-163
- Beatty, L., Kemp, E., Coll, J., Turner, J., Butow, P., Milne, D., **Yates, P.**, Lambert, S., Wootten, A., Yip, D. & Koczwara, B. Finding My Way: results of a multicentre RCT evaluating a web-based self-guided psychosocial intervention for newly diagnosed cancer survivors. *Supportive Care in Cancer*, (2019), 27, 2533-2544
- Mitchell, G., Willmott, L., White, P., Piper, D., Currow, D. & **Yates, P.** A perfect storm: fear of litigation for end of life care. *Medical Journal of Australia*, (2019), 210(10), 441.e1
- Bradford, N., Chambers, S., Hudson, A., Jauncey-Cooke, J., Penny, R., Windsor, C. & **Yates, P.** Evaluation frameworks in health services: An integrative review of use, attributes and elements. *Journal of Clinical Nursing*, (2019), 28(13-14), 2486-2498
- Conway, A., Donnell, C. & **Yates, P.** The effectiveness of the nurse care coordinator role on patient-reported and health service outcomes: A systematic review. *Evaluation and the Health Professions*, (2019), 42(3), 263-296
- Hardy, J.**, Skerman, H., Good, P., Philip, J., Currow, D., Mitchell, G., **Yates, P.** A randomized, double-blind controlled trial of methotrimeprazine versus haloperidol in palliative care patients with cancer-related nausea. *BMJ Open*, (2019);9: e029942. DOI:10.1136/bmjopen-2019-029942

Journal Articles (cont)

- Ni, X., Chan, R., **Yates, P.**, Hu, W., Huang, X. & Lou, Y. The effects of Tai Chi on quality of life of cancer survivors: a systematic review and meta-analysis. *Supportive Care in Cancer*, (2019), 27(10), 3701-3716
- Chan, R., Blades, R., Jones, L., Downer, T.-R., Peet, S., button, E., Wyld, D., McPhail, S., Doolan, M. & **Yates, P.** A single-blind, randomised controlled trial of StrataXRT₂ – A silicone based film-forming gel dressing for prophylaxis and management of radiation dermatitis in patients with head and neck cancer. *Radiotherapy and Oncology*, (2019), 139, 72-79
- Xing, W., So, W.K.W., Choi, K.C., Wong, C.L., Tong, M., Choy, Y., Molassiotis, A., **Yates, P.** & Chan, R.J. Translation and psychometric testing of Cancer Survivors' Unmet Needs (Chinese Version). *Asia Pacific Journal of Clinical Oncology*, (2019), 15(5), e142-e146
- Turner, J., **Yates, P.**, Kenny, L., Gordon, L., Burmeister, B., Hughes, B., McCarthy, A., Perry, C., Chan, R., Paviour, A., Skerman, H., Batstone, M. & Mackenzie, L. The ENHANCES study: a randomized controlled trial of a nurse-led survivorship intervention for patients treated for head and neck cancer. *Supportive Care in Cancer*, (2019), 27(12), 4627-4637
- Poudel, A., Berry, R., McCarthy, A., Walpole, E., **Yates, P.** & Nissen, L. Medication use in older, terminally ill cancer patients: Are all medications appropriate? A longitudinal audit. *Palliative Medicine*, (2019), 33(9), 1232-123
- Huang, Y.-L., **Yates, P.**, Thorberg, F.A. & Wu, C.-J.J. Adults' perspectives on cultural, social and professional support on end-of-life preferences. *Collegian*, (2019), 26(6), 621-628
- Good, P., Haywood, A., Gogna, G., Martin, J., **Yates P.**, Greer, R., **Hardy, J.** Oral medicinal cannabinoids to relieve symptom burden in the palliative care of patients with advanced cancer: a double-blind, placebo controlled, randomised clinical trial of efficacy and safety of cannabidiol (CBD). *BMC Palliative Care*, (2019), 18(110). DOI:10.1186/s12904-019-0494-6
- McCaffrey, N., Flint, T., Kaambwa, B., Fazekas, B., Rowett, D., Currow, D., **Hardy, J.**, Agar, M., Quinn, S., & Eckermann, S. Economic evaluation of the randomised double-blind, placebo-controlled study of subcutaneous ketamine in the management of chronic cancer pain. *Palliative Medicine*, (2019); 33(1), 74-81
- Haywood, A., Duc, J., Good, P., Khan, S., Rickett, K., Vayne-Bossert, P., **Hardy, J.** Systemic corticosteroids for the management of cancer-related breathlessness (dyspnoea) in adults. *Cochrane Database of Systematic Reviews*, (2019), Issue 2. Art. No.: CD012704. DOI: 10.1002/14651858.CD012704.pub
- King, M., Agar, M., Currow, D., **Hardy, J.**, Fazekas, B., McCaffrey, N. Assessing quality of life in palliative care settings: head-to-head comparison of four patient-reported outcome measures (EORTC QLQ-C15-PAL, FACIT-Pal, FACIT-Pal-14, FACT-G7)". *Supportive Care in Cancer*, (2019), Apr 16. DOI: 10.1007/s00520-019-04754-9. [Epub ahead of print]
- Alqabandi, N., Haywood, A., Kindl, K., Khan, S., Good, P., **Hardy, J.** Managing diabetes at the end of life – a retrospective chart audit of two health providers in Queensland, Australia. *Progress in Palliative Care*, (2019), 27(2), 51-57, DOI: 10.1080/09699260.2019.1611721
- Delaforce, A., Moore, D., Duff, J., Munday, J., **Hardy, J.** Assessing transfusion practice in elective surgical patients: a baseline audit. *ISBT Science Series*, (2019); 0:1-8 Available from: <https://onlinelibrary-wiley-com.ezp01.library.qut.edu.au/DOI/full/10.1111/voxs.12496>
- Pinkerton, E., Good, P., Kindl, K., Richard, R., Fischer, A., **Hardy, J.** Quality use of medicines: oral corticosteroids in advanced cancer. *Palliative Medicine*, (2019), Research letter 2019: 33(10),1325-1326. Aug 5:269216319866647. DOI: 10.1177/0269216319866647
- Good, P., Greer, R., Huggett, G., **Hardy, J.** An open-label pilot study testing the feasibility of assessing total symptom burden in trials of cannabinoid medications in palliative care. *Journal of Palliative Medicine*, (2019), Dec 3. DOI: 10.1089/jpm.2019.0540. [Epub ahead of print] PMID:31800354
- Hardy, J.**, Bundock, D., Cross, J., Gibbons, K., Pinkerton, R., Kindl, K., Good, P., Philip, J. Prevalence of QTc prolongation in patients with advanced cancer receiving palliative care – a cause for concern? *Journal of Pain and Symptom Management*, (2019) Dec 19. pii: S0885-3924(19)31061-9. DOI: 10.1016/j.jpainsymman.2019.12.356. [Epub ahead of print].

Book Chapters / Letters

- Matsuoka, H., Agar, M., Vandersman, Z., Good, P., Brown, L., **Hardy, J.**, Weil, J., Currow, D. Harms from haloperidol for symptom management in palliative care; a post hoc pooled analysis of three randomised controlled studies and two consecutive cohort studies. *Journal of Pain and Symptom Management* 2019. May 20. pii: S0885-3924(19)30244-1. DOI: 10.1016/j.jpainsymman.2019.05.004. [Epub ahead of print]. 2019;58(3); e6-e8. (Research Letter)
- Yates, P.** Cancer. In Brown, D., Edwards, H., Buckley, T. & Aitken, R. (Eds.) *Lewis's Medical-Surgical Nursing: Assessment and Management of Clinical Problems* (5th Ed.), (2019). Elsevier Australia, Sydney, pp. 274-312.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

- Yates, P.** Achieving quality palliative care for all. Canberra Health Annual Research Meeting (CHARM 2019), Canberra, Australia, 31st July 2019
- Yates, P.** National Palliative Care Projects: Palliative Care Education and Training Collaborative (PCC4U and PEPA). Oceanic Palliative Care Conference, Perth, Australia, 11th September 2019
- Yates, P.** National Palliative Care Projects: National Specialist Palliative Care and Advance Care Planning Advisory Services – ELDAC. Oceanic Palliative Care Conference, Perth, Australia, 11th September 2019
- Yates, P.** Building nursing's capacity in cancer control: the important leadership role of the International Society of Nurses in Cancer Care. 12th International Conference on Cancer Care, Maputo, Mozambique, South Africa, 8th November 2019
- Yates, P.** Prostate cancer: latest advances in treatment for early prostate cancer. 2019 COSA Annual Scientific Meeting, Adelaide, Australia, 12th November 2019
- Yates, P.** Palliative care outcomes are effective: but hospital symptoms are superior. PCOC Outcomes & Benchmarking Conference, Sydney, Australia, 20th November 2019

Invited Speakers (cont)

7. **Yates, P.** Improving patient experiences of cancer care. Brisbane Cancer Conference, Brisbane, Australia, 29th November 2019
8. **Hardy, J.** Top 10 tips for medicinal cannabis. General Medicine Update Symposium, Centre for Palliative Care Research and Education, Royal Brisbane and Women's Hospital, Brisbane, Australia, 29th March 2019
9. **Hardy, J.** Advance care planning in the era of high risk anaesthesia. PA Anaesthesia Conference, Translational Research Institute, Princess Alexandra Hospital, Brisbane, Australia, 12th October 2019
10. **Hardy, J.** Cancer pain management, what works and what doesn't? Faculty Pain Medicine Annual Conference, The Byron Resort, Byron Bay, Australia, 18th October 2019
11. **Hardy, J.** Medicinal cannabis – what is the role in palliative care? Faculty Pain Medicine Annual Conference, The Byron Resort, Byron Bay, Australia, 18th October 2019.

Oral Presentations

1. **Yates, P.** Transforming end-of-life care for older Australians: building workforce capacity through ELDAC. 15th National Rural Health Conference, Hobart, Tasmania, 26th March 2019
2. **Yates, P.** Lessons from the field: global nursing leadership in cancer control. International Council of Nurses (ICN) Congress 2019, Singapore, Singapore, 28th June 2019
3. **Yates, P.** Developing the evidence base to strengthen nursing services: The benefits of academic-health service-policy partnerships. ACN National Nursing Forum, Hobart, Tasmania, 23rd August 2019
4. Bradford, N., Chan, R. & **Yates, P.** The veil of cancer symptoms in children: symptoms we know about are not the same as the ones that cause distress. MASCC/ISOO Annual Meeting, San Francisco, USA, 21st June 2019
5. Gavin, N., Button, E., Smith, M., Hayes, T., Leutenegger, J., Glynn, T., Percival, V., Wong, L., Wessling, C. & **Yates, P.** Developing a nursing research internship. Cancer Nurses Society of Australia 22nd Annual Congress, Melbourne, Australia, 21st June 2019
6. Ogle, T., Alexander, K., **Yates, P.** & Miaskowski, C. A systematic review of the effectiveness of self-initiated interventions to decrease pain and sensory disturbances associated with peripheral neuropathy. TCNSA 22nd Annual Congress, Melbourne, Australia, 21st June 2019
7. Chan, R., Blades, R., Jones, L., Downer, T.-R., Peet, S., Button, E., Wyld, D., McPhail, S., Doolan, M. & **Yates, P.** A single-blind, randomised controlled trial of StrataXRT[®] – a silicone-based film-forming gel dressing for prophylaxis and management of radiation dermatitis in patient with head and neck cancer. CNSA 22nd Annual Congress, Melbourne, Australia, 22nd June 2019
8. Bradford, N., Cashion, C., Chan, R., Walker, R., Herbert, A. & **Yates, P.** Integrating patient reported outcomes with digital solutions to empower children and families to self-manage complex health conditions. 2nd Asia Pacific Conference on Integrated Care, Melbourne, Australia, 11th November 2019
9. Delaforce, A., Duff, J., Munday, J., & **Hardy, J.** Assessing transfusion practice in elective surgical patients: a baseline audit. ACORN – Australian College of Perioperative Nurses Conference 2019, Townsville, Australia, 2nd-4th May 2019
10. McCaffrey, N., Agar, M., Currow, D., **Hardy, J.**, Fazekas, B., King, M. "Assessing Quality of Life in People Receiving Palliative Care: Empirical Comparison of Four Questionnaires (EORTC QLQ-C15-PAL, FACT-G7, FACIT-Pal, FACIT-Pal-14). 16th World Congress of the European Association for Palliative Care, Berlin, Germany, 23rd-25th May 2019
11. Delaforce, A., Munday, J., Duff, J., **Hardy, J.**, Moore, D. Assessing transfusion practice in elective surgical patients: a baseline audit to identify opportunities for improvement. Blood 2019: combined Annual Scientific Meeting of the Haematology Society of Australia & New Zealand, Australian & New Zealand Society of Blood Transfusion and Thrombosis and Haemostasis Society of Australia & New Zealand, Perth, Australia, 20th-23rd October 2019
12. Delaforce, A., Duff, J., Munday, J. & **Hardy, J.**, Assessing transfusion practice in elective surgical patients: a baseline audit. Annual University of Newcastle Research Week, Newcastle, Australia, 12th-18th August 2019.

Poster Presentations

1. Bradford, N.K., Chan, R., Cashion, C., Walker, R. & **Yates, P.** RESPONSE: Adaption and validation of a Patient Reported Outcome Measure for Australian Children and Adolescents with Cancer. Cancer Survivorship Conference, Sydney, Australia, 28th-29th March 2019
2. Chan, R., Blades, R., Jones, L. & **Yates, P.** A single-blind, randomized controlled trial of a silicone-based film-forming gel dressing for prophylaxis and management of radiation dermatitis in patient with head and neck cancer. Oncology Nursing Society's 44th Annual Congress, Anaheim, USA, 13th April 2019
3. Blades, R., Chan, R., **Yates, P.** & McPhail, S. Cost-effectiveness of StrataXRT[®] versus Sorbolene for radiodermatitis in head and neck cancer patients: a trial-based economic evaluation. Cancer Nurses Society of Australia 22nd Annual Congress, Melbourne, Australia, 20th-22nd June 2019
4. **Yates, P.**, Rusnac, N., Rosenberg, J., Clifton, K., Brodie, M., Gavin, J., Harrison, D. & Moore, R. Improving palliative care and advance care planning in aged care – early findings of ELDAC working together audit data. Oceanic Palliative Care Conference, Perth, Australia, 10th-13th September 2019
5. Gavin, N., Smith, M., Hayes, T., Leutenegger, J., Glynn, T., Williams, D., Percival, V., Wong, L., Wessling, C., Watling, A., Roberts, N. & **Yates, P.** Developing a nursing research internship. Herston State of the Art Healthcare Symposium, Herston, Australia, 9th-12th September 2019
6. Lah, M.C., Good, P., Huggett, G., **Hardy, J.** Medicinal Cannabinoids for Symptom Relief in Advanced Cancer Patients – Feasibility Study. Australian Society for Breast Disease 12th Scientific Meeting, RACV Royal Pines Resort, Gold Coast, Australia, 10th-12th October 2019
7. Delaforce, A., Munday, J., Duff, J., **Hardy, J.** Assessing transfusion practice in elective surgical patients: a baseline audit to identify opportunities for improvement. Blood 2019: combined Annual Scientific Meeting of the Haematology Society of Australia & New Zealand, Australian & New Zealand Society of Blood Transfusion and Thrombosis and Haemostasis Society of Australia & New Zealand, Perth Convention and Exhibition Centre, Perth, Australia, 20th-23rd October 2019.

Other communications and outputs:

Published Abstracts

Ranse, K., Delaney, L., Ranse, J., Coyer, F. & **Yates, P.** End-of-life care in postgraduate critical care nurse curricula: An evaluation of current content informing practice. *Australian Critical Care*, (2019), 32, S1-S18

McCaffrey, N., Agar, M., Currow, D., **Hardy, J.**, Fazekas, B., King, M. Assessing Quality of Life in People Receiving Palliative Care: Empirical Comparison of Four Questionnaires (EORTC QLQ-C15-PAL, FACT-G7, FACIT-Pal, FACIT-Pal-14). 16th World Congress of the European Association for Palliative Care, Berlin, Germany, 23rd-25th May 2019

Delaforce, A., Duff, J., Munday, J., & **Hardy, J.** Assessing transfusion practice in elective surgical patients: a baseline audit. ACORN – Australian College of Perioperative Nurses Conference 2019, Townsville, Australia, 2nd-4th May 2019

Delaforce, A., Munday, J., Duff, J., **Hardy, J.**, Moore, D. Assessing transfusion practice in elective surgical patients: a baseline audit. Blood 2019: combined Annual Scientific Meeting of the Haematology Society of Australia & New Zealand, Australian & New Zealand Society of Blood Transfusion and Thrombosis and Haemostasis Society of Australia & New Zealand, Perth, Australia, 20th-23rd October 2019

Delaforce, A., Duff, J., Munday, J. & **Hardy, J.**, Assessing transfusion practice in elective surgical patients: a baseline audit. Accepted for oral presentation at the annual University of Newcastle Research Week, Newcastle, Australia, 12th-18th August 2019.

Workshops / Other Presentations

Yates, P. Designing a research project. Emergency Medicine Foundation Research 101 Workshop, Brisbane, Australia, 12th March 2019

Yates, P. ELDAC: Improving palliative care and advance care planning for older Australians. Pre-Conference Workshop, Oceanic Palliative Care Conference, Perth, Australia, 10th September 2019

Yates, P. Creating real improvements for people affected by cancer: The essential role of nursing research. Nursing Research Forum, Memorial Sloan Kettering Cancer Center, New York, USA, 15th April 2019

Yates, P. Panel member. World Health Assembly Side Event, Beyond the headlines – what will it take to address the growing cancer burden? Geneva, Switzerland, 21st May 2019

Yates, P. Navigating the journey from diagnosis to after treatment. 59th PAH Health Symposium, Princess Alexandra Hospital, Brisbane, Australia, 1st August 2019

Yates, P. Dying Well – PCWA Public Forum, Perth, Australia, 9th September 2019

Yates, P. Achieving personalised health care: The role of nurses. The 1st Nanjing Medical University/QUT Nursing Research Symposium, Nanjing, China, 19th October 2019

Yates, P. The Future of Cancer Care Coordination – What does the evidence say? Cancer Care Coordinator Development Day, Mater Health Services, Brisbane, Australia, 25th October 2019

Yates, P. Building systems that respond to what matters most for older Australians at end of life. Joint luncheon of the Parliamentary Friends of Palliative Care and the Parliamentary Friends of Dementia, Canberra, Australia, 28th November 2019

Hardy, J. Nausea RCTs – what are the results and what have we learnt from them? UTS Concept Development Workshop, Jim Douglas Boardroom, St Vincent's Private Hospital, Brisbane, Australia, 1st March 2019

Hardy, J. Top 10 tips for medicinal cannabis – what have we learnt to date? Palliative Care Interest Group Dinner, Victoria Park Function Centre, Herston, Australia, 16th April 2019

Hardy, J. Medicinal cannabis – top 10 tips or what we have learnt so far. Mater Multi-disciplinary Education Session, Mater Adult Hospital, Brisbane, Australia, May 2019

Hardy, J. Opioid update. GP Education Evening, St Vincent's Private Hospital, Brisbane, Australia, 30th July 2019.

Non-Refereed Publications

White, B., Willmott, L., **Yates, P.**, Then, S.-N., Neller, P. & Feeney, R. End of Life Law for Clinicians: new national training. *MJA InSight*, 4th February 2019. (Editorial)

Button, E., Bolton, M., Chan, R., Chambers, S., Butler, J. & **Yates, P.** Editorial. A palliative care model and conceptual approach suited to clinical malignant haematology. *Palliative Medicine*, (2019), 33(5), 483-485.

HERSTON IMAGING RESEARCH FACILITY

The Herston Imaging Research Facility (HIRF) is a dedicated facility for human imaging research on the RBWH campus. The facility houses one of only four combined PET and MR scanners in Australia, as well as a 3T Prisma MRI scanner and a PET/CT scanner, along with supporting infrastructure. HIRF is operated as a unit of RBWH, using RBWH radiographers and nuclear medicine technologists to operate the scanners. Being a stand-alone facility separate to the clinical radiology and nuclear medicine departments, HIRF offers greater access and booking certainty to imaging scanners than is possible in a busy clinical environment. As well as offering a pleasant environment for research participants, HIRF reduces the research load on clinical scanners, reducing wait-list times.

HIRF is an alliance of four partners: Queensland University of Technology, University of Queensland, Metro North Hospital and Health Service, and Queensland Institute of Medical Research-Berghofer. Researchers from all of the partners, as well as external institutions, collaborate on imaging research at HIRF. It is involved in multi-centre national and international trials, commercial work and clinical trials. HIRF also collaborates closely with the radiopharmaceutical laboratory of the nuclear medicine department at RBWH to make available a wide variety of PET tracers for researchers to use at HIRF.

Highlights of our research from 2019 include:

This year HIRF has made significant contributions to a large number of projects, producing high quality outputs. The research projects are focused on a variety of questions – such as more accurate diagnoses, better patient monitoring and therapy outcomes. The researchers work with a broad range of participants, from 6 to 86+ years old. Fostering these strong collaborative relationships with the partners and other external research institutes means that the quality of research and research productivity from HIRF will only grow over 2020.

During 2019 we had 67 research projects, among them were:

Abbvie: A Randomized, Double-Blind, Placebo-Controlled Multiple Dose Study to Assess Efficacy, Safety, Tolerability, and Pharmacokinetics of ABBV-8E12 in Progressive Supranuclear Palsy.

ATA188-MS-101: An Open-Label Phase 1 Study to Evaluate the Safety of ATA188 in Subjects with Progressive and Relapsing-Remitting Multiple Sclerosis.

BeClear Speech Dysarthria: An intensive speech treatment for adults with non-progressive dysarthria.

Beigene 304: An International, Phase 3, Open-label, Randomized Study of BGB-3111 Compared with Bendamustine plus Rituximab in Patients with Previously Untreated Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma.

BIOFAB: Skin Burns and Trauma Program – Medical imaging of the external ear towards 3D models for ear reconstruction.

CEST: A multi-centre trial investigating imaging technologies as measures of knee and hip cartilage composition in patients.

CF-LUNG: MRI for automated paediatric cystic fibrosis treatment response assessment.

Chronic Pain: The Central Neurobiological and Immunological Effects of Exercise in Individuals with Chronic.

Neck Pain Consult II: Predicting Surgery-induced Neurological Deficits using CONSULT tractography software.

CXCR4-Pancreatic Cancer: A study to look at a new way of detecting the spread of pancreas cancer.

CXCR4-Rectal Cancer: A pilot study of CXCR-4 PET scanning in operable rectal cancer.

DBS Impulsivity: Impulsivity and caregiver burden after deep brain stimulation for Parkinson's disease.

Defocus: Exploring the retinal response to defocus using fMRI – The brain's response to blurred images.

Echo – Acerta Pharma: A phase 3, randomised, double-blind, placebo-controlled, multicentre study of Bendamustine and Rituximab alone versus in combination with Acalabrutinib (ACP-196) in subjects with previously untreated mantle cell lymphoma.

ENVPWI: A language study of healthy participants into environmental sounds in picture-word interference.

FunDemental: Functional MRI in Delirium Pilot Study.

Ga-68-DOTATATE: Pilot project to compare Ga-68-DOTATATE clinical PET-CT with dynamic liver PET, 'diagnostic MRI' and simultaneous PET-MRI to assess well differentiated neuroendocrine tumour (NET) with liver metastases.

Ga-68-PSMA Colorectal Cancer: Evaluation of the use of Positron Emission Tomography using gallium-labelled [⁶⁸Ga] PSMA ligand in the detection of Metastatic Colorectal Cancer – A Pilot Study.

GE-180 PET in GVHD: Pilot study of ¹⁸FGE180PET to assess acute gastrointestinal graft versus host disease.

HABIT-ILE: A randomized trial of hand arm bimanual intensive training including lower extremity training for children with bilateral cerebral palsy.

KB004: A Phase I safety and biomaging trial of KB004 in patients with glioblastoma {ONJ2017-002}.

LYRA: Sanofi Phase II trial of LYR-210 in Adult subjects with chronic sinusitis.

Malaria: *Functional nuclear medicine imaging in subpatent malaria: a pilot study* Memory or Neurobiological markers for dementia: Neurobiology-informed diagnostic toolkit for Neurodegenerative Disease.

MicroResonance: *Early Psychosis:* Neuroinflammation and Neurodegeneration from prodrome to FEP using multi-modal MRI.

MINERAL: Magnetic Resonance Imaging and Quantitative Susceptibility Mapping (MRI-QSM) of brain iron to identify Chemotherapy-Associated Neurocognitive Impairment (CANI) in Acute Myeloid Leukaemia (AML).

Multiple Myeloma: Pilot study of ⁶⁸Ga-Pentixafor positron emission tomography (PET) imaging in multiple myeloma.

OCD: Effects of focal non-invasive brain stimulation on network dynamics and symptoms of Obsessive-Compulsive Disorder.

Paediatric A-T: The assessment of the respiratory aspects of ataxia-telangiectasia.

PD-MCI: Markers and mechanisms of mild cognitive impairment (MCI) in Parkinson's disease (PD).

Perineural Spread: Utility of High-Resolution MRI in Evaluating Perineural Spread in Head and Neck Cancers.

PERSPECTIVE LCZ696/Entresto: A multicenter, randomized, double-blind, active-controlled study to evaluate the effects of LCZ696 compared to valsartan on cognitive function in patients with chronic heart failure and preserved ejection fraction.

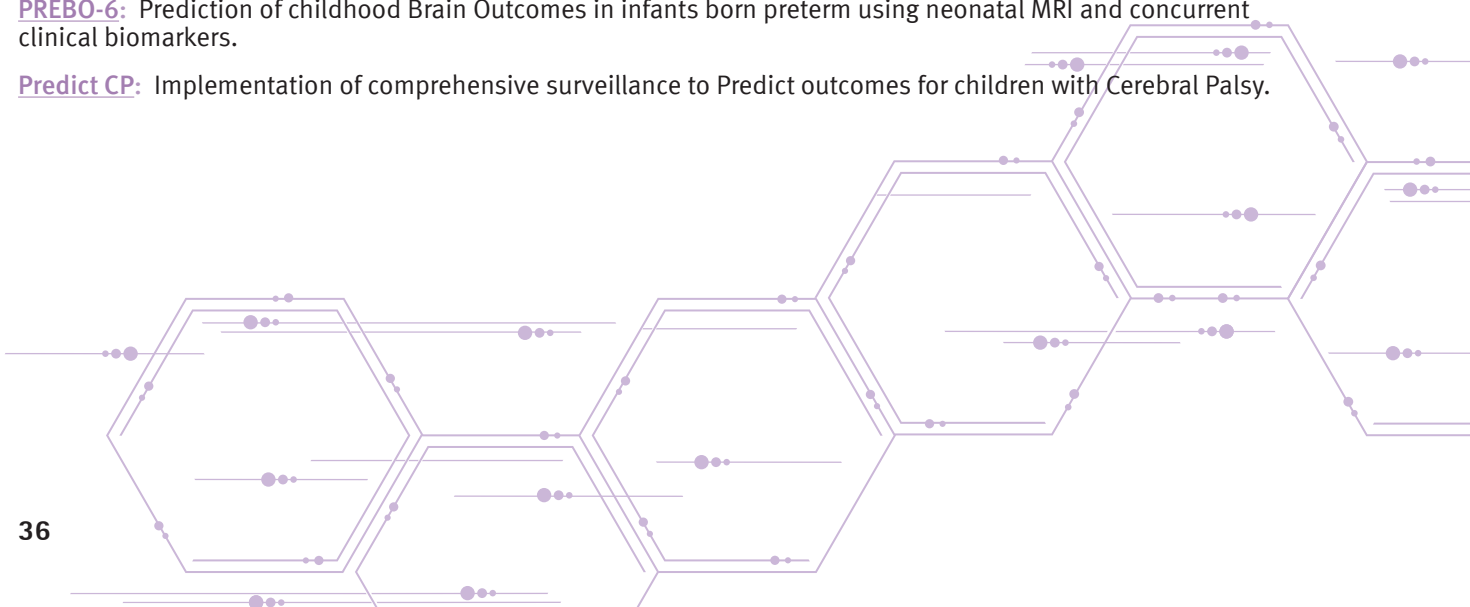
PETAL: Improving the precision of clinical staging of the axilla.

PISA: Prospective Imaging Study of Ageing: Genes, Brain and Behaviour.

PLIMATH: A multi-centre Phase II study to determine the response kinetics, safety and efficacy of pembrolizumab as frontline treatment of patients with Hodgkin Lymphoma considered unsuitable for ABVD.

PREBO-6: Prediction of childhood Brain Outcomes in infants born preterm using neonatal MRI and concurrent clinical biomarkers.

Predict CP: Implementation of comprehensive surveillance to Predict outcomes for children with Cerebral Palsy.



Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Jessica Bugeja	PhD, UQ (2018-2021)	Imaging Technologies to Measure Cartilage Structure and Composition CEST	Shekhar Chandra (UQ), Jurgen Fripp (CSIRO), Craig Engstrom (UQ)
Tahleesa Cuda	PhD, UQ	⁶⁸ Ga-PMSA Colorectal Cancer	Andrew Stevenson, David Clark, Paul Thomas, Andrew Riddell, John Hooper, Simon Puttick (CSIRO)
Bjorn Burgher	PhD Student	Early Psychosis: neuroinflammation and Neurodegeneration from prodrome to FEP using multi-modal MRI	Michael Breakspear (QIMR), James Scott
Ji Hyun (Julia) Yang	PhD, UQ (2015-2019)	Markers and mechanisms of mild cognitive impairment (MCI) in Parkinson's disease (PD)	Nadeeka Dissanayaka, Katie McMahon (HIRF/QUT), Gerard Byrne
Caitlin Hall	PhD UQ (2018-2021)	Effects of focal non-invasive brain stimulation on network dynamics and symptoms of Obsessive-Compulsive Disorder	Luca Cocchi (QIMR), Graham Radford-Smith, Anton Lord (QIMR)
Arash Arabshahi	PhD UQ (2018-2021)	Effects of focal non-invasive brain stimulation on network dynamics and symptoms of Obsessive-Compulsive Disorder	Luca Cocchi (QIMR), James Roberts (QIMR)
Dr Ashleigh Scott	PhD, University of QLD (2017-2021)	Pilot study of ¹⁸ FGE180PET to assess acute gastrointestinal graft versus host disease	Glen Kennedy, Siok-Keen Tey
Dr Philip Mosley	PhD QIMR Berghofer MRI	Impulsivity and caregiver burden after deep brain stimulation for Parkinson's disease	Prof Michael Breakspear (QIMR)
Maureen Ross	PhD, QUT (2018-expected 2021)	Medical imaging of the external ear towards 3D models for ear reconstruction	Mia Woodruff (QUT), Mark Allenby (QUT), Sean Powell (QUT), Edward Ren (QUT)

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Matthew Burge	Paul Thomas, Melissa Eastgate, David Wyld, Nicholas O'Rourke, David Cavallucci, Richard Bryant	CXCR4-Pancreatic Cancer
Dr Matthew Burge	Paul Thomas, Melissa Eastgate, David Wyld, Andrew Stevenson, David Clark	CXCR4-Rectal Cancer
Dr Po-Ling Inglis	Zernie Lwin (PCH), Paul Thomas	KB004
Dr Jason Butler	Dr Cameron Curley, Dr Simon Durrant, Dr Kirk Morris, Dr Elando Subramoniapillai, Tey, Dr Nicholas Weber and Dr Glen Kennedy	PLIMATH
Dr Kowsi Murugappan	A/Prof Paul Thomas, Professor Owen Ung, Dr Ben Green, Cr Clement Wong, Professor Liz Kenny; A/Prof Karin Steinke, Colleen Niland (UQ), Professor Sunil Lakhani (UQ)	PETAL
Ryan Sommerville	Charles Lin, Jennifer Gillespie, Paul Thomas, Brett Hughes, Gishan Ratnayake, Jason Papacostas, Touraj Taheri, Maria Sathi, Markus Barth (UQ), Steffan Bollmann (UQ), Chris Oosthuizen (Mater Hospital), Catherine Barnett (PAH), Ashvini Abeysekara (SCUH), Matthew Fielder (SCUH)	Perineural Spread
Dr Nadeeka Dissanayaka	Ms Ji Hyun (Julia) Yang (UQCCR), Prof Gerard Byrne (RBWH; UQCCR), A/Prof David Copland (UQCCR), A/Prof John O'Sullivan (RBWH; UQCCR), A/Prof Katie McMahon (QUT, HIRF), Prof Nancy Pachana (UQCCR), Prof Peter Silburn (QBI), Prof George Mellick (Griffith University), Ms Tiffany Au (UQCCR), Dana Pourzinal (UQCCR), Elana Forbes (UQCCR)	PD-MCI
Nick Weber	Samuel Kyle, Paul Thomas, Glen Kennedy, Caitlin Thiru	Multiple Myeloma
Bjorn Burgher	Nikitas Koussis (QIMR), Genevieve Whybird (QIMR), Michael Breakspear (QIMR), James Scott	Microresonance
Anders Cervin		LYRA
Ashleigh Scott	Glen Kennedy, Siok-Keen Tey, David Pattison, Paul Thomas	GE-180 PET in GVHD
Jason Butler	Haem Staff – Dr's Curley, Durrant, Morris, Pillai, Tey, Weber and Kennedy	Echo – Acerta Pharma

Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Ashleigh Scott	Glen Kennedy , Katie McMahon (<i>HIRF, QUT</i>), Olivier Salvado (<i>CSIRO</i>), Ada Lo, ZKate Thompson	MINERAL
Nicholas Weber	Haem Staff – Dr’s Curley, Durrant, Morris, Pillai, Tey, Weber and Kennedy	Beigene 304
Manoj Bhatt	David Pattison, David Wyld Matthew Burge , Rahul Ladwa (<i>PAH</i>), Peter Garcia, Kevin Lee, Samuel Kyle, Jye Smith , Steven Rose (<i>CSIRO</i>)	Ga ⁶⁸ -DOTATATE

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Kaye Petherick, Judith McLean, Lowanna Dunn, Deborah Anderson, Cynthia Cliff, Marisha McAuliffe (<i>QUT</i>)	Alison Alexander, Gillian Nasato, Michael Smith, Ian Drake, Jodie Stewart, Glen Kennedy	Cancer Care Information Portal for Cancer Patients in Brisbane’s Metro North Area
Stuart Crozier (<i>UQ</i>), Jurgen Fripp (<i>CSIRO</i>), Craig Engstrom (<i>UQ</i>), Ales Neubert (<i>CSIRO</i>), Shekhar Chandra (<i>UQ</i>)		Imaging Technologies to Measure Cartilage Structure and Composition CEST
John Woodford (<i>QIMR</i>)	James McCarthy (<i>RBWH, QIMR</i>), Paul Thomas, Jennie Roberts , Ashley Gillman (<i>CSIRO</i>), Stephen Rose (<i>CSIRO</i>)	Malaria
Sarah Ward and Michael Breakspear (<i>QIMR</i>)	Eamonn Eeles (<i>RBWH, PCH</i>), Robert Adam, Kana Appadurai, Shanthi Kanagaraja, Elizabeth Waldie, Madeleine Cameron, Suzie Thistlethwaite	FunDemental
Greig de Zubicaray (<i>QUT</i>), Sonia Brownsett (<i>QUT</i>), Matteo Mascelloni (<i>QUT</i>),	Katie McMahon (<i>HIRF, QUT</i>)	ENVPWI
Lee Reid (<i>CSIRO</i>), Jurgen Fripp (<i>CSIRO</i>)	Marita Prior, Lindy Jeffree, Alan Coulthard	CONSULT II
Maureen Ross (<i>QUT</i>), Mia Woodruff (<i>QUT</i>), Sean Powell (<i>QUT</i>), Mark Allenby (<i>QUT</i>), Andy Pandey (<i>QUT</i>), Davide Fontassa (<i>QUT</i>)	Katie McMahon (<i>HIRF/QUT</i>), Clare Berry, Maya Aghajanyan	BIOFAB
Deborah Theodoros (<i>UQ</i>), Brooke-Mai Whelan (<i>UQ</i>), Elizabeth Cardell (<i>Griffith</i>), Emma Finch (<i>UQ</i>), Adam Vogel (<i>Uni of Melbourne</i>), Stacie Park (<i>ACU</i>), Louise Cahill (<i>UQ</i>), David Copland (<i>UQ</i>), Alan Coulthard (<i>UQ</i>), Megan McAuliffe (<i>University of Canterbury</i>)	Katie Mc Mahon (<i>HIRF/QUT</i>), Anna Farrell	BeClear
Professor Michael Pender (<i>UQ</i>)	Dr Zara Ioannides, Dr A Swayne , Nanette Douglas, Gem Mackenroth and Kaye Hooper	ATA188-MS-101

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Dr Joanne George	Lions Dunning-Orlich NHMRC New Investigator Award 2019	Highest ranked NHMRC New Investigator Project grant in the Faculty of Medicine, UQ
Bjorn Burger and the Metro-North early psychosis service	Clinical Research Team Award	Metro-North Research Excellence Awards 2019
Dr Leanne Sakzewski	UQ Foundation Research Excellence Award	Research Week, The University of Queensland
Dr Philip Mosley	Australian Society for Medical Research Postgraduate Medal 2018	ASMR Awards
Dr Philip Mosley	American Society for Stereotactic and Functional Neurosurgery Best Abstract	ASSFN Biennial Meeting, Denver, 2018
Dr Philip Mosley	Parkinson’s QLD HDR Travel Award	World Parkinson Congress, Kyoto, Japan, 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Matthew Burge; Vicki Whitehall	Medical Oncology, cancer care services	Molecular Subtyping of KRAS Mutant Colon Cancers to Inform Clinical Decision Making	Tour de Cure	\$100,000.00	\$100,000.00	2019
Janette Vardy, Matthew Burge	Medical Oncology, cancer care services	CHALLENGE: Colon Health and Life Long Exercise ChaNGE.	NHMRC	\$1.121million	\$224,378.20	2019-2023
Matthew Burge	Medical Oncology, cancer care services	MONARCC study	AMGEN	\$650,000.00	\$216,666.67	2019-2021
Dr Joanne George, Dr Alex Pagnozzi, Dr Samudragupta Bora	Queensland Cerebral Palsy and Rehabilitation Research Centre, CSIRO, Mater-UQ	Prediction of childhood Brain Outcomes in infants born preterm using neonatal MRI and concurrent clinical biomarkers - PREBO-6	NHMRC	\$831,700.36	\$148,463.78	2019-2023
Riddell A	RBWH Colorectal Research Unit	Targeted Radionuclide Therapy for Metastatic Lower Gastrointestinal Tumours	Redcliffe Private Practice Fund	\$10,000.00	\$10,000.00	2019
Boyd R, Davies P, Ziviani J, Trost S, Barber L, Ware R, Rose S, Whittingham K, Whitty J, Bell K	Queensland Cerebral Palsy and Rehabilitation Research Centre (UQ), Griffith, CSIRO, Children's Health Queensland	PREDICT outcomes to inform services for children with cerebral palsy	NHMRC	\$774,450.00	\$59,932.00	2014-2020
Ryan Sommerville, Jennifer Gillespie	Head and Neck Cancer Multidisciplinary Team	Utility of High-Resolution MRI in Evaluating Perineural Spread in Head and Neck Cancers	Royal Brisbane and Women's Hospital Foundation Diamond Care Grant	\$31,200.00	\$31,200.00	2019
Dr Leanne Sakzewski, Prof Roslyn Boyd, Prof Yannick Bleyenheuft, Prof Iona Novak, Prof Catherine Elliott, Dr Catherine Morgan, Dr Kerstin Pannek	Queensland Cerebral Palsy and Rehabilitation Research Centre (UQ), Université catholique de Louvain, USyd, Curtin Uni, U Aukland, CSIRO	HABIT-ILE: A randomised trial of Hand Arm Bimanual Intensive Training Including Lower Extremity training for children with bilateral cerebral palsy	NHMRC	\$1,100,902.90	\$299,707.00	2018-2021
Dr Philip Mosley	QIMR Berghofer MRI	Brain Networks Predicting Impulsivity after Subthalamic Deep Brain Stimulation for Parkinson's Disease	Advance Queensland	\$522,000.00	\$180,000.00	2016-2019
Rutger de Zoete, Jeff Coombes, Michele Sterling	UQ	The Central Neurobiological Effects of Exercise in Individuals with Chronic Pain	UQ HABS	\$32,000.00	\$32,000.00	2019
Claire Wainwright; Dr David Reid; Scott Bell, Emmanuelle Fantino, Abdullah A Tarique; Tony Kettle, Nina Dickerhof, Jason Dowling, Andrew Paproki, Tim Rosenow, Andrew Butler	CSIRO, CHRC, TPCH, QCH, CFFR, Telethon Kids Institute	Early life origins of CF lung disease	Cystic Fibrosis Foundation	\$2.3million	\$556,574.00	2019-2021
Manoj Bhatt	Department of Nuclear Medicine, RBWH	Pilot project to assess liver metastases by comparing noel, dynamic and static functional imaging and also morphological imaging with standard of care in HQO Grade I and Grade II Neuroendocrine tumours (NET)	2016 RBWH HIRF Seed Funding Grant	\$38,500.00	\$24,700.00	2018-2019

2019 Research Publications

Journal Articles

1. B Lee, L Lipton, J Cohen, J Tie, A A Javed, L Li, D Goldstein, **M Burge**, P Cooray, A Nagrial, N C Tebbutt, B Thomson, M Nikfarjam, M Harris, A Haydon, B Lawrence, D W M Tai, K Simons, A M Lennon, C L Wolfgang, C Tomasetti, N Papadopoulos, K W Kinzler, B Vogelstein, P Gibbs, Circulating tumor DNA as a potential marker of adjuvant chemotherapy benefit following surgery for localized pancreatic cancer, *Annals of Oncology* mdz200, <https://doi.org/10.1093/annonc/mdz200>
2. Christine Semira; Hui-Li Wong, **Matthew Burge** et al. Chemotherapy and biologic use in routine management of metastatic colorectal cancer: is clinical practice following the evidence? *Internal Medicine Journal* 49 (2019) 446-54
3. Tie J, Cohen JD, Wang Y, **M Burge** et al. Serial circulating tumour DNA analysis during multimodality treatment of locally advanced rectal cancer: a prospective biomarker study. *Gut* 2019; 68:663-671
4. Shehara Mendis, Sophie Beck, Belinda Lee, Margaret Lee, Rachel Wong, Suzanne Kosmider Jeremy Shapiro Desmond Yip, Simone Steel, Louise Nott Ross Jennens, Lara Lipton, **Matthew Burge**, Kathryn Field, Sumitra Ananda, Hui-Li Wong, Peter Gibbs. Right versus left sided metastatic colorectal cancer: Teasing out clinicopathologic drivers of disparity in survival. *Asia-Pac J Clin Oncol.* 2019;1-8
5. **Matthew Burge**, Timothy Price, Christos S. Karapetis. First Line Therapy for Metastatic Colorectal Cancer: Current Perspectives and Future Directions. *Asia-Pac J Clin Oncol.* 2019; 15:3-14
6. Christine Semira, Ben Tran, **Matthew Burge**, Lara Lipton, Peter Gibbs et al. Chemotherapy and biologic use in the routine management of metastatic colorectal cancer in Australia: is clinical practice following the evidence? *Internal medicine Journal.* 49(4): 446-454, 2019
7. Cuda T, Riddell A, Lyons N, Rose S, **Wyld D, Clark D, Stevenson A**, Hooper J, Puttick S, **Thomas P**. Quantifying 68Ga-PSMA-11 Uptake in Metastatic Colorectal Cancer: A Prospective PET Imaging Pilot Study (currently under review with *Journal Nuclear Medicine*)
8. LJ Heame, DP Birney, L Cocchi, JB Mattingley. The Latin Square Task as a Measure of Relational Reasoning. *European Journal of Psychological Assessment*
9. A Kottaram, LA Johnston, L Cocchi, EP Ganella, I Everall, C Pantelis, ... Brain network dynamics in schizophrenia: Reduced dynamism of the default mode network. *Human brain mapping* 40 (7), 2212-2228
10. Cash RFH, Cocchi L, Anderson R, Rogachov A, Kucyi A, Barnett AJ, Zalesky A, Fitzgerald PB. A multivariate neuroimaging biomarker of individual outcome to transcranial magnetic stimulation in depression. *Hum Brain Mapp.* 2019 Jul 22. doi: 10.1002/hbm.24725
11. Cash RFH, Zalesky A, Thomson RH, Tian Y, Cocchi L, Fitzgerald PB. Subgenual Functional Connectivity Predicts Antidepressant Treatment Response to Transcranial Magnetic Stimulation: Independent Validation and Evaluation of Personalization. *Biol Psychiatry.* 2019 Jul 15;86(2): e5-e7. doi: 10.1016/j.biopsych.2018.12.002
12. Di Biase MA, Cropley VL, Cocchi L, Fornito A, Calamante F, Ganella EP, Pantelis C, Zalesky A. Linking Cortical and Connectional Pathology in Schizophrenia. *Schizophr Bull.* 2019 Jun 18;45(4):911-923. doi: 10.1093/schbul/sby121
13. Ren Y, Nguyen VT, Sonkusare S, Lv J, Pang T, Guo L, Eickhoff SB, Breakspear M, Guo CC. Effective connectivity of the anterior hippocampus predicts recollection confidence during natural memory retrieval. *Nature communications.* 2018 Nov 19;9(1):4875
14. Douglas RG, Psaltis AJ, Rimmer J, Kuruvilla T, **Cervin A**, Kuang Y. Phase 1 clinical study to assess the safety of a novel drug delivery system providing long-term topical steroid therapy for chronic rhinosinusitis. *Int Forum Allergy Rhinol.* 2019 Apr;9(4): 378-387. doi:10.1002/alr.22288. Epub 2019 Jan 15
15. Bachert C, Han JK, Desrosiers M... **Cervin AU**, ...Mannent LP. Efficacy and safety of dupilumab in patients with severe chronic rhinosinusitis with nasal polyps (LIBERTY NP SINUS-24 and LIBERTY NP SINUS-52): results from two multicentre, randomised, double-blind, placebo-controlled, parallel-group phase 3 trials. *Lancet.* Accepted
16. Burgess A, Boyd RN, Ziviani J, Chatfield MD, Ware RS, Sakzewski L. Stability of the Manual Ability Classification System in young children with cerebral palsy. *Developmental Medicine & Child Neurology* 2019, 61(7): 798-804. doi: 10.1111/dmcn.14143
17. Reedman S, Boyd RN, Trost SG, Elliott C, Sakzewski L. Efficacy of Participation-focused therapy on performance of physical activity participation goals and habitual physical activity in children with cerebral palsy: A randomized controlled trial. *Archives of Physical Medicine and Rehabilitation* 2019, 100(4):676-686. doi: 10.1016/j.apmr.2018.11.012
18. Sakzewski L, Sicola E, Verhage CH, Sgandurra G, Eliasson AC. Development of hand function in the first year of life of infants with unilateral cerebral palsy. *Developmental Medicine & Child Neurology* 2019, 61(5):563-569. doi: 10.1111/dmcn.14091
19. Campbell M, Ziviani J, Stocker C, Khan A, Sakzewski L. Neuromotor performance in infants before and after early open-heart surgery and risk factors for delayed development at six months of age. *Cardiology in the Young* 2019, 29(2):110. doi: 10.1017/S1047951118001622
20. Burgess A, Ziviani J, Ware RS, Boyd RN, Sakzewski L. Self-care in children with cerebral palsy and its relationship to manual ability: A longitudinal study. *Developmental Medicine & Child Neurology* 2019 61(5):570-578. doi: 10.1111/dmcn.14049
21. Mosley, P.E., Marsh, R., Perry, A., Coyne, T. & Silburn, P. (2018) Persistence of mania after cessation of stimulation following subthalamic deep brain stimulation for Parkinson's disease. *Journal of Neuropsychiatry and Clinical Neurosciences.* 30: 246-249
22. Mosley, P.E., Breakspear, M., Coyne, T., Silburn, P. & Smith, D. (2018) Caregiver burden and caregiver appraisal of psychiatric symptoms are not modified by subthalamic deep brain stimulation for Parkinson's disease. *Nature Parkinson's Disease.* 4: 12
23. Mosley, P.E., Smith, D., Coyne, T., Silburn, P., Breakspear, M. & Perry, A. (2018) The site of stimulation moderates neuropsychiatric symptoms after subthalamic deep brain stimulation for Parkinson's disease. *NeuroImage: Clinical.* 18: 996-1006
24. Mosley, P.E., Robinson, K., Coyne, T., Silburn, P., Breakspear, M. & Carter, A. (2019) A qualitative analysis of neuropsychiatric symptoms after subthalamic deep brain stimulation for Parkinson's disease. *Neuroethics.* Published online ahead of print
25. Paliwal, S., Mosley, P.E.*, Breakspear, M., Coyne, T., Silburn, P., Aponte, E. & Stephan, K. (2019) Subjective estimates of uncertainty and volatility during gambling predict impulsivity after subthalamic deep brain stimulation for Parkinson's disease. *Scientific Reports.* In press. *Co-first author

Journal Articles (cont)

26. Mosley, P.E., Paliwal, S., Robinson, K., Coyne, T., Silburn, P., Tittgemeyer, M., Stephan, K., Breakspear, M. & Perry, A. (2019) The structural connectivity of discrete networks underlies impulsivity and gambling in Parkinson's. Brain. In press.

Conference Publication (reviewed)

1. Tie J, Cohen J, Wang Y, Li L, Lee M, Wong R, Kosmider S, Wong H-L, Lee B, **Burge ME**, Tip D, Karapetis CS, Price TJ, Tebbut NC, Haydon AM, Tomasetti C, Papadopoulos N, Kinzler KW, Vogelstein B, Gibbs P. A pooled analysis of multicentre cohort studies of post-surgery circulated tumour DNA (ctDNA) in early stage colorectal cancer. J Cinc Oncol, 2019 (suppl, abstr 3518)
2. Mendis SR, Lee B, Lee M, Wong R, Kosmider S, Shapiro JD, Yip D, Steel SA, Nott LM, Jennens R, Lipton LR, **Burge ME**, Field KM, Ananda S, Beck S, Wong H-L, Gibbs P. J Cinc Oncol, 2019 (suppl, abstr 623).

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. Paproki A., Dowling J, **Wainwright C**, Rose S, Invited speaker and panelist at the 2019 international cystic fibrosis workshop organized by Vertex Pharmaceuticals: “Innovative medical image informatics for improved clinical management of cystic fibrosis”
2. **Dissanayaka N**, fMRI Markers for Mild Cognitive Impairment in Parkinson's disease. Parkinson's Disease Neuroimaging Symposium, Las Vegas, USA July 2019
3. **Dissanayaka N**, Yang J, fMRI Markers for Mild Cognitive Impairment in Parkinson's disease. Department of Neurology Research Seminar Series, August 2019
4. Sakzewski L. Unmasking the black box of participation-focused therapy for children with cerebral palsy. European Academy of Childhood Disability, Paris, France, March 2019
5. Paproki A., Dowling J, Wainwright C, Rose S, invited speaker and panelist at the 2019 international cystic fibrosis workshop organized by Vertex Pharmaceuticals: “Innovative medical image informatics for improved clinical management of cystic fibrosis”.

Oral Presentations

1. Abeysekara A, **Sommerville R**, Lin C, Taheri T, **Sommerville J**. “Head and Neck Cancer with Perineural Spread: Pre-Operative MRI Compared with Histopathology Assessment of Zonal Classification”. Australian and New Zealand Head and Neck Cancer Society (ANZHNC), September 2019
2. Sakzewski L, Verhage C, Sicola E, Eliasson AC. Development of hand function during the first year of life in children with unilateral cerebral palsy. American Academy of Cerebral Palsy and Developmental Medicine, 9-13 October 2018, Cincinnati USA. Developmental Medicine & Child Neurology 2018, 60(S3):65-6
3. Mosley PE, Neurosurgery for psychiatric disorders: an update, RANZCP Congress, Cairns, Australia, 2019.

Poster Presentations

1. Wong H-L, **Burge M** et al, Understanding variation in treatment sequences and outcomes in metastatic colorectal cancer. AGITG ASM 2019
2. Kumari S, **Burge M** et al. Outcomes following resection of colorectal cancer liver metastases in the older patient. AGITG ASM 2019
3. Wong H-L, **Burge M** et al, A pooled analysis of multicentre cohort studies of post-surgery circulating tumour DNA in early stage colorectal cancer. AGITG ASM 2019
4. Collens S, Ahearn E, Kuchal A, **Pritchard W**, **Whitehall V**, **Eastgate M**, **Wyld D**, **Burge M**. Trends in RAS testing in metastatic colorectal cancer cases in a real-world cohort study. AGITG ASM 2019
5. Chong C, Jalali A, Wong H, Loft M, Wrong R, Lee M, Gately L, Shapiro JD, Kosmider S, Tie J, Ananda S, Ma B, **Burge M**, Jennens R, Tran B, Lee B, Lim L, Dean A, Nott L, Gibbs P. Evolution of RAS mutation analysis in Australasian patients with metastatic colorectal cancer. AGITG ASM 2019
6. Cuda T, Riddell A, Lyons N, Rose S, **Wyld D**, **Clark D**, **Stevenson A**, Hooper J, Puttick S, **Thomas P**. Quantifying ⁶⁸Ga-PSMA-11 Uptake in Metastatic Colorectal Cancer: A Prospective PET Imaging Pilot Study. Australia and New Zealand Society of Nuclear Medicine, Annual Scientific Meeting
7. Abeysekara A, Fielder M, **Sommerville J**, **Thomas P**, Lin C, Al Najjar A, Barth M, **Sommerville R**. “Utility of Ultra High-Resolution MRI in Evaluating Perineural Spread in Head and Neck Cancers”. The Australian Society of Otolaryngology Head and Neck Surgery (ASOHS), March 2019
8. Yang JH, **McMahon KL**, Copland DA, Byrne GJ, Mitchell LK, O'Sullivan JD, Dissanayaka NNW. *Identifying altered resting-state network in Parkinson's disease with mild cognitive impairment*. 23rd Annual Meeting of the Organisation for Human Brain Mapping, June 2019
9. Mosley PE, Structural connectivity and impulsivity after deep brain stimulation for Parkinson's disease, World Parkinson Congress, Kyoto Japan, 2019
10. Paproki A. et al. “Paediatric lung imaging – a new paradigm for cystic fibrosis management” – AEHRC colloquium abstract.

Other communications and outputs:

PAEDIATRIC A-T

The project (and MR images) has been presented at the bi-annual Ataxia-Telangiectasia clinic organized by Claire Wainwright (Queensland Children's Hospital). The images received positive from respiratory clinicians involved in AT research. The MRI protocol could be crucial in diagnosing lung disease in children with AT (manifested as anomalies similar to Cystic Fibrosis) given that these immunocompromised patients cannot get imaged using CT imaging. The results from the project have also been included in a report provided to the AT society.

HABIT-ILE: 10 News feature of HABIT-ILE (31/06/2019). <https://www.facebook.com/watch/?v=1205603096268506>.

ENVPWI: A DAAD grant application was submitted (outcome not yet known) which builds on the results of this study.



Back: Michael O'Sullivan (*HIRF Director*), Peta Gray (*HIRF Operations Manager*), Clare Berry (*HIRF Radiographer*), Katie McMahon (*HIRF Deputy-Director*), Kunal Oojorah (*Radiographer*)

Front: Hilarie Richards (*HIRF Administration Officer*), Tracey Burke (*Radiographer*)

JAMIESON TRAUMA INSTITUTE



Professor Michael Schuetz
Director

Jamieson Trauma Institute

The Jamieson Trauma Institute (JTI) is named after one of the country's most renowned and respected medical minds, Dr Kenneth Grant Jamieson. JTI's mission is to advance trauma care across Queensland and Australia through a collaboration of service and research partners and the integration of trauma services. While contributing to national and international evidence, the institute plays a key role in identification and implementation of solutions to the unique trauma issues facing Queensland.

JTI is supported by a joint funding venture between Metro North HHS and the Motor Accident Insurance Commission (MAIC) and is under the directorship of Professor Michael Schuetz. The institute is dedicated to increasing clinician-driven research and being co-located with a research-active teaching hospital is key to enhancing interactions with clinician researchers and fostering strong collaborative research partnerships. As an internationally recognised trauma and burns hospital, with strong ties to the Australian Defence Force (ADF) and with extensive research and education capacity, RBWH is a perfect fit for JTI, and will be fundamental to furthering trauma research and improvement.

Contributing to JTI's systems capability are representatives and honorary positions from Queensland University of Technology, The University of Queensland (UQ), Monash University, Royal Australian College of Surgeons, ADF UQ Military Medicine and Metro South HHS. JTI also has ongoing collaborations with Queensland Brain Institute (UQ), Herston Biofabrication Institute, the Herston Imaging Research Facility, rehabilitation services, research centres and our main funding partners, Metro North HHS (MNHHS) and MAIC.

In its second year, 2019 has seen the expansion of JTI capability with new staffing appointments and extensive collaborations resulting in a strategic research program aimed to deliver tangible outcomes. Priorities for JTI research are quality and data analytics, injury prevention, clinical trials, innovation, diagnostics, virtual and augmented reality, rehabilitation and outcome measurement, all with a focus on translation, education and training to improve patient care. This year, JTI established a new theme, Quality of Patient Care and Processes, with the goal of enhancing the efficiency of trauma management through research and innovation.

The Trauma Data Warehouse project, which aims to enable research to improve the care and outcomes of injured patients in Queensland, gained momentum this year thanks to JTI's key leadership roles. The data and analytics unit progressed research on linked trauma data, and presented analysis of trauma trends, costs and outcomes at several conferences and to key stakeholders. JTI researchers were involved in 27 collaborative clinical research projects, with 15 new initiatives in 2019 and four project completions. JTI has provided seed funding to 11 collaborative projects that will lay the groundwork for strong and ongoing collaborations with MNHHS, university and industry partners from 2020.

JTI is now delivering tangible clinical and policy benefits. The institute has established itself as the key contact for trauma-related Queensland Health Ministerial requests and briefings. It has also supported six federal government submissions using research and data to support safety regulatory initiatives related to quad bikes, personal mobility devices, such as e-scooters, and consumer products, and contributed to a literature review and consultation process to inform the National Injury Prevention Strategy development. Furthermore, research conducted at JTI has delivered a set of recommendations on pre-hospital retrieval processes for road trauma patients in Queensland.

JTI will continue to generate the evidence to support improvements in trauma care through engagement with our partners, stakeholders, end-users and patients.

JAMIESON TRAUMA INSTITUTE (CONT)

JTI THEMES:

- New: Quality of Care and Processes
- Data Quality and Analytics
- Diagnostics and Innovation
- Rehabilitation and Outcome Measurement
- Virtual Trauma Centre
- Clinical Trials
- Education and Training
- Injury Prevention.

Research highlights:

The Jamieson Trauma Institute (JTI) brings together multiple university, health service and industry partners to advance trauma prevention, research, systems, and clinical management with the goal to deliver optimal care for people who suffer a traumatic injury. The team includes experts in data analytics, injury epidemiology, rehabilitation, biostatistics and health economics, to develop a research program spanning the whole continuum of trauma care.

In 2019, its second year of activity, JTI continued to build momentum through partnerships, increased service capability and strategic planning. This year JTI's research program delivered a total of 24 peer-reviewed journal articles and several conference presentations. JTI continued to support the Trauma Data Warehouse development project, whose purpose is to integrate data across the continuum of trauma care in Queensland to facilitate system-level audits and support state-wide trauma quality improvement, inform trauma and injury prevention policy, and enable research to improve the care and outcomes of injured patients in Queensland. JTI trauma data analytics team continued accumulating and analysing linked trauma data to enable investigation of trauma trends, patterns, burden, costs, and outcomes. The team has forged a strong collaborative relationship with the Queensland Health Statistical Services Branch through various research projects. The Statistical Services Branch now regularly engages JTI to respond to all trauma-related Queensland Health Ministerial Requests and Briefings. Furthermore, the JTI trauma data analytics team were involved in four federal government submissions utilising research and data to support regulatory initiatives to improve the safety of quad bikes, personal mobility devices and consumer products. They also contributed to a literature review and consultation process to inform the National Injury Prevention Strategy development, led by the George Institute.

JTI has made significant advances in the research of traumatic brain injury (TBI), with two new projects and funding obtained for a third project commencing in 2020. Progress has also been made towards the initiation of a multicentre research project aimed at predicting patient outcomes after TBI, with promising discussions across research institutions and four major Queensland hospitals. Participation in the federal government's new Mission TBI (National TBI Committee) is key for the alignment of JTI's TBI program to national priorities. International activities include a multinational research grant awarded by the prestigious AO Foundation (world leaders in musculoskeletal surgical innovation), which will aim to improve worldwide trauma care systems through guidelines and advocacy. The establishment of the new Quality of Patient Care and Processes theme articulates JTI's engagement with research end users and service consumers.

A priority of the JTI has been seeking external funding and funding partners, with a total of nine successful research grant applications totalling \$8.8 million for use from 2020, and a JTI position funded by Clinical Excellence Queensland. JTI has provided seed funding to eleven collaborative projects that will lay the groundwork for further collaborations with MNHHS, university and industry partners in years to come.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Adam Mahoney	PhD, UQ (2018-current)	The spatial epidemiology of trauma in Queensland	Michael Reade, Kirsten, Vallmuur, Cate Cameron, Kerrie Mengerson
Martha Druery	PhD, UQ (2014-current)	Psychosocial outcomes post-major burn injuries in adults – a longitudinal exploratory study	Jeff Lipman, Peter Newcombe, Cate Cameron
Erin Pitt	PhD, GU (2013-2019)	Early childhood food consumption and dietary patterns: the influence of socio-economic and demographic factors and the food environment	Tracy Comans, Cate Cameron, Lukar Thornton, Danielle Gallegos
Catherine Niven	PhD, QUT (2017-current)	Evaluating consumer product safety regulator responses to hazardous child products in Australia and USA to inform health and safety policies and improve the safety of Australian children	Kirsten Vallmuur, Ben Matthews
Kim Vuong	PhD, QUT (2015-2019)	Quads and Kids: Understanding parents' knowledge, attitudes and beliefs about safety and risks	Angela Watson, Ioni Lewis, Kirsten Vallmuur
Caroline Gillespie	PhD, QUT (2015-current)	Influencing Safety in Supply Chains: Challenges and Opportunities for Businesses	Kirsten Vallmuur, Narelle Haworth, Darren Wishart
Anthony Holley	PhD, UQ (2018-current)	Observational studies of critical care practice in the management of severe burns patients in Australia and New Zealand	Michael Reade, Jeremy Cohen, Jeff Lipman
Elissa Milford	PhD, UQ (2014-2019)	Effects on the glycocalyx of resuscitation with immunomodulatory drugs and cryopreserved blood products in preclinical and clinical trauma	Michael Reade, John-Paul Tung
Andrew Flint	PhD, Monash (2017-current)	Retrospective analysis of the effect of platelet transfusion on infection complications in critical illness	Michael Reade, Zoe McQuilten, Elizabeth Wood
Gabriela Simonova	PhD, UQ (2016-2019)	Effect of storage conditions and duration on the clinical effect of platelet and red blood cell transfusion	Michael Reade, John-Paul Tung, Melinda Dean
Phillipa Johnson	M Psych, JCUS (2018-2019)	Understanding the maternal mental health continuum	Maria Hennessy
Yi Ren Tan	M Psych, JCUS (2018-2019)	Understanding wellbeing in Singapore	Maria Hennessy, Peter Chew
Divyot Kaur	M Psych, JCUS (2018-current)	Comprehensive assessment of wellbeing in Australia	Maria Hennessy
Claire Moffatt	PhD, JCUA (2016-2019)	The development of a novel positive health framework to improve the understanding of recovery after chronic subdural haematoma	Maria Hennessy, Nerina Caltabiano, Laurence Marshman
Paul Lee-Archer	PhD, UQ (2019-current)	A randomised controlled trial of dexmedetomidine to lessen postoperative agitation in children undergoing elective surgery or radiology	Michael Reade

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Michael Schuetz	Director, Chair of Trauma	0.5	External	Innovations, Diagnostics and Translation	QUT
Cate Cameron	Principal Research Fellow, Adjunct Associate Professor	0.6	Operational	Injury Prevention and Epidemiology	QUT
Maria Hennessy	Principal Research Fellow, Associate Professor in Clinical Psychology	1.0	Operational	Rehabilitation and Outcome Measurement	JCUS
David Douglas	Chair, Rehabilitation Medicine, Adjunct Associate Professor	0.5	Operational	Rehabilitation and Outcome Measurement	UQ

RBWH Research Staff with research roles, positions or appointments e.g. Coordinators, etc (cont)

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Victoria McCreanor	Senior Researcher (<i>Health Economist</i>)	0.9	Operational	Quality and Data Analytics	QUT
Jacelle Warren	Statistical Analyst	0.8	Operational	Quality and Data Analytics	
Michael Reade	Clinical Representative (<i>Australian Defence Force</i>), Professor of Military Medicine	0.1	Operational	Clinical Trials	UQ
Carl Lisec	Clinical Representative (<i>Burns and Trauma</i>), Senior Lecturer	0.1	Operational	Burns and Trauma	UQ
Jason Brown	Clinical Representative (<i>Burns and Trauma</i>)	0.1	Operational	Burns and Trauma	
Paul Thomas	Clinical Representative (<i>Diagnostics</i>), Associate Professor	0.25	Operational	Innovations, Diagnostics and Translation	UQ
Kevin Tetsworth	Clinical Representative (<i>Orthopaedics</i>) Adjunct Associate Professor	0.1	Operational	Orthopaedic Trauma	UQ
Beat Schmutz	Principal Research Fellow	0.5	Operational	Innovations, Diagnostics and Translation	QUT
Silvia Manzanero	Research Coordinator	1.0	Operational	n.a.	nil

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Cliff Pollard	Honorary Clinical Representative, Adjunct Associate Professor	Part-Time	Virtual Trauma Centre (VTC): Augmented Reality and Virtual Reality in Trauma Care	UQ
Kirsten Vallmuur	Honorary Principal Research Fellow, MAIC Principal Research Fellow	0.5	Quality and Data Analytics	QUT
Mark Midwinter	Honorary Clinical Representative, Professor of Clinical Anatomy	Part-Time	Virtual Trauma Centre (VTC): Augmented Reality and Virtual Reality in Trauma Care	UQ

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Maria Hennessy	Dion Lo (<i>JCUS</i>), Monique Kirk (<i>JCU</i>), Laurence Marshman (<i>JCU, TTH</i>)	Use of positive psychology interventions to improve mental health outcomes after mild to moderate TBI
Maria Hennessy	Dion Lo (<i>JCUS</i>), Monique Kirk (<i>JCU</i>), Laurence Marshman (<i>JCU, TTH</i>)	Evaluating the needs of people who have experienced TBI in regional areas
Maria Hennessy	Karen Sullivan (<i>QUT</i>), Heidi Zeeman (<i>Griffith</i>), Gary Mitchell (<i>ETC</i>), Craig Winter (<i>Neurosurgery</i>), Victoria McCreanor (<i>TI</i>), Jacelle Warren (<i>TI</i>)	Positive health outcomes after traumatic brain injury
Maria Hennessy	Karen Sullivan (<i>QUT</i>), Shaun Chandler (<i>QUT</i>)	Evaluating the needs of people who have experienced TBI in regional areas
Maria Hennessy	Michael Schuetz (<i>TI</i>), Karen Sullivan (<i>QUT</i>), Erwin Boettinger (<i>HPI, Germany</i>), Roberto Dillon (<i>JCUS</i>), Jason McMillen (<i>Neurosurgery</i>)	Digital health markers to predict emergence from PTA
Maria Hennessy	Laurence Marshman (<i>JCU, TTH</i>), Jessica McLellan (<i>JCU</i>), Lorryn Delle Baite (<i>UQ</i>)	Influence of opioids on PTA assessment
Maria Hennessy	Laurence Marshman (<i>JCU, TTH</i>), Lorryn Delle Baite (<i>UQ</i>)	Novel cognitive and behavioural assessment of PTA
Maria Hennessy	Cate Cameron (<i>TI</i>), Victoria McCreanor (<i>TI</i>), Jacelle Warren (<i>TI</i>), Kirsten Vallmuur (<i>TI</i>)	Epidemiology of traumatic brain injury in Queensland

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Kirsten Vallmuur	Matthew Hope <i>(PAH)</i> , Ben Beck <i>(Monash)</i> , Victoria McCreanor <i>(JT)</i> , Gary Mitchell <i>(ETC)</i> , Rob Eley <i>(PAH)</i> , Shefta Huda <i>(Logan)</i> , Cate Cameron <i>(JT)</i> , Jacelle Warren <i>(JT)</i>	Personal mobility device injuries: observational study using data from Brisbane
Cate Cameron	Jacobus Ungerer <i>(Pathology)</i> , Kirsten Vallmuur <i>(JT)</i> , Jacelle Warren <i>(JT)</i> , Victoria McCreanor <i>(JT)</i> , Cliff Pollard <i>(JT)</i> , Michael Schuetz <i>(JT)</i> , Tegwen Howell <i>(Consultant)</i> , Gary Mitchell <i>(ETC)</i>	Alcohol and injury: Prevalence study at RBWH ED
Cate Cameron	Bill Loveday <i>(MRQ)</i> , Kirsten Vallmuur <i>(JT)</i> , Victoria McCreanor <i>(JT)</i> , Melanie Proper <i>(MDPC)</i> , Jacelle Warren <i>(JT)</i> , Cliff Pollard <i>(JT)</i> , Nick Graves <i>(QUT)</i>	Prevalence and impact of opioid use pre- and post-trauma in Queensland: population-based data linkage study
Cate Cameron	Matthew Hope <i>(PAH)</i> , Victoria McCreanor <i>(JT)</i> , Jacelle Warren <i>(JT)</i> , Kirsten Vallmuur <i>(JT)</i> , Kevin Tetworth <i>(JT)</i> , Cliff Pollard <i>(JT)</i>	The burden and cost of pelvic and lower extremity orthopaedic injuries from land transport crashes in Queensland
Cate Cameron	Jacelle Warren <i>(JT)</i> , Michael Muller <i>(Burns)</i> , Michael Rudd <i>(Trauma Service)</i>	Epidemiology of burns patients admitted to the state-wide Adults Burns Service in Queensland: A 10year review
Kirsten Vallmuur	Angela Watson <i>(QUT)</i> , Paul Taylor <i>(MAIC)</i> , Victoria McCreanor <i>(JT)</i> , Cate Cameron <i>(JT)</i> , Jacelle Warren <i>(JT)</i>	An examination of the quality of injury data and patterns, trends and burden of injury for informing establishment of a statewide trauma data warehouse
Kirsten Vallmuur	Angela Watson <i>(QUT)</i> , Chris Uber <i>(UQ)</i> , Belinda Gabbe <i>(Monash)</i> , James Harrison <i>(Flinders)</i> , Son Ngheim <i>(Griffith)</i> , Cate Cameron <i>(JT)</i> , Jacelle Warren <i>(JT)</i> , Victoria McCreanor <i>(JT)</i>	Evaluation of ICD-10-AM based injury severity estimation models
Kirsten Vallmuur	Angela Watson <i>(QUT)</i> , Paul Taylor <i>(MAIC)</i> , Michael Clacher <i>(QLD Treasury)</i> , Sebastian Bielen <i>(OIR)</i> , Andrew Currie <i>(WorkCover)</i> , Cate Cameron <i>(JT)</i> , Jacelle Warren <i>(JT)</i> , Victoria McCreanor <i>(JT)</i>	Feasibility, requirements, and value of data linkage of motor vehicle accident compensation, workers compensation and health data in Queensland
Cate Cameron	Maura Desmond <i>(P.A.R.T.Y.)</i> , Michael Rudd <i>(Trauma Service)</i> , Cliff Pollard <i>(JT)</i> , Kerriane Watt <i>(ICU)</i>	A retrospective analysis of data collected from the P.A.R.T.Y. (Prevent Alcohol and Risk-Related Trauma in Youth) program 2010-2018
Michael Reade	Denese Marks <i>(Red Cross)</i> , Laurence Weinberg <i>(Austin Health)</i> , David Irving <i>(Red Cross)</i> , Zoe McQuilten <i>(Monash)</i> , Craig French <i>(Uni Melb)</i> , Alistair Royle <i>(RMH)</i> , Paul Bannon <i>(RPA)</i> , Lacey Johnson <i>(Red Cross)</i> , David Gattas <i>(USyd)</i>	A phase III multicentre blinded randomised controlled clinical trial of cryopreserved platelets vs. conventional liquid-stored platelets for the management of post-surgical bleeding (The Cryopreserved vs. Liquid Platelets trial: CLIP-II)
Victoria McCreanor	Christopher Smith <i>(Physiotherapy)</i> , Greg Kneebone <i>(oapl)</i> , Jerry van de Pol <i>(Orthopaedics)</i> , Mark Cruickshank <i>(Physiotherapy)</i> , Michael Schuetz , Peter Slattery <i>(Rehabilitation Engineering)</i> , Stefan Geiselbrechtinger <i>(OPED)</i> , Venerina Johnston <i>(UQ)</i>	Streamlining aftercare for ankle fractures using digital innovation

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Robert Andrews <i>(QUT)</i>	Moe Thandar Wynn <i>(QUT)</i> , Kirsten Vallmuur <i>(JT)</i> , Arthur ter Hofstede <i>(QUT)</i> , Stephen Rashford <i>(QAS)</i> , Emma Bosley <i>(QAS)</i> , Mark Elcock <i>(RSQ)</i>	Identifying pre-hospital retrieval processes for road trauma patients in Queensland
Deborah Theodoros <i>(UQ)</i> , Louise Cahill <i>(UQ)</i>	Jacelle Warren <i>(JT)</i> , Cate Cameron <i>(JT)</i> , Kirsten Vallmuur <i>(JT)</i>	Distribution and type of inpatient allied health services provided to patients following road traffic crashes across Queensland
David Liu <i>(UQ)</i>	Jason Pincus <i>(ICU)</i> , Elizabeth Hallt <i>(RBWH)</i> , Michael Reade <i>(JT)</i>	Clonidine at Low dosage postoperatively to Nocturnally Enhance Sleep (CLONES) phase II pilot trial
Stephen Bernard <i>(Monash)</i>	Michael Reade <i>(JT)</i> , Biswadev Mitra <i>(Monash)</i> , Russell Gruen <i>(ANU)</i> , Dashiel Gantner <i>(Alfred)</i> , Brian Burns <i>(USyd)</i> , Zsolt Balogh <i>(Uni Newcastle)</i>	Pre-hospital anti-fibrinolytics for traumatic coagulopathy and haemorrhage-2 (The PATCH2 Study)

Collaborative Research Activity involving RBWH Research Group / Department *(cont)*

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Gary Mitchell <i>(ETC)</i>	Cliff Pollard <i>(JTI)</i> , Fatima Nasrallah <i>(UQ)</i> , Michael O'Sullivan <i>(UQ)</i> , Jason Ross <i>(CSIRO)</i> , Louise Cullen <i>(ETC)</i> , Jack Taylor <i>(ETC)</i> , Nathan Brown <i>(ETC)</i>	The sensitivity and specificity of brain-origin circulating cell free DNA (ccfDNA) for the diagnosis of concussion and prediction of intracranial injuries
Peter Slattery <i>(Rehab Engineering)</i>	David Douglas <i>(JTI)</i> , Silvia Manzanero <i>(JTI)</i> , Oliver Mason <i>(Rehab Engineering)</i> , Gunjeet Minhas <i>(Pain Service)</i> , Sean Powell <i>(QUT)</i> , David Forrestal <i>(QUT)</i> , Jacob Skewes <i>(QUT)</i> , Mia Woodruff <i>(QUT)</i> , Carey Bayliss <i>(MSHHS Spinal Outreach Team)</i> , Lucy Maugham <i>(MSHHS Spinal Outreach team)</i> , Shailendra Maharaj <i>(QCH)</i> , Kristen Morris <i>(Medical Aids Subsidy Scheme)</i>	Personalised 3D printed reactive cushions for pressure wound management
Mathilde Desselle <i>(QUT)</i>	Paul Gray <i>(Pain Service)</i> , Elizabeth Vujcich <i>(Burns)</i> , Jason Brown <i>(Burns)</i>	Virtual Reality for Burn/Trauma Care
Ashish Wadhawan <i>(Orthopaedics)</i>	Michael Schuetz <i>(JTI)</i> , Kevin Tetsworth <i>(JTI)</i> , Beat Schmutz <i>(JTI)</i> , Pierrick Bourgeat <i>(CSIRO)</i> , Jurgen Fripp <i>(CSIRO)</i>	Development of an Artificial Intelligence screening system to identify patients requiring a CT scan following distal radius fractures

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Milford EM, Reade MC <i>(JTI)</i>	Felicity Hawker Prize for the best presentation by an Advanced Trainee of the College of Intensive Care Medicine of Australia and New Zealand for "Characterisation of the prolonged time course of syndecan-1 blood concentration as a marker of the endotheliopathy of trauma: a pilot cohort study."	College of Intensive Care Medicine of Australia and New Zealand Annual Scientific Meeting, Cairns, 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Cameron CM , Loveday B, Vallmuur K , Graves N, Proper M, Warren J , Bradford N, Carter H, Pollard C	JTI, Multidisciplinary Pain Centre	Opioid use in Queensland trauma patients: population-based data linkage study	RBWH and RBWH Foundation	\$36,809	\$36,809	2019
Mitchell R, Cameron CM	JTI	Impact of chronic health conditions and injury on school performance and health outcomes of children: pilot study	Philanthropic Funds	\$77,639	\$77,639	2019
Patel B, Rudd M, Pollard C	JTI, Trauma Service	Management of Splenic Injuries in Queensland: Retrospective trend analysis over 5 years and one-year prospective evaluation of clinical practice guideline implementation	2019 MAIC-RCS Trauma Scholarship	\$66,000	\$66,000	2019
Hunter K, Keay L, Lukaszyk C, Brown J, Clapham K, Curtis K, Ivers R, Cullen P, Vallmuur K , Scott D, Mitchell R	JTI	National Injury Prevention Strategy – Literature Review	Australian Government – Department of Health	\$131,756	\$131,756	2019
Brown J , Zephania Tyack, Steven McPhail, Michelle Donovan	JTI, Burns	Feasibility, acceptability, costs and preliminary effects of an innovative ablative fractional CO2 laser service for people with burns scars	RBWH and RBWH Foundation	\$39,944	\$39,944	2019
French C, Nichol A, Bellomo R, Cooper DJ, Bailey M, Higgins A, McArthur C, Hodgson C, Gabbe B, Duranteau J, Presneill J, Rosenfeld J, Napolitano L, Skrifvars M, Reade MC , Pettita V	ICU, JTI	ErythroPoietin alfa to prevent mortality and reduce severe disability in critically ill TRAUMA patients: a multicentre, stratified, double blind, placebo randomised controlled trial. (The EPO-TRAUMA trial)	MRFF	\$3.5 million	\$700,000	2019-2024

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Reade MC , Marks D, Weinberg L, Irving D, McQuilten Z, French C, Royse A, Bannon P, Johnson L, Gattas D	ICU, JTI	A phase III multicentre blinded randomised controlled clinical trial of cryopreserved platelets vs. conventional liquid-stored platelets for the management of post-surgical bleeding (The Cryopreserved vs. Liquid Platelets trial: CLIP-I)	NHMRC	\$1.8 million	\$450,000	2019-2023
Bernard S, Mitra B, Gruen R, Gantner D, Reade MC , Burns B, Balogh Z	ETC, ICU, JTI	Pre-hospital anti-fibrinolytics for traumatic coagulopathy and haemorrhage-2 (The PATCH2 Study)	NHMRC	\$656,000	\$328,000	2019-2020

2019 Research Publications

Journal Articles

- Andrews R, Wynn MT, **Vallmuur K**, Hofstede AHM, Bosley E, Elcock M. Leveraging Data Quality to Better Prepare for Process Mining: An Approach Illustrated Through Analysing Road Trauma Pre-Hospital Retrieval and Transport Processes in Queensland. *International Journal of Environmental Research and Public Health*. 2019. <https://doi.org/10.3390/ijerphxx010000>
- Butson B, Pearson A, & **Reade MC**. Project Wantok Haus Sik. *Journal of Military and Veterans' Health*. 2019;27(4):67-68
- Curtis K, Gabbe B, Shaban RZ, Nahidi S, Pollard C, **Vallmuur K**, ... Christey G. Priorities for trauma quality improvement and registry use in Australia and New Zealand. *Injury*. 2019. <https://doi:10.1016/j.injury.2019.09.033>
- Dhanani J, Roberts J, **Reade MC**. Nebulized tranexamic acid for hemoptysis associated with submassive pulmonary embolism. *Journal of Aerosol Medicine and Pulmonary Drug Delivery*. 2019. <http://doi.org/10.1089/jamp.2019.1534>
- Frossard L, Jones MWM, Stewart I, Leggat PA, **Schuetz M**, Langton C. Kinetics of lower limb prosthesis: automated detection of vertical loading rate. *Prosthesis*. 2019;1(1)16-28
- Holley AD**, **Reade MC**, Lipman J, Delaney A, Udy A, Lee R, ... Cohen J. Survey of critical care practice in Australian and New Zealand burn referral centres. *Critical Care and Resuscitation*. 2019;21(4):303-304
- Irving A, Higgins A, Ady B, Bellomo R, Cooper D J, French C, ... McQuilten ZK (inc. **Reade MC**). Fresh Red Cells for Transfusion in Critically Ill Adults: An Economic Evaluation of the Standard Issue Transfusion Versus Fresher Red-Cell Use in Intensive Care (TRANSFUSE) Clinical Trial. *Critical Care Medicine*. 2019;47(7):e572-e579. <https://doi:10.1097/ccm.0000000000003781>
- Karbysheva S, Butini ME, Di Luca M, Winkler T, **Schuetz M**, Trampuz A. Chemical biofilm dislodgement with chelating and reducing agents in comparison to sonication: implications for the diagnosis of implant associated infection. *bioRxiv*. 2019. <https://doi.org/10.1101/604637>
- Milford EM and **Reade MC**. Resuscitation fluid choices to preserve the endothelial glycocalyx. *Critical Care*. 2019. <https://doi.org/10.1186/s13054-019-2369-x>
- Moffatt C, **Hennessey MJ**, Marshman LAG, Manickam A. Long-term health outcomes after chronic subdural haematoma. *Journal of Clinical Neuroscience*. 2019. <https://doi.org/10.1016/j.jocn.2019.04.039>
- Niven CM, Mathews B, Harrison JE, & **Vallmuur K**. Hazardous children's products on the Australian and US market 2011-2017: an empirical analysis of child-related product safety recalls. *Injury Prevention*. 2019. <https://doi:10.1136/injuryprev-2019-043267>
- Reade MC**. Addressing high practice variability in reported management of burns. *Critical Care and Resuscitation*. 2019;21(4):233-235
- Reade MC**. Delirium: one size does not fit all. *Internal Medicine Journal*. 2019;49(12):1469-1471. <https://doi:10.1111/imj.14656>
- Reade MC**. How urgent is an urgent craniotomy in the deployed military context? A retrospective observational study. *Journal of Military and Veterans' Health*. 2019;27(4):48-49
- Reade MC**. Prehospital antibiotics – a narrative review and rationale to change ADF practice. *Journal of Military and Veterans' Health*. 2019;27(4):66
- Reade MC**, Marks DC, Bellomo R, Deans R, Faulke DJ, Fraser JF, Gattas DJ, Holley AD, Irving DO, Johnson L, Pearse BL, Royse AG, Wong J. A randomized, controlled pilot clinical trial of cryopreserved platelets for perioperative surgical bleeding: The CLIP-I trial. *Transfusion*. 2019. <https://doi.org/10.1111/trf.15423>
- Russow G, **Schuetz M**, Berner A. Locking Plate Osteosynthesis. *OP-Journal*. 2019. <https://doi.org/10.1055/a-0755-0171>
- Shehabi Y, Howe BD, Bellomo R, Arabi YM, Bailey M, Bass FE, Kadiman S, MacArthur C, Murray L, **Reade MC**, ... Webb SA. Early Sedation with Dexmedetomidine in Critically Ill Patients. *The New England Journal of Medicine*. 2019;380(26):2506-2517. <https://doi:10.1056/NEJMoa1904710>
- Simonova G, Dean MM, **Reade MC** & Tung J-P. Characterization Of Immunomodulatory Mediators In Conventional And Cryopreserved Sheep Platelet Concentrates. *ISBT Meeting, Basel. Vox Sanguinis*. 2019;114(Suppl 1):226. <https://doi.org/10.1111/vox.12792>

Journal Articles (cont)

20. Simonova G, Dean MM, **Reade MC** & Tung, JP (2019). Characterization of immunomodulatory mediators in sheep packed red blood cells: development of a robust transfusion model. ISBT Meeting, Basel. Vox Sanguinis. 2019;114(Suppl 1):226. <https://doi.org/10.1111/vox.12792>
21. Simonova G, Dean MM, **Reade MC** & Tung J-P (2019). Towards understanding of post-transfusion immunomodulation: sheep immune responses to lipopolysaccharide. ISBT Meeting, Basel. Vox Sanguinis. 2019;114(Suppl 1):226. <https://doi.org/10.1111/vox.12792>
22. Simonova G, Temple F, Johnson L, Marks D, **Reade MC** & Tung J-P, The Storage Mode of Sheep Platelet Concentrates Differentially Affects Microparticle Formation. ISBT Meeting, Basel. Vox Sanguinis. 2019;114 (Suppl 1):111. <https://doi.org/10.1111/vox.12792>
23. Smits E, Brakenridge C, Gane E, **Warren J**, Heron-Delaney M, Kenardy J & Johnston V. Identifying risk of poor physical and mental health recovery following a road traffic crash: An industry-specific screening tool. Accident Analysis & Prevention. 2019;132:105280. <https://doi.org/10.1016/j.aap.2019.105280>
24. Zenzes M, Bortel EL, Fratzl P, Mundlos S, **Schuetz M**, Schmidt H, Duda GN, Witte F, Zaslansky P. Normal trabecular vertebral bone is formed via rapid transformation of mineralized spicules: A high-resolution 3D ex-vivo murine study. Acta Biomaterialia. 2019. <https://doi.org/10.1016/j.actbio.2018.12.050>

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Schuetz M**. Working together: RACS QTC, STCN, JTI. RBWH Trauma Symposium, Brisbane, 22 February 2019
2. **Reade M**. How a military hospital prepares for a mass casualty event. ISICEM, Brussels, 19-22 March 2019
3. **Reade M**. Is clonidine just as good as dexmedetomidine? ISICEM, Brussels, 19-22 March 2019
4. **Reade M**. Prehospital antibiotic administration. ISICEM, Brussels, 19-22 March 2019
5. **Reade M**. How to get patients to sleep? ISICEM, Brussels, 19-22 March 2019
6. **Reade M**. Nerve agents: saving the patient and protecting the staff. ISICEM, Brussels, 19-22 March 2019
7. **Reade M**. How urgent is an urgent craniotomy? ISICEM, Brussels, 19-22 March 2019
8. **Brown J**. Biofabrication in Burns Treatment. 2019 Herston Biofabrication Institute Conference, Brisbane, 22 March 2019
9. **Tetsworth K**. Biofabrication in Orthopaedics. 2019 Herston Biofabrication Institute Conference, Brisbane, 22 March 2019
10. **Midwinter M**. Augmented Reality and Virtual Reality in Clinical Practice. 2019 Herston Biofabrication Institute Conference, Brisbane, 22 March 2019
11. **Reade M**. Defence Force transfusion innovations. ANZCA ASM, Kuala Lumpur, Malaysia, 1 May 2019
12. **Lisec C**. Trauma Update: Burns. QLD Autumn Symposium, Brisbane, 23 May 2019
13. **Schuetz M**. Improving the clinical outcome of peri-implant infections through multidisciplinary management and clinical guidelines. AOTP Scientific Congress, Taipei, Taiwan, 25 May 2019
14. **Brown J**. Laser for Burns Scar/Novosorb BTM. 6th National Burns Survivors Forum, Sunshine Coast, 30 May 2019
15. **Reade M**. Trials on the horizon. 2019 College of Intensive Care Medicine Annual Scientific Meeting, Cairns, 6-9 June 2019
16. **Reade M**. Blast. 2019 College of Intensive Care Medicine Annual Scientific Meeting, Cairns, 6-9 June 2019
17. **Vallmuur K**. Queensland Trauma Data Warehouse: Reading between the lines. 2019 College of Intensive Care Medicine Annual Scientific Meeting, Cairns, 6 - 9 June 2019
18. **Schuetz M**. Quality of Life, Pain and Mental Health Outcomes. IMPACT 2019, Brisbane. 10 Sep 2019
19. **Reade MC**. Military critical care. World Congress of Intensive Care, Melbourne. 14-18 Oct 2019
20. **Pollard C**, Best D, Faulkner B, Midwinter M, Phillips J, Poyser S, Santamauro C, Shuker M. Using Augmented Reality to improve Point-of-Care Support for Rural Generalists. Rural Medicine Australia 2019, Gold Coast. 26 Oct 2019
21. **Vallmuur K**. The value of linked health data for enhancing CTP scheme insights - Early findings. Rehabilitation Industry Group Meeting, Brisbane. 2 Dec 2019.

Oral Presentations

1. **Brown J** & Black N. Initial Experience and Cost Implications with a Novel Biodegradable Temporising Membrane (BTM) in Major Burns over 40%. JAB Burns Symposium, Maui, 5 February 2019
2. **Brown J** & Black N. Self-Immolation: A 20 Year Experience of Severe Self-Inflicted Burns in a State-Wide, Tertiary, Australian Burns Service. JAB Burns Symposium, Maui, 5 February 2019
3. Andrews R, Wynn M, ter Hofstede A, **Vallmuur K**, Bosley E, Rashford S, Elcock M. Getting There: Evidence-based Decision-making in Road Trauma Pre-hospital Transport and Care in Queensland. WADEM Congress on Disaster and Emergency Medicine, Brisbane, 7-10 May 2019
4. Santamauro C, McCurdie T, **Pollard C**, Shuker M. Exploring the Feasibility of Wearable Technologies to Provide Interactive Telepresence Sub-Specialist Support to Remote Clinicians Treating Patients with Traumatic Injuries. WADEM Congress on Disaster and Emergency Medicine, Brisbane, 7-10 May 2019

Oral Presentations (cont)

5. **Schuetz M.** International Trauma Services. WADEM Congress on Disaster and Emergency Medicine, Brisbane, 7-10 May 2019
6. **Reade M.** Does the Golden Hour Exist? WADEM Congress on Disaster and Emergency Medicine, Brisbane, 7-10 May 2019
7. Milford E, **Reade M.** Characterisation of the prolonged time course of syndecan-1 blood concentration as a marker of the endotheliopathy of trauma: a pilot cohort study. 2019 College of Intensive Care Medicine Annual Scientific Meeting, Cairns, 6-9 June 2019
8. **Reade MC.** Coagulopathy and fibrinolysis in trauma. Australian and New Zealand College of Veterinary Science Annual Scientific Conference, Gold Coast. 5 Jul 2019
9. **Reade MC.** Cryopreserved platelets in trauma. XXVII Congress of the International Society on Thrombosis and Haemostasis, Melbourne. 17 Jul 2019
10. **Reade MC.** Innovations in ADF transfusion practice: frozen platelets, freeze-dried plasma and whole blood. Australian Institute of Medical Scientists (AIMS) and the New Zealand Institute of Medical Laboratory Science (NZIMLS) Annual Scientific Congress, Gold Coast. 17 Sep 2019
11. Patel B, **Pollard C**, Wall D, Bain R, Davies S, Mott N, Grieve J, Rashid M, Ericksen D, Wullschlegler M, Rudd M. Outcomes of Splenic Injuries. Australasian Research Management Society, Adelaide. 17-20 Sep 2019
12. **Reade MC.** Sedation to avoid delirium – possible? World Congress of Intensive Care, Melbourne. 14-18 Oct 2019
13. Smits E, Brakenridge C, Gane E, **Warren J**, Heron-Delaney M, Kenardy J, Johnston V. A tool to identify risk of non-return to work following a road traffic crash: a screening tool. Transform 2019: Physiotherapy Conference, Adelaide, 19 Oct 2019
14. **Vallmuur K.** Responsive surveillance for prevention policy: A case study of the lime scooter trial in Brisbane. 14th Australasian Injury Prevention and Safety Promotion Conference, Brisbane. 25 Nov 2019
15. **Cameron C**, **Vallmuur K**, Tippet V, **Pollard C**, **Schuetz M.** Queensland Injury Prevention Knowledge Hub (QIP-KHub). 14th Australasian Injury Prevention and Safety Promotion Conference, Brisbane. 25-27 Nov 2019
16. **McCreanor V**, Hope M, **Cameron C**, **Warren J**, **Vallmuur K**, **Pollard C.** The burden and cost of pelvic and lower limb orthopaedic injuries from land transport crashes in Queensland. 14th Australasian Injury Prevention and Safety Promotion Conference, Brisbane. 25-27 Nov 2019
17. **McCreanor V**, **Warren J**, **Cameron C**, **Vallmuur K**, **Pollard C**, Hope M. Burden and cost of pelvic and lower limb injuries from road traffic crashes, in Queensland. 11th Health Services and Policy Research Conference, Auckland, NZ. 4-6 Dec 2019
18. **Reade MC.** Optimizing the management of pain, agitation/sedation and delirium throughout the ICU stay. Shaping Critical Care conference, Taipei, Taiwan. 2019
19. Flint A, McQuilten Z, Smith J, Bailey M, **Reade MC.** Predictive model for platelet transfusion in patients with acute haemorrhage. Military Health Services Research Symposium, Orlando, Florida, USA. 2019
20. **Reade MC.** Is the golden hour still relevant on the modern battlefield? United States Central Command Medical Co-operation and Exchange meeting, Tampa, Florida. 2019.

Poster Presentations

1. Devlin M, Williamson F, Wall D, Daelman T, Rudd M, Lipp T, Hamilton A, Handy M, Ross J, Jackman K, Grant K, Pearce S, Smith R, Lewis J, Vohland J, Grant A, Zheng O, Ashurst C, Klan M, Hacking C, Cleland P, **Warren J**, **Cameron C.** Performing the tertiary survey: A comparison of medical officer and trauma nurse. Poster presented at RBWH Trauma Symposium, Brisbane, 22 February 2019
2. Sharpless M, **Reade MC.** How long is too long? Identifying the culprit drug in anaphylaxis by timing of exposure – case report and literature review. ANZCA ASM, Kuala Lumpur, Malaysia, 1 May 2019
3. **Lisec C** & Sivasuthan G. Imaging in the diagnosis of thoracoabdominal penetrating injuries. RACS Scientific Meeting, Bangkok, 6-10 May 2019
4. **Lisec C** & Sivasuthan G. Epidemiology of penetrating thoracoabdominal trauma. RACS Scientific Meeting, Bangkok, 6-10 May 2019
5. **Hennessy M**, Stone K. Understanding the search for meaning in life: relationships with mental health, wellbeing and level of presence. 6th World Congress of Positive Psychology, Melbourne. 18-21 Jul 2019
6. **Warren J**, Theodoros D, **Vallmuur K**, **Cameron C**, Cahill L, Sterling M, Johnston V. Distribution and type of inpatient allied health services for people following road traffic crashes across Queensland – where are the gaps? National Allied Health Conference, Brisbane. 5-8 Aug 2019
7. **McCreanor V**, **Cameron C**, **Warren J**, **Vallmuur K**, **Pollard C.** The burden and cost of injury-related admissions in Queensland. Trauma 2019, Sydney. 4-6 Oct 2019
8. **Reade MC.** PATCH trial. College of Intensive Care Medicine of Australia and New Zealand Annual Scientific Meeting, Cairns. 2019
9. **Reade MC.** Challenges and opportunities in delivering deployable healthcare to the next war. NSW Defence Regional Health Advisory Group Annual Conference, Sydney. 2019
10. **Reade MC**, Bushby T, Davies K, Beresford-Jones P, Palling J, Evans N, Hasse K, Maher G. Prolonged Field Care. Combined Army Health Corps National Conference, Brisbane. 2019.

Other communications and outputs:

GOVERNMENT SUBMISSIONS

Vallmuur K, Hope M, Beck B. Response to ACCC Quad bike safety standard exposure draft. July 2019. Response developed for the ACCC consultation.

Hunter K, Bestman A., Elkington J., Anderst A., Scott D, Cullen P, Mitchell R, Clapham K, Killian J, Curtis K, Beck B, **Vallmuur K**, Lukacszyk C, Ivers RQ, Keay L, Brown J. National Injury Prevention Strategy – Literature Review. July 2019. Report developed for the Australian Government Department of Health.

Niven C, **Vallmuur K**, Barker R, Warren-Wright K, Teerds S, Strachan D, Hope M, Beck B. Collaborative Response to the Consultation Regulatory Impact Statement (CRIS): Improving the Effectiveness of the Consumer Product Safety System. Nov 2019. Response developed for the Australian Competition and Consumer Commission consultation.

Vallmuur K, Hope M, Beck B. Response to NTC Collaborative Response to the Consultation Regulatory Impact Statement (CRIS): Barriers to the safe use of personal mobility devices. Dec 2019. Response developed for the National Transport Commission consultation.

REPORTS

Harrison JE, Watson A, Vallmuur K. A National Approach to Measuring Non-fatal Crash Outcomes. Austroads Research Report AP-R599-19. 2019. <https://austroads.com.au/publications/road-safety/ap-r599-19>.

PARLIAMENTARY BRIEFING NOTES

Six Parliamentary Briefing Notes (hot issues) prepared for Minister for Health for AIHW embargoed reports on:

1. Pedal cyclist deaths and hospitalisations, 1999-00 to 2015-16
2. Injury of Aboriginal and Torres Strait Islander people due to transport 2010-11 to 2014-15
3. Mobility scooter-related injuries and deaths
4. Hospitalised injury and socioeconomic influence in Australia 2015-16
5. Injury mortality and socioeconomic influence in Australia 2016-16
6. Trends in injury deaths Australia 1999-00 to 2016-17.



Left – Right Rachael Brown, Jacelle Warren, Sophie Trenery, Rosalind Wendt, Michael Schuetz, Silvia Manzanero, Cate Cameron, Nathan Valentine, Kirsten Vallmuur, Dihan Aponso, Shehera Banu, Beat Schmutz, Victoria McCreanor, Brett Droder, Lisa Whittaker.



DNA

molecule

-CaH₂

ALLIED HEALTH

ALLIEDHEALTH PROFESSIONALS



Mr Peter Buttrum
Executive Director
Allied Health

The Allied Health Professions (AHP) service line comprises **Audiology, Nutrition and Dietetics, Occupational Therapy, Orthotics and Prosthetics, Physiotherapy, Psychology, Rehabilitation Engineering, Social Work and Speech Pathology**, as well as the **Clinical Multimedia Unit**.

Allied Health is committed to the integration of research within clinical care and actively contributes to the achievement of the RBWH vision to be a world class academic health centre. This research investment, along with ongoing education, underpins the evidence base, effectiveness, and efficiency of our service delivery, and outcomes are aimed at transforming clinical service delivery within the rapidly changing healthcare environment.

Allied health researchers are leading research in almost all service lines and clinical areas in RBWH, with research focus areas including:

- Evaluation of innovative models of care (primary contact services, advanced and extended scope of practice roles incl. medication prescription, pathology ordering, mHealth, telehealth)
- Consumer engagement and co-design (patient experience, outcome measurement)
- Technology solutions to complex problems (personalised 3D printing for pressure cushions, virtual reality immersion for burns procedures, app development for chronic pain and cochlear implants).

Investment in supporting clinicians to undertake research as part of practice has been a cornerstone of Allied Health research capacity building both throughout Metro North and the RBWH over recent years. In 2019 we have actively implemented the Allied Health Translating Research into Practice (AH-TRIP) program, with staff participating in knowledge translation training, developing networks to support clinicians undertaking knowledge translation and winning three awards in local and statewide showcase events. Dedicated research coordinator positions across most disciplines provide practical support to clinicians in evaluating their everyday practice, resulting in improved patient care and important end user knowledge to the wider academic community. Currently there are 27 of our RBWH Allied Health Practitioners undertaking a research higher degree (RHD). Our experienced researchers are involved in the supervision of an additional 23 RHD students across multiple universities; many of these students undertaking vital research that contributes to enhanced service delivery and patient care. We had three clinicians, Dr Julie Adsett (Physiotherapy), Dr Kylie Matthews and Dr Angela Byrnes (both Nutrition and Dietetics), complete their PhD in 2019.

In 2019, research outputs in Allied Health has continued to grow, with highlights including:

- \$1.7M of research funding provided in 2019, with a further \$1.3M in new grants awarded
- 186 allied health-led research and service evaluation projects across all departments
- 36 research awards, including three Highly Commended awards at the MNHHS Research Excellence Awards and five international conference prizes
- 67 peer-reviewed publications including one book chapter
- 61 presentations at national and international conferences
- 45 research positions (funded research coordinator positions, conjoints and honorary appointments).

The allied health research agenda continues to grow in diversity and impact with a wide range of multidisciplinary health service collaborators and university partners. The future is bright, with opportunities for growing health service research agenda with the new STARS facility and four new conjoint STARS/UQ AH research positions to come in 2021. We appreciate and thank the contribution of all our university partners and collaborators across MNHHS and RBWH service lines, without whom this level of research success would not be possible and look forward to their ongoing collaboration. Finally, and most importantly, sincere thanks and congratulations are extended to all Allied Health staff for their dedicated efforts and achievements in 2019.

CENTRE FOR ALLIED HEALTH RESEARCH

The Centre for Allied Health Research (CAHR) is a network of Allied Health clinician researchers with a focus on building capacity for high quality research and evaluation within everyday clinical practice. The vision is to facilitate advances to health care and service delivery that translate into improvements to patient outcomes. The team provide support to both experienced and novice clinicians in developing and implementing health services research and evaluation within their practice.

In 2019, the focus of CAHR activities continues to be supporting research capacity in AH departments who are relatively new to research. This resulted in a poster presentation at an international conference for the Orthotics and Prosthetics department, and several new service evaluation and research projects in Orthotics and Prosthetics, Rehabilitation Engineering and Psychology.

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Peter Buttrum	Adjunct Associate Professor		In-kind	School of Health and Rehabilitation Sciences	UQ
Adrienne Young	Principal Research Fellow	0.5	Operational	Centre for Allied Health Research	NA
	Sessional Assoc Professor	1hr/mth	In-kind	Faculty of Health Sciences and Medicine	Bond University
Angela Chang	Research Coordinator	0.5	Operational	Centre for Allied Health Research	NA
	Honorary Senior Lecturer	1hr/mth	In-kind	School of Health and Rehabilitation Sciences	UQ
Kylie Matthews	Research Coordinator	0.3 (May-Nov)	Operational	Centre for Allied Health Research	NA

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Angela Chang	Anna Farrell (<i>Speech Pathology</i>), Marilyn Banks (<i>Nutrition and Dietetics</i>), Peter Buttrum (<i>Allied Health</i>)	How much time do allied health clinicians spend undertaking research?
Angela Chang	Susie de Jersey (<i>Nutrition and Dietetics</i>), Anna Farrell (<i>Speech Pathology</i>), Jenny Strong (<i>Occupational Therapy</i>), Adrienne Young , Gai Harrison (<i>Social Work</i>), Jennifer Paratz (<i>Physiotherapy</i>), Peter Buttrum (<i>Allied Health</i>), Marilyn Banks (<i>Research</i>)	Understanding research capacity and outputs in allied health workforce at RBWH
Adrienne Young	Sally Bennett (<i>UQ</i>), Gill Harvey (<i>University of Adelaide</i>), Sally Barrimore (<i>MNHHS AH</i>), Katrina Campbell (<i>MNHHS AH</i>), Ashley Cameron (<i>AHPOQ</i>), Shelley Wilkinson (<i>Mater</i>), Ingrid Hickman (<i>PAH</i>)	Evaluating an allied health knowledge translating training and support initiative

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Alice Pender <i>(Audiology)</i>	Carla Rose <i>(Audiology)</i> , Angela Chang , Kylie Matthews , Tracy Comans <i>(UQ)</i>	Patient outcomes following cochlear implant surgery
Amber Jones <i>(OT)</i>	Perry Judd <i>(PT)</i> , Michelle Cottrell <i>(PT)</i> , Anita Plaza <i>(PT)</i> , Andrea McKittrick <i>(OT)</i> , Angela Chang , Clare Burns <i>(SP)</i>	Exploration of healthcare provider and patients views towards the implementation of an Allied Health-led TeleBurns Model of Care
Amber Jones <i>(OT)</i>	Perry Judd <i>(PT)</i> , Michelle Cottrell <i>(PT)</i> , Anita Plaza <i>(PT)</i> , Andrea McKittrick <i>(OT)</i> , Angela Chang , Adrienne Young , Clare Burns <i>(SP)</i> , Hannah Carter <i>(AusHSI)</i>	The Royal Brisbane and Women's Hospital Allied Health TeleBurns Clinic: An implementation evaluation using the RE-AIM approach
Andrew MacDonald <i>(Orthotics and Prosthetics)</i>	Brian Delaney <i>(Orthotics and Prosthetics)</i> , Helen McDonald <i>(Orthotics and Prosthetics)</i> , Adrienne Young	Feasibility of implementing plantar pressure mapping software into routine practice for the treatment of individuals with Diabetic Foot Disease in the RBWH Orthotics and Prosthetics Department
Carla Rose <i>(Audiology)</i>	Alice Pender <i>(Audiology)</i> , Angela Chang , Clare Burns <i>(SP)</i> , Kylie Matthews , Trevor Russell <i>(UQ)</i>	Using telehealth to manage patients following cochlear implant surgery
Genesta Nicolson <i>(Psychology)</i>	Angela Chang , Kylie Matthews , Angela White <i>(Psychology)</i>	Implementing an evidence-based multidisciplinary pre-medical group education day for non-urgent referrals to the Professor Tess Cramond Multidisciplinary Pain Centre
Katrina Campbell <i>(Allied Health, MNHHS)</i>	Angela Chang , Adrienne Young , Michelle Stute <i>(Allied Health, MNHHS)</i> , Sally Barrimore <i>(Allied Health, MNHHS)</i> , Norm Morris <i>(TPCH)</i>	Research Culture, Capacity and Translation across Allied Health Services in Metro North
Maree Raymer <i>(Physiotherapy)</i>	Patrick Swete Kelly <i>(Physiotherapy)</i> , Louise Wellington <i>(Physiotherapy)</i> , Angela Chang	Consultation process to facilitate the development and trial of a workforce development pathway to support advanced musculoskeletal physiotherapy (AMP) roles
Matthew Leong <i>(Thoracic Medicine)</i>	Michael Brown <i>(Thoracic Medicine)</i> , Dinithi Samarunga <i>(Thoracic Medicine)</i> , Angela Chang	Encouraging Nasal/nasal pillow masks during initial titration reduces recommended CPAP pressures and improves titration outcomes
Michelle Stute <i>(Allied Health, MNHHS)</i>	Peter Buttrum , Merrilyn Banks <i>(Research)</i> , Maree Raymer <i>(Physiotherapy)</i> , Tracy Comans <i>(UQ)</i> , Sonia Sam <i>(Allied Health MNHHS)</i> , Nicole Moretto <i>(Allied Health MNHHS)</i> , Marita Plunkett <i>(Allied Health)</i>	Allied Health Specialist Clinics Project
Perry Judd <i>(PT)</i>	Paula Easton <i>(Mackay Base Hospital)</i> , Michelle Cottrell <i>(PT)</i> , Tracy Comans <i>(UQ)</i> , Angela Chang	Delivery of Orthopaedic Physiotherapy Screening Clinic (OPSC) Assessments from RBWH to Mackay Hospital via Telehealth
Stephanie Fountain <i>(RE)</i>	Oliver Mason <i>(RE)</i> , Peter Slattery <i>(RE&O&P)</i> , Angela Chang , Adrienne Young	Outcome Measurement in Rehabilitation Engineering
Susie de Jersey <i>(Nutrition and Dietetics)</i>	Elizabeth Eakin <i>(UQ, SPH)</i> , Shelley Wilkinson <i>(Mater)</i> , Tracy Comans <i>(CAHR)</i> , Leonie Callaway <i>(UQ, WNBS)</i> , Claire Gardiner, Taylor Guthrie, Hilary Jimmieson, Angela Chang	Implementation evaluation of a telephone-delivered dietetic model of care for overweight pregnant women
Yuta Arai <i>(O&P)</i>	Steven Walker <i>(O&P)</i> , Brian Delaney <i>(O&P)</i> , Jessica Angus <i>(O&P)</i> , Kylie Matthews	Retrospective cohort study comparing three halo management protocols and the incidence of adverse events

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Ingrid Hickman, Adrienne Young , Ashley Cameron, Shelley Wilkinson, Katrina Campbell, Rhiannon Barnes, Sally Barrimore	President's Award for Innovation	Dietitians Association of Australia National Conference, 2019
Nicole Moretto, Tracy Comans, Angela Chang , Shaun O'Leary, Sonia Osborne, Hannah Carter, David Smith, Tania Cavanagh, Dean Blond, Maree Raymer	Best Paper	Centre for Health Services Research Awards, Faculty of Medicine, University of Queensland, 2019

2019 Research Publications

Journal Articles

1. Cottrell M, Judd P, Comans T, Easton P and **Chang AT**. Comparing fly-in fly-out and telehealth models for delivering advanced-practice physiotherapy services in regional Queensland: An audit of outcomes and costs. *Journal of Telemedicine and Telecare*. 2019; DOI: 10.1177/1357633X19858036
2. Moretto N, Comans TA, **Chang AT**, O'Leary SP, Osborne S, Carter HE, Smith D, Cavanagh T, Blond D, Raymer M. Implementation of simulation modelling to improve service planning in specialist orthopaedic and neurosurgical outpatient services. *Implement Sci*. 2019 Aug 9; 14(1):78. doi: 10.1186/s13012-019-0923-1.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Oral Presentations

1. Barrimore SE, Cameron AE, **Young AM**, Hickman IJ, Campbell KL. Translating Research into Practice – How confident are Allied Health Clinicians? National Allied Health Conference, Brisbane August 2019
2. **Chang AT, Young A**, Farrell A, Strong J, Harrison G, Paratz J, Buttrum, P, Cottrell M, Window P, Banks M, de Jersey S. Developing a team-based, tailored approach to building research capacity in allied health. National Allied Health Conference, Brisbane August 2019
3. **Chang AT, Young A**, Farrell A, Strong J, Harrison G, Paratz J, Buttrum, P, Cottrell M, Window P, Banks M, de Jersey S. Is there a link between clinician reported time spent on research and research success?. National Allied Health Conference, Brisbane August 2019
4. Raymer M, Moretto N, Comans T, O'Leary S, **Chang A**, Standfield L, Carter H, Osborne S. Advanced Musculoskeletal Physiotherapist and Surgeon led care in Orthopaedics and Neurosurgery outpatient services: what's the right professional mix? World Congress of Physical Therapy, Geneva May 2019.

Poster Presentations

1. Aria, Y., Angus, J., Walker, S., Delaney, B., Matthews, K. Retrospective cohort study comparing three HALO management protocols and the incidence of adverse events. International Society for Prosthetics and Orthotics Conference, Japan October 2019.



Sarah Andersen (*Nutrition and Dietetics*) receiving an award for 'Best Original Communication' for the presentation on 'Nutrition Support and the Gastrointestinal Microbiome – A systematic review and pilot study' at the **British Association for Parenteral and Enteral Nutrition (BAPEN) Conference** (in Belfast in November 2019)

DEPARTMENT OF NUTRITION & DIETETICS

RBWH Department of Nutrition and Dietetics are recognised leaders in nutrition and dietetic research, and continues to conduct high impact and clinically relevant research and knowledge translation to improve care and service for patients at RBWH and in health services more broadly. Our research has led to the development and implementation of statewide programs to prevent and treat malnutrition and pressure injuries; proactive pre-treatment nutrition support for patients undergoing treatment for head and neck cancer; and changes to routine antenatal care that has seen a reduction in the proportion of women gaining excess weight in pregnancy, preventing future chronic disease in both the women and their children.

This year saw numerous research highlights for the RBWH Department of Nutrition and Dietetics including:

- 16 research awards recognising the achievements the research at the local, state and national level
- 14 research higher degree (RHD) students supervised by dietitian researchers within the department, including seven clinicians currently working at the RBWH and one international student
- 3 supervised RHD students were conferred during 2019
- A new conjoint research position with Queensland University of Technology School of Exercise and Nutrition Sciences
- Dietitian-led collaborative research with co-investigators across all RBWH service lines and broad specialties, multiple external university partners, other Metro North sites, and sites within Metro South, West Moreton and Community and Oral Health
- 2 projects conducted which engaged consumers in the entire research process, by embedding a consumer representative in the project teams
- 21 peer-reviewed publications (including 10 first author publication) and one invited book chapter
- 27 oral conference presentations at national and international conferences.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Abigail Marsh	PhD, UQ (2018-2024)	The effects of an anti-inflammatory diet on disease activity, symptom severity and microbiota profile in patients with inflammatory bowel disease	Merrilyn Banks , Graham Radford-Smith, Veronique Chachay
Angela Byrnes	PhD, UQ (2015-2018) Conferred 15 February 2019	Nutritional care and status of older surgical patients	Judy Bauer, Adrienne Young , Merrilyn Banks , Alison Mudge
Carrie-Anne Lewis	PhD, UQ (2016-2021)	Micronutrient and protein energy malnutrition outcomes in a bariatric surgery outpatient clinic	Ingrid Hickman, Susie de Jersey , Emma Osland
Claire Nelson	PhD, QUT (2014-2019)	Investigation of nutrition status of community adults with lower leg wounds	Merrilyn Banks , Mary Hannan-Jones , Kathleen Findlayson
Emilie Croisier	PhD, UQ (2018-2021)	Nutritional outcomes of gynaecology patients undergoing pelvic radiotherapy: understanding the patient experience and dietary recommendations for symptom management	Judy Bauer, Teresa Brown
Emma Shipton	PhD, UQ (2019-2024)	Models of care and the effect of breastfeeding rates post hospital discharge	Susie de Jersey , Leonie Callaway, Nigel Lee

Supervised Post-Graduate Research Students (cont)

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Joanne Hiatt	PhD, UQ (2017-2023)	Nutrition throughout head and neck cancer treatment: patient experience and adherence, barriers and enablers to enteral feeding recommendations	Merrilyn Banks, Teresa Brown, Judy Bauer
Joanna McCormack	PhD, GU (2018-2022)	How are food service dietitians learning about environmental sustainability: A qualitative systematic protocol	Christy Noble, Denise Cruickshank, Lynda Ross, Andrea Bialocerkowski
Katrina Ridout	PhD, QUT (2016-2021)	Antenatal lifestyle intervention programs targeting healthy gestational weight gain and management: exploring the barriers and enablers to participation for women who are overweight or obese	Susie de Jersey, Danielle Gallegos, Shelley Wilkinson
Kylie Matthews	PhD, UQ (2015-2018) <i>Conferred 15 February 2019</i>	Refeeding syndrome in acute care: Is there a dietetics role?	Sandra Capra, Michelle Palmer, Veronique Chachay
Nerida Hart	PhD, QUT (2015-2018)	What makes a quality hospital foodservice?	Mary Hannan-Jones, Merrilyn Banks
Nina Meloncelli	PhD, QUT (2016-2019)	Management of gestational diabetes: exploring practices, evidence base and models of care among the multidisciplinary team	Susie de Jersey, Adrian Barnett
Quoc Cuong Tran	PhD, QUT (2014-2018) <i>Thesis submitted and conferred</i>	Nutritional status of patients in Vietnamese hospitals	Danielle Gallegos, Merrilyn Banks, Mary Hannan-Jones
Sarah Andersen	PhD, UQ (2015-2019)	Investigating nutrition support during allogeneic stem cell transplantation	Judy Bauer, Merrilyn Banks, Olivia Wright

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Adrienne Young	Research Coordinator	0.3	Operational	Nutrition in older adults and hospital inpatients	
	Adjunct Assoc Professor	8 hrs/mth	In kind		Queensland University of Technology
	Sessional Assoc Professort				Bond University
Angela Byrnes	Research Coordinator	0.3	Operational	Research and quality	N/A
Helen MacLaughlin	Conjoint Senior Lecturer	1.0	50% Operational	Nutrition in chronic kidney disease	Queensland University of Technology
	Advanced Clinician Researcher		50% External		
Merrilyn Banks	Adjunct Assoc Professor	8 hrs/mth	In kind	Efficacy and cost effectiveness of nutrition in healing pressure ulcers	Queensland University of Technology
					University of Queensland
Susie de Jersey	Visiting Research Fellow	12 hrs/mth		Preventing and managing lifestyle chronic disease in women and children	Queensland University of Technology
	Honorary Senior Lecturer			Improving nutrition-related antenatal care to optimise future health outcomes for mothers and their offspring	University of Queensland
Teresa Brown	Research Coordinator	0.2	Operational	Nutrition in cancer care	
	Associate Lecturer	4-8 hrs/mth	In Kind		University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Lynda Ross	Visiting Fellow	8 hrs/mth	Healthy Eating and Lifestyle Program (HELP) intervention evaluation and follow up	Griffith University
Mary Hannan-Jones	Honorary Research Fellow	15 hrs/mth	Improving quality of Food Services	Senior Lecturer, Queensland University of Technology

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Abigail Marsh	Merrilyn Banks , Graham Radford Smith (<i>Gastroenterology</i>), Veronique Chachay (<i>UQ</i>)	Cross sectional analysis of dietary intake of patients attending the RBWH IBD outpatient clinics: how does their diet compare to Mediterranean diet?
Adrienne Young	Merrilyn Banks , Tayla Robertson (<i>PAH</i>), Jo Hiatt , Kate Morgan , Danielle Gallegos (<i>QUT</i>), Angela Byrnes	Nutritional care in hospital: What is the patient experience?
Adrienne Young	Angela Byrnes , Carrie-Anne Lewis , Cindy Jennings , Zoe Walsh (<i>CISS</i>)	Observation of mealtime care practices and nutritional intake for sub-acute older inpatients (2014-current)
Adrienne Young	Claire Dux , Gai Harrison (<i>Social Work</i>), Maria Walls , Rachana Naidu , Raje Badwa , Jess Fry , Liliana Zapta , Carrie-Anne Lewis , Merrilyn Banks	Evaluation of the value of dietetic assistant (DA) role from the DA, patient and staff perspective
Adrienne Young	Xuan Wang (<i>QUT</i>), Cassie Hoole , Rebecca Fichera	Patient involvement in dietetic care: description of current practice
Adrienne Young	Angela Byrnes , Evonne Miller (<i>QUT</i>), Alison Mudge (<i>IMRU</i>), Gary Power (<i>Consumer</i>), Merrilyn Banks , Mark Brough (<i>QUT</i>), Amanda Dines, Prue McRae (<i>IMRU</i>), Chiara Santomauro (<i>CSDS</i>), Tara McCurdie (<i>QIPPS</i>), Samantha Olenski (<i>IMRU</i>)	Co-designing a positive meal environment for older people in hospital: a multi-phase experience-based co-design study
Adrienne Young	Kylie Matthews , Kate Flint (<i>UQ</i>), Dylan Flaws (<i>Mental Health</i>), Alison Mudge (<i>Internal Medicine</i>)	Nutritional intake and mealtime care of older people admitted to inpatient mental health wards
Adrienne Young	Tegan Stuckey (<i>QUT</i>), Wendy Tai (<i>West Moreton</i>)	The relationship between post-hospital nutritional status and health outcomes for older people (65+ years) enrolled in a Transition Care Program (TCP)
Adrienne Young	Natalie Hwang (<i>UQ</i>), Champika Puttullo (<i>Pharmacy</i>), Alison Mudge (<i>Internal Medicine</i>), Kerinya Pillai (<i>Medical Services</i>), Margaret Cahill (<i>Internal Medicine</i>), Carly Scott (<i>Health Information Services</i>)	Understanding hospital acquired constipation at RBWH – retrospective chart audit
Ally di Bella	Merrilyn Banks , Tracy Comans (<i>UQ</i>), Ingrid Hickman (<i>PAH</i>), Donna Hickman (<i>TPCH</i>), Adrienne Young	Prevalence and impact of obesity in acute hospital setting
Ally di Bella	Winnie Soo Yii Tan (<i>QUT</i>), Merrilyn Banks , Tracy Comans (<i>UQ</i>), Ingrid Hickman (<i>PAH</i>), Donna Hickman (<i>TPCH</i>), Adrienne Young	Cost of obesity in the acute hospital setting
Amanda Watt	Emma Osland , Vishal Kaushik (<i>Gastroenterology</i>), Craig Harris (<i>Surgery</i>), David Taylor (<i>Surgery</i>), Teresa Brown	Examination of nutrition care and support practices for patients having pelvic exenteration surgery
Angela Byrnes	Mikaela Wheeler (<i>UQ</i>), Adrienne Young , Amanda Watt , Judy Bauer (<i>UQ</i>)	Exploring patient's experience of perioperative nutrition education and care when undergoing elective colorectal surgery
Angela Byrnes	Clare Cutmore , Adrienne Young , Elise Treleaven , Joanne Hiatt , Claire Dux , Kylie Matthews , Merrilyn Banks	Standardising protocol driven enteral feeding
Carrie-Anne Lewis	Ingrid Hickman (<i>PAH</i>), Susan de Jersey , Emma Osland , Siobhan Wallin , Lindsay Web (<i>PAH</i>), George Hopkins (<i>Surgery</i>), Blair Bowden (<i>Surgery</i>), Benjamin Dodd (<i>Surgery</i>), Viral Chikani (<i>Endocrinology</i>), Anthony Cheng (<i>Surgery</i>), Chung Kwun Won (<i>Surgery</i>), Kath Bradley (<i>Surgery</i>), Lara Maidment (<i>Endocrinology</i>)	Micronutrient and protein energy malnutrition outcomes in a weight loss surgery population
Christine Eadeh		Evaluation of Patient outcomes from the Dietitian First Gastroenterology Clinic

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Cindy Jennings	Adrienne Young	Validity of the FIM in determining risk of malnutrition and nutritional decline during inpatient rehabilitation admission
Claire Blake	Teresa Brown Rainbow Lai (UQ), Laura Moroney (SP), Jennifer Helios (SP), Brett Hughes (Cancer Care), Liz Kenny (Cancer Care), Anita Pelecanos (QIMR), Judy Bauer (UQ)	Nutrition outcomes and toxicities from tomotherapy in head and neck cancer patients
Claire Blake	Teresa Brown , Laura Moroney (SP), Jennifer Helios (SP), Brett Hughes (Cancer Care), Liz Kenny (Cancer Care), Anita Pelecanos (QIMR)	Enteral Nutrition outcomes and toxicities from tomotherapy in head and neck cancer patients
Claire Blake	Merrilyn Banks , Mark Appleyard (Gastroenterology)	Cost effectiveness of Dietitian-led PEG service
Claire Blake	Elise Treleaven, Anna Edwards, Teresa Brown	Evaluation of pre-treatment model of care in patients with head and neck cancer
Claire Blake	Elise Treleaven, Ally di Bella, Teresa Brown, Adrienne Young , Jenni Leutenegger (Cancer Care), David Wyld (Cancer Care)	Implementation of patient-led malnutrition screening in the cancer care ambulatory setting
Claire Blake, Emma Osland	Kay Lasenby (Gastroenterology)	Service evaluation of the management of complex nutrition patients (PEN PALS Project)
Claire Dux		Feed interruptions in ICU and impact on nutritional intake
Denise Cruickshank	Mary Hannan-Jones	Proportional Length of Stay Patterns in Queensland Health Facilities: Review of QH Nutrition Standards for Meals and Menus
Denise Cruickshank	Mary Hannan-Jones	Review of the Implementation of the Queensland Health Nutrition Standards for Meals and Menus across Health & Hospital Services
Denise Cruickshank	Philip Juffs (West Moreton)	Comparing IDDSI to current clinically accepted testing methods
Elissa Pacheco	Adrienne Young , Rebecca Smith (TPCH), Juliette Mahero (TPCH), Chloe Jarvis (Redcliffe), Stacey O'Donnell (Caboolture), Anna Farrell (Speech Pathology), Teri Green (QUT), Andrew Wong (Neurology)	Implementation evaluation of an acute stroke nutrition support pathway across Metro North HHS
Emilie Croisier	Alana Morrissy (UQ), Teresa Brown , Alice Brigg (CCS), Philip Chan (CCS), Jeffrey Goh (CCS), Judy Bauer (UQ)	The clinical and nutritional implications of pelvic radiotherapy in gynaecology oncology patients, an observational study
Helen MacLaughlin	Mindy Pike, Cassianne Robinson-Cohen, Alp Ikizler, Eddie Siew	Association between obesity and kidney disease outcomes after acute kidney injury in the ASSESS-AKI study
Hilary Powlesland	Belinda Mason, Adrienne Young , Lynda Ross, Adrian Kark, Riley O'Donohue	New Group Model of Care for low salt dietary education for Chronic Kidney Disease patients.
Hilary Powlesland	Clare Byrne, Susie de Jersey	Evaluation of the New Beginnings program
Jane Musial	Mary Hannan-Jones, Adrienne Young, Susie de Jersey , Bonnie Leung, Chelsea Allport, Robbie Mullins, Andrea Cawte	Evaluation of combined QUT-RBWH diabetes clinic – patient and service outcomes
Jen Ellick	Christine Eadeh, Michaela Hatzirodos, Claire Dux, Merrilyn Banks, Adrienne Young	Evaluation of the implementation of Delegate electronic patient meal management system
Jen Ellick, Christine Eadeh	Adrienne Young	eHealth Nutrition Intervention in a Hospital Setting: Feasibility and cost vs benefit
Joanne Hiatt	Teresa Brown, Merrilyn Banks , Judy Bauer (UQ)	Patient Experience of Nutrition Care across three treatment modalities for the management of head and neck cancer
Joanne Hiatt	Angela Byrnes	Implementation of enteral feeding protocol for patients on 8AN
Kylie Matthews	Clare Cutmore, Adrienne Young , Caroline Summers (IMAC), Sue Patterson (Mental Health)	Eating disorders: to tube or not to tube? A comprehensive evaluation of acceptability and use of a nasogastric refeeding protocol
Kylie Matthews	Candice Drysdale (UQ), Adrienne Young	Audit of dietetic practice against newly updated Metro North Refeeding Syndrome Guidelines

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Kylie Matthews	Clare Cutmore	Audit of management of patients with a medically unstable eating disorder in internal medicine
Mary Hannan-Jones	Adrienne Young, Merrilyn Banks, Claire Dux, Bianca Neaves <i>(TPCH)</i> , Ji Peng Toh <i>(QUT)</i>	Exploring best practice features of large-scale hospital foodservice systems in Australia
Merrilyn Banks	Mary Hannan-Jones	Evaluation of state-wide HEN service
Rebecca Fichera	Teresa Brown, Sarah Andersen, Glen Kennedy <i>(Cancer Care)</i> , David Williams <i>(Cancer Care)</i>	New Model of Care for autologous stem cell transplant patients (AutoCare): adherence and clinical outcomes
Robin Hay	Lynda Ross, Taylor Guthrie, Cindy Jennings	Evaluation of Healthy Eating and Lifestyle Program (HELP) telehealth clinic
Sarah Andersen	Merrilyn Banks, Glen Kennedy <i>(Cancer Care)</i> , Teresa Brown, Nicholas Weber <i>(Cancer Care)</i> , Judy Bauer <i>(UQ)</i>	Investigating the effect of enteral and parenteral nutrition on the gastrointestinal microbiome post allogeneic transplantation
Sarah Andersen	Merrilyn Banks, Glen Kennedy <i>(Cancer Care)</i> , Teresa Brown, Nicholas Weber <i>(Cancer Care)</i> , Judy Bauer <i>(UQ)</i>	Staff perceptions, barriers and enablers to enteral feeding during allogeneic stem cell transplantation
Sarah Andersen	Merrilyn Banks, Glen Kennedy <i>(Cancer Care)</i> , Teresa Brown, Nicholas Weber <i>(Cancer Care)</i> , Judy Bauer <i>(UQ)</i>	Nutrition support during allogeneic transplantation in Australian adult bone marrow transplantation units
Sarah Andersen	Madison Jefferis <i>(UQ)</i> , Cameron Curley <i>(Cancer Care)</i> , Teresa Brown, Judy Bauer <i>(UQ)</i>	Investigating the effect of malnutrition on clinical outcomes post allogeneic stem cell transplantation
Siobhan Wallin	Carrie-Anne Lewis, Adrienne Young, Marzia Bell <i>(QUT)</i>	Pre-operative lifestyle intervention for patients undergoing bariatric surgery
Susie de Jersey	Leonie Callaway <i>(UQ, WNBS)</i> , Taylor Guthrie, Jeanette Tyler <i>(Women's and Newborn)</i> , Nickie Moreton <i>(Women's and Newborn)</i> , Karen New <i>(UQ, Women's and Newborn)</i>	Efficacy of a low intensity consumer held pregnancy weight monitoring tool to prevent excess gestational weight gain
Susie de Jersey	Elizabeth Eakin <i>(UQ, SPH)</i> , Shelley Wilkinson <i>(Mater)</i> , Tracy Comans <i>(UQ)</i> , Leonie Callaway <i>(UQ, WNBS)</i> , Claire Gardiner, Hilary Powlesland, Taylor Guthrie, Angela Chang <i>(CAHR)</i>	Implementation evaluation of a telephone-delivered dietetic model of care for overweight pregnant women
Susie de Jersey	Kimberley Mallan <i>(ACU)</i> , Lynne Daniels <i>(QUT)</i> , Rebecca Byrne <i>(QUT)</i>	New Beginnings Healthy Mothers and Babies Study: Long-term Follow-up
Susie de Jersey	Natasha Lorenzen, Taylor Guthrie	Gestational Diabetes Service Nutrition Practice Guidelines and Outcomes clinical audit
Tenielle Hamlin	Adrienne Young, An-Yang Chen	Midmeal provision in GEM
Teresa Brown	Aaron Chan <i>(UQ)</i> , Kathleen Dwyer, Merrilyn Banks, Brett Hughes <i>(Cancer Care)</i> , Judy Bauer <i>(UQ)</i> , Charles Lin <i>(Cancer Care)</i> , Liz Kenny <i>(Cancer Care)</i> , Jane Crombie <i>(Speech Path)</i> , Ann-Louise Spurgin <i>(Speech Path)</i>	Revalidation of swallow and nutrition guidelines in tomotherapy
Teresa Brown	Ray Chan <i>(PAH)</i> , Angela Byrnes, Alex Molassiotis <i>(Hong Kong)</i> , Patsy Yates <i>(QUT)</i> , Gillian Nasato <i>(Cancer Care)</i> , Elise Button <i>(Cancer Care)</i> , Andrea Marshall <i>(Griffith)</i> , Liz Isenring <i>(Bond University)</i> , David Wyld <i>(Cancer Care)</i> , Melissa Eastgate <i>(Cancer Care)</i> Nicole Gavin <i>(Cancer Care)</i>	A patient-family-centred intervention to promote nutrition in advanced cancer patients: a pilot randomised controlled trial
Teresa Brown	Louise Cooney <i>(PAH)</i> , Louise Elvin-Walsh <i>(PAH)</i> , Eliza Kern, Suzie Ahern, David Smith <i>(QIMR)</i> , Liz Kenny <i>(Cancer Care)</i> , Brett Hughes <i>(Cancer Care)</i> , Sandro Porceddu <i>(PAH)</i> , Ingrid Hickman <i>(PAH)</i> , Bena Cartmill <i>(PAH)</i>	Comparison of nutrition and clinical outcomes in H&N cancer patients following reactive and proactive nutrition support approaches
Teresa Brown	Merrilyn Banks, Brett Hughes <i>(Cancer Care)</i> , Charles Lin <i>(Cancer Care)</i> , Liz Kenny <i>(Cancer Care)</i> , Louise Campbell <i>(Qld PET Service)</i> , Judy Bauer <i>(UQ)</i>	Assessment of sarcopenia and malnutrition in patients with head and neck cancer undergoing treatment of curative intent – implications for practice

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Alice Pashley <i>(UQ)</i>	Teresa Brown , Belinda Lehn <i>(Speech Pathology)</i> , Robert Hodge <i>(ENT)</i> , Judy Bauer <i>(UQ)</i>	Investigating the effects of nutritional status on post-operative complications in patients with head and neck cancer undergoing laryngectomy and pharyngolaryngectomy
Alison Mudge <i>(IMS)</i>	Merrilyn Banks , Adrian Barnett <i>(QUT)</i> , Irene Blackberry <i>(Latrobe)</i> , Ann Chang <i>(QUT)</i> , Nick Graves <i>(QUT)</i> , Ruth Hubbard <i>(UQ)</i> , Sharon Inouye <i>(Harvard)</i> , Sue Kurrle <i>(Uni of Sydney)</i> , Kwan Lim <i>(Uni of Melbourne)</i> , Prue McRae <i>(IMS)</i> , Nancye Peel <i>(UQ)</i> , Adrienne Young	CHERISH Collaborative for Hospitalised Elders: Reducing the Impact of Stays in Hospital
Alita Rushton <i>(TPCH)</i>	Adrienne Young , Judy Bauer <i>(UQ)</i> , Belinda Gavaghan <i>(AHPOQ)</i> , Heather Keller <i>(University of Waterloo)</i> , Jack Bell <i>(TPCH)</i>	Evaluating Full Scope Dietitian Assistant Opportunities within a Systematised Interdisciplinary Malnutrition Program (SIMPLE)
Angela T Chang <i>(CAHR)</i>	Susie de Jersey , Anna Farrell <i>(Speech Pathology)</i> , Jenny Strong <i>(Occupational Therapy)</i> , Adrienne Young , Gai Harrison <i>(Social Work)</i> , Jennifer Paratz <i>(Physiotherapy)</i> , Peter Buttrum <i>(AHP)</i> , Merrilyn Banks	Understanding research capacity and outputs in allied health workforce at RBWH
Ashleigh Molenaar <i>(CISS)</i>	Zoe Davis <i>(CISS)</i> , Merrilyn Banks , Adrienne Young , Sandra Capra <i>(UQ)</i> , Olivia Wright <i>(UQ)</i>	Exploring obesity in the aged care setting
Chung Nga Lam <i>(Bond university)</i>	Jaimon Kelly <i>(Bond)</i> , Elizabeth Isenring <i>(Bond)</i> , Amanda Watt , Barbara van der Meij <i>(Bond, Mater hospital)</i>	The effect of omega-3 polyunsaturated fatty acid supplementation on muscle maintenance and quality of life: a systematic review
Claire Nelson <i>(QUT)</i>	Merrilyn Banks , Mary Hannan-Jones <i>(QUT)</i> , Kathleen Findlayson	Nutritional status of community dwelling individuals with chronic leg wounds
Clare Burns <i>(SP)</i>	Claire Blake	Expanded telehealth model of care for H&N pre and post treatment
Dylan Flaws <i>(Mental Health)</i>	Alison Mudge <i>(IMS)</i> , Gerard Byrne <i>(Mental Health)</i> , Prue McRae <i>(IMS)</i> , Megan Nitz <i>(Mental Health)</i> , Conor O'Launaigh <i>(TPCH)</i> , Trevor Hollingsworth <i>(Caboolture)</i> , Adrienne Young , Elise Treleaven	Delirium in older psychiatry inpatients: protocol for an observational study
Helen Barrett <i>(UQ, Mater Health Services)</i>	Marloes Dekker <i>(UQ)</i> , H David McIntyre <i>(Mater and UQ)</i> , Michael d'Embden, Leonie Callaway, Susie de Jersey	Post prandial triglycerides in diabetes in pregnancy: a pilot study
Jack Bell <i>(TPCH)</i>	Adrienne Young , Merrilyn Banks , Tracy Comans <i>(Centre for Allied Health, UQ)</i> , Jan Hill <i>(PAH)</i>	The SIMPLE Approach: Systematised, Interdisciplinary Malnutrition Program Implementation and Evaluation
Jack Bell <i>(TPCH)</i>	Adrienne Young , Alita Rushton <i>(TPCH)</i> , Belinda Gavaghan <i>(AHPOQ)</i> , Heather Keller <i>(University of Waterloo)</i> , Jan Hil <i>(PAH)</i> , Merrilyn Banks , Rhiannon Barnes <i>(AHPOQ)</i> , Tracy Comans <i>(UQ)</i>	SIMPLE Phase II: Knowledge Translation
Jorja Collins <i>(Monash Uni)</i>	Denise Cruickshank , Jo McCormack <i>(Griffith)</i> , Kristen MacKenzie-Shalders <i>(Bond)</i> , Stefanie Carino <i>(Monash Uni)</i>	Environmental sustainability in foodservice: strategies and mechanisms for change
Judy Bauer <i>(UQ)</i>	Nathan Baldwin <i>(UQ)</i> , Merran Findlay <i>(Sydney)</i> , Teresa Brown	Evaluation of implementation, enablers and barriers for the <i>Evidence-based- guidelines for the nutritional management of adult patients with head and neck cancer</i>
Judy Bauer <i>(UQ)</i>	Teresa Brown , Merrilyn Banks , Brett Hughes <i>(Cancer Care)</i> , Charles Lin <i>(Cancer Care)</i> , Liz Kenny <i>(Cancer Care)</i> , Louise Campbell <i>(Qld PET Service)</i>	Comparison of body composition methods in head and neck cancer patients undergoing chemoradiotherapy – PET-CT vs BIA
Justin A Ezekowitz <i>(University of Alberta)</i>	John Atherton <i>(Cardiology)</i> , Kate Morgan <i>(Nutrition and Dietetics)</i> , Lynda Ross <i>(Griffith)</i> , Belinda Mason <i>(Nutrition and Dietetics)</i>	SODIUM-HF (Study of Dietary Intervention Under 100 MMOL in Heart Failure)
Katrina Ridout <i>(QUT)</i>	Susie de Jersey , Danielle Gallegos <i>(QUT)</i> , Adrian Barnett <i>(QUT)</i>	Understanding and improving pregnant women's participation in government funded prenatal nutrition and lifestyle intervention programs
Loris Pironi <i>(Home Artificial Nutrition Group, ESPEN)</i>	Emma Osland	International benchmarking of Home Parenteral Nutrition service provision and validation of ESPEN chronic intestinal failure classifications.
Lynda Ross <i>(Griffith)</i>	Robin Hay , Angela Byrnes , Keanne Langston <i>(Griffith)</i>	Healthy Eating and Lifestyle Program (HELP) intervention evaluation and follow up
Margie Conley <i>(MSHHS, QUT)</i>	Helen MacLaughlin , Katrina Campbell <i>(MN)</i> , Kath McFarlane <i>(SC)</i> , David Johnson <i>(MSHHS)</i>	Interventions for weight loss in people with chronic kidney disease who are overweight or obese – systematic review
Melissa Eastgate <i>(Cancer Care)</i>	Shu Fen Lee <i>(Cancer Care)</i> , David Wyld <i>(Cancer Care)</i> , Teresa Brown	Patient perceptions of diet and cancer – survey of cancer care patients

Collaborative Research Activity involving RBWH Research Group / Department *(cont)*

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Michelle Palmer <i>(MSHHS)</i>	Helen Porteous <i>(MSHHS)</i> , Susie de Jersey	Attendance rates and demographic descriptors of obese women referred to the dietitian for weight management advice during pregnancy
Nassar Lafta, Mark Appleyard, Florian Grimpen, Kimberley Ryan	Jessica Kinneally	TFGED (two food group elimination diet) versus swallowed fluticasone for the management of adult eosinophilic esophagitis, a multi-centered randomized prospective study
Merida Hart <i>(QUT)</i>	Mary Hannan-Jones <i>(QUT)</i> , Merrilyn Banks	What makes a quality foodservice system?
Nicole Gavin <i>(Cancer Care)</i>	Glen Kennedy <i>(Cancer Care)</i> , David Patterson <i>(Infectious Diseases)</i> , Claire Rickard <i>(Griffith Uni)</i> , Sarah Andersen , Elise Button <i>(Cancer Care)</i> , Rebecca Lippiatt <i>(Cancer Care)</i>	Exploring changes in gastrointestinal tract microbiome and their influence on mucosal barrier injury laboratory confirmed bloodstream infection in patients diagnosed with high risk features of acute myeloid leukaemia
Nicole Gavin <i>(Cancer Care)</i>	Glen Kennedy <i>(Cancer Care)</i> , Claire Rickard <i>(Griffith Uni)</i> , Patrick Harris <i>(UQ)</i> , Sarah Andersen , Elise Button <i>(Cancer Care)</i> , Rebecca Lippiatt <i>(Cancer Care)</i>	Improving central-line associated bloodstream infection diagnosis in malignant haematology patients with parenteral nutrition (Improving CLABSI Trial)
Nicole Kiss <i>(Deakin University)</i>	Anna Boltong <i>(Cancer Council)</i> , Merran Findlay <i>(RPA)</i> , Belinda Steer <i>(Peter mac)</i> , Jenelle Loeliger <i>(Peter Mac)</i> , Teresa rown , Liz Isenring <i>(Bond)</i> , Judy Bauer <i>(UQ)</i>	Australian cancer clinician's awareness, perceptions and practices regarding to cancer-related malnutrition and sarcopenia
Nina Melloncelli <i>(SCHHS, QUT)</i>	Susie de Jersey , Adrian Barnett <i>(QUT)</i>	Evaluation of a dietitian-led model of care in low risk gestational diabetes pregnancies
Nina Melloncelli <i>(SCHHS, QUT)</i>	Susie de Jersey , Adrian Barnett <i>(QUT)</i>	Examining the management of gestational diabetes mellitus
Priya Cherian <i>(Radiology)</i>	Claire Blake , Mark Appleyard <i>(Gastro)</i> , Nigel Mott <i>(DMI)</i> , David Smith <i>(QIMR)</i>	Radiologically inserted gastrostomy (RIG) an Interventional Radiology Procedure that promotes high value healthcare
Samantha Olenski <i>(IMS)</i>	Alison Mudge <i>(IMS)</i> , Adrienne Young , Prue McRae <i>(IMS)</i> , Kimberley Mallan <i>(ACU)</i> , Zoe Walsh <i>(CISS)</i> , Jill Ross <i>(CISS)</i> , Alanna Geary <i>(Nursing and Midwifery)</i> , Elise Treleaven	Developing and validating a novel survey to identify barriers and enablers to improving nutrition care in acute and subacute inpatient settings
Shelley Roberts <i>(Griffith)</i>	Andrea Marshall <i>(Griffith)</i> , Merrilyn Banks , Alan Spencer <i>(GCUH)</i> , Zane Hopper <i>(GCUH)</i> , Adrienne Young , Ruben Gonzales <i>(Griffith)</i> , Wendy Chaboyer <i>(Griffith)</i>	Using technology to engage patients in their nutrition care: a pilot study

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Adrienne Young	Research in Practice Award	Dietitians Association of Australia Annual Conference August 2019
Adrienne Young	Barbara Chester Award	Dietitians Association of Australia Annual Conference August 2019
Adrienne Young	Awarded for Excellence in Performance	Metro North Staff Excellence award, October 2019
Andrea Cawte, Jane Musial, Susan De Jersey, Michael D'Emden, Heike Krausse, An-Yang Chen, Robert Mullins (QUT), Mary Hannan-Jones (QUT)	Certificates of Excellence – Winner “RBWH-QUT Partnership Program for Diabetes”	Values Based Healthcare RBWH Foundation and Values Based Healthcare Initiative, MNHHS, June 2019
Christine Eadeh	IHHC Qld/NSW Branch Project of the year Excellence Award	IHHC Qld/NSW Branch – awarded 2 nd November 2018
Christine Eadeh, Margot Leeson-Smith, Claire Dux, Jilyn Blundell	Certificates of Excellence – winner “The late meals vending machine”	Values Based Healthcare RBWH Foundation and Values Based Healthcare Initiative, MNHHS, June 2019
Claire Blake, Anna Edwards, Elise Treleaven, Teresa Brown, Brett Hughes, Charles Lin, Lizbeth Kenny, Merrilyn Banks, Judy Bauer	Health Practitioner Research Award	Herston Healthcare Symposium 2019

Research Awards and Achievements *(cont)*

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Clare Cutmore, Carrie-Anne Lewis, Caroline Summers, Adrienne Young	Translation of Research into Practice Award	CAHRLI Symposium, Brisbane, June 2019
Clare Cutmore	The lessons learnt award	AH-TRIP Showcase 2019
Hilary Powlesland	New Researcher Award	CAHRLI Symposium, Brisbane, June 2019
Merrilyn Banks	Research Support Award–Highly Commended	MNHHS Research Excellence Awards May 2019
Merrilyn Banks	Allied Health Excellence in Leadership and Management Award (for recognition of her focus on embedding a culture of research and research translation into clinical practice)	Australian Allied Health Awards September 2019
Mudge AM, McRae P, Hubbard R, Peel N, Lim WK, Banks M, Young AM , Blackberry I, Green T, Graves N, Harvey G, Barnett A, Inouye SK Reducing hospital associated complications in older people: Results from the CHERISH cluster randomised controlled study. American Geriatric Society, Oregon, May 2019	Presidential Poster Award – Clinical Trials	American Geriatric Society conference May 2019
Sarah Andersen	Best oral communication	British Association for Parenteral and Enteral Nutrition (BAPEN) Annual Conference, November 2019
Teresa Brown	2017 Dean’s Award for Outstanding Higher Degree by Research Theses	University of Queensland – awarded 5 th March 2019
Teresa Brown <i>(RBWH H&N team)</i>	Clinical Research Award – Highly commended	MNHHS Research Excellence Awards May 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Adrienne Young , Alison Mudge, Prue McRae, Angela Byrnes , Mark Brough <i>(QUT)</i> , Gary Power, Amanda Dines, Merrilyn Banks , Tara McCurdie	Nutrition and Dietetics, Internal Medicine Research Unit	Co-designing a positive meal environment for older people in hospital: a multi-phase experience-based co-design study	RBWH Foundation	\$35,459	\$35,349	2019
Claire Blake, Ally di Bella, Teresa Brown, Adrienne Young , Jenni Leutenegger <i>(Cancer Care)</i> , David Wyld <i>(Cancer Care)</i>	Nutrition and Dietetics; Cancer Care	Implementation of patient-led malnutrition screening in the cancer care ambulatory setting	RBWH Foundation Diamond Grant	\$40,000	\$20,000	2018-2019
Jane Musial, Andrea Cawte	Nutrition and Dietetics, QUT Health Clinic, Renal Medicine Service, COH Diabetes	QUT-RBWH-COH partnership Program for Diabetes and Chronic Kidney Disease	MNHHS LINK Innovation Scheme	\$58,330	\$38,886	2019-2020
Jane Musial , Katrina Campbell <i>(MNHHS)</i>	Nutrition and Dietetics, MNHHS	Enhancing obesity management using mHealth: supporting behaviour change to improve long term outcomes	AHPOQ	\$140,067	\$37,771	2019-2021
Kylie Matthews , Sue Patterson, Clare Byrne, Adrienne Young	Nutrition and Dietetics, Internal Medicine	Eating Disorders: To tube or not to tube? A comprehensive evaluation of acceptability and use of a nasogastric refeeding protocol	RBWH Foundation	\$37,048	\$37,048	2019
Margot Leeson-Smith, Adrienne Young , Jack Bell <i>(TPCH)</i> , Theresa Green <i>(Nursing, QUT)</i> , Rebecca Moore <i>(TPCH)</i> , Stacey O’Donnell <i>(Caboolture)</i> , Chloe Jarvis <i>(Redcliffe)</i> , Juliette Mahero <i>(TPCH)</i> , Andrew Wong <i>(Neurology)</i>	Nutrition and Dietetics, Nursing, Neurology	Implementation and Evaluation of a Multi-site Acute Stroke Nutrition Care Pathway	Health Practitioners Research Scheme Grant	\$26,059	\$10,858	2018-2019

Research Grants (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Midori Nakagaki, Glen Kennedy, Cameron Curley, Michael Smith, Therese hays, Jenni Leutenegger, Annett Barnes, Caroline Stewart, Teresa Brown , Rebecca Fichera , Leonie Naumann, Angela O'Malia, Ian Coombes, Karen Whitfield	Pharmacy, Cancer Care Services Nutrition and Dietetics, Physiotherapy, Social Work	Implementation and Evaluation of a Nurse-Allied Health Multidisciplinary Post-Bone Marrow Transplant Clinic	MNHHS SEED Innovation Fund	\$81,150	\$81,150	2019
Natasha Roberts, David Wyld, Gary Power, Helene Jacmon, Teresa Brown , Leonie Naumann, Erin Molloy, Suzette Fox, Greg Lewis, Many Fairclough, Maree Grier, Kieron Barker, Therese Hayes, Jenni Leutenegger, Nicole Gavin, Elise Button	Cancer Care Services, Nutrition and Dietetics	A Co-designed implementation science strategy with clinicians, consumers and researchers for symptom-management in oncology care	Diamond Care Grants	\$39,027.48	\$19,514	2019-2020
Nina Meloncelli (<i>SCHHS, QUT</i>), Susan de Jersey , Adrian Barnett (<i>QUT</i>), Rachel Hayes (<i>SCHHS</i>), Elise Gilberston (<i>SCHHS</i>), Michelle Mack (<i>SCHHS</i>), Rebekah Shakhovskoy (<i>SCHHS</i>), Sophie Poulter (<i>SCHHS</i>)	Nutrition and Dietetics Researchers	Evaluation of a dietitian-led model of care in low risk gestational diabetes pregnancies	Health Practitioners Research Scheme Grant	\$29,636	\$12,348	2018-2019

2019 Research Publications

Journal Articles

1. **Andersen S**, Weber N, Kennedy G, **Brown T**, **Banks M**, Bauer J. Tolerability of proactive enteral nutrition post allogeneic haematopoietic progenitor cell transplant: a randomised comparison to standard care. *Clinical Nutrition*. DOI: 10.1016/j.clnu.2019.06.012
2. **Andersen, S.**, Staudacher, H., Weber, N., Kennedy, G., Varelias, A., **Banks, M.** & Bauer, J. (2019). Pilot study investigating the effect of enteral and parenteral nutrition on the gastrointestinal microbiome post-allogeneic transplantation. *British Society for Haematology*. doi: 10.1111/bjh.16218
3. Ashrafi, D., Memon M., **Osland E.** Bariatric surgery and gastroesophageal reflux disease. *Annals of Translational Medicine*. 2019. doi: 10.21037/atm.2019.09.15
4. **Byrnes A**, **Young A**, Mudge A, **Banks M**, Bauer J. Exploring practice gaps to improve PERloperative Nutrition CarE (EXPERIENCE Study): a qualitative analysis of barriers to implementation of evidence-based practice guidelines. *Eur J Clin Nutr* 2019; 73 (1): 94-101
5. Cherlan, P., **Blake, C.**, Appleyard, M., Clouston, J., Mott, N. Outcomes of radiologically inserted gastrostomy versus
6. Cuong, T.Q., **Banks, M.**, Hannan-Jones, M., Thi Ngoc Diep, Do. & Gallegos, D. (2019) Validity, reliability and feasibility of nutrition screening tools NRS-2002 and MST administered by trained medical doctors in routine practice. *Hospital Practice*. doi: 10.1080/21548331.2019.1699760
7. Langston, K., **Ross, L.**, **Byrnes, A.**, **Hay, R.** (2019). A secondary-prevention behaviour-change strategy for high-risk patients: benefits for all classes of body mass index. *Nutrition & Dietetics*. doi: 10.1111/1747-0080.12605
8. **Marsh A**, Radford-Smith G, Lord A, **Young, A**, Robertson T, **Kinneally J.** Food avoidance in outpatients with Inflammatory Bowel Disease – Who, What and Why. *Clinical Nutrition ESPEN* – Published online 1 April 2019; doi: 10.1016/j.clnesp.2019.03.018
9. **Matthews K**, Gordon L, Van Beusekom J, Sheffield J, QuEDS Collaboration Group, Patterson S. A day treatment program for adults with eating disorders: Staff and patient experiences in implementation. *Journal of Eating Disorders*. 2019. doi: 10.1186/s40337-019-0252-4
10. McCormack J, Noble C, **Ross L**, **Cruickshank D.** Bialocerkowski A. (2019). How do foodservice dietitians and dietetic students learn about environmental sustainability? A scoping review protocol. *BMJ Open*. doi: 10.1136/bmjopen-2019-032355
11. Meloncelli N, Barnett A, **de Jersey SJ.** Staff resourcing, guideline implementation and models of care for gestational diabetes mellitus management. 2019 *Australian and New Zealand Journal of Obstetrics and Gynaecology* doi: 10.1111/ajo.13032
12. **Morgan K**, **de Jersey S**, **Mason B**, **Young A.** Guidelines for review of patients on haemodialysis: Are we meeting patient needs? *Nutrition & Dietetics* 76 (2), 166-173
13. Moroney L, Ward E, Helios J, Crombie J, Burns C, **Blake C**, Comans T, Chua B, Kenny L, Hughes B. Evaluation of a speech pathology service delivery model for patients at low dysphagia risk during radiotherapy for HNC. *Oral Oncology* 2019; doi: 10.1007/s00520-019-04992-x
14. **Osland E**, **Powlesland H**, **Guthrie T**, **Lewis CA**, Memon M. Micronutrient management following bariatric surgery: the role of the dietitian in the post-operative period. *Annals of Translational Medicine* 2019; <http://dx.doi.org/10.21037/atm.2019.06.04>
15. **Osland E.**, McGrath K., Ali A., Carey S., Daniells S., Angstrom K., Bines J., Asrani V., Watson C., Jones L., De Cruz P. (2019). A Framework to support Quality of Care for patients with Chronic Intestinal Failure requiring Home Parenteral Nutrition. *Journal of Gastroenterology and Hepatology*. doi: 10.1111/jgh.14841 percutaneous endoscopic gastrostomy. 2019. doi: 10.1111/1754-9485.12932

Journal Articles (cont)

16. Tran, Q. C., **Banks, M.**, Do, T. N. D., Gallegos, D., & Hannan-Jones, M. (2019). Characteristics of dietary intake among adult patients in hospitals in a lower middle-income country in Southeast Asia. *Nutrition and Dietetics* 76(3), 321-327.
17. Wong, A., Marcin Sowa, P., **Banks, M. D.**, Bauer, J. D. (2019). Home Enteral Nutrition in Singapore's Long-Term Care Homes – Incidence, Prevalence, Cost and Staffing. *Nutrients*. doi: 10.3390/nu11102492
18. **Yim, S. Y., Guthrie, T., de Jersey, S.** Impact of service wide initiatives to support healthy pregnancy weight gain on weight-related documentation. *Australian and New Zealand Journal of Obstetrics and Gynecology*. 2019 online October 2. Doi: 10.1111/ajo.13053
19. **Young A.**, Keller H, Barnes R, Bell J. Clinicians as novice facilitators: a SIMPLE case study. *J Health Organ Manag* 2019; 33(1):78-92
20. **Young, A. M.**, Olenski, S., Wilkinson, S. A., Campbell, K., Barnes, R., Cameron, A., & Hickman, I. (2019). Knowledge Translation in Dietetics: A Survey of Dietitians' Awareness and Confidence. *Canadian Journal of Dietetic Practice and Research*, 1-5. doi:10.3148/cjdr-2019-027.

Book Chapters / Letters

1. **Young A.M., Byrnes A.** (2019) Malnutrition. In: Gu D., Dupre M. (eds) *Encyclopedia of Gerontology and Population Aging*. Springer, Cham.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Young A.** Hospital acquired malnutrition: What does it mean, how do we capture it. How do we reduce it? AuSPEN, Adelaide, November 2019
2. **Young A.** Improving hospital mealtimes. Dietitians Association of Australia Diversity in Dietetics conference, Perth, November 2019.

Oral Presentations

1. **Andersen S.** Nutrition Support and the gastrointestinal microbiome, a systematic review and pilot study. BAPEN Annual Conference, Belfast, November 2019
2. Bell J, **Young A.**, Hill J, **Banks M.**, Comans T, Barnes R, Keller H. Integrated systems, interdisciplinary teams, full scope practice and delegation to deliver better value healthcare? A SIMPLE case for change. 13th National Allied Health Conference, Brisbane August 2019
3. **Blake, C., Edwards, A., Treleaven, E., Brown, T.,** Hughes, B., Lin, C., Kenny, L., **Banks, M.**, Bauer, J. Evaluation of Nutrition Outcomes Post-Implementation of a Pre-Treatment Model Of Care For Patients With Head And Neck Cancer Receiving Chemoradiotherapy. AusPEN Annual Conference, Adelaide, November 2019
4. Cawte, A., **Musial, J.**, Mullins, R., **De Jersey, S.**, Allport, C., Hannan-Jones, M. Is type 2 diabetes mellitus group education effective in a student-led environment? DAA National Conference, Brisbane August 2019
5. **Cutmore, C., Lewis, C. Matthews, K.,** Summers, C., Davis, A., **Young, A.** Dietitians leading change to improve teamwork and care of patients admitted with medically unstable eating disorders. DAA National Conference, Brisbane August 2019
6. **Eadeh, C.**, Leeson-Smith, M., Blundell, J. Late meals vending machine: An innovative solution to the problem of missing meals in hospital. IHHC Conference, Melbourne, August 2019
7. **Eadeh, C., Leeson-Smith, M., Dux, C., Blundell, J., Young, A.** Late meals vending machine: an innovative solution to the problem of missed meals in hospital. DAA National Conference, Brisbane August 2019
8. **Guthrie, T., Powlesland, H.,** Wilkinson, S., Callaway, L., Eakin, E., **de Jersey, S.** Staff and participant satisfaction with a dietetic-led telephone coaching program to support healthy gestational weight gain. DAA National Conference, Brisbane August 2019
9. **Hiatt J, Brown T, Lewis CA, Banks M,** Bauer J. Patient and carer experience of nutrition care throughout and beyond treatment for head and neck cancer: a systematic review and meta-synthesis. Australia & New Zealand head & neck Cancer Society ASM, Adelaide, September 2019
10. Jefferis, M., **Andersen, S., Brown, T.,** Curley, C., Bauer, J. Effect of malnutrition on clinical outcomes post allogeneic stem cell transplantation. DAA National Conference, Brisbane August 2019
11. **Leeson-Smith M,** Archer C, Carson G, Mahero J, Botero Zapata L, **Young A.** Opportunity for delegation and interdisciplinary nutrition care in acute stroke units. 13th National Allied Health Conference, Brisbane August 2019
12. **Leeson-Smith M, Eadeh C, Dux C, Young A.** The Feedback Tree: a novel way of engaging staff and consumers to provide feedback on hospital foodservices. 13th National Allied Health Conference, Brisbane August 2019
13. Leung, N., **Eadeh, C., Dux, C., Young, A.** What do hospital foodservice staff know about malnutrition? DAA National Conference, Brisbane August 2019
14. **Litzow T, Cruickshank, D.** Benchmarking – How QH Statewide Foodservices use KPIs to drive performance & improvement in Foodservices Statewide. IHHC Conference, Melbourne, August 2019
15. Mudge AM, McRae P, Hubbard R, Peel N, Lim WK, **Banks M, Young AM,** Blackberry I, Green T, Graves N, Harvey G, Barnett A, Inouye SK Reducing hospital associated complications in older people: Results from the CHERISH cluster randomised controlled study. International Association of Geriatrics and Gerontology conference, Gothenburg, May 2019
16. Musial, J., Cawte, A., Mullins, R., **De Jersey, S.**, Allport, C., Hannan-Jones, M. How effective is an inter-disciplinary student clinic in addressing the diabetes tsunami? A review of implementation outcomes. DAA National Conference, Brisbane August 2019
17. NJL Meloncelli, Ag Barnett, **SJ De Jersey.** 1437-P: How Has Changing the Diagnostic Criteria Impacted Perinatal Outcomes for Those NOT Diagnosed with GDM? *Diabetes* 68 (Supplement 1), 1437-P. American Diabetes Association (ADA) 79th Scientific Sessions, San Francisco, June 2019

Oral Presentations (cont)

18. NJL Meloncelli, AG Barnett, **SJ De Jersey**. Lessons Learned from Implementing a Dietician-Led Low Risk Model of Care. *Diabetes 68* (Supplement 1), 1396-P. American Diabetes Association (ADA) 79th Scientific Sessions, San Francisco, June 2019
19. Palmer M, Porteous H, **de Jersey SJ**. Attendance rates and descriptors of obese women referred to the dietitian for individual weight management advice during pregnancy. Dietitians Association of Australia National Conference, Gold Coast, Australia August. *Nutrition and Dietetics 2019*
20. **Powlesland, H., Guthrie, T.**, Callaway, L., Wilkinson, S., Eakin, E., **Young, A., de Jersey, S.** Advertising antenatal healthy lifestyle telephone coaching service through direct text messaging increases self-referral and overall service access. DAA National Conference, Brisbane August 2019
21. **Powlesland, H., Mason, B.**, ODonohue, R., Kark, A., Ross, L., **Young, A.** Providing high value care in high demand allied health services: an example of group education in chronic kidney disease. 13th National Allied Health Conference, Brisbane August 2019
22. **Powlesland, H., Mason, B.**, ODonohue, R., Kark, A., Ross, L., **Young, A.** Group education to reduce sodium intake in acceptable and effective for patients with chronic kidney disease. DAA National Conference, Brisbane August 2019
23. **Treleaven, E.**, Hewitt, M., **Olenski, S.**, Mudge, A., Wheeler, M., McRae, P., **Young, A.** Capturing the patient perspective: barriers to nutritional intake in hospital. DAA National Conference, Brisbane August 2019
24. Waters M, Brebner N, Fielding B, Chaplain A, Bransdon M, **de Jersey SJ**. Allied health in cancer care, electronically capturing what we do to inform succession planning from a skills based perspective. National Allied Health Conference. Brisbane August 2019
25. **Young A, Banks M**, Mudge A, McRae P. Taking an interprofessional approach to improving nutrition for older people in hospital. 13th National Allied Health Conference, Brisbane August 2019
26. **Young A**, Keller H, Barnes R, Hill J, **Banks M**, Comans T, Bell J. Supporting an allied health workforce to facilitate complex implementation projects: lessons learned from the SIMPLE project. 13th National Allied Health Conference, Brisbane August 2019.

Poster Presentations

1. **Brown T, Banks M**, Campbell L, Hughes B, Ahern E, Lin C, Kenny L, Bauer J. Assessment of sarcopenia and malnutrition in patients with head and neck cancer undergoing treatment of curative intent – implications for practice. Society for Sarcopenia, Cachexia and Wasting Disorders, Berlin, December 2019
2. **Croisier E, Brown T**, Bauer J. The efficacy of dietary fibre modification for managing gastrointestinal toxicity symptoms in gynae-oncology patients undergoing pelvic radiotherapy: a systematic review. ANZGOG Conference, Sydney, March 2019
3. **Croisier, E., Brown, T.**, Bauer, J. The role of dietary fibre in managing gastrointestinal toxicity symptoms in gynaecology patients undergoing pelvic radiotherapy DAA National Conference, Brisbane August 2019
4. Drysdale, C., **Matthews, K., Young, A.** Refeeding syndrome: Is a more assertive approach in the management of refeeding syndrome safe? BAPEN Annual Conference, Belfast, November 2019
5. **Dux, C., Leeson-Smith, M., Eadeh, C., Young, A.** The feedback tree: a novel way of engaging staff and consumers to provide feedback on hospital foodservices. DAA National Conference, Brisbane August 2019
6. **Hatzirodos, M., Guthrie, T.**, Austin, A., **Young, A.** When admissions to Short Stay Units are not so short: an opportunity for a dietetic assistant role. DAA National Conference, Brisbane August 2019
7. Kiss N, Bauer J, Boltong A, **Brown T**, Isenring E, Loeliger J, Steer B, Findlay M. Australian Cancer Clinicians' awareness, perceptions and practices regarding cancer-related malnutrition & sarcopenia. AuSPEN, Adelaide, November 2019
8. Kiss N, Bauer J, Boltong A, **Brown T**, Isenring E, Loeliger J, Steer B, Findlay M. Australian Cancer Clinicians' awareness, understandings and perceptions regarding cancer-related malnutrition & sarcopenia. Clinical Oncological Society of Australia (COSA) ASM, Adelaide, November 2019
9. Kiss N, Bauer J, Boltong A, **Brown T**, Isenring E, Loeliger, Steer B, Findlay M. Australian cancer clinicians' awareness, perceptions and practices regarding cancer-related malnutrition and sarcopenia. MASCC, San Francisco, June 2019
10. **Leeson-Smith, M.**, Archer, C., Carson, G., Mahero, J., Botero Zapata, L., **Young, A.** Low malnutrition and enteral feeding rates in acute stroke patients: time to reconsider blanket dietitian referrals? DAA National Conference, Brisbane August 2019
11. Meloncelli N, Barnett, A, d'Embden M, **de Jersey S**. How has changing the diagnostic criteria for GDM impacted perinatal outcomes in Queensland. Australasian Diabetes in Pregnancy Society Annual Scientific Meeting, Sydney, August 2019
12. Mudge AM, McRae P, Hubbard R, Peel N, Lim WK, **Banks M, Young AM**, Blackberry I, Green T, Graves N, Harvey G, Barnett A, Inouye SK Reducing hospital associated complications in older people: Results from the CHERISH cluster randomised controlled study. American Geriatric Society conference, Oregon, May 2019
13. Mudge AM, **Young AM**, McRae P, Graham F, Whiting L, Hubbard R. "Older People Aren't My Real Patients": a Qualitative Study of Barriers and Enablers to Older Person Friendly Hospitals. International Association of Geriatrics and Gerontology conference, Gothenburg, May 2019
14. Pashley A, **Brown T**, Lehn B, Hodge R, Bauer J. Investigating the effects of nutritional status on post-operative complications in a head and neck surgical population. Clinical Oncological Society of Australia (COSA) ASM, Adelaide, November 2019
15. Vivanti, A., **Eadeh, C.**, Juffs, P. Experiences and learnings: mapping food allergy, intolerance and sensitivity items to the systematized nomenclature of medicine-clinical terms (SNOMED-CT). DAA National Conference, Brisbane August 2019
16. Wheeler, M., **Byrnes, A., Young, A.**, Watt, A., Bauer, J. Preoperative nutrition education: The patient perspective. DAA National Conference, Brisbane August 2019
17. Yim, S. Y., **Guthrie, T., de Jersey, S.** Examining the impact of service initiatives to support healthy pregnancy weight gain on weight related documentation. DAA National Conference, Brisbane August 2019.

Details of staff that completed their PhDs in 2019 within your department / research group:

Name	Name of Project	Completed Date	Affiliated University/ies
Angela Byrnes	Nutritional care and status of older surgical patients	Feb 2019	UQ
Kylie Matthews	Refeeding syndrome in acute care: Is there a dietetics role?	Feb 2019	UQ

Other communications and outputs:

Staff Member	Details
Abigail Marsh	The Gut Microbiome episode of My Amazing Body podcast. https://www.health.qld.gov.au/news-alerts/podcast/my-amazing-body-the-gut-microbiome – 30 th May 2019
Christine Eadeh	ABC interview: Late meals vending machine (during DAA conference, 2019) – supported by DAA Media
Adrienne Young	Infuse Dietitian Connection magazine September 2019 https://view.joomag.com/infuse-infuse-9-september-2019/0069842001567558306/p24?short

Dr Adrienne Young (*Nutrition and Dietetics*) receiving “Research in Practice” award at the national Dietitians Association of Australia conference.



DEPARTMENT OF OCCUPATIONAL THERAPY

Translating research into better outcomes for patients is a key driver for Occupational Therapy at The Royal Brisbane and Women's Hospital (RBWH). Occupational Therapy continues to grow in building research capacity, experience and in delivering research outcomes. Occupational Therapy research has focused on translating or generating new evidence to improve our patients' hospital journey, health outcomes and re-engagement with peoples' life roles i.e. "occupations".

A variety of strategies have been implemented to facilitate clinician engagement and participation in research which include:

- Embedding a professional practice framework
- Recruitment and retention of critical roles and skill set
- A dedicated Research Co-ordinator role to develop capability
- Integration of research activities into operational planning
- Introduction of clinical auditing to inform consistent, evidence based practice in high volume OT services.

2019 was a successful year for Occupational Therapy with 7 peer reviewed publications, 13 National and international conference presentation and \$513,120 in competitive grant funding.

Highlights for Occupational Therapy in 2019 include:

- CAHRLI Award for Excellence in Research Learning and Innovation awarded to Emeritus Professor Jenny Strong, Research Co-ordinator
- Pain ROADMAP and lead investigator Dr Nicole Andrews awarded:
 - ↳ winner Research and Development Project of 2019, Queensland iAwards
 - ↳ merit award for Data Insights Innovation 2019, Queensland and Australian iAwards
 - ↳ merit award for Community Service Market 2019, Australian iAwards.
- 7 RBWH Foundation Scholarships awarded for 2020 – 4 new, 3 renewals



Emeritus Professor Jenny Strong (*Occupational Therapy*), recipient of the CAHRLI Award for Excellence in Research, Learning and Innovation (pictured with Sue Laracy (*Director Occupational Therapy*) and Mark Butterworth, *Executive Director Allied Health Metro North*)

- Growth of research activity from 8 % to 40 % participation rate (2017 to 2019)
- "Expert Consumer" led research into Burns survivorship
- Jamieson Trauma Institute funding for the evaluation of clinical protocols of radial wrist fractures
- Ongoing partnership with the Herston Biofabrication Institute evaluating the effectiveness of scar management technology including fractional CO 2 ablative laser.

Introduction of a dedicated research co-ordinator has accelerated the rate of clinician engagement in Occupational Therapy research and knowledge translation and recognition is made of the significant contribution by Emeritus Professor Jenny Strong.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Andrea Mc Kittrick	Doctor of Philosophy, UQ (2018-2023)	Outcome measures for hand burn injuries	Louise Gustafsson
Erin Crofton	Master of Philosophy, UQ (2018-2020)	Sensory sensitivity and adherence with compression garments after burn injuries	Jenny Strong , Pam Meredith, Paul Gray
Genevieve O'Donoghue	PhD CQU (2018-2020)	Couples, attachment and chronic pain	Pamela Meredith, Jenny Strong , Nicole Andrews
Giovanna Tornatore	Doctor of Philosophy, UQ (2019-2027)	Rehabilitation intensity for patients with upper limb impairment – what is the impact on occupational performance.	Hannah Gullo, Jenny Fleming
Grace Brandjerporn	PhD UQ (2016-2019)	Pre-natal and perinatal attachment and child development	Pamela Meredith, Jenny Strong
Kaitlyn Spalding	MPhil Griffith University (2019-2023)	Outcomes after daily living group training	Louise Gustafsson
Kathryn Goodchild	MPhil UQ (2019-2023)	Functional cognition in neurosurgery	Jenny Fleming
Nicole Coghlan	Masters of Philosophy, UQ (2015-2019), Conferred December 2019	Patient experiences of wearing compression garments post burn injury	Jenny Strong , Jodie Copley, Tammy Aplin, Sue Laracy
Sarah O'Reilly	Master of Philosophy, UQ (2018-2020)	The efficacy of stretch tapes in reducing hypertrophic scarring after burn injury	Jenny Ziviani, Jenny Strong
Shannon Scarff	Master of Philosophy, UQ (2018-2021)	Ecological assessment of cognition by the occupational therapist: The Multiple Errands Test revised in the Australian context	Jennifer Fleming, Hannah Gullo, Emily Nalder
Stephanie Power	PhD UQ (2014-2019)	The language of pain in the birthing room; a cross cultural perspective	Fiona Bogossian, Roly Sussex, Jenny Strong

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Jenny Strong	Emeritus Professor	24 hrs/mth	In-kind	School of Health and Rehabilitation Sciences	The University of Queensland,
	Adjunct Professor			School of Health, Medical and Applied Sciences	Central Queensland University
Michelle Donovan	Honorary Associate lecturer	0.25 hrs/mth	In-kind	School of Health and Rehabilitation Sciences	The University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Amber Jones , Perry Judd <i>(PT)</i>	Michelle Cottrell <i>(PT)</i> , Anita Plaza <i>(PT)</i> , Andrea Mc Kittrick , Angela Chang <i>(CAHR)</i> , Clare Burns <i>(SP)</i>	Exploration of healthcare provider and patients views towards the implementation of an Allied Health-led TeleBurns Model of Care
Amber Jones , Perry Judd <i>(PT)</i>	Michelle Cottrell <i>(PT)</i> , Anita Plaza <i>(PT)</i> , Andrea Mc Kittrick , Angela Chang <i>(CAHR)</i> , Clare Burns <i>(SP)</i> , Hannah Carter <i>(QUT)</i>	The Royal Brisbane and Women's Hospital Allied Health TeleBurns Clinic: An implementation evaluation using the RE-AIM approach

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group/ Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Andrea Mc Kittrick	Amber Jones, Sue Laracy, Jenny Strong, Andre Baeur <i>(Psychology)</i>	“Scar Wars” – The effective use of cinemagraphic remedial make up by Occupational Therapy to conceal disfiguring scars”
Andrea Mc Kittrick	Amber Jones, Jason Brown <i>(Professor Pegg Adult Burns Centre, RBWH)</i>	A retrospective review of the management and functional outcomes of patients who developed Heterotopic Ossification in one or bilateral upper limbs post severe burn injury at Royal Brisbane and Women’s Hospital (RBWH) between 2006 and 2016
Andrea Mc Kittrick	Sue Laracy, Jenny Strong, Michael Rudd <i>(Burns)</i>	Royal Brisbane and Women’s Hospital Occupational Therapy auditing framework for identifying improvements to acute adult burns care”
Andrea Mc Kittrick	Amber Jones and Australian Catholic University – School of Occupational Therapy	A feasibility study of the Canadian Occupational Performance Measure (COPM) in the burn’s cohort in an acute tertiary facility
Andrea Mc Kittrick	Amber Jones and The University of Queensland – School of Health and Rehabilitation Sciences – Occupational Therapy	To determine PREMs and PROMS post burn injuries to the ear from the consumer and clinician perspectives across Australia and New Zealand
Celeste Glasgow	Sue Laracy, Kathy Green <i>(Logan),</i> Ruth Cox <i>(QE2),</i> Leo Ross <i>(QE 2)</i>	Evaluation of the Primary Contact Occupational Therapy Hand (PCOTH) Clinical Outcomes ; non carpal tunnel syndrome (CTS) diagnoses
Celeste Glasgow	Sue Laracy, Cherie Aceto	What is the most effective orthosis for improving PIP joint extension following hand trauma? A RCT
Celeste Glasgow	Sue Laracy, Kristin Kirwan	Occupational Therapy Hand Unit Consumer engagement project
Erin Crofton	Amber Jones, Sue Laracy, Jenny Strong, Paul Gray, <i>(Pain Centre)</i>	The use of Immersive Virtual Reality in Occupational Therapy during burn wound care procedures
Erin Crofton	Jenny Strong, Pamela Meredith <i>(Central Queensland University),</i> Paul Gray <i>(Pain Centre)</i>	Is sensory sensitivity a factor in non-adherence in compression garment wear post burn?
Kathy Goodchild	Jenny Fleming <i>(UQ),</i> Jodie Copley <i>(UQ)</i>	Translating the evidence to improve Occupational Therapy assessment of functional cognition following acute traumatic brain injury (TBI)
Kaitlyn Spalding	Louise Gustafsson <i>(GU)</i>	Enhancing occupational performance using the LifeSkills program
Kaitlyn Spalding	Kristin Kirwan	Positioning of the lower limb for the prevention and management of pressure injuries: a review of current practice
Kristin Kirwan	John Fraser <i>(TPCH),</i> Chris Anstey <i>(TPCH)</i>	Determining the pressure redistribution properties of selected commercial and custom made products to reduce the incidence of pressure injury development on the head
Nicole Andrews	Belinda Long, Jenny Strong, Sue Laracy	Evaluation of occupational therapy interventions within the orthopaedic physiotherapy screening clinic
Nicole Andrews	Marlien Varnfield <i>(CSIRO),</i> David Ireland <i>(CSIRO)</i>	Towards understanding how much is too much for individuals with chronic pain
Nicole Andrews	Olivia Zheng <i>(Trauma Service),</i> Jodie Ross <i>(Trauma Service),</i> Venerina Johnston <i>(UQ),</i> Elise Gane <i>(UQ),</i> Esther Smits <i>(UQ),</i> Charlotte Brakenridge <i>(UQ),</i> Paul Gray, <i>(Professor Tess Cramond Multidisciplinary Pain Centre),</i> Michael Rudd <i>(Trauma Service)</i>	An investigation of the prevalence, impact, and management of chronic pain post trauma at a tertiary public hospital
Nicole Andrews	David Ireland <i>(CSIRO),</i> Marlien Varnfield <i>(CSIRO),</i> Cate Sinclair <i>(Pain Specialists Australia),</i> Michael Deen <i>(MSHHS),</i> Kathleen Cooke <i>(St Vincents),</i> Helen Rowe <i>(The Therapy Space),</i> Atiyeh Vaezipour <i>(UQ),</i> Esther Smits <i>(UQ)</i>	Is app gamification effective in increasing consumer engagement and satisfaction? An evaluation of gamification for a chronic pain monitoring app
Nicole Andrews	Venerina Johnston <i>(UQ),</i> Genesta Nicolson <i>(Psychology),</i> Michael Handy <i>(Trauma Service),</i> Robyn Charles <i>(Trauma Service)</i>	Evaluating the use of the ‘Leading the Way in Your Recovery’ resource
Nicole Coghlan	Jenny Strong, Jodie Copley (UQ), Tammy Aplin <i>(UQ),</i> Sue Laracy	Patient experiences of wearing compression garments post burn injury

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group/ Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Robyn Scheer		The Lymphoedema Arm Measurement Study – Winter vs Summer
Robyn Scheer	Nicole Andrews, Erin Crofton	The effect of limb position on leg circumference measurements in patients diagnosed with lower limb lymphoedema
Sarah O'Reilly	Jenny Ziviani (UQ), Jenny Strong , Jason Brown (<i>Surgery</i>)	The application of multidimensional tape on small size burn scars
Shannon Scarff	Jennifer Fleming (UQ), Hannah Gullo (UQ), Emily Nalder (<i>UofToronto</i>)	Ecological assessment of cognition by the occupational therapist: The Multiple Errands Test revised in the Australian context
Sue Laracy	Kristin Kirwan, Jenny Strong	Acute surgical business case 7 day service review
Tennille Rowland	Giovanna Tornatore, Beverley Lewis, Sue Laracy , Simon Finnigan (<i>UQCCR</i>)	Occupational therapy stroke audit: Measuring compliance of occupational therapy practice with evidence – based guidelines

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Atiyeh Vaezipour (UQ), Mark Horswill (UQ), Oscar-Oviedo Trespalacios (CARRS-Q), Venerina Johnston (UQ), Patricia Delhomme (<i>IFSTAR</i>)	Nicole Andrews	Improving the management of driving behaviour in individuals with chronic pain
Charlotte Brakenridge (UQ), Venerina Johnston (UQ), Esther Smits (UQ), Elise Gane (UQ)	Nicole Andrews	Impact of interventions on work-related outcomes for individuals with musculoskeletal injuries after road traffic crash: a systematic review protocol
Elise Gane (UQ), Venerina Johnston (UQ), Esther Smits (UQ), Charlotte Brakenridge (UQ)	Nicole Andrews	Exploring the perspectives of key stakeholders in return to work after road traffic crash
Esther Smits (UQ), Venerina Johnston (UQ), Charlotte Brakenridge (UQ), Elise Gane (UQ)	Nicole Andrews	Recovery following a road traffic crash – a Delphi study
Jessica Thackeray (UQ), Sophie Bowen (UQ), Cory Poll (UQ), Pamela Meredith (CQU)	Jenny Strong, Nicole Andrews	“Can Sensory- and Attachment-Informed approaches be used to modify perceptions of pain?”
Kirsten Cook (<i>SCUH</i>)	Simon Finnigan (<i>UQCCR</i>), Sue Laracy	Evaluation of the Primary Contact Occupational Therapy Hands Pathway in the Treatment of Carpal Tunnel Syndrome; statewide
Louise Corben (<i>MCRI</i>), Martin Delatycki (<i>MCRI</i>)	Tennille Rowland, Jenny Strong, John O’Sullivan (Neurology), Sue Laracy	Does functional electrical stimulation improve hand function and daily participation of individuals with Friedreich ataxia?
Lynn DeBar (<i>Kaiser Permanente Centre for Health Research, Portland, USA</i>), Meghan Mayhew (<i>Kaiser Permanente Centre for Health Research, Portland, USA</i>)	Nicole Andrews	PPACT Administrative Supplement for Research on Sleep Disturbances and Impact on Chronic Pain
Midori Nakagaki (<i>BMT Pharmacist</i>)	Therese Hayes (<i>Nursing</i>) Jenni Leutenegger (<i>Nursing</i>); Caroline Steward (<i>Nursing</i>); Midori Nakagaki (<i>Pharmacy</i>), Rebecca Fichera (<i>Dietetics</i>), Leonie Naumann (<i>Physiotherapy</i>), Justine Brennan (<i>Social Work</i>), Suzette Fox (<i>Social Work Team Leader</i>), Emma Foley, Erin Crofton , Nicole Gavin (<i>Nursing</i>), Glen Kennedy (<i>Haematology</i>), Cameron Curley (<i>Haematology</i>)	Implementation and Evaluation of a Nurse-Allied Health Multidisciplinary Post-Bone Marrow Transplant Clinic
Shanithi Kanagarajah (<i>Geriatrics, RBWH</i>)	Sue Laracy , Kana Appadurai (<i>Geriatrics</i>), Kathleen Richter (<i>Nursing</i>), Gisela Brittain	Hospital Wide clinician led audit of patients requiring sub acute care in a large tertiary hospital
Venerina Johnston (UQ), Melissa Kendall (<i>MSHHS</i>), Donna Valiant (UQ), Ray Quinn (<i>MSHHS</i>), Ben Turner (<i>MSHHS</i>), Hannah Gullo (UQ), Charlotte Brakenridge (UQ)	Nicole Andrews	Review of Vocational Rehabilitation Services for persons with brain injury within Queensland

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Jenny Strong	Award for Excellence in Research Learning and Innovation 2019	CAHRLI , 19 June 2019
Nicole Andrews	Pain ROADMAP – Winner Research and Development Project of the Year 2019	Queensland iAwards
	Pain ROADMAP – Merit Award for Data Insights Innovation of the Year 2019	
	Pain ROADMAP – Merit Award for Community Services Market 2019	
Nicole Andrews	Pain ROADMAP – Merit Award for Research and Development Project of the Year 2019	
	Pain ROADMAP – Merit Award for Data Insights Innovation of the Year 2019	Australian iAwards

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Andrea McKittrick (OT)	OT	To develop a specific outcome measure for hand burn injuries informed by all levels of evidence: research evidence, specialist clinicians and consumers	RBWH Foundation Postgraduate Scholarship – renewal	\$38,083	\$38,083	2019
Atiyeh Vaezipour (UQ), Nicole Andrews (OT and UQ), Mark Horswill (UQ), Oscar-Oviedo Trespalacios (CARRS-Q), Venerina Johnston (UQ), Patricia Delhomme (IFSTAR)	OT	Improving the management of driving behaviour in people with chronic pain: perspective of people with chronic pain and health professionals	RACV Safety Research Fund	\$74,630	\$20,000	2019-2020
Erin Crofton	OT	Is sensory sensitivity a factor in non-adherence with compression garments postburn?	RBWH Foundation Postgraduate Scholarship	\$38,083	\$38,083	2019
Freyr Patterson (UQ), Amanda Pigott (UQ), Jennifer Fleming (UQ), Cate Fitzgerald (QH), Jenny Strong , Stephen Birch (UQ), Mary Whitehead (PAH), Sue Laracy , Amy McKenzie , Giovanna Tornatore and Jackie Searles (PAH)	UQ SHRS OT, OT PAH, and OT RBWH	Student-resourced service delivery group placements in occupational therapy: an economic and health evaluation	UQ Faculty of Health and Behavioural Sciences Economic and Health Value of Student Placements Research Grants	\$50,000	\$50,000	2019
Jason Brown (Burns), Michael Rudd (Burns), Sue Laracy , Michelle Donovan	Burns and OT	Biofabrication for Better Burn Treatment	MNHHS Program Engagement (Clinical and Research), Herston Biofabrication Institute	\$2,499,645	\$499,929	2018-2022
Jason Brown (Burns), Michelle Donovan , Zephania Tyack (UQ), Steve McPhail (QUT)	Burns and OT	Feasibility, acceptability, costs and preliminary effect of an innovative ablative fractional CO2 laser service for people with burn scars	QLD Health New Health Technology Funding Evaluation Program	\$39,944	\$39,944	2019
Jason Brown (Burns), Michelle Donovan , Zephania Tyack (UQ), Steve McPhail (QUT)	Burns and OT	Feasibility, acceptability, costs and preliminary effect of an innovative ablative fractional CO2 laser service for people with burn scars	RBWH Foundation Project Grant	\$30,000	\$30,000	2019
Jenny Strong , Sarah O'Reilly , Dale Trevor, Jodie Copley (UQ), Tammy Aplin (UQ), Joanna Mollison (Allied Health), Nicole Coghlan (QCH), Sue Laracy and Jason Brown (Burns)	OT, Allied Health and Burns	The Lived Experience of Pressure Garments: an Exploration of the Partnership between Expert Consumers and Occupational Therapists in a Tertiary MDT Burns Centre	RBWH Foundation grant	\$14,965	\$14,965	2019

Research Grants (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Kaitlyn Spalding and Kylie Watson	OT	Digital technology in home assessments	CAHRLI Innovation/translation Challenge	\$2,000	\$2,000	2019
Nicole Andrews (OT and UQ), David Ireland (CSIRO), Marlien Varnfield (CSIRO)	OT	An evaluation of the usability of a pediatric version of the Pain ROADMAP App	APS/APRA/CFK Clinical Research Grant	\$30,000	\$12,400	2019-2020
Perry Judd (Physiotherapy), Amber Jones	Physiotherapy and OT	RBWH OT/PT led burns outpatient telehealth service	MNHHS	\$139,167	\$48,680	2019-2020
Sarah O'Reilly, Jenny Strong and Jason Brown (Burns)	OT and Burns	Elastic tapes in burn scar management	CAHRLI Innovation/translation Challenge	\$5,000	\$5,000	2019
Shannon Scarff	OT	Ecological assessment of patient cognition by the occupational therapist: The Multiple Errands Test-Revised in the Australian context	RBWH Foundation Postgraduate Scholarship	\$38,083	\$38,083	2019

2019 Research Publications

Journal Articles

1. Brakenridge, C L., Gane, E M., Smits, E J., **Andrews, N E.**, Johnston, V Impact of interventions on work-related outcomes for individuals with musculoskeletal injuries after road traffic crash: a systematic review protocol. *Systematic Reviews*, 2019 8 1: 247. doi:10.1186/s13643-019-1178-2
2. Coghlan ,N, Copley,J, Aplin T, **Strong, J.** How to improve compression garment wear after burns: patient and therapist perspectives. *BURNS*. 2019. Doi.org/10.1016/j.burns.2019.04.018
3. Coghlan ,N, Copley,J, Aplin T, **Strong, J.** The experience of wearing compression garments after burn injury: “On the inside it is still me”. *BURNS*, 2019 doi.org/10.1016/j.burns.2018.08.014
4. Cox R, **Laracy S, Glasgow G,** Green G, Ross L. Evaluation of occupational therapy-led advanced practice hand therapy clinics for patients on surgical outpatient waiting lists at eight Australian public hospitals *J Hand Therapy* 2019 DOI: <https://doi.org/10.1016/j.jht.2019.01.004>
5. **Crofton, E.**, Meredith, P., Gray, P., **O'Reilly, S.** & **Strong, J.** (2019). Non-adherence with compression garment wear in adult burn patients: A systematic review and meta-ethnography, *BURNS*, <https://doi.org/10.1016/j.burns.2019.08.011>
6. Hasenbring, I., **Andrews, N E,** Ebenbichler, G, Overactivity in Chronic Pain, the Role of Pain Related Endurance and Neuromuscular Activity – An Interdisciplinary, Narrative Review. *The Clinical Journal of Pain*. 2019 doi: 10.1097/AJP.0000000000000785
7. Ireland, D, **Andrews, N** Pain ROADMAP: A mobile platform to support activity pacing for chronic pain. *Stud Health Technol Inform* 2019266:89-94. doi: 10.3233/SHTI190778.

Conference Presentations – Invited Speaker, Oral and Poster

Invited Speaker

1. **Andrews, N.** Over-exercising and pain? Moving on With Pain Symposium, Aarhus, Denmark, November 2019.

Oral Presentations

1. **Glasgow, C.,** Cox, R., **Laracy, S.,** Green, K., Ross, L. (2019). Advanced scope of practice (ASP) hand therapy-led care improves patient reported function and enhances patient satisfaction, for hand injured consumers of QLD Health. Australian Hand Therapy Association National Conference, Melbourne
2. **Jones, A.,** Judd, P., Cottrell, M., Plaza, A., **Mc Kittrick, A.,** Chang, A., Burns, C. Exploration of patients' views towards the implementation of an Allied Health led TeleBurns model of care. Australian and New Zealand Burns Association, ASM, Hobart, October 2019
3. **Mc Kittrick, A., Jones, A.** & Brown, J. “A retrospective review of the management and functional outcomes of patients who developed Heterotopic Ossification in one or bilateral upper limbs post severe burn injury at Royal Brisbane and Women’s Hospital (RBWH) between 2006 and 2016” Australian and New Zealand Burns Association, ASM, Hobart, October 2019

Oral Presentations *(cont)*

4. **Mc Kittrick, A.**, Reeves, A., Lee, A. & Cloete, I. "A scoping review of the incidences of basal cell and squamous cell carcinomas in burns survivors, and the efficacy of sun protection" Australian and New Zealand Burns Association, ASM, Hobart, October 2019
5. **Millard, H.**, Gustafsson, L., Molineux, M, O'Shea, K. A systematic review of outcomes measures used to evaluate the effectiveness of task-specific training after stroke. Occupational Therapy Australia National Conference – Sydney – July 2019
6. **Millard, H.**, Gustafsson, L., Molineux, M, O'Shea, K. Understanding peoples' experience of using the SaeboFlex® following a stroke. Authors: Hayley Millard, Louise Gustafsson, Matthew Molineux, and Katherine O'Shea. Occupational Therapy Australia National Conference - Sydney – July 2019
7. **Tornatore G, Laracy S, Spalding, K, Cooper, T, Scarff, S.** Frequency and intensity of practice: moving towards evidence informed Occupational Therapy services. Occupational Therapy Australia, 28th National Conference and Exhibition, July 2019.

Poster Presentations

1. **Laracy S,** Nickson G, Sheahan N, **Glasgow C,** Cox R, Ross L, Green K. Patient satisfaction with Occupational Therapy led conservative management of chronic hand and wrist conditions. Occupational Therapy Australia, 28th National Conference and Exhibition, July 2019
2. **Laracy S, Strong J.** Transforming occupational therapy practice through a culture of research informed care. Occupational Therapy Australia, 28th National Conference and Exhibition, July 2019
3. **Mc Kittrick, A., Jones, A., Laracy, S., Strong, J.** & Bauer, A. "The Effective use of Cinemagraphic Remedial Make Up by Occupational Therapy to Conceal Disfiguring Scar" Australian and New Zealand Burns Association, ASM, Hobart, October 2019
4. Meredith P, **Strong J, Andrews N,** Thackeray J, Bowen S, Poll C. Sensory modulation and attachment coping strategies in an experimental pain situation. Australian Pain Society Annual Scientific Meeting, April 2019
5. **Rowland T,** O'Sullivan J, Delatycki M, **Strong J,** Corben L. Electrical stimulation to improve hand function in people with Friedreich Ataxia. 2019 International Ataxia Research Conference, Washington, USA, November 2019.

RBWH Occupational Therapy Research Team



DEPARTMENT OF PHYSIOTHERAPY



In 2019, the Physiotherapy research programme undertook research and quality activities across both inpatient and outpatient settings. This year saw implementation of the team-based project activity which led to research and quality activities being undertaken in critical care, surgery, medicine, cancer care, musculoskeletal, neurosciences, rehabilitation and women's and newborn services.

Research highlights for 2019 include:

- A focus on innovative models of care including telehealth applications for outpatient services in OPSC, cancer care and burns
- Continued research into advanced and extended scope of practice roles such as medication prescribing by emergency physiotherapy practitioners, vestibular clinics and primary contact musculoskeletal clinics.
- Implementation of team-based research and quality projects to increase research capacity across the Physiotherapy tment at RBWH.

The Physiotherapy Department continued to develop strong research collaborations with universities with ongoing support for existing Conjoint Research Fellow positions with the University of Queensland (Dr Shaun O'Leary) and Griffith University (Assoc Prof Jenny Paratz). Through research higher degrees, collaborations have also been forged with Queensland University of Technology and the Australian Catholic University.

In 2019, 55 research projects were undertaken with participation from 84 staff members. One staff member successfully completed their PhD and three others continue their PhD studies. Research activities led to 20 peer reviewed publications, 15 national and international conference presentations and involvement in close to \$450 000 grant funding. The Physiotherapy Department was successful in receiving an RBWH Foundation AH TRIP Enabling Implementation award for their implementation of team-based research within the department. Michelle Cottrell and team received a highly commended award at the 2019 Metro North Research Excellence Awards and 2 other staff members received awards at a national and international conferences.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Alan Wan	PhD, UQ (2016-2019)	Movement Evoked Pain Sensitivity in Chronic Spinal Pain	Shaun O'Leary , Michael Sullivan, Michele Sterling
Ian Parker	PhD, ACU (2013-2019)	The Prevalence, Profile and Efficacy of conservative management for Hospital Ear Nose and Throat Category 2 and 3 wait list patients with vestibular dysfunction	Nancy Low Choy, Ann Rahman, Tracy Comans, David Goode
Jemima Boyd	MPhil, Griffith (2016-2019)	Haemodynamic measurement in mobility post cardiac surgery	Jennifer Paratz , James Walsh
Judith Bellapart	PhD, UQ (2013-2019)	Microcirculation in head injury: an ovine model	Jennifer Paratz , Rob Boots, John Fraser
Julie Adsett	PhD, Griffith (2013-2019) <i>Conferred May 2019</i>	Exercise rehabilitation for people with heart failure	Norm Morris, Allison Mudge, Jennifer Paratz , Suzanne Kuys
Lauren O'Connor	PhD, Griffith (2015-2019)	The effect of the Passy Muir valve on postural retraining	Jennifer Paratz , Norm Morris
Mark Cruickshank	PhD, QUT (2017-2023)	An Evaluation of Physiotherapy Prescribing in the Emergency Department	Lisa Nissen, Greg Kyle
Martha Druery	PhD, UQ (2016-2020)	Predictors of Quality of life outcomes post burn injury	Jennifer Paratz , Jeff Lipman, Cate Cameron, Peter Newcombe

Supervised Post-Graduate Research Students *(cont)*

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Maureen Peasy	MPhil, Griffith (2015-2019)	Physical activity in COPD	Jennifer Paratz , Norm Morris
Michelle Cottrell	PhD, UQ (2015-2019)	Evaluating the impact of a telerehabilitation model of care in an orthopaedic physiotherapy-led screening clinic & multidisciplinary service	Trevor Russell, Shaun O'Leary , Anne J Hill, Tracy Comans
Olivia Galea	PhD, UQ (2015-2019) <i>Conferred July 2019</i>	Do impairments exist beyond expected recovery time following Mild Traumatic Brain Injury and what is their relationship with self-reported symptoms?	Shaun O'Leary , Julia Trelevan
Orlando Flores	PhD, UQ (2014-2019) <i>Conferred July 2019</i>	Metabolism in Burns	Jennifer Paratz , Kellie Stockton, Zephania Tyack
Prudence Butler	PhD, UQ (2019-2023)	Illness Representations and recovery outcomes after traumatic extremity injuries	Michele Sterling, Shaun O'Leary , Melita Guimmarra
Rebecca Hardy	MPhil Griffith (2017-2019)	Physical activity post heart-lung transplantation	Norm Morris, Jennifer Paratz
Rebecca Kelly	MPhil, Griffith (2015-2019)	Factors predicting daily physical activity post heart transplantation	Jennifer Paratz , Norm Morris

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Jennifer Paratz	Conjoint Principal Research Fellow	1.0	50% operational, 50% external	Multiple projects in the area of ICU and Burns	Griffith University
Michelle Cottrell	RBWH Physiotherapy Research Coordinator	0.4 Jan-Sept	Operational	Multiple projects within Physiotherapy Department	N/A
Peter Window	RBWH Physiotherapy Research Coordinator	0.4	Operational	Multiple projects within Physiotherapy Department	N/A
Julie Adsett	RBWH Physiotherapy Research Coordinator	0.4 Sept-Dec	Operational	Multiple projects within Physiotherapy Department	N/A
Shaun O'Leary	Conjoint Fellow	1.0	50% operational, 50% external	Multiple projects in the area of Musculoskeletal Physiotherapy and supervision of Honours, Masters and PHD students	University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Hildegard Reul-Hirche	Honorary Research Position		Multiple projects in the area of Cancer Care Research	N/A
Lucy Thomas	Honorary Research Position	4 days/mnth (1 day/wk)	Neck pathology differential diagnosis in emergency department presentations	University of Queensland
Venerina Johnson	Honorary Research Position		Facilitating return to pre-injury function	RECOVER
Esther Smits	Honorary Research Position		Facilitating return to pre-injury functioning after road traffic accidents	RECOVER

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Anita Plaza	Jennifer Paratz, Michelle Cottrell	Telehealth for the delivery of Physiotherapy exercise programs following burn injury
Anita Plaza	Phillipa Ault, Marnie Macfie, Brooke Mulliss, Joanne Alexander, Charlotte Jackson, Catherine Sharpe, Jacinta Weber, Catherine Anderson, Gemma Allinson, Michelle Cottrell	An audit of movement and mobility protocols after surgical intervention for the management of burn injuries at the Royal Brisbane and Women's Hospital
Brita Hughes	Leanne Hepnar, Damian Caruana, Laura Murphy, Suzette Griffioen, Alice Beningfield, Ian Parker, Peter Window, Harriet Sheahan	Audit of Physiotherapy Adherence to Aspects of Clinical Guidelines for Stroke (2017)
Brita Hughes	Tim Donovan (<i>Neonatal Medicine</i>), Jennifer Paratz	Outcome in neonates with HIE
Sarah Flanagan	Gary Mitchell, Shea Roffey	Adherence to clinical practice guidelines for low back pain presentations to the RBWH Emergency and Trauma Centre
Cara Masterson	Janene Stephens, Lorelle Hawes, Emily Edwards, Melissa Webber, Jenny Boyce, Jenny Paratz, Michelle Cottrell	Hydrotherapy in the management of persistent pelvic pain: a pilot, randomised controlled trial
Emilie Amiss	Merinda Rhodes, Michelle Cottrell	Evaluation of a stepping strategy mobile application in cardiopulmonary rehabilitation: a prospective cohort study
Garry Anderson	Emilie Amiss, Peter Window, Michelle Cottrell	RBWH Physiotherapy staff attitudes toward undergraduate physiotherapy student clinical education: a cross-sectional survey
Ian Parker	Gretta Palmer (<i>PAH</i>), Leia Barnes (<i>Logan</i>), Tamsin Smith (<i>GCUH</i>)	An evaluation of the Allied Health Specialist Clinics – Vestibular Rehabilitation Services
Ian Parker	Damian Caruana, Lindsay Martin, Alexandra Boughey, Merinda Rhodes, Brett Parfitt, Amy Naumann, Michelle Cottrell	Measuring physiotherapy intensity of practice for patients admitted to the RBWH Geriatric Assessment and Rehabilitation Unit: a service evaluation
Jennifer Paratz	Rob Boots (<i>Thoracic Medicine</i>), Justin Kenardy (<i>UQ CONROD</i>), Fiona Coyer (<i>RBWH and QUT Nursing</i>), Peter Thomas , Tracy Comans (<i>UQ</i>), Jack Iwashyna (<i>University of Michigan</i>), Ignacio Martin-Loaches (<i>University of Dublin</i>), Carol Hodgson (<i>Monash University</i>), Bernadette Bissett (<i>Canberra University</i>)	Improving the outcome of sepsis: RCT
Jennifer Paratz	Geetha Kayambu (<i>National University Hospital, Singapore</i>), Rob Boots (<i>Thoracic Medicine</i>)	i-perform – Early rehabilitation in sepsis
Jennifer Paratz	Peter Thomas , Kellie Stockton (<i>LCCH</i>)	Saline installation in respiratory therapy in ICU, a crossover study
Jennifer Paratz	Rob Boots (<i>Thoracic Medicine</i>), Michael Muller (<i>Surgery</i>), Rajeev Hegde (<i>ICU</i>)	Inhalation and right heart failure in burns
Jennifer Paratz	Jason Roberts (<i>UQ, Pharmacy</i>), Michael Muller (<i>Surgery</i>), Kellie Stockton (<i>LCCH</i>), Rob Boots (<i>Thoracic Medicine</i>), Orlando Flores (<i>UQ Medicine</i>)	Beta blocker therapy in burns: an RCT
Jennifer Paratz	Michael Muller (<i>Surgery</i>), Anita Plaza , Kellie Stockton (<i>LCCH</i>), Jonny Younger (<i>Cardiology</i>), Orlando Flores (<i>UQ, Medicine</i>)	IMPACT- Improving physical and psychological outcomes in burns: an RCT
Jennifer Paratz	Kellie Stockton (<i>LCCH</i>), Rob Boots (<i>Thoracic Medicine</i>)	Exercise testing in the chronic critically ill
Jennifer Paratz	Jonny Younger (<i>Cardiology</i>), Cate Cameron (<i>Jamieson Trauma Institute</i>)	Mortality in burns survivors
Jennifer Paratz	Jonny Younger (<i>Cardiology</i>), Sanjoy Paul (<i>QIMR</i>), Kellie Stockton (<i>LCCH</i>)	Cardiovascular disease in burn survivors
Jennifer Paratz	Peter Thomas , Alice Jones, George Ntoumenopoulos (<i>SUT</i>), Antonio Torres (<i>University of Barcelona</i>), Gianluigi (<i>University of Barcelona</i>)	Location and identification of secretion retention in ICU patients
Jennifer Paratz	Michael Muller (<i>Surgery</i>), Rob Boots (<i>Thoracic Medicine</i>)	Microcirculation as an endpoint to burn resuscitation
Kirsty Quince	Leonie Naumann, Michelle Cottrell, Hildegard Ruel-Hirche , Kowsalya Murugappan (<i>Centre for Breast Health, RBWH</i>)	Incidence of lymphoedema following lymph node removal in the surgical treatment of breast cancer: a retrospective audit
Leonie Naumann	Jennifer Paratz, Michelle Cottrell, Hildegard Reul-Hirche , Clare Burns (<i>SP</i>), Tracy Comans (<i>UQ</i>), Anna Finnane (<i>UQ</i>), Trevor Russell (<i>UQ</i>)	A telehealth model for education and monitoring for early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: A pilot cohort study

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Leonie Naumann	Hildegard Ruel-Hirche , Amanda Pigott (UQ), Jodie Nixon	Advanced lymphedema course quality evaluation
Mahender Samanti	Matthew Grundy, Catherine Chong, Michelle Cottrell	Evaluation of hand splinting service to the management of hand injuries presenting to the RBWH Emergency and Trauma Centre
Mahender Samtani	Jennifer Paratz, Shaun O'Leary	Management of Back Pain in DEM: an RCT
Maree Raymer	Tracy Comans (UQ), Shaun O'Leary, Louise Mitchell, Peter Window	An evaluation of the variation in clinical and service related site characteristics of the state-wide Neurosurgical/Orthopaedic Physiotherapy Screening Clinic and Multidisciplinary Service (N/OPSC & MDS) and Orthopaedic Screening in Primary Care (OSiP).
Maree Raymer	Patrick Swete Kelly , Tina Souvlis (GU), Angela Chang (CAHR)	Development and Implementation of a workforce development pathway to support advanced musculoskeletal physiotherapy (AMP) roles (Survey phase)
Maree Raymer	Patrick Swete Kelly , Tina Souvlis (GU), Louise Wellington , Angela Chang (CAHR)	Development and Implementation of a workforce development pathway to support advanced musculoskeletal physiotherapy (AMP) roles(Consultation Phase)
Maree Raymer	Shaun O'Leary, Michelle Cottrell , Natalie Collins (UQ), Liam Maclachlan (UQ), Michelle Smith (UQ), Bill Vicenzino (UQ), Tracy Comans (UQ), Joanne Kemp (LTU), Christian Barton (LTU), Darryl Lee , Stuart McCaskill (QEII), Andrew Hislop (TPCH)	Implementation of GLA:D in Queensland public health services: towards a standardised non-surgical management approach for hip and knee osteoarthritis
Mark Cruickshank	Maree Raymer , Deborah Lenaghan (GCUH), Darryn Marks (GCUH), Sonia Sam , Tania Cavanagh (Cairns Hosp), Lisa Nissen (QUT), Mark Nelson (QEII), Dean Blond (GCUH), Rod Ellem (GC HHS), Cherie Hearn (PAH), Nicole Bellet (TPCH)	Physiotherapy Defined Scope of Practice (Prescribing)
Matthew Stewart	Craig Winter (Neurosurgery), Mary-Ann Litchfield, Michelle Cottrell, Maree Raymer	Is it appropriate for Advanced Musculoskeletal Physiotherapists to see Category 1 spinal outpatients in a tertiary neurosurgery outpatient department: a service evaluation
Megan Shipperley	Michelle Cottrell, Heidi McCarthy, Charlotte Kiemann, Anne Mitchell, Natalie Karlovic, Alissa Chapman.	RBWH Pulmonary Rehabilitation: Review of referral practices and analysis of the impact attendance has on readmission rates
Megan Shipperley	Julie Adsett, Kermeen Kansara	Exploration of perceived barriers for referral to pulmonary rehabilitation at the Royal Brisbane and Women's Hospital
Michelle Cottrell	Shaun O'Leary, Maree Raymer, Anne J Hill (UQ), Tracy Comans, Mark Cruickshank, Perry Judd, Patrick Swete Kelly, Trevor Russell (UQ)	Telerehabilitation in the multidisciplinary management of patients with chronic musculoskeletal conditions: a prospective cohort study
Michelle Cottrell	Perry Judd, Mark Cruickshank, Maree Raymer, Shaun O'Leary, Anne Hill (UQ), Tracy Comans (CAHR), Trevor Russell (UQ)	Spinal Physiotherapy Screening Clinic (SPSC) Telehealth Clinic: an evaluation of the first 2 years of service
Michelle McGrath	James Wood	The use of 3-dimensional gait analysis and its efficacy on the adult population – A Systematic review
Michelle McGrath	James Wood, Estelle Corr	Can Three-Dimensional Motion Analysis and Fuzzy entropy detect movement differences in General Movement Assessment Categories in the normative infant population?
Michelle McGrath	Estelle Corr	Typical progression of gait over the adult life span
Michelle McGrath	James Wood	A Pedobarograph study
Michelle McGrath	Estelle Corr , Venerina Johnston (RECOVER UQ), Esther Smits (RECOVER UQ), Peter Window	Gait Classification Following Traumatic Brain Injury
Michelle McGrath	Bharat Phani Vaikuntam (UQ)	Cost-effective analysis of the use of 3-dimensional gait analysis in the treatment of severe burns
Nanette Paxman	Kye Grant (SCUH), Sharne Neill (Redcliffe), Katie Acland (St. Andrew's), Kirby Adams (Logan)	Tracheostomy State-wide survey
Oliver Rowley	Mahender Samtani, Glen Volker, Darryl Lee, Michelle Cottrell, Peter Window	Quantifying the 'standard' episode of care delivered by the Royal Brisbane and Women's Hospital Physiotherapy Outpatient Department: a retrospective audit

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Perry Judd	Paula Easton (<i>Mackay Base Hospital</i>), Michelle Cottrell , Tracy Comans (<i>UQ</i>), Angela Chang (<i>Centre for Allied Health Research</i>)	Delivery of Orthopaedic Physiotherapy Screening Clinic (OPSC) Assessments from RBWH to Mackay Hospital via Telehealth
Peter Bryan	Peter Window, Joanna Hargreaves, Catherine Sharpe, Ruth McKendry , Rob Laukens (<i>RBWH O+P</i>)	Evaluation of the Outcomes of Pneumatic Post Amputation Mobility Aids in Early Rehabilitation of Lower Limb Amputees
Peter Thomas	Emily Daniel, Drew Bignell	Physiotherapy management of chest trauma
Peter Thomas	Jennifer Paratz	Ventilator Hyperinflation in ventilated patients
Peter Thomas	Jo Alexander, Gemma Baxter, Carol Cross, Melissa Elliot, Hayley Futcher, Christopher Hall, Aimee Moore, Zoe Otto, Nanette Paxman, Liam Picard, Nicole Puetter, Harriet Sheahan, Peter Window	AWOL: Audit of Walking and mobility post-operative Orders Leading to delays in physiotherapy
Raj Singh	Suzanne Kuys (<i>ACU</i>), Jennifer Paratz (<i>RBWH</i>)	Circuit training in GEMS patients an RCT
Raj Singh	Megan Shipperley, Simone Leslie, Isabella Prowse, Peter Window	GEMS QI Project: A study of patient compliance with supervised home exercise programs on discharge from hospital and the effect this has on falls and hospital readmission rates
Sally Yin	Jennifer Paratz	Risk Factors for Readmission to the GEMS ward
Shaun O'Leary	Gwendolyn Jull (<i>UQ</i>), Stephen McPhail (<i>PAH</i>), Glen Volker , Peter Tonks (<i>PAH</i>)	Physical Therapy for Neck Pain – Are we moving in the right direction?
Steven Elvy	Christopher Smith, Andrew Atatham, Jackson Savill, Shama Kulkani, Peter Window	Total Joint Clinical Pathway Review including Day of Surgery Mobilisation and Preadmission Optimisation

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Alan Wan (<i>UQ</i>)	Shaun O'Leary	Movement evoked pain sensitivity in chronic spinal pain
Alison Mudge (<i>IMRU</i>)	Julie Adsett	Exercise participation and outcomes in frail and non-frail heart failure patients: results from EJECTION-HF
Amber Jones (<i>RBWH OT</i>)	Perry Judd, Michelle Cottrell, Anita Plaza , Andrea McKittrick (<i>RBWH OT</i>), Angela Chang (<i>CAHR</i>), Clare Burns (<i>RBWH SP</i>)	Exploration of healthcare provider and patients views towards the implementation of an Allied Health-led TeleBurns Model of Care
Amber Jones (<i>RBWH OT</i>)	Perry Judd, Michelle Cottrell, Anita Plaza , Andrea McKittrick (<i>RBWH OT</i>), Angela Chang (<i>CAHR</i>), Clare Burns (<i>RBWH SP</i>), Hannah Carter (<i>AusHSI</i>)	The Royal Brisbane and Women's Hospital Allied Health TeleBurns Clinic: An implementation evaluation using the RE-AIM approach
Boden I (<i>Launceston General Hospital</i>)	Nanette Paxman, Peter Thomas , multiple national and international co-investigators (<i>CHESTY Collaborative</i>)	CHESTY (CHEST infection prevalence after surgery): international multicentre observational trial
De Looze J (<i>Internal Medicine Services – IMS</i>)	Mary Fenn, Charles Denaro (<i>IMS</i>), Keshwar Baboolal (<i>IMS</i>), Peter Buttrum (<i>Allied Health</i>), Peter Thomas , Robyn Fox (<i>Centre for Clinical Nursing</i>), Thea-Grace Collier (<i>CMORE</i>), Alison Mudge (<i>IMS</i>), Jeffrey Lipman (<i>ICU</i>), John Gowardman (<i>ICU</i>)	Patients of concern at the RBWH – a prospective cohort study to define patient outcomes and risk of clinical deterioration
Fiona Coyer (<i>Critical Care</i>)	Jessica Ingleman (<i>QUT</i>), Anthony Holley (<i>ICU</i>), Peter Thomas , Greg McNamara (<i>ICU</i>), Chris Edwards (<i>QUT</i>)	Extreme II - Critically ill patient tissue reperfusion in two body positions and varied timed periods of load. RBWH
Jane Nikles (<i>RECOVER, UQ</i>)	Michele Sterling (<i>UQ</i>), Robyn Tate (<i>Uni of Sydney</i>), Michael Perdices (<i>RNSH</i>), Geoff Mitchell (<i>UQ</i>), Chris Freeman (<i>UQ</i>), James McGree (<i>QUT</i>), Gerben Keijzers (<i>Griffith & Bond University</i>), Meng-Wong Taing (<i>UQ</i>), Tim Ballard (<i>UQ</i>), Mark Cruickshank , Sally Byrne	Personalised treatments for acute Whiplash Injuries: a pilot study
Jerry van de Pol (<i>Orthopaedics, RBWH</i>)	Macy Lu, Marita Prior, Peter Jenvey, Michael Hockey	Randomized Controlled trial comparing Short vs Long graft ACL reconstruction

Collaborative Research Activity involving RBWH Research Group / Department *(cont)*

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Karyn Heineger <i>(CNC, RBWH TMS)</i>	Nanette Paxman , Kathy Hocking, Prof Fiona Coyer	Identifying CON tributing factor S to tracheostomy stoma breakdown; A retrospective TRA cheostomy pressure I njury audit in an adult Intensive care unit
Kerina Denny <i>(Gold Coast University Hospital)</i>	Jennifer Paratz , David Paterson <i>(Infectious Diseases)</i> , Jeff Lipman <i>(ICU)</i> , Carl Pretorius <i>(pathology)</i> , Joel Dulhunty <i>(ICU)</i>	Biomarker for Sepsis to Thwart Antibiotic Overuse in the Intensive Care Unit
Leia Barnes, Renee de Maria <i>(Logan Hospital)</i>	Ian Parker , Tamsin Smith <i>(GCUH)</i>	Balance confidence compared across vestibular conditions
Michael Muller <i>(Burns)</i>	Jennifer Paratz , David Reutens <i>(UQ)</i> , Hana Burianova <i>(UQ)</i> , Joel Dulhunty <i>(ICU)</i>	Burn prevention, an advertising campaign utilizing functional MRI
Michelle Stute <i>(MNHHS)</i>	Peter Buttrum <i>(Allied Health)</i> , Marilyn Banks <i>(Nutrition and Dietetics)</i> , Maree Raymer , Tracey Comans <i>(UQ)</i> , Sonia Sam <i>(Allied Health)</i> , Nicole Moretto <i>(Allied Health)</i> , Marita Bhagwat <i>(Allied Health)</i>	Allied Health Specialist Clinics Project
Olivia Galea <i>(UQ)</i>	Shaun O'Leary	The role of cervical musculoskeletal impairment in concussion
Prue McRae <i>(Internal Medicine Research Unit)</i>	Esther Smits <i>(UQ)</i> , Venerina Johnston <i>(UQ)</i> , Alice Beningfield , Peter Window , Yizhou Wu <i>(UQ Student)</i>	Activity Levels in an Acute Hospital setting: Is behavioural Mapping comparable to Accelerometry?
Rohan Grimley <i>(SCUH)</i>	Brita Hughes	Building efficient and equitable pathways to and through rehab in stroke (BEEPRS)
Sandy Brauer <i>(UQ, SHRS)</i>	Jennifer Paratz	IMproving Physical ACTivity with Treadmill training following stroke: the stroke-IMPACT trial
Sue Berney <i>(Austin Hospital)</i> ,	Jennifer Paratz , Linda Denehy <i>(University of Melbourne)</i> , Dale Needham <i>(John Hopkins University, USA)</i> , Ramona Hopkins <i>(Brigham Young University)</i>	Estim cycle early rehabilitation in ICU: RCT

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Michelle Cottrell , Shaun O'Leary , Maree Raymer , Trevor Russell <i>(UQ)</i> , Annie Hill <i>(UQ)</i> , Tracy Comans <i>(UQ)</i> , Perry Judd	Highly Commended–Health Services and Implementation Research	2019 Metro North Research Excellence Awards
Julie Adsett , Alison Mudge	Best Clinician Research <i>(Cardiorespiratory)</i>	Australian Physiotherapy Conference, Oct 2019
Gemma Allinson	Best presentation <i>(Paediatrics)</i>	Australian Physiotherapy Conference, Oct 2019
Gemma Allinson	Best Poster	European Academy of Childhood Disability 2019
Mark Cruickshank , Perry Judd , Adrienne Pozzi	RBWH Foundation Enabling Implementation Award	AH-TRIP Showcase 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Amber Jones, Perry Judd , Michelle Cottrell , Anita Plaza , Andrea McKittrick	RBWH Physiotherapy and Occupational Therapy Departments	RBWH OT/PT Led Burns Outpatient Telehealth Service	RBWH Executive	\$140,000	\$136,000	2019-2020
Anita Plaza , Jenny Paratz , Michelle Cottrell	RBWH Physiotherapy Department	The evaluation of a telehealth model for the delivery of Physiotherapy exercise programs for rural and remote patients after burns injury	RBWH Physiotherapy Dept. Funding Round 2018	\$25,000	\$25,000	2018-2019
Emilie Amiss	Physiotherapy Dept, RBWH	Evaluation of a stepping strategy mobile application in cardiopulmonary rehabilitation: a prospective cohort study	QPACT <i>(Queensland Policy and Advisory Committee for new Technology)</i>	\$40,734	\$20,367	2018-2019

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Leonie Naumann, Jennifer Paratz, Hildegard Reul-Hirche, Michelle Cottrell , Clare Burns, Anna Finnane, Tracy Comans, Trevor Russell, Kirsty Quince	RBWH Physiotherapy and University of Queensland	A telehealth model for education and monitoring of early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: a pilot cohort study	Health Practitioner Research Scheme	\$29,929	\$14,710.71	2018-2019
Leonie Naumann, Jennifer Paratz, Hildegard Reul-Hirche, Michelle Cottrell , Clare Burns, Anna Finnane, Tracy Comans, Trevor Russell, Kirsty Quince	RBWH Physiotherapy and University of Queensland	A telehealth model for education and monitoring of early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: a pilot cohort study	RBWH Foundation Diamond Care Grants 2019	\$12,816	\$9,825	2019-2020
Maree Raymer, Shaun O'Leary , Natalie Collins, Michelle Smith, Liam McLaughlin, Bill Vicenzino, Michelle Cottrell , Kay Crossley, Tracy Comans, Christian Barton, Jo Kemp	Physiotherapy RBWH,	Implementation of GLA:D in Queensland public health services: towards a standardised non-surgical management approach for hip and knee osteoarthritis	RBWH Foundation Research	\$39,910.80	\$39,910.80	2019
Midori Nakagaki <i>(Pharmacy RBWH)</i> , multiple other stakeholders including Leonie Naumann	RBWH Cancer Care Services, RBWH Allied Health; RBWH Pharmacy	Implementation and Evaluation of a Nurse-Allied Health Multidisciplinary Post-Bone Marrow Transplant Clinic	2019 Metro North SEED funding	\$81,150	\$11,813	2019
Nanette Paxman	Katie Acland + QCRPN Tracheostomy Project Team members (state-wide)	State-wide Tracheostomy Survey	DOPSQ Funding Round 2018-19	\$5,000	\$1,500	2018-2019
Peter Thomas	Physiotherapy Dept, RBWH	Physiotherapy Management of Chest Trauma	RBWH Physiotherapy Dept. Funding Round 2018	\$11,730	\$1,230	2018-2019
Peter Thomas, Jennifer Paratz	Physiotherapy RBWH	Ventilator Hyperinflation: Influence of Pressure versus Volume controlled settings to optimise expiratory flow rate bias	Queensland Cardiorespiratory Physiotherapy Network	\$6,834	\$6,834	2018-2019
Prue Butler	Physiotherapy RBWH	Illness Representations and recovery outcomes after traumatic extremity injuries	RBWH Foundation Allied Health top up scholarship	\$8,000	\$8,000	2019-2020
Prue Butler	Physiotherapy RBWH	Illness Representations and recovery outcomes after traumatic extremity injuries	Research Training Program Government Scholarship	\$82,788	\$27,596	2019-2021
Sally Yin, Jennifer Paratz	Physiotherapy Dept, RBWH	Analysing risk factors for readmission to the Geriatric Evaluation and Management (GEM) ward	RBWH Physiotherapy Dept. Funding Round 2018	\$4,284	\$2,124	2018-2019

2019 Research Publications

Journal Articles

- Adsett J**, Morris N, Kuys S, **Paratz J**, Mudge A. Motivators and barriers for participation in aquatic and land-based exercise training programmes for people with stable heart failure: A mixed methods approach. *Heart and Lung*. 2019; 48 (4):287-293
- Adsett J**, Morris N, Mudge A. Impact of exercise training programme attendance and physical activity participation on six minute walk distance in patients with heart failure. *Physiotherapy Theory and Practice* 2019 [Epub ahead of print]. DOI: 10.1080/09593985.2019.1669232
- Adsett J**, Morris N, Mudge A. Predictors of exercise training and physical activity adherence in people recently hospitalised with heart failure: A brief report. *Journal of Cardiopulmonary Rehabilitation and Prevention*. 2019. 39(3):E12-E16. DOI: 10.1097/HCR.0000000000000407
- Baldwin C, Parry S, Kaymabu G, **Paratz J**. Early detection of muscle weakness and functional limitations in the critically ill: a retrospective evaluation of bioimpedance spectroscopy. *J Parent Ent Nutrition*. 2019 Oct 3. doi: 10.1002/jpen.1719. [Epub ahead of print]
- Bissett BM, Wang J, Neeman T, Leditschke IA, Boots R, **Paratz J**. Which ICU patients benefit most from inspiratory muscle training? Retrospective analysis of a randomized trial. *Physiother Theory Pract*. 2019 Feb 9:1-6

Journal Articles (cont)

6. **Cottrell MA, O'Leary P, Raymer M**, Hill AJ, Comans T, Russell TG. Does telerehabilitation result in inferior clinical outcomes compared with in-person care for the management of chronic musculoskeletal spinal conditions in the tertiary hospital setting? A non-randomised pilot clinical trial. 2019 DOI.org/10.1177/1357633X19887265
7. **Cottrell M, Judd P**, Comans T, Easton P, Chang A. Comparing fly-in fly-out and telehealth models for delivering advanced-practice physiotherapy services in regional Queensland: an audit of outcomes and costs. *Journal of Telemedicine and Telecare*. 2019 [E-pub ahead of print]. DOI: 10.1177/1357633X19858036
8. Galea OA, **O'Leary SP**, Treleaven JM. Persistent impairment based symptoms post Mild Traumatic Brain Injury: does a standard symptom scale detect them? *Musculoskeletal Science and Practice*. 2019; 41:15-22. DOI: 10.1016/j.msksp.2019.02.002
9. Gane EM, McPhail SM, Hatton AL, Panizza BJ, **O'Leary SP**. Neck and Shoulder Motor Function following Neck Dissection: A Comparison to Healthy Control Subjects. *Otolaryngology-Head and Neck Surgery*. 2019; 160 (6): 1009-1018. DOI: 10.1177/0194599818821885
10. Jun D, Johnston V, McPhail SM, **O'Leary S**. Are measures of postural behaviour using motion sensors in seated office workers reliable? *Human Factors*. 2019. 61 (7) 1141-1161. DOI:10.1177/0018720818821273
11. Jun, D, **O'Leary S**, McPhail SM, Johnston V. Job strain and psychological distress in office workers: the role of coping for publication. *Work*. 2019; 64(1): 55-65. DOI: 10.3233/PWOR-192968
12. Jun D, Kim JM, **O'Leary S**, Johnston V. Cross-cultural adaptation and validation of the Latack Coping Scale in the general working population in Korea. *Work*. 2019; 63 (3): 325-334. . DOI: 10.3233/WOR-192938
13. Li DE, David B, **O'Leary SP**, Treleaven JM. Higher Variability in Cervical Force Perception in People with Neck Pain. *Musculoskeletal Science and Practice*. 2019; 42:6-12. DOI: 10.1016/j.msksp.2019.04.001
14. Linnane MP, Caruana LR, Tronstad O, Corley A, Spooner AJ, Barnett AG, **Thomas PJ**, Walsh JR (2019): A comparison of the effects of manual hyperinflation and ventilator hyperinflation on restoring end-expiratory lung volume after endotracheal suctioning: A pilot physiologic study. *J Crit Care*. Feb;49:77-83. doi: 10.1016/j.jcrc.2018.10.015
15. **Moretto N**, Comans T, Chang A, **O'Leary S**, Osborne S, Carter H, Smith D, Cavanagh T, Blond D, **Raymer M**. Implementation of simulation modelling to improve service planning in specialist orthopaedic and neurosurgical outpatient services, *Implementation Science* 2019 14:78 <https://doi.org/10.1186/s13012-019-0923-1>
16. O'Connor L, Morris N, **Paratz J**. "Physiological and clinical outcomes associated with use of one-way speaking valves on tracheostomised patients: a systematic review". *Heart Lung*. 2019; 48 (4):356-364
17. **O'Leary SP**, Hoogma C, Solberg OM, Sundberg S, Pedler A, Van Wyk L. Comparative strength and endurance parameters of the craniocervical and cervicothoracic extensors and flexors in females with and without idiopathic neck pain. *Journal of Applied Biomechanics*. 2019; 35 (3):209-215. DOI: 10.1123/jab.2018-0033
18. Parker IG, Hartel G, **Paratz J**, Choy NL, Rahmann A. A Systematic Review of the Reported Proportions of Diagnoses for Dizziness and Vertigo. *Otol Neurotol*. 2019 Jan;40(1):6-15
19. Steele M, Janda M, Vagenas D, Ward L, Cornish B, Box R, Gordon S, Matthews M, Poppitt S, Plank L, Yip W, Rowan A, **Reul-Hirche H**, Obermair A, Hayes S. A bioimpedance spectroscopy-based method for diagnosis of lower-limb lymphoedema. *Lymphatic Research and Biology*. 2019 Sept 5 doi: 10.1089/lrb.2018.0078 [Epub ahead of print]
20. Walsh JR, Pegg J, Yerkovich ST, Morris N, McKeough ZJ, Comans T, **Paratz JD**, Chambers DC. Longevity of pulmonary rehabilitation benefit for chronic obstructive pulmonary disease — health care utilisation in the subsequent 2 years. *BMJ Open Res* 2019;6:e000500. doi:10.1136/bmjresp-2019-000500.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Oral Presentations:

1. **Adsett J**, Mudge A (2019). Exercise participation in frail and non frail heart failure patients: Results from EJECTION HF. Oral presentation. Australian Physiotherapy Association National Conference. 17th October
2. **Allinson, G**, Dewar, R, Raatz, B, Hannah, S & Johnston, L (2019) Postural control predicts gross motor coordination in primary school children with and without coordination difficulties. Australian Physiotherapy Association National Conference. October 2019
3. **Allinson, G**, Dewar, R, Raatz, B, Hannah, S & Johnston, L (2019) Postural control predicts gross motor coordination in primary school children with and without coordination difficulties. World Confederation of Physical Therapy Congress (2019)
4. Raatz, B, Dewar, R, **Allinson, G**, Hannah, S & Johnston, L (2019) Reproducibility of the timed up and go (TUG) standard and dual task in school-aged children with and without coordination difficulties. World Confederation of Physical Therapy Congress (2019)
5. **Cruickshank M, Sam S**, Nissen L (2019) An evaluation of physiotherapist independent prescribing in Queensland. Oral Presentation. National Allied Health Conference. 6 Aug 2019
6. **Cruickshank M, Sam S**, Nissen L (2019) An evaluation of autonomous non-medical prescribing by physiotherapists in Queensland emergency departments. Oral Presentation. Australian Physiotherapy Association National Conference. 18th October 2019
7. Comans T, **Moretto N**, **Raymer M**, Chang A, **O'Leary S**, Osborne S, Carter H, Smith D, Cavanagh T, Blond D. Health service planning for the future: Using simulation modelling to bridge the gap in overburdened specialist outpatient service planning. International Health Economics Association Congress, Basel, July 2019
8. **Plaza A, Ault P, Macfie M, Mulliss B, Sharpe C, Alexander J, Jackson C, Weber J Anderson C, Allinson G, Cottrell M** (2019) Movement and Mobility protocols after Surgical Management of Burn Injuries: An audit of current practice at the Royal Brisbane and Women's Hospital. Australian and New Zealand Burns Association Annual Scientific Meeting. 17 October 2019
9. **Plaza, A, Paratz, J, Cottrell, M** (2019) Evaluating the effectiveness of a home-based telerehabilitation model for the delivery of physiotherapy exercise programs following burn injury. Australian and New Zealand Burns Association Annual Scientific Meeting. 17 October 2019

Oral Presentations (cont)

10. **Raymer M, Moretto N**, Comans T, **O'Leary S**, Chang A, Standfield L, Carter H, Osborne S. Advanced Musculoskeletal Physiotherapist and Surgeon led care in Orthopaedics and Neurosurgery outpatient services: what's the right professional mix? World Congress of Physical Therapy, Geneva May 2019
11. **Raymer M**, Mitchell L, Comans, T, **Window P, O'Leary S**. Exploring variation in outcomes between advanced practice physiotherapy screening clinics in Queensland. National Allied Health Conference, Brisbane, August 2019
12. **Wellington L, Swete Kelly P, Raymer M**. Early career workforce development for Advanced Musculoskeletal Physiotherapy (AMP) roles, National Allied Health Conference, Brisbane, August 2019
13. **Wellington L, Swete Kelly P, Raymer M**. Elements of a common early career pathway toward advanced musculoskeletal physiotherapy roles, Australian Physiotherapy Association national conference, Adelaide October 2019.

Poster Presentations

1. **Allinson, G**, Dewar, R, Raatz, B, Hannah, S & Johnston, L (2019). Postural control predicts gross motor coordination in primary school children with and without coordination difficulties. International Society of Posture & Gait Research
2. **Allinson, G**, Dewar, R, Raatz, B, Hannah, S & Johnston, L (2019). Postural control predicts gross motor coordination in primary school children with and without coordination difficulties. 13th International Conference on Developmental Coordination Disorder
3. **Allinson, G**, Dewar, R, Raatz, B, Hannah, S & Johnston, L (2019). Postural control predicts gross motor coordination in primary school children with and without coordination difficulties. European Academy of Childhood Disability
4. Raatz, B, Dewar, R, **Allinson, G**, Hannah, S & Johnston, L (2019). Reproducibility of the timed up and go (TUG) standard and dual task in school-aged children with and without coordination difficulties. International Society of Posture & Gait Research
5. Raatz, B, Dewar, R, **Allinson, G**, Hannah, S & Johnston, L (2019). Reproducibility of the timed up and go (TUG) standard and dual task in school-aged children with and without coordination difficulties. 13th International Conference on Developmental Coordination Disorder (2019)
6. Raatz, B, Dewar, R, **Allinson, G**, Hannah, S & Johnston, L (2019). Reproducibility of the timed up and go (TUG) standard and dual task in school-aged children with and without coordination difficulties. European Academy of Childhood Disability.

Details of staff that completed their PhDs in 2019 within your department / research group

Name	Name of Project	Completed Date	Affiliated University/ies
Julie Adsett	Exercise rehabilitation for people with heart failure	May 2019	Griffith University

RBWH Physiotherapy Research Team



DEPARTMENT OF PSYCHOLOGY

In 2019, the RBWH psychology department focused on university collaborations and the continuation of clinical research, evaluation, and dissemination. Highlights have included the successful attainment of a Metro North Collaborative Research Grant with Griffith University, and LINK/SEED Innovation Funding with the University of Queensland.

Research in 2019 has covered a wide range of specialty areas, including projects in neurology, geriatric rehab, general rehab, orthopaedics, stroke, epilepsy, multidisciplinary pain, renal medicine, neonatology, and staff health. A novel intervention for older adults with cognitive impairment which involves music and singing was implemented and evaluated, with the results leading to further research. Several exciting projects have also started which have focused on the use of digital resources and investigating their impact on outcomes for patients. It is envisaged that 2020 will see further development of productive research collaborations both with our university partners, but also with state and national government and non-government organisations and stakeholders.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Jenna Scambler	DPsych <i>(Clin and Neuro)</i> , University of Queensland <i>(2017-2021)</i>	The effects of Temporal Lobectomy on Electrical Brain Potentials in Response to Emotional Stimuli	Alan Pegna, Kate Thompson

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Ada Lo	Adjunct Senior Lecturer	In-kind	School of Psychology	University of Queensland
Angela White	Adjunct Industry Fellow	In-kind	School of Psychology	Queensland University of Technology
	Clinical Consultant			
	Adjunct Assoc. Prof.			University of Queensland
Drew Craker	Adjunct Senior Lecturer	In-kind	School of Psychology	University of Queensland
Elisabeth Hamernik	Honorary Fellow	In-kind	School of Psychology	University of Queensland
Kate Thompson	Adjunct Senior Lecturer	In-kind	School of Psychology	University of Queensland
Mala McHale	Adjunct Senior Lecturer	In-kind	School of Psychology	University of Queensland
Maree Grier	Adjunct Lecturer	In-kind	School of Psychology	University of Queensland
Rosemary Argall	Adjunct Associate	In-kind	School of Psychology	University of Queensland
Stephanie Lawton	Adjunct Fellow	In-kind	UQ Centre for Clinical Research	University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	Research Program	Affiliated University/ies
Bonnie Clough	Honorary Research Fellow	RBWH JMB – Department of Psychology	Griffith University (2017-current)
Harriet Bodimeade	Adjunct Research Fellow	School of Human Services and Social Work	Griffith University (2016-current)

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Ada Lo	Kate Thompson, Elisabeth Hamernik, Angela White	Evaluation of neuropsychology service for acute stroke patients-clot retrieval
Ada Lo	Harriet Bodimeade , Stephanie Jessup (<i>SW</i>)	Validating anxiety and mood screening tools in stroke patients
Emmaline Falconer	Hannah McGlashan, Sharpley Hsieh, Angela White	Enhancing Neuropsychological and Cognitive Rehabilitation Using Innovative Digital Resources in a Public Hospital Subacute Rehabilitation Service
Genesta Nicolson	Angela White , Angela Chang (<i>CAHR</i>)	A stitch in time: Evaluation of the impact and efficacy of an MDT psychoeducation workshop for non-urgent referrals on the PTCMPC waitlist
Rosemary Argall	Genevieve Dingle, Sharpley Hsieh, Robert Davidson, Kelly Bower, Avanka Wickramanayaka	Group Singing in the Geriatric Evaluation and Management (GEM) Unit
Vanessa Whitehead and Rosemary Argall	Angela White , Nancy Pachana (<i>UQ</i>)	Understanding anxiety in geriatric inpatients
Scott Ruddell	Bonnie Clough (<i>GU</i>), Angela White, Tamara Ownsworth , Leanne Casey (<i>GU</i>), Mala McHale, Andrew Craker	Improving Outcomes of Videoconference Psychotherapy for Patients with Chronic Spinal Pain-The Impact of Illness Beliefs

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Ashleigh Scott (<i>RBWH</i>), Glen Kennedy (<i>RBWH</i>), Katie McMahon (<i>RBWH</i>), Olivier Salvado (<i>CSIRO</i>)	Ada Lo, Kate Thompson	MINERAL: Magnetic Resonance Imaging and Quantitative susceptibility mapping (MRI-QSM) of brain iron to identify chemotherapy-associated neurocognitive impairment (CAN) in Acute Myeloid Leukemia (AML)
David Kavanaugh, Heidi Sturk, Samantha Wild (<i>QUT</i>)	Angela White	Australian Health Professional Referral Rates to Digital Mental Health services and programs: A cross sectional study
Haryana Dhillion (<i>University of Sydney</i>), Joanne Shaw (<i>University of Sydney</i>), David Kissane (<i>Monash University</i>), Danette Langbecker (<i>University of Queensland</i>), Kim Hobbs (<i>Westmead Hospital</i>), Laura Kirsten (<i>Nepean Cancer Care Centre</i>), Lisa Beatty (<i>Flinders Centre for Innovation in Cancer</i>), Lisa Vaccaro (<i>University of Sydney</i>), Carrie Lethborg (<i>St Vincent's Hospital, Melbourne</i>)	Maree Grier	Adjustment Working Group for the PoCoG Transforming Psychosocial Care of Patients in Australia: Implementation of a Comprehensive Training and Service Delivery Program
Hilary Jimmieson (<i>Nutrition and Dietetics</i>)	Belinda Mason (<i>Nutrition and Dietetics</i>), Adrienne Young (<i>Nutrition and Dietetics</i>), Lynda Ross (<i>Nutrition and Dietetics</i>), Adrian Kark, Riley O'Donohue	New Group Model of Care for low salt dietary education for Chronic Kidney Disease patients
Jenna Scambler (<i>UQ</i>), Alan Pegna (<i>UQ</i>)	Kate Thompson	The effects of temporal lobectomy on electrical brain potential in response to emotional stimuli

Collaborative Research Activity involving RBWH Research Group / Department *(cont)*

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Kate McCarthy <i>(RBWH)</i> , Majed Almarzooqi <i>(UQ, School of Med)</i> , Anna Hickling <i>(UQ, School of Psychology)</i>	Angela White	Defining patients concerns in Outpatient Parenteral Antibiotic Therapy (OPAT) settings
Lee Reid <i>(Australian e-health Research Centre)</i> , Jurgen Fripp <i>(Australian e-health Research Centre)</i> , Stephen Rose <i>(Australian e-health Research Centre)</i> , Marita Prior <i>(RBWH)</i> , Rosalind Jeffree <i>(RBWH)</i> , David Walker <i>(Wesley Hospital)</i> , Hamish Alexander <i>(RBWH)</i> , Parnesh Raniga <i>(RBWH)</i> , Julie Trinder <i>(RBWH)</i>	Ada Lo, Kate Thompson	Predicting Surgery-induced Neurological Deficits using CONSULT. A study to measure the ability of CONSULT tractography software to predict surgery-induced neurological deficits
Louise Cullen <i>(DEM)</i> , Carol Jeffreys <i>(DEM)</i> , Caitlin Lock <i>(DEM)</i> , Emily Brownhill <i>(DEM)</i>	Andrew Craker	Wellness training for nurses in the Emergency Department
Maryam Ziaei <i>(UQ)</i> , David Reutens <i>(UQ and RBWH Neurology)</i>	Kate Thompson	Social-cognitive functioning among patients with epilepsy
Tim Donovan <i>(GSNU)</i> , Barbara Lingwood <i>(UQCCR)</i> , Yvonne Eiby <i>(UQCCR)</i> , Gill Lack <i>(GSNU)</i> , Ian Wright <i>(Uni Woollongong)</i> , Paul Colditz <i>(UQCCR)</i> , Katie Foxcroft <i>(Perinatal Research Centre)</i>	Stephanie Lawton	Preterm Early Adiposity and Childhood Outcome (PEACH Study)
Peter Window, Miriam Dillon, Perry Judd <i>(RBWH Physiotherapy)</i> , Mary-Rita Lane <i>(RBWH OT)</i>	Scott Ruddell, Anna Salzgeber	OnTRACC – Optimising Treatment Adherence in Chronic spinal Conditions

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Andrew Craker, and Angela White	Psychology	Wellbeing to your Door: The implementation of a mobile psychoeducation support service for staff and consumers	RBWH Capital Funding for Research and Training Equipment 2018	\$7,344	\$7,344	2018-2020
Elizabeth Torbey, Emmaline Falconer	Psychology	Enhancing Neuropsychological and Cognitive Rehabilitation Using Innovative Digital Resources in a Public Hospital Subacute Rehabilitation Service	CAHRLI Innovation/ Translation Challenge 2018	\$5,000	\$5,000	2019

2019 Research Publications

Journal Articles

1. Forbes, Y. and Donovan, C. (2019). The Role of Internalised Weight Stigma and Self-Compassion in the Psychological Well-Being of Overweight and Obese Women. *Australian Psychologist*. DOI:10.1111/ap.12407.

DEPARTMENT OF REHABILITATION ENGINEERING, ORTHOTICS & PROSTHETICS

In 2019, the Rehabilitation Engineering and Orthotics and Prosthetics department continued to develop links with partners to improve enhance research opportunities including closer links with the allied health professions service line research coordination team.

The Orthotic and Prosthetic team has focused research efforts on practices in spinal fracture management, the implementation of technology to enhance foot orthotic delivery, and the review of outcomes when using a variety of orthotic lower-limb devices. A poster on the spinal management protocols was accepted and presented at the International Society of Orthotics and Prosthetics, World Congress in Kobe Japan during October.

Rehabilitation Engineering partnered with teams from the Brisbane Spinal Research Group and with the Bio fabrication Institute to develop grant applications for Metro North Collaborative Research Grants Scheme and through the Jamieson Trauma Institute (JTI). Both projects build upon previous years of work investigating the introduction of advanced imaging and fabrication methodologies into the field of assistive technology provision. The JTI submission was successful and the project will begin in early 2020. Work has also continued evaluating current data that may lead to better outcome measurement in custom assistive device supply.

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Peter Slattery	Adjunct Associate Professor	1 hr/wk	In-kind	Science and Engineering Faculty	Queensland University of Technology
Brian Delaney	Adjunct Senior Lecturer	1 hr/wk	In-kind	Health, Nursing and Sport Science Faculty (O&P)	University of the Sunshine Coast

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Stephanie Fountain	Oliver Mason, Peter Slattery, Angela Chang (<i>AHP Research</i>), Adrienne Young (<i>AHP Research</i>)	Outcome Measurement in Rehabilitation Engineering
Brian Delaney	Andrew MacDonald, Helen McDonald, Peter Slattery, Angela Chang (<i>AHP Research</i>), Adrienne Young (<i>AHP Research</i>)	Orthotic insole management for the prevention of foot ulcers in at risk diabetic patients
Yuta Arai	Steven Walker, Brian Delaney , Jessica Angus, Kylie Matthews (<i>AHP Research</i>)	Retrospective cohort study comparing three halo management protocols and the incidence of adverse events
Peter Slattery	Oliver Mason, Kristen Morris (<i>MASS</i>), Sean Powell (<i>QUT</i>), David Forrestal (<i>QUT</i>), Shailendra Maharaj (<i>QCH</i>), Carey Bayliss (<i>PAH</i>), Paige Little (<i>QUT</i>)	Personalised 3D printed reactive cushions for pressure wound management

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Gunther Paul <i>(James Cook University)</i>	Peter Slattery	Seating cushion design simulation

2019 Conference Presentations – Invited Speaker, Oral and Poster

Poster Presentations

1. **Arai Y, Walker S, Delaney B, Angus J, McDonald H, Matthews K.** An audit to determine the rate of adverse events in patients fitted with a HALO orthosis at the RBWH Orthotics department between November 2003 and April 2019 – International Society of Prosthetics and Orthotics 2019, October, Japan
2. Bayliss C, **Mason O.** “Horsing Around” 2019 Australian & New Zealand Spinal Cord Society Annual Scientific Meeting (ANZSCoS), Melbourne August 2019



Oliver Mason,
Team Leader Rehabilitation Engineering

DEPARTMENT OF SOCIAL WORK

The Social Work Department's research activities are underpinned by a commitment to addressing the adverse social and environmental conditions that impact the health and wellbeing of patients and their families. In 2018 we commenced work on an elder abuse project in recognition that the maltreatment of older people is under-recognised and under-reported in hospitals. This year the project team was successful in securing a SEED Innovation grant to develop an integrated model of care to address the safety needs of vulnerable older patients, due for commencement in 2020. The timeliness of this initiative is underscored by the recent adverse findings from the recent Royal Commission into Aged Care.

Another initiative is a collaboration with Griffith University and Women's and Newborn Services to promote men-inclusive maternity services, which entails investigating the experiences and needs of men as fathers. Preliminary findings from this study were presented at the National Allied Health Conference in August.

Other notable achievements include the recent graduation of Anne De Ruiter, social work team leader, from QUT's Graduate Certificate in Health Science (Health Services Innovation). Anne is a member of the first cohort of MNHHS staff to graduate from this program and her project on a Preadmission Social Work Model of Care is now in its implementation phase.

The Social Work Department increased its number of peer-reviewed publications in 2019, with journal articles featuring in both national and international journals including the British Medical Journal. Staff also showcased their research at local and national conferences, including the Kidney Supportive Care Symposium, the Renal Society of Australasia Annual Conference, the Oncology Social Work Australia Conference, and the Australian and New Zealand Social Work and Welfare Education and Research Conference.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Mithila Karmaker	PhD, UQ (2017-2019)	The housing pathways of Bangladeshi immigrants during the process of settling in Australia	Gai Harrison , Jill Wilson

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Angela O'Malia	Adjunct Senior Lecturer	4 hrs/mnth	In-kind	School of Nursing, Midwifery and Social Work	UQ
Gai Harrison	Honorary Senior Lecturer	4 hrs/mnth	In-kind	School of Nursing, Midwifery and Social Work	UQ

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Amanda Masters	Anne De Ruiter, Gai Harrison, Sandy Jamieson (<i>Nursing</i>)	Developing a model of care to address elder abuse at RBWH
Anne de Ruiter		Implementation of Preadmission Social Work Model of Care: Context assessment and evaluation of service outcomes, including patient satisfaction
James Ready	Alex Markwell (<i>ETC</i>)	Staff Debriefing in the Emergency and Trauma Centre: Using Debriefing as a tool to promote wellbeing, reflection and learning
Kristy Fitzgerald, Gai Harrison	Leonie Callaway (<i>Women's and Newborn Services</i>), Patrick O'Leary (<i>Griffith University</i>), Alka Kathari (<i>Redcliffe Hospital</i>)	Promoting men-inclusive maternity services: Exploring the expectations, experiences and needs of men as fathers
Mary Brown, Gai Harrison		Evaluation of the Sexual Assault Response Team (SART) Service

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Adrienne Young (<i>Nutrition and Dietetics, RBWH</i>)	Carrie-Anne Lewis (<i>Nutrition and Dietetics</i>), Gai Harrison , Claire Dux (<i>Nutrition and Dietetics</i>), Rachana Naidu (<i>Nutrition and Dietetics</i>), Rajeswari Badwa (<i>Nutrition and Dietetics</i>), Jessie Fry (<i>Nutrition and Dietetics</i>), Lilliana Botero (<i>Nutrition and Dietetics</i>), Merrilyn Banks (<i>Nutrition and Dietetics</i>)	Exploring the roles and values of dietetic assistants at RBWH
Thomas Torpie (<i>GCUH</i>)	James Ready , James Hughes (<i>Nursing</i>)	Domestic and Family Violence Screening in the Emergency Department: Who's doing it? How are they doing it? How often?

2019 Research Publications

Journal Articles

- Osborne S, **Harrison G, O'Malia A**, Barnett A, Carter H, Graves N. Cohort study of a specialist social worker intervention on hospital use for patients at risk of long stay. *BMJ Open*. 2018; 8(12): 1-6. Doi:10.1136/bmjopen-2018-023127
- Harrison G, O'Malia A, Napier S**. Addressing psychosocial barriers to hospital discharge: A social work led model of care. *Australian Social Work*. 2019; 7(3): 366-374
- Davidson D, **Harrison G**. "Leaning in" and "Leaning back": Exploring the spatiality of telephone counselling. *Health and Place*. 2019; 58. Doi.org/10.1016/j.healthplace.2019.102158
- Lewis G, Fox S**. Between theory and therapy: Grief and loss skills-based training for hospital social workers [online]. *Advances in Social Work and Welfare Education*, 2019; 21(1): 110-114.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Oral Presentations

- Fitzgerald K, Harrison, G**. Promoting men-inclusive maternity services at Royal Brisbane & Women's Hospital. National Allied Health Conference, Brisbane, Australia, 6th August, 2019
- Hudson, E**. Making student placements within small teams sustainable – Developing and implementing a structured student-centred learning programme. Australian New Zealand Social Work and Welfare Education Research symposium Oct 3, 2019
- Irwin-Hobbs T and Brennan, J**. The 5C Group – Building connections between patients and carers on the ward: Social Work-facilitated group work in Haematology and Bone Marrow Transplant. Oncology Social Work Australia Conference, Hobart, Australia, 21-22 Nov, 2019
- Kirby, J** Psychosocial factors and the value of social work in a kidney supportive care multidisciplinary team, Renal Society of Australasia Annual Conference, Auckland, New Zealand, 28th June 2019.

Poster Presentations

- Kirby J**, Purtell L, Bonner A, Berquier I, Austin L, Healy H. Are we wasting your time? Improving time efficiency for patients and families attending a kidney supportive care program. Renal Society of Australasia Annual Conference, Auckland, New Zealand, 28th June 2019.

DEPARTMENT OF SPEECH PATHOLOGY & AUDIOLOGY

The Speech Pathology Department and Audiology Department research programs have continued to grow in 2019. The Speech Pathology research program encompasses the clinical service areas of cancer care, acute and critical care as well as neurorehabilitation. The Audiology research program is currently focused on the areas of cochlear implants and tinnitus. The research programs across the two departments aim to embed research into core clinical services and ensure translation of research into practice. We have continued to grow our collaborations with ongoing successful partnerships with UQCCR, UQ School of Health and Rehabilitation Sciences, RECOVER Injury Research Group and QUT. An exciting development in late 2019 was the announcement of the establishment of the Queensland Aphasia Rehabilitation Centre which will be a key clinical research centre in the STARS development. This clinical research partnership with UQ and philanthropic partners is a unique opportunity to embed research within new models of care for treating post-stroke aphasia.

Key Outcomes and Achievements:

SPEECH PATHOLOGY DEPARTMENT

The Speech Pathology department had a successful year of research outcomes with several of our team receiving international and national awards in 2019. We are particularly proud of the achievements of Dr Clare Burns (Advanced Speech Pathologist and Metro North Clinician Research Fellow) who had a very productive first year of her MN Clinician Research Fellowship. In 2019, Dr Burns pioneered research into new telepractice models of care whilst mentoring clinician researchers across MNHHS. Our team continued to receive international recognition with Leisa Turkington receiving the Springer International Publishing Award at the Dysphagia Research Society in San Diego, USA while Laura Moroney was awarded first prize from the national Speech Pathology Australia conference for best PhD Student Oral presentation. Furthermore, Shana Taubert was awarded the Excellence in Education and Learning Award at the CAHRLI Symposium. The impact of our team's research on a statewide level was recognised with Clare Burns, Leisa Turkington, Shana Taubert, and Laura Moroney each receiving awards for excellence from the Queensland Health Speech Pathology Advisory Committee Forum. Another highlight of the year was the successful PhD submissions for Leisa Turkington and Laura Moroney in September. The department is grateful for the generous support from the RBWH Foundation to support our clinicians undertaking research higher degrees with Penni Burfein, Shana Taubert and Laura Moroney receiving post-graduate scholarships in 2019. Another outstanding achievement in 2019 was the announcement that Nadia de Silva was a recipient of a Churchill Fellowship to travel to the USA and Europe to advance the management of communication in patients undergoing awake craniotomy.

AUDIOLOGY DEPARTMENT

The Audiology Department continued to deliver innovative clinical services and undertake research in important areas in 2019. A key achievement was Alice Pender commencing her PhD investigating hearing loss and middle ear dysfunction in an adult Indigenous Australian population.

The Speech Pathology Department and the Audiology Department have a clear vision to build research programs which translate into benefits for our consumers and we are committed to researching new models of service provision and clinical innovation.

RBWH Speech Pathology Research Team



Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Alice Pender	PhD, UQ (2019-2024)	Rates and effects of hearing loss and middle ear dysfunction in an adult Indigenous Australian population	Deborah Askew, Wayne Wilson, Philip Schluter, Roxanne Bainbridge
Ellie Minchell	PhD, UQ (2018-2021)	Dysphagia outcomes post clot retrieval and thrombolysis	Anna Rumbach, Emma Finch
Jasmine Foley	PhD, UQ (2018-2021)	Understanding the Regional and Remote Head and Neck Cancer (HNC) Patient Services Journey	Liz Ward, Clare Burns , Rebecca Nund
Laura Moroney	PhD, UQ (2015-2019)	Dysphagia and related toxicities in head and neck patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy	Liz Ward, Jane Crombie , Clare Burns
Leisa Turkington	PhD, UQ (2013-2019)	Neurogenic dysphagia and sensory enhancement strategies	Liz Ward, Anna Farrell
Penni Burfein	MPhil, UQ (2019-2023)	Return to work for survivors with Aphasia	David Copland, Tracy Roxbury
Sarah Wilson	MPhil, UQ (2018-2022)	Assessment of dysphagia following laryngectomy	Bena Cartmill, Clare Burns
Shana Taubert	PhD, UQ (2016-2020)	Videofluoroscopic Swallow Studies: Education and training approaches	Liz Ward, Clare Burns

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Alice Pender	Honorary Associate Lecturer	In-kind	Division of Audiology, School of Health and Rehabilitation Sciences	University of Queensland
Anna Farrell	Honorary Lecturer	In-kind	Division of Speech Pathology, School of Health and Rehabilitation Sciences	University of Queensland
Carla Rose	Honorary Associate Lecturer	In-kind	Division of Audiology, School of Health and Rehabilitation Sciences	University of Queensland
Clare Burns	Honorary Lecturer	In-kind	Division of Speech Pathology, School of Health and Rehabilitation Sciences	University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	Research Program	Affiliated University/ies
Bonnie Cheng	Honorary Research Position	Predicting and Promoting Sub-acute Aphasia Recovery	University of Queensland (2018-2019)
Jane Watts	Honorary Research Position	Predicting and Promoting Sub-acute Aphasia Recovery	University of Queensland (2018-2019)
Lisa Anemaat	Honorary Research Position	Predicting and Promoting Sub-acute Aphasia Recovery	University of Queensland (2018-2019)

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Alexia Rohde	Linda Worrall (UQ), Erin Godecke (Edith Cowan), Robyn O'Halloran (La Trobe), Anna Farrell, Penni Burfein, Andrew Wong (Stroke) , Genevieve Skinner (Stroke)	Evidence-based identification of aphasia using a rational clinical examination approach
Alice Pender	Carla Rose , Angela Chang (Centre for Allied Health Research), Tracy Comans (UQ)	Patient outcomes following cochlear implant surgery
Alice Pender	Deborah Askew (UQ, RBWH), Wayne Wilson (UQ), Philip Schluter (University of Canterbury), Roxanne Bainbridge (Cairns Institute)	Self-reported hearing loss and follow-up care of Aboriginal and Torres Strait Islander adults in an urban setting
Anna Farrell	Anna Rumbach (UQ), Stacey Verner-Wren (TPCH), Rebecca Nund (UQ), Nerina Scarinci (UQ), Nicole Hutchinson (Neurology), Robert Henderson (Neurology), Pamela McCombe (Neurology)	Patient and family carer experiences of dysphagia in Motor Neurone Disease: Determining speech pathology service needs for those living in rural and remote locations
Anna Farrell	Lisa Hall (UQ), Lynell Bassett	Implementation of Speech Pathology stroke guidelines
Belinda Lehn, Sarah Wilson	Clare Burns, Ann-Louise Spurgin , Robert Hodge (ENT), Martin Batstone (MaxFacs)	Evaluation of speech and swallowing outcomes following total laryngectomy and pharyngolaryngectomy
Carla Rose	Lynell Bassett , Sharon Kelly (ENT)	Evaluation of the First Contact Audiology Clinics
Clare Burns	Liz Ward (CFAHR; UQ), Annie Hill (UQ), Lynell Bassett , Liz Kenny – Cancer Care (CC), Karen Malcolm- Sunshine Coast University Hospital (SCUH), Rebecca Hicks, Jenni-Lee Rees	Health service evaluation of two Speech Pathology models of care providing support to Head and Neck, Cancer patients living in regional sites within Queensland Health
Clare Burns	Liz Ward (CFAHR; UQ), Annie Hill (UQ), Ben Keir (Medical Physics), Sharon Kelly (ENT), Linda Porter (Medical Imaging), Nick Phillips (Medical Imaging)	Conducting instrumental assessments of adult dysphagia via telehealth
Clare Burns	Liz Ward (CFAHR; UQ), Robyn Saxon (Sunshine Coast HHS), Brooke Cowie (Metro North HHS), Amy Gray (Wide Bay HHS), Lisa Baker (Wide Bay HHS), Natalie Winter (Cairns and Hinterland HHS), Sarah Bignell (South West HHS)	Development, implementation and evaluation of a Queensland Health telepractice model for the clinical assessment of adult dysphagia
Clare Burns	Liz Ward (CFAHR; UQ), Jasmine Foley (UQ), Rebecca Nund (UQ), Laurelie Wall (MSHHS), Maurice Stevens (RBWH), Lizbeth Kenny (RBWH)	Understanding the Regional and Remote Head and Neck Cancer (HNC) Patient Services Journey
Clare Burns	Elizabeth Ward (UQ), Claire Blake, Liz Kenny, Rachael Villiers (CQHHS), Mia Hemingbrough, Tracy Comans (UQ), Kerrie-Anne Frakes (CQHHS), Phil Greenup (QH)	Implementation of a telepractice service providing specialist swallowing, nutrition, and communication intervention for patients with head and neck cancer
Clare Burns	Annie Hill (UQ), University of Queensland; Liz Ward (CFAHR; UQ), Lynell Bassett ; Kate Hacking (COH); Michelle Slee (TPCH); Brooke Cowie (Caboolture Hospital); Wendy Luttrell (Redcliffe Hospital)	Examining stakeholder perceptions of an asynchronous telepractice program for the delivery of dysphagia rehabilitation
Jane Crombie, Ann-Louise Spurgin	Liz Ward (CFAHR; UQ), Stephanie Ng (UQ), Teresa Brown (Nutrition and Dietetics), Liz Kenny (CC), Brett Hughes (CC), Lee Tripcony (CC), Jacqueline Wells (CC)	RBWH Swallowing and Nutrition Guidelines for Head and Neck Cancer patients
Laura Moroney	Liz Ward (CFAHR), Jane Crombie, Jennifer Helios, Clare Burns, Ann-Louise Spurgin , Liz Kenny (CC), Brett Hughes (CC), Clare Blake (Nutrition and Dietetics)	Dysphagia and related toxicities in head and neck patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy
Leisa Turkington	Liz Ward (CFAHR; UQ), Anna Farrell	Neurogenic dysphagia and sensory enhancement strategies
Lynell Bassett	Jennifer Helios	Evaluation of the First Contact Dysphagia Clinic
Lynell Bassett, Sonia Baker	Rob Boots (Medical-Tracheostomy Management Team), Nanette Paxman (Physiotherapy), Karyn Heiniger (Nursing)	Evaluation of the Tracheostomy Management Team (TMT)
Sarah Heaton	Anna Farrell, Lynell Bassett	Implementation of the Dysphagia Screening Tool
Sarah Heaton, Anna Farrell	Anna Rumbach (UQ) and Katrina Webster (Ipswich Hospital)	Dysphagia outcomes in Subarachnoid Haemorrhage

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Shana Taubert	Clare Burns	Videofluoroscopic Swallow Study referral processes at RBWH
Shana Taubert and Clare Burns	Liz Ward (CFAHR; UQ), Kellie McCarthy (PAH)	Evaluating an e-Learning program for training in Adult MBS assessment

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Alicja Malicka (UQ supervisor), Anita Burgess (UQ Audiology masters Student)	Carla Rose and Alice Pender	Evaluating the impact of joint Audiology-ENT clinical pathways on outpatient services and efficiencies: A quality assurance project
Amber Jones (OT RBWH), Perry Judd (PT RBWH), Michelle Cottrell (PT RBWH), Anita Plaza (PT RBWH), Andrea McKittrick (OT RBWH), Dr Angela Chang (AHP RBWH), Hannah Carter (QUT)	Clare Burns	The Royal Brisbane and Women's Hospital Allied Health TeleBurns Clinic: An implementation evaluation using the REAIM approach
David Copland (UQ), Tracy Roxbury (UQ), Katie McMahon (UQ), Greig de Zubicaray (QUT), Marcus Meinzer (UQ)	Penni Burfein, Anna Farrell, Andrew Wong (Stroke)	Predicting and Promoting Sub-Acute Aphasia Recovery
Deborah Theodoros (UQ), Brooke-Mai Whelan (UQ), Louise Cahill (UQ), David Copland (UQ), Alan Coulthard (UQ), Elizabeth Cardell (Griffith), Adam Vogel (University of Melbourne), Stacie Park (ACU), Katie McMahon (HIRF)	Anna Farrell	Be Clear Online: An intensive speech treatment for adults with non-progressive dysarthria
Georgia Thomas (UQ), David Copland (UQ)	Nadia Borgna, Sarah Heaton, Anna Farrell, Lindy Jefree (Neurosurgery)	The use of functional magnetic resonance imaging and MRI diffusion tractography for pre-surgical mapping and investigation of neuroplasticity in adults with a brain tumour
Leonie Naumann, Jennifer Paratz, Hildegard Reul-Hirche, Michelle Cottrell, Clare Burns, Anna Finnane, Tracy Comans, Trevor Russell	Clare Burns	A telehealth model for education and monitoring of early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: A pilot cohort study
Linda Worrall (UQ), David Copland (UQ), Melissa Lawrie (Gold Coast HHS), Liz Ward (UQ), Moya Pattie (Wesley)	Penni Burfein, Anna Farrell	Can a new, intensive model of aphasia rehabilitation achieve better outcomes than usual care?
Liz Ward (Metro South HHS/UQ), Jasmine Jones (UQ), Laurelie Wall (UQ), Rebecca Nund (UQ), Nicky Graham (QH), Wendy Comben (Townsville HH), Emily Missenden (North West HHS)	Clare Burns	Enhancing Speech Pathology Workforce and Service Capabilities to Deliver Services to Patients with Head and Neck Cancer
Salma Charania (TPCH), Anna Rumbach (UQ), Petrea Cornwell (Griffith University & TPCH), Rebecca Nund (UQ)	Anna Farrell, Robert Henderson (Neurology), Nicole Hutchinson (Neurology)	A year in the life: The impact of changes in communication for a person with MND and their family and friends
Theresa Green (RBWH and QUT), Bernd Ploderer (QUT), Tara Hormann (RBWH)	Anna Farrell	An image-based tablet app to support communication of daily activity scheduling between patients with post-stroke aphasia, family and hospital staff

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Clare Burns	Excellence Award in Research/Knowledge Translation	Queensland Health Speech Pathology Advisory Committee (QHSPAC) Annual Forum, 10 th September 2019, Brisbane
Laura Moroney	Excellence Award in Research/Knowledge Translation	Queensland Health Speech Pathology Advisory Committee (QHSPAC) Annual Forum, 10 th September 2019, Brisbane

Research Awards and Achievements *(cont)*

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Laura Moroney , Liz Ward, Clare Burns and Jane Crombie	Best PhD Student Oral Presentation	Speech Pathology Australia Conference, 5 th June 2019, Brisbane
Leisa Turkington	Excellence Award in Research/Knowledge Translation	Queensland Health Speech Pathology Advisory Committee (QHSPAC) Annual Forum, 10 th September 2019, Brisbane
Leisa Turkington , Liz Ward, Anna Farrell	Springer International Publishing Travel Scholarship	Dysphagia Research Society Conference, 7 th March 2019, San Diego, California
Madeline Raatz, Liz Ward, Jeanne Marshall, and Clare Burns	Dysphagia Research Society, 1 st place scientific abstract and poster presentation	Dysphagia Research Society Conference, 7 th March 2019, San Diego, California
Madeline Raatz, Liz Ward, Jeanne Marshall, and Clare Burns	Commendation for Best PhD Student Oral Presentation	Speech Pathology Australia Conference, 5 th June 2019, Brisbane
Shana Taubert	Excellence in Education and Learning Award, CAHRLI	CAHRLI Symposium, 19 th June 2019. Brisbane
Shana Taubert	Excellence Award in Research/Knowledge Translation	Queensland Health Speech Pathology Advisory Committee (QHSPAC) Annual Forum, 10 th September 2019, Brisbane

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Alice Pender	Audiology	Rates and effects of hearing loss and middle ear dysfunction in an adult Indigenous Australian population	RBWH Foundation Postgraduate Scholarship	\$38,082	\$38,082	2019
Clare Burns	Speech Pathology	Enhancing speech pathology dysphagia services through telepractice	Metro North Clinician Research Fellowships	\$175,000	\$43,000	2019-2022
Laura Moroney	Speech Pathology	Patterns of dysphagia and related toxicity outcomes in head and neck cancer patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy	RBWH Foundation Postgraduate Scholarships	\$38,082	\$38,082	2019
Liz Ward, Clare Burns , Nicky Graham, Rebecca Nund, Laurelie Wall, Jasmine Foley , Wendy Comben, Emily Missenden	Speech Pathology	Enhancing SP outpatient models of care in regional services for patients with Head and Neck Cancer	Health Practitioner Research Scheme	\$95,808	\$28,830	2019-2021
Nadia de Silva , Lindy Jeffree, David Copland	Speech Pathology	Development of an innovative intra-operative language testing battery for patients with brain tumours	RBWH Diamond Care Grant	\$28,203	\$14,101	2019-2020
Penni Burfein	Speech Pathology	Return to work for stroke survivors with aphasia	RBWH Foundation Postgraduate Scholarships	\$38,082	\$38,082	2019
Penni Burfein	Speech Pathology	Translating Comprehensive Aphasia Therapy (CHAT) into practice	AHPOQ Knowledge Translation Bursary	\$1,100	\$1,100	2019
Sarah Wallace, David Copland, Stephen Birch, Anna Farrell , Penni Burfein , Anne Hill, Tanya Rose, Madeline Cruice	Speech Pathology	The health and economic value of a speech pathology student placement delivering technology-enhanced treatment for aphasia.	University of Queensland Health and Behavioural Science Faculty Economic and Health Value of Student Placements Research Grants	\$50,000	\$50,000	2019
Shana Taubert	Speech Pathology	Enhancing practice in videofluoroscopic swallow study assessment	RBWH Foundation Postgraduate Scholarships	\$38,082	\$38,082	2019

2019 Research Publications

Journal Articles

1. **Burns, C. L.,** Ward, E. C., Gray, A., Baker, L., Cowie, B., Winter, N., Turvey, J. (2019). Implementation of speech pathology telepractice services for clinical swallowing assessment: An evaluation of service outcomes, costs and consumer satisfaction. *Journal of Telemedicine and Telecare*, 25(9), 545–551. <https://doi.org/10.1177/1357633X19873248>
2. **Burns, C.L.,** Wishart, L.R., Kularatna, S., Ward, E.C. Knowing the costs of change: An introduction to health economic analyses and considerations for their use in implementation research. *Speech, Language and Hearing*. DOI: 10.1080/2050571X.2019.1693750
3. **Dunn, K.,** & Rumbach, A. (2019). Clinical progression and outcome of individuals with and without swallowing impairment following non-traumatic subarachnoid haemorrhage: A retrospective cohort study. *International Journal of Speech Language Pathology*. doi: 10.1080/17549507.2019.1648552
4. **Heaton, S., Farrell, A., Bassett, L.** (2019). Implementation of dysphagia screening in large tertiary hospital. *International Journal of Communication Disorders*. doi:10.1080/17549507.2019.1597922
5. **Minchell, E.,** Finch, E., Rumbach, A. (2019). The effects of endovascular clot retrieval and thrombolysis on dysphagia: A scoping review. *Journal of Speech, Language and Hearing*. doi: 10.1080/2050571X.2019.1660460
6. **Moroney L,** Ward EC, Helios J, Crombie J, Burns C., Blake C., Comans, T., Kenny L., Chua B., Hughes B. (2019). The RBWH head and neck cancer low risk speech pathology pathway: Evaluation of an alternative supportive care service delivery model. *Supportive Care in Cancer*, doi:10.1007/s00520-019-04992-x
7. Raatz, M., Ward, E. C., Marshall, J., & **Burns, C. L.** (2019). Developing the system architecture for conducting synchronous paediatric feeding assessments via telepractice. *Journal of Telemedicine and Telecare*, 25(9), 552–558. <https://doi.org/10.1177/1357633X19872091>
8. Roxbury, T., McMahon, K., Wong, A., **Burfein, P., Farrell, A.,** Copland, D., **Taubert, S.,** Read, S. (2019). Brain activity during spoken word recognition in subacute aphasia. *Brain and Language*, 195 104630. doi:10.1016/j.bandl.2019.04.004
9. **Turkington, L.,** Ward, E., **Farrell, A.** An investigation of taste intensity, palatability, effervescence and sip volumes of carbonated liquid stimuli for use in videofluoroscopic studies. *American Journal of Speech-Language Pathology*. doi:10.1044/2019_AJSLP-19-0045
10. **Turkington, L.,** Ward, E.C., **Farrell, A.,** Porter, L. and Wall, L. (2019). Impact of carbonation on neurogenic dysphagia and an exploration of the clinical predictors of a response to carbonation. *International Journal of Language and Communication Disorders*, doi:10.1111/1460-6984.12458.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Burns, C.** Interdisciplinary Dysphagia Clinical Programs: How do we develop? Dysphagia Research Society. 7th March 2019. San Diego, California
2. **Burns, C.,** Ward, E. Communications from clinic to community using technology & telepractice: Implications for dysphagia practice. Dysphagia Research Society. 7th March 2019. San Diego, California
3. Ward, E, & **Burns, C.** Using technology & telepractice: Implications for dysphagia practice. Speech Pathology Australia Conference. 7th June 2019. Brisbane.

Oral Presentations

1. **Burns, C.** An Evaluation of Service Outcomes, Costs, and Consumer Engagement Following Implementation of a Telepractice Service for Swallowing Assessments. Successes and Failures in Telehealth Conference, 21-23 October 2019, Gold Coast
2. **Moroney, L., Helios, J.,** Ward, E., Crombie, J., **Burns, C.,** Blake, C., Pelecanos, A., Comans, T., Kenny, L., Chua, B., Hughes, B. Outcomes of a new speech pathology service for "low risk" patients receiving radiation for HNC: Is it safe and efficient? Speech Pathology Australia National Conference. 5th June 2019, Brisbane
3. Raatz, M., Ward, E., Marshall, J., **Burns, C.** Development of the system architecture for conducting paediatric feeding assessment via telepractice. Speech Pathology Australia National Conference. 3rd June 2019. Brisbane
4. Ratz, M and **Burns, C.** Development of the System Architecture Required for Conducting Paediatric Feeding Assessments via Telepractice. Successes and Failures in Telehealth Conference, 21-23 October 2019, Gold Coast
5. **Taubert, S.,** Ward, E., **Burns, C.** Implementation and evaluation of speech pathology-led referring process for videofluoroscopic swallow studies. National Allied Health Conference. 5th August 2019, Brisbane
6. **Turkington, L.,** Ward, E., **Farrell, A.** Carbonated fluids: Could preparation and other sensory impacts influence patient performance? Speech Pathology Australia National Conference. 4th June 2019. Brisbane.

Poster Presentations:

1. Copland, D., Roxbury, T., **Minchell, E.** Predicting and Promoting Aphasia Recovery (PAPAR): A randomised controlled trial of aphasia treatment using neuroimaging-based predictors. Speech Pathology Australia National Conference. 5th June 2019, Brisbane
2. **Dunn, K.,** Rumbach, A. Clinical Progression and outcome of swallowing impairment following non-traumatic subarachnoid haemorrhage: A retrospective study. Dysphagia Research Society. 7th March 2019. San Diego, California
3. **Minchell, E.,** Finch, E., Rumbach, A. The effects of thrombolysis and endovascular clot retrieval on dysphagia: A scoping review Speech Pathology Australia National Conference. 5th June 2019, Brisbane

Poster Presentations (cont)

4. Raatz, M., Ward, E., Marshall, J., **Burns, C.** Developing system requirements for paediatric feeding assessments via telepractice. Dysphagia Research Society. 7th March 2019. San Diego, California
5. **Taubert, S.**, Ward, E., **Burns, C.**, **Bassett, L.**, Porter, L., **Burfein, P.** Implementation and Evaluation of speech pathology-led referring process for videofluoroscopic studies. Speech Pathology Australia National Conference. 3rd June 2019. Brisbane
6. **Turkington, L.**, Ward, E., **Farrell, A.** An investigation of taste intensity, palatability, effervescence and sip volumes of carbonated liquid stimuli for use in videofluoroscopic studies. Dysphagia Research Society. 7th March 2019. San Diego, California.

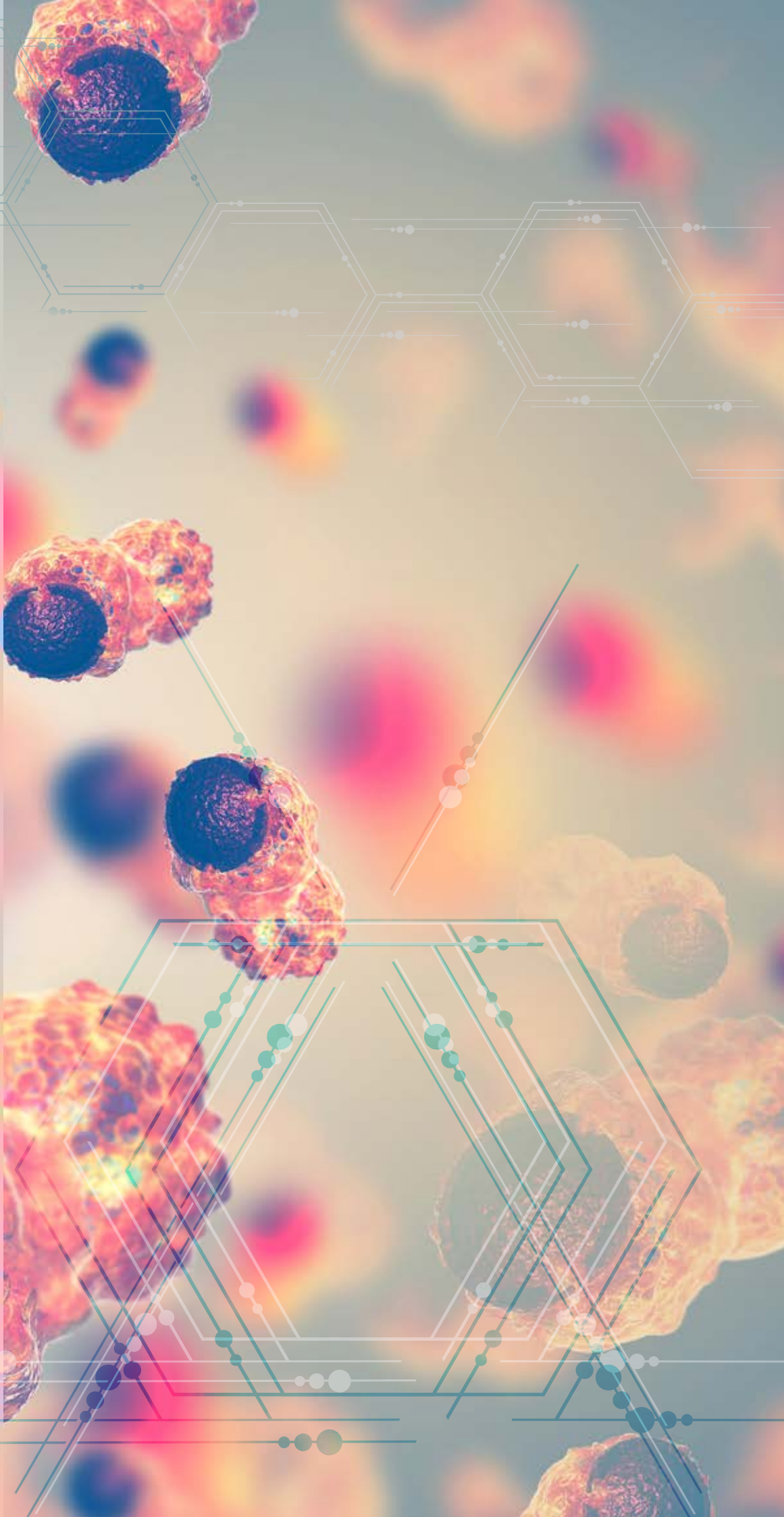
Other communications and outputs:

Staff Member	Details
Carla Rose and Alice Pender	Media release on Channel 7 on 30.7.19 with Minister of Health regarding Minister of Health regarding the recent development of a HEAROS App that guides hearing impaired people through the new environment of sound, following a cochlear implant. https://www.facebook.com/7NEWSBrisbane/videos/449564072565339/
Clare Burns	An update on Speech Pathology intervention in Head and Neck Cancer: Current pathways, practices and considerations. Speech Pathology Australia Live Webinar 31 st January 2019
Clare Burns	Invited lecture on Speech Pathology Telepractice Services to Speech Pathology Department, University of Queensland, 16 th September 2019
Luke de Visser	Publication in Royal College of Speech & Language Therapists Bulletin March (2019). Saving Face: The Collaborative approach that benefits patients with facial muscle weakness. <i>Royal College of Speech and Language Therapists Bulletin</i> , March 2019, p13-14



Health Minister Steven Miles (far right) with Executive Director Allied Health Peter Buttrum (far left) and the RBWH Audiology Team (Alice Pender, Lynell Bassett and Carla Rose)

CANCER CARE SERVICES



CANCERCARE SERVICES



Dr Glen Kennedy
Executive Director
Cancer Care Services MNHHS

Cancer Care Services (CCS) at RBWH continues to provide expert highly skilled, evidence-based care to patients affected by cancer and non-malignant haematological conditions, including haemophilia. As a service committed to striving for excellence, our multidisciplinary research team is an integral part of ensuring the provision of cutting-edge treatment to our patients.

The Cancer Care research team includes the Allied Health Professions, Cancer Nursing Professorial Precinct, Medical Oncology, Radiation Oncology and Haematology including the Haemophilia Centre and Bone Marrow Transplant Unit. Research is considered core business within Cancer Care, and a vehicle to the facilitation of progressive treatment for our patients. 2019 represented another year of fantastic achievement in research for Cancer Care. The annual CCS Research Retreat brought together investigators from CCS and senior hospital and district executives to enable planning to ensure that research remains at the forefront of our service both now and into the future. Highlights in 2019 included establishment of infrastructure, funded by a Queensland Health New Technology Grant, to locally manufacture chimeric antigen receptor T-cells (CAR-T) for treatment of B-cell malignancies, as well as opening commercial CAR-T studies and other genetic treatment studies in Haemophilia. Our Research Advisory Group (RAG) also extended membership to include representatives from all MNHHS facilities, as part of our continuing programme to link cancer research across our district. Establishment of a research trial database has also significantly improved our ability to plan our clinical trial resources more effectively. Other research highlights for the year are detailed in our separate departmental reports. We look forward to 2020 to continue to strive to expand and embed research within CCS across all patient and disease groups, incorporating new and novel approaches to care within clinical, translational and basic science research programmes and partnerships, aiming to constantly improve clinical outcomes for our patients.

CLINICAL RESEARCH



Dr Steven Lane
Director of Clinical Research
 Clinical Haematologist
 Cancer Care Services RBWH

Research is ingrained in the DNA of the Division of Cancer Care Services. The last 12 months have seen the program move from strength to strength, with major national and international collaborations delivering strong research results that will impact the care of our patients.

We have had major highlights such as contributions to publications in the New England Journal of Medicine, Science and top specialist journals, the publication of national and international guidelines, a Eureka Prize and funding from the State Government to develop the first chimeric antigen receptor T cell (CAR-T) program in the state. Our program collaborates widely across the Herston campus, forming partnerships with QIMR Berghofer, University of Queensland, QUT, Griffith University and more broadly through vehicles such as the Brisbane Diamantina Health Partnership. These amazing results have been achieved in a challenging research environment, with major changes across the campus in reporting, ethics and governance and clinical trial management. As such, I would like to particularly acknowledge the amazing work of our clinical trials co-ordinators and research staff. Our department has made changes to work flow to ensure efficiency and readiness for the future, including the roll out of a prospective clinical trials database and tele-trials initiatives. Linking in with this, we have prepared a research strategy to link with the overarching Metro North Research Strategy. CCS clearly remains committed to the ongoing support and development in clinical research. This work is essential to the development of new therapies and ideas in treatment and support of patients suffering different cancer diagnoses. Congratulations and thanks to all involved in this important work and on behalf of the Cancer Research Department we look forward to an exciting time ahead for research.

Name	Role	Department	Organisation
Tracey Gilbert	Research Support Officer	Cancer Care Services	Queensland Health

HAEMATOLOGY & BONEMARROW TRANSPLANT



Dr Cameron Curley
Deputy Director
Clinical Haematology and BMT

The Department of Haematology and BMT is committed to healthcare innovation to improve patient outcomes through the provision of a high level comprehensive translational and clinical research program. A culture of research excellence continues to grow within the department supported by ongoing collaborations between research partners including: QIMR Berghofer, UQ, Herston Imaging Research Facility, the Australasian Leukaemia and Lymphoma group and other medical and allied health teams within RBWH and from other health districts. Pleasingly, 2019 was another successful year that has seen many positive achievements with regards to research opportunities and outcomes for our staff and patients.

Clinical trials continue to grow recruitment across a number of disease streams including myeloid malignancy, lymphoma, myeloma, thrombosis and haemostasis and cellular therapies including allogeneic BMT and chimeric antigen receptor T cell (CAR T) therapy.

Importantly over 2019 funding opportunities continued to grow. Major successful grants included:

- Queensland Genomics 2019-2020 – CAR T targeting CD19 (\$800k)
- RBWH Foundation Diamond Grant 2020 – Haem GP shared care (\$40k)
- NHMRC Grant 2019-2021 – (\$878k).

Over the course of 2019 there have been notable publications in impact journals, and presentations and posters at national and international conferences by departmental staff. Areas of note include novel insights into leukaemogenesis, aspects of pharmacokinetics of anti-infective therapies in febrile neutropenia, the immunology of allogeneic stem cell transplantation, nutrition and the microbiome post-transplant and unique approaches to the prevention of graft versus host disease.

The Department of Haem/BMT continues to encourage the pursuit of higher degrees amongst our team and pleasingly Dr Andrea Henden and Dr Victoria Ling both successfully completed their PhD's in 2019. We congratulate them on their achievement and are encouraged by the increasing numbers of fellow staff currently enrolled in higher degrees.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Ashleigh Scott	MPhil, UQ (2017-19)	Targeting translocator protein to improve diagnostic accuracy in gastrointestinal graft versus host disease	Glen Kennedy, Siok-Keen Tey
Dr Andrea Henden	PhD, UQ (2015-2019) <i>Conferred</i>	Anti-leukaemia effects of type I and type III Interferons	Prof Geoff Hill, Prof Steven Lane
Nienke Zomerdijk	PhD, UQ (2015-19)	The psychosocial impact of donating haematopoietic stem cells on adult related donors	Prof Jane Turner, Prof Geoff Hill
Victoria Ling	PhD, UQ	Chemotherapy resistance in leukaemia	Steven Lane
William Godfrey	Hons, UQ	Chemotherapy resistance in leukaemia	Steven Lane

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Steven Lane	Treasurer	Haematology Society of Australia and New Zealand	
Steven Lane	Councillor	Haematology Society of Australia and New Zealand	
Steven Lane	Committee Member	Metro North Research Committee	
Steven Lane	Head of Cancer Program		QIMR Berghofer Medical Research Institute
Steven Lane	Head, Cancer Theme		Brisbane Diamantina Health Partners
Steven Lane	Committee Member	RBWH Research Committee	
Steven Lane	Research Coordinator	RBWH Haematology Research	
Steven Lane	Invited Member		Leukaemia Foundation Blood Cancer Expert Panel
Steven Lane	Scientific Review Panel Member		Snowdome/Leukemia and Lymphoma Society (USA) Scientific Review Panel
Steven Lane	Scientific Program Member		Maddie Riewoldt's Vision, Grants Committee
Siok Tey	Clinician Research Fellowship	MNHHS	UQ, Faculty of Medicine
Andrea Henden	Senior Lecturer		UQ, Faculty of Medicine
Nicholas Weber	Committee member		Australasian Myeloma Research Consortium
Robyn Western	Manager, Clinical Trials Unit	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Carolyne Little	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Jessica Kelly	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Kate Stark	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Katie Matthews	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Tricia Pusztai	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Kiara Mason	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Madonna Fuery	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Michelle deBock	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Bridie Roff	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Keri Kerr	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Nicola Quirk	Senior Administration Officer	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Sharon Milne	Senior Administration Officer	Clinical Trials Unit Haematology/Bone Marrow Transplant	
Nienke Zomerdijk	Research Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Ashleigh Scott	Glen Kennedy, Siok Tey, Paul Thomas, David Pattison	Pilot study of ¹⁸ FGE-180-PET to assess acute gastrointestinal graft versus host disease
Ashleigh Scott	Leo Francis	Histological features and anti-TSPO immunohistochemistry (anti-TSPO IHC) in acute gastrointestinal graft versus host disease (GI-GVHD)
Ashleigh Scott	Glen Kennedy, Katie McMahon, Olivier Salvado, Kate Thompson, Ada Lo	Magnetic Resonance Imaging and Quantitative Susceptibility Mapping (MRI-QSM) of brain iron to identify Chemotherapy-Associated Neurocognitive Impairment (CANI) in Acute Myeloid Leukaemia (AML)
Siok Tey	Glen Kennedy, Cameron Curley, Jason Butler, Elango Subramonia-Pillai, Ashleigh Scott, Simon Durrant, James Morton	A Phase 2/3, Multicenter, randomized, Double-blind, placebo-controlled, study to evaluate the safety and efficacy of Alpha-1 Antitrypsin for the prevention of graft-versus-host disease in patients receiving hematopoietic cell transplant – CSL MODULAATE
Siok Tey	Jason Butler, Cameron Curley, Elango Subramonia-Pillai, Ashleigh Scott	PCYC 1140-IM ICON Integrate – Clinical trial of Ibrutinib in Combination With Corticosteroids versus Placebo in Combination With Corticosteroids in Subjects with New Onset Chronic Graft Versus Host Disease (cGVHD)
Siok Tey	Glen Kennedy, Simon Durrant, James Morton, Jason Butler, Elango Subramonia-Pillai, Cameron Curley, Ashish Misra	IL-17 – Observational study of IL-17-related cytokines in stem cell transplantation
Siok Tey	Glen Kennedy, Cheryl Hutchins	TREG Apheresis – Developing a method to generate regulatory T cells from healthy donors
Siok Tey	Glen Kennedy, Simon Durrant, James Morton, Jason Butler, Elango Subramonia-Pillai, Cameron Curley, Ashish Misra	IR Auto – Observational study of immune reconstitution in patients undergoing autologous stem cell transplantation
Siok Tey	Glen Kennedy, Simon Durrant, James Morton, Jason Butler, Elango Subramonia-Pillai, Cameron Curley, Ashish Misra	IR Allo – Observational study of immune reconstitution following stem cell transplantation
Jane Mason		A Prospective Non-Interventional Study of Bleeding Episodes, Factor VIII Infusions, and Patient-Reported Outcomes in Individuals with Severe Hemophilia A – BMN 270-902
Jane Mason	Nicholas Weber, Michelle Spanevello	A Phase 3 Open-Label, Single-Arm Study To Evaluate The Efficacy and Safety of BMN 270, an Adeno-Associated Virus Vector-Mediated Gene Transfer of Human Factor VIII in Hemophilia A Patients with Residual FVIII Levels = 1 IU/dL Receiving Prophylactic FVIII Infusions – BMN 270-301
Jason Butler		A phase III randomized open-label multi-center study of ruxolitinib vs. best available therapy in patients with corticosteroid-resistant acute graft vs. host disease after allogeneic stem cell transplantation – REACH 2
Jason Butler	Cameron Curley, Simon Durrant, Kirk Morris, Elango Subramonia Pillai, Siok Tey, Nicholas Weber, Glen Kennedy	A Phase 3, Randomized, Double blind, Placebo controlled, Multicenter Study of BR alone Versus in Combination with Acalabrutinib (ACP 196) in Subjects with Previously Untreated Mantle Cell Lymphoma – Acerta ECHO
Jason Butler	Cameron Curley, Simon Durrant, Elango Subramonia Pillai, Siok Tey, Nicholas Weber, Kirk Morris	A Randomized, Open-label, Phase 3 Study Comparing Carfilzomib, Dexamethasone, and Daratumumab to Carfilzomib and Dexamethasone for the Treatment of Patients With Relapsed or Refractory Multiple Myeloma – 20160275 – Amgen Candor 275
Jason Butler	Cameron Curley, Glen Kennedy, Elango Subramonia Pillai, Siok Tey, Nicholas Weber, Kirk Morris, Ashleigh Scott	A Phase II, single arm, multicenter open label trial to determine the efficacy and safety of tisagenlecleucel (CTL019) in adult patients with refractory or relapsed follicular lymphoma – Novartis ELARA
Jason Butler	Ashleigh Scott, Nicholas Weber, Cameron Curley, Elango Subramonia Pillai, Kirk Morris	A multi-centre Phase II study to determine the response kinetics, safety and efficacy of pembrolizumab as frontline treatment of patients with Hodgkin Lymphoma considered unsuitable for ABVD – PLIMATH
Jason Butler	Cameron Curley, Kirk Morris, Simon Durrant, Nicholas Weber, Elango Subramonia Pillai, Ashleigh Scott	A Phase 3 Randomized, Controlled, Open-Label study of Selinexor, Bortezomib, and Dexamethasone (SVD) Versus Bortezomib and Dexamethasone (VD) In Patients With Relapsed or Refractory Multiple Myeloma (RRMM) – Karyopharm BOSTON

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group/Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Glen Kennedy	Simon Durrant, Jason Butler, James Morton, Ashish Misra, Siok Tey, Elango Subramonia Pillai, Cameron Curley	A phase II study of humanized anti-IL-6 receptor antibody Tocilizumab (TCZ) to prevent development of acute graft versus host disease (GVHD) post HLA-mismatched allogeneic haematopoietic progenitor cell transplantation (HPCT) – TCZ II
Glen Kennedy	Sanjoy Paul, David Ritchie, David Gottlieb, John Moore, Julian Cooney, Simon Durrant, Jason Butler, James Morton, Ashish Misra, Siok Tey, Elango Subramonia Pillai, Cameron Curley	A phase III randomized study of humanized anti-IL-6 receptor antibody Tocilizumab (TCZ) to prevent development of acute graft versus host disease (GVHD) post HLA-matched allogeneic haematopoietic progenitor cell transplantation (HPCT) – TCZ III
Glen Kennedy	Geoff Hill, Simon Durrant, Jason Butler, Ashish Misra, Siok Tey, Elango Subramonia-Pillai, Cameron Curley	A phase I / II study of pegylated-Interferon-2alpha for relapsed haematological malignancy after allogeneic haematopoietic progenitor cell transplantation (HPCT)
Nicholas Weber	Paul Thomas, Samuel Kyle, Glen Kennedy, Kirk Morris, Simon Gray	Pilot study of 68Ga-Pentixafor positron emission tomography (PET) imaging in multiple myeloma
Nicholas Weber		Beta-lactam PK/PD in febrile neutropenia (Patient population: patients undergoing intensive chemotherapy with anticipated duration of neutropenia >7 days)
Nicholas Weber		Tolerability of early enteral feeding during allogeneic haematopoietic progenitor cell transplantation: a randomized comparison with 'standard' parenteral nutritional support
Nicholas Weber	Jason Butler, Ashish Misra, Kirk Morris, Cameron Curley, Elango Subramonia Pillai	An International, Phase 3, Open-label, Randomized Study of BGB 3111 Compared with Bendamustine plus Rituximab in Patients with Previously Untreated Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma – Beigene 304
Nienke Zomerdijk		The psychosocial impact of HSC donation on adult related donors
Nienke Zomerdijk		Evaluation of a psycho-educational resource to support adults who are donating stem cells to a family member
Simon Durrant		A Phase 3, Multicenter, Randomized, Double Blind Study of Bortezomib and Dexamethasone in Combination with Either Venetoclax or Placebo in Subjects with Relapsed or Refractory Multiple Myeloma Who are Sensitive or Naïve to Proteasome Inhibitors – ABBVIE BELLINI
Simon Durrant		A Phase 3, Randomized, Double-Blind Active-Controlled Study Evaluating Momelotinib vs Ruxolitinib in Subjects with Primary Myelofibrosis (PMF) or Post-Polycythemia Vera or Post-Essential Thrombocythemia Myelofibrosis (Post-PV/ET MF) – Gilead SIMPLIFY
Simon Durrant		An Open-Label Bosutinib Treatment Extension Study for Subjects With Chronic Myeloid Leukemia (CML) Who Have Previously Participated in Bosutinib Studies B1871006 or B1871008 (Protocol Number: B1871040) – Pfizer Ski Extension
Simon Durrant		Randomized, open label, multicenter phase III study of Efficacy And Safety in POLycythemia vera subjects who are resistant to or intolerant of hydroxyurea: JAK iNhibitor INC424 tablets verSus bEst available care – Novartis RESPONSE
Simon Durrant		Randomized, open label, multicenter phase IIIB study evaluating the efficacy and safety of ruxolitinib versus best available therapy in patients with polycythemia vera who are hydroxyurea resistant or intolerant – Novartis RESPONSE 2
Simon Durrant	Jason Butler, Elango Subramonia Pillai, Cameron Curley, Glen Kennedy, Nicholas Weber, Kirk Morris	A Phase 2/3 Multi-center Study Comparing Blinatumomab to Standard of Care in Subjects with Relapsed/Refractory Aggressive B-Cell Non-Hodgkin Lymphoma (20150292) – Amgen VERDI
Steven Lane	Glen Kennedy	Examination of genes that control the growth and survival of blood cancers

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Monash University, Peter MacCallum Cancer Centre	Elango Subramonia Pillai, Michelle Spanevello, Jason Butler, Cameron Curley, Kirk Morris, Nicholas Weber, Ashleigh Scott	TREATT: A double blind, randomised controlled trial evaluating the safety and efficacy of tranexamic acid in patients with haematological malignancies with severe thrombocytopenia
The Australasian Leukaemia and Lymphoma Group (ALLG)	Glen Kennedy, Nicholas Weber, Cameron Curley, Jason Butler, Kirk Morris, Elango Subramonia Pillai, Simon Durant, Steven Lane	AML M16 – Sorafenib in Combination with Intensive Chemotherapy for Previously Untreated Adult FLT3-ITD Positive AML: A Phase 2 Randomised Double-Blind Placebo Controlled Multi-Centre Study
The Australasian Leukaemia and Lymphoma Group (ALLG)	Glen Kennedy, Cameron Curley, Jason Butler, Elango Subramonia Pillai, Steven Lane, Kirk Morris, Nicholas Weber, Simon Durant	ALLG NBCR – Australasian Leukaemia and Lymphoma Group Acute Myeloid Leukaemia National Blood Cancer Registry
The Australasian Leukaemia and Lymphoma Group (ALLG)	Jason Butler, Cameron Curley, Simon Durant, Glen Kennedy, Steven Lane, Ashish Misra, Kirk Morris, James Morton, Elango Subramonia Pillai, Nicholas Weber	NHL 29 – A Phase II study of Ibrutinib, Rituximanb and mini-CHOP therapy in very elderly patients with newly diagnosed DLBCL
The Australasian Leukaemia and Lymphoma Group (ALLG)	Steven Lane, Cameron Curley, Jason Butler, Nicholas Weber, Elango Subramonia Pillai	APML5: A phase 1 pharmacokinetic evaluation of oral arsenic trioxide in previously untreated patients with acute promyelocytic leukaemia
The Australasian Leukaemia and Lymphoma Group (ALLG)	Steven Lane, Cameron Curley, Jason Butler, Kirk Morris, Nicholas Weber, Elango Subramonia Pillai, Simon Durrant, Glen Kennedy	AML M21: A phase Ib/II clinical evaluation of Ponatinib in combination with 5-azacitidine in FLT3-ITD positive acute myeloid leukaemia
The Australasian Leukaemia and Lymphoma Group (ALLG)	Steven Lane, Cameron Curley, Jason Butler, Kirk Morris, Nicholas Weber, Elango Subramonia Pillai	LS17 REGALLIA: Studies to delineate the molecular and genomic basis of high risk ALL (Registry of Acute Lymphoblastic Leukaemia in Australasia and Associated Correlative Studies)
The Australasian Leukaemia and Lymphoma Group (ALLG)	Cameron Curley, Ashleigh Scott, Kirk Morris, Nicholas Weber	BLAM: A phase IIb study of Blinatumomab + Cytarabine (AraC) and Methotrexate in adult B-precursor Acute Lymphoblastic Leukaemia
Monash University	Jason Butler, Nicholas Weber	MRDR – Myeloma and Related Diseases Registry
Alfred Hospital	Nicholas Weber, Cameron Curley, Jason Butler, Kirk Morris, Elango Subramonia Pillai, Siok-Keen Tey, Ashleigh Scott	AMaRC – A randomized phase 2 study of bortezomib, cyclophosphamide and dexamethasone induction (VCD) compared with VCD and daratumumab induction followed by daratumumab maintenance (VCDD) for the initial treatment of transplant ineligible patients with multiple myeloma
State of QLD – Qld Genomics Health Alliance	Andrea Henden, Cameron Curley, Nicholas Weber, Louisa Gordon	QMGP – Queensland Myeloid Genomics Program Evaluation
University of Queensland, Princess Alexandra Hospital	Nicholas Weber, Leonie Naumann	The MyeEx Study: The Effect of an Individualised Exercise Intervention on Functional, Biological and Quality of Life Outcomes in Patients with Multiple Myeloma
Queensland Youth Cancer Service	Kirk Morris	National Projects with CanTeen – The Youth Cancer Service Experience of Care Survey
NHMRC	Jason Butler	Integrating immunity and genetics in Follicular Lymphoma to establish a prognostic score fit for the modern era

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Ashleigh Scott	RBWH Research Postgraduate Scholarship 2019 (\$44,000)	To perform research activities in 2019
Nienke Zomerdijk	UQ Faculty of Medicine Travel Scholarship (\$1,200)	To support research activities in 2019
Andrea Henden	ISCT-ASTCT Cell Therapy Scholarship	To attend the ISCT-ASTCT Cell Therapy Training Course in 2019
Siok Tey	Federal Government – Stem Cell Therapies Expert Advisory Panel	

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Ashleigh Scott	Haematology/BMT	Using novel brain imaging to define mechanisms of persisting central nervous system toxicity ("Chemobrain") following allogeneic progenitor cell transplantation	RBWH Foundation Diamond Care Grants	\$40,000	\$40,000	2018-2019
Andrea Henden, Cameron Curley, Glen Kennedy, Nicholas Weber, Louisa Gordon	Haematology/BMT, QIMR	The Queensland Myeloid Genomics Program – improving the survival of children and adults with myeloid cancers Queensland Genomics	Queensland Genomics	\$837,208	\$418,604	2019-2020
Siok Tey, David Gottlieb, Glen Kennedy	Haematology/BMT	A phase I clinical study of adoptive transfer of regulatory T cells (Tregs) and low-dose interleukin-2 (IL-2) for the treatment of chronic graft-versus-host disease (GVHD): gene-marking to inform rational combination therapy	NHMRC	\$878,748	\$295,244	2019-2021
Siok Tey, Glen Kennedy	Haematology/BMT	Chimeric Antigen Receptor (CAR) T cells targeting CD19 antigen	Queensland Genomics	\$800,000	\$400,000	2019-2020
Siok Tey, Chris Fraser	Haematology/BMT/ QIMR	CHQ-QIMRB-RBWH Cancer Immunotherapy Project	Children's Hospital Foundation	\$80,000	\$40,000	2019-2020
Steven Lane	Haematology/BMT	Genetic modelling of MPN progression	Cancer Australia	\$200,000	\$100,000	2018-2019
Steven Lane	Haematology/BMT	Understanding Chemoresistance in AML	CSL Centenary Fellowship	\$1.25m	\$250,000	2017-2021
Steven Lane	Haematology/BMT	Interferon challenge	MPN Research Foundation (USA)	\$300,000	\$100,000	2018-2020

2019 Research Publications

Journal Articles

- Martins JP, Andoniou CE, Fleming P, Kuns RD, Schuster IS, Voigt V, Daly S, Varelias A, **Tey SK**, Degli-Esposti MA, **Hill GR**. Strain-specific antibody therapy prevents cytomegalovirus reactivation after transplantation. *Science*. 2019; Jan 18;363(6424):288-293. doi: 10.1126/science.aat0066
- Zhang P, **Curley CI**, **Mudie K**, **Nakagaki M**, **Hill GR**, **Roberts JA**, **Tey SK**. Effect of plasmapheresis on ATG (Thymoglobulin) clearance prior to adoptive T cell transfer. *Bone Marrow Transplantation*. 2019; Mar 19. doi:10.1038/s41409-019-0505-5
- Ling VY**, Saw J, Tremblay CS, Sonderegger S, Toulmin E, Boyle JA, Chiu SK, **Lane SW**, Ting SB, Curtis DJ. Attenuated acceleration to leukemia after Ezh2 loss in NHD13 myelodysplastic syndrome. *HemaSphere*. 2019; 3:(4).doi: 10.1097/HS9.0000000000000277
- Lane SW**. Unravelling the loops of resistance in ALL. *The Hematologist*. 2019; 16(3)
- Lane SW**. Beating AML: Know your enemy. *The Hematologist*, 2019; 16(2)
- Yuan Y, Mediawake H, Bokhari SW, Holley A, **Lane SW**. Acute promyelocytic leukaemia with marked symptomatic hyperleukocytosis. *Br J Haem*. 2019. In Press
- Zomerdijk N**, **Turner J**, **Hill GR**, Gottlieb D. Adult related haematopoietic stem cell donor care: Views of Transplant Nurses. *European Journal of Oncology Nursing*. 2019; 41: 56-63. <https://doi.org/10.1016/j.ejon.2019.05.012>
- Weber N**, **Jackson K**, **McWhinney B**, **Ungerer J**, **Kennedy G**, **Lipman J**, **Roberts JA**. Evaluation of pharmacokinetic/pharmacodynamic and clinical outcomes with 6-hourly empiric piperacillin-tazobactam dosing in hematological malignancy patients with febrile neutropenia. *Journal of Infection and Chemotherapy*. 2019; 25(7): 503-508 <https://doi.org/10.1016/j.jiac.2019.02.014>
- Nakagaki M, Button E, Keating A, Marsh J, Mitchell C, Birchley A, **Kennedy GA**. Hyperhydration is not necessary for high-dose melphalan in stem cell transplantation. *Bone Marrow Transplantation*. 2019; Jun 11. <https://doi.org/10.1038/s41409-019-0586-1>
- Thirunavukarasu C, **Weber N**, **Morris K**, **Subramonia Pillai E**, **Curley C**, **Butler J** & **Kennedy G**. Weekly cyclophosphamide-bortezomib-dexamethasone (CBD) induction performs comparably to twice weekly dosing with respect to both response rates and survival post-autologous transplant. *Acta Haematologica*. 2019; Nov 5:1-2. doi: 10.1159/000501791
- Andersen S, **Weber N**, **Kennedy G**, Brown T, Banks M, Bauer J. Tolerability of proactive enteral nutrition post allogeneic haematopoietic progenitor cell transplant: a randomised comparison to standard care. *Clinical Nutrition*. 2019; June 19. doi: 10.1016/j.clnu.2019.06.012
- Nakagaki M**, **Button E**, Keating A, Marsh J, Mitchell C, Birchley A, **Kennedy GA**. Hyperhydration is not necessary for high-dose melphalan in stem cell transplantation. *Bone Marrow Transplantation*. 2019; Jun 11. doi: 10.1038/s41409-019-0586-1
- Ardalan ZS**, **Chandran S**, **Vasudevan A**, **Angus P**, **Grigg A**, **He S**, **Macdonald GA**, **Strasser SI**, **Tate CJ**, **Kennedy GA**, **Testro A** & **Gow PJ**. Management of patients with EPP related progressive liver disease. *Liver Transplantation*. 2019 Aug 30. doi: 10.1002/lt.25632. [Epub ahead of print]
- Mason JA**, Robertson JD. Extreme skewing of X-inactivation: Rethinking severe haemophilia in women and girls. *Haemophilia*. 2019; 25(4): e286-e287. doi: 10.1111/hae.13755

Journal Articles (cont)

15. **Ling VY**, Saw J, Tremblay CS, Sonderegger S, Toulmin E, Boyle JA, Chiu SK, **Lane SW**, Ting SB, Curtis DJ. Attenuated acceleration to leukemia after Ezh2 loss in NHD13 myelodysplastic syndrome. *HemaSphere*. 2019; 3(4): e277. doi: 10.1097/HS9.0000000000000277
16. Straube J, **Lane SW**. TARGETing genetic drivers of MPN at single cell resolution. *The Hematologist*. 2019; 16:(5)
17. **Ling VY**, **Lane SW**. Piecing together the bone marrow niche. *The Hematologist*. 2019; 16(4)
18. Austin RJ, Straube J, Bruedigam C, Pali G, Jacquelin S, Vu T, Green J, Grasel J, Lansink L, Cooper L, Lee S, Chen N, Lee C, Haque A, Heidel FH, D'Andrea R, Hill GR, Mullally A, Milsom MD, Bywater M*, **Lane SW***. Distinct effects of ruxolitinib and interferon-alpha on murine JAK2V617F myeloproliferative neoplasm hematopoietic stem cell populations. *Leukemia*. 2019; November doi: 10.1038/s41375-019-0638 (*denotes equal contribution)
19. **Lane SW**. Inflammation in del(20q): a MST opportunity? *Blood*. 2019; 134(20): 1685-1686. doi: 10.1182/blood.2019003028
20. Kumar R, Bunn PT, Singh SS, Ng SS, Montes de Oca M, Rivera FD, Chauhan SB, Singh N, Faleiro RJ, Edwards CL, Frame TCM, Sheel M, Austin RJ, **Lane SW**, Bald T, Smyth MJ, **Hill GR**, Best SE, Haque A, Corvino D, Waddell N, Koufariotis L, Mukhopadhyay P, Rai M, Chakravarty J, Singh OP, Sacks D, Nylén S, Uzonna J, Sundar S, Engwerda CR. Type 1 interferons suppress anti-parasitic immunity and can be targeted to improve treatment of visceral leishmaniasis. *Cell Reports*. 2019; In press
21. **Henden AS**, Varelias A, **Leach J**, **Sturgeon E**, **Avery J**, Kelly J, Olver S, Samson L, Hartel G, **Durrant S**, **Butler J**, **Morton AJ**, **Misra A**, **Tey SK**, **Subramoniapillai E**, **Curley C**, **Kennedy G**, **Hill GR**. Pegylated interferon-2 α invokes graft-versus-leukemia effects in patients relapsing after allogeneic stem cell transplantation. *Blood Adv*. 2019; 3(20): 3013-3019. doi: 10.1182/bloodadvances.2019000453
22. Odedra A, Laloo DG, **Kennedy G**, Llewellyn S, McCarthy JS. Safety and effectiveness of apheresis in the treatment of infectious diseases: a systematic review. *Journal of Infection*; 2019 Oct 14. pii: S0163-4453(19)30285-3. doi: 10.1016/j.jinf.2019.09.014
23. Andersen S, Staudacher H, **Weber N**, **Kennedy G**, Varelias A, Banks M, Bauer J. Pilot study investigating the effect of enteral and parenteral nutrition on the gastrointestinal microbiome post-allogeneic transplantation. *British Journal of Haematology*. 2019; Oct 14. doi: 10.1111/bjh.16218
24. Varelias A, Gartlan KH, Wilkinson AN, Olver SD, Samson LD, **Tey SK**, MacDonald KPA, **Hill GR**. Expansion of IL-17A-secreting CD8(+) mucosa-associated invariant T cells in peripheral blood following stem cell mobilization. *Blood Advances*. 2019; 3(5): 718-723
25. Saldan A, Martins JP, Zhang P, Kuns RD, Johnston R, Waddell N, **Lane SW**, Fleming P, Andoniou CE, Degli-Esposti MA, **Hill GR** and **Tey SK**. Interplay between cytomegalovirus infection and graft-versus-leukaemia response. 17th International Congress of Immunology (IUIS), Beijing Peoples R China, Oct 19-23, 2019
26. **Kennedy G**, **Tey SK**, **Curley C**, **Butler JP**, **Misra A**, **Subramoniapillai E**, **Morton J**, **Durrant S**, **Hendon AS**, Moore J, Ritchie D, Gottlieb D, Cooney J, Buizen L, Paul SK, **Hill GR**. Results of a Phase III Double-Blind Study of the Addition of Tocilizumab Vs. Placebo to Cyclosporin/ Methotrexate Gvhd Prophylaxis after HLA-Matched Allogeneic Stem Cell Transplantation. *Blood*. 2019; 134 (Supplement_1): 368. <https://doi.org/10.1182/blood-2019-126285>
27. Wilkinson AN, Chang K, Kuns RD, **Henden AS**, Minnie SA, Ensby KS, Clouston AD, Zhang P, Koyama M, Hidalgo J, Rose-John S, Varelias A, Vuckovic S, Gartlan KH, **Hill GR**. IL-6 dysregulation originates in dendritic cells and mediates graft-versus-host-disease via classical signalling. *Blood*. 2019; Dec 5
28. Koyama M, Mukhopadhyay P, Schuster IS, **Henden AS**, Hülsdünker J, Varelias A, Vetizou M, Kuns RD, Robb RJ, Zhang P, Blazar BR, Thomas R, Begun J, Waddell N, Trinchieri G, Zeiser R, Clouston AD, Degli-Esposti MA, **Hill GR**. MHC class II antigen presentation by the intestinal epithelium initiates graft-versus-host disease and is influenced by the microbiota. *Immunity*. 2019; Nov 19
29. Gartlan KH, Koyama M, Lineburg KE, Chang K, Ensby KS, Kuns RD, **Henden AS**, Samson LD, Clouston AD, Lopez AF, MacDonald KPA, **Hill GR**. Donor T-cell-derived GM-CSF drives alloantigen presentation by dendritic cells in the gastrointestinal tract. *Blood Advances*. 2019; Oct 8
30. Schnoeder T, Schwarzer A, Perner F, Kirkpatrick J, Dolnik A, Döhner K, Arriba-Tutusaus P, Assi S, Bruedigam C, Kathner C, Eifert T, Buschbeck M, Nafria I Fedi M, Ptasinska A, Elefanti A, Ng E, Bierhoff H, Gras F, Matziolis G, Fischer K, Heidenreich O, **Lane SW**, Bullinger, von Eyss B, Ori A, Bonifer C, Heidel F. Loss of Phospholipase C Gamma 1 (PLCG1) Impairs AML1-ETO Induced Leukemia Stem Cell Self-Renewal, *Blood*. 2019; 134 (Supplement_1): 531.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Steven Lane** – 29.11.2019 ‘Brisbane Diamantina Health Partners and cancer research,’ Brisbane Cancer Conference Presentation, Brisbane, November 2019, Plenary Speaker
2. **Steven Lane** – 14.11.2018, “Targeted therapy in myeloproliferative neoplasm”, Barossa Cell Signaling meeting, invited speaker
3. **Steven Lane** – 11.11.2019. “Precision oncology in blood cancers” Australian Precision Oncology Symposium, paid invited plenary speaker APOS conference, Adelaide
4. **Steven Lane** – 05.08.2019 “Life as a Clinician Scientist,” Queensland Clinical Sciences Forum, Australian Academy of Health and Medical Sciences
5. **Steven Lane** – 21.03.2019 “Asking questions with PDX preclinical trials of novel drug treatments in AML” ALLG/VCCC AML symposium, Walter and Eliza Hall Institute, Melbourne
6. **Steven Lane** – 30.03.2019 “Transplantation in AML” GET Weekend, Novartis, Sydney
7. **Steven Lane** – 03.2019 “Clonal evolution of blood cancers and how does this influence treatment response,” Princess Alexandra Hospital, Department of Haematology and Oncology.

Oral Presentations

1. **Kennedy G, Curley C, Tey SK, Butler J** – Clinical Allogeneic Transplantation: Acute and Chronic GVHD, Immune Reconstitution: Clinical Trials – ASH 61st Annual Meeting and Exposition. 7-10 December 2019
2. **Kennedy G, Tey SK, Curley C, Butler JP, Misra A, Subramoniapillai E, Morton J, Durrant S, Hendon AS**, Moore J, Ritchie D, Gottlieb D, Cooney J, Buizen L, Paul SK, **Hill GR**. Results of a Phase III Double-Blind Study of the Addition of Tocilizumab Vs. Placebo to Cyclosporin/ Methotrexate Gvhd Prophylaxis after HLA-Matched Allogeneic Stem Cell Transplantation. American Society of Hematology, 61st Annual Meeting, Orlando, USA
3. **Weber N**, Thirunavukarasu C, Kyle S, Seymour L, **Morris K, Scott A, Butler J, Tey S, Curley C, Subramoniapillai E, Kennedy G**, Thomas P – CXCR4 positron emission tomography for the detection of bone disease in newly diagnosed myeloma – 17th International Myeloma Workshop, 2019 Boston, USA
4. Yadanar Lwin Y, Steven Tran S, Donna Aarons D, Leonie Wilcox L, Simon He S, Spencer A, Purtill D, Mcewan A, Browett P, Butler A, Carter J, Barty P, **Kennedy G**, Szer J, Ritchie D, Greenwood G, Larsen S, Milliken S, Lai H, Gottlieb D, Kwan J & Hamad N - An update of Australasian trends in allogeneic stem cell transplantation in myelofibrosis in the molecular era – Haematology Society of Australia and New Zealand, 2019 Congress, Perth
5. Button E, Roberts N, Northfield S, Kelly-Austin A, **Gavin N, Wyld D, Chan R**, Kulperger S, **Kennedy G** & Yates P – Rainy Day Care Project pilot – Haematology Society of Australia and New Zealand, 2019 Congress, Perth
6. **Siok Tey** – 28.11.2019 ‘CAR-T cells- a revolutionary treatment’ disruptive technology,’ Brisbane Cancer Conference, Queensland
7. **Siok Tey** – 13.11.2019 “Cell therapy for blood cancer – Delivering on the promise.” ASSCR-AGCTS-ISCT ANZ 2019 Joint Scientific Meeting, Brisbane
8. **Siok Tey** – 12.11.2019 – “Stem Cell Research: Now & the Future – Public forum.” Organised by ASSCR and National Stem Cell Foundation
9. **Siok Tey** – 24.10.2019 – “Cellular Therapies Program” Cancer Care Services half day Research Retreat, RBWH, Brisbane
10. **Siok Tey** – 12.09.2019 – “The critically unwell patient with cancer, a multidisciplinary challenge” Herston State of the Art Healthcare Symposium, RBWH, Brisbane
11. **Siok Tey** – 29.8.2019 – “Bone marrow transplant (& cellular therapy) – a local update” – Princess Alexandra Hospital, Brisbane
12. **Siok Tey** – 2.8.2019 “Chimeric Antigen Receptor T cells – Past, present and future.” Brisbane Immunology Group Annual Meeting, Noosa, Queensland
13. **Siok Tey** – 22.7.2019 “Analysing the peripheral blood maturation of natural killer (NK) cells following allogeneic bone marrow transplantation.” Oz Single Cell Consortium conference, Melbourne
14. **Siok Tey** – 16.3.2019 “Cell and gene therapy – wetlab science meets clinical medicine.” Australian Academy of Health and Medical Sciences Queensland Clinical Symposium, Brisbane
15. **Steven Lane** – 13.11.2019 “Precision medicine trials in blood cancer,” ALLG (Australian Lymphoma & Leukaemia Group) Annual Scientific Meeting, Adelaide
16. **Steven Lane** – 22.08.2019 “Junior PI Career Development Survival Kit,” International Society of Experimental Hematology, Annual Scientific Meeting, Brisbane
17. **Steven Lane** – 15.08.2019 “Translational research to improve outcomes for patients with blood cancer,” Faculty Seminar, QIMR Berghofer, Brisbane
18. **Steven Lane** 03.2019 “Clonal evolution of blood cancers and how does this influence treatment response,” Princess Alexandra Hospital, Department of Haematology and Oncology
19. **Steven Lane** 2019 Memorial Sloan Kettering Cancer Centre, Centre for Hematological Malignancies Seminar Series
20. **Ling V**, Godfrey W, Jacquelin S, Straube J, Cooper L, Bruedigam C, Tey S, Bullinger L, Herold M, Bywater M
21. **Lane S**. Targeting control of cell cycle enhances the activity of conventional chemotherapy in chemoresistant acute myeloid leukaemia. HSAZ, Blood 2019 – Perth, WA 20-23 October
22. **Stewart Hunt, Glen Kennedy, Greg Hapgood, Georgina Hodges, Waqas Bokhari**. Outcomes of relapsed/refractory Hodgkin’s lymphoma with salvage treatment and autologous stem cell transplant in Queensland, Australia: a multi-centre retrospective study. HSAZ, Blood 2019 – Perth, WA 20-23 October.

Poster Presentations

1. **Mediwake H, Morris K, Kennedy G**. Early outcomes of haploidentical stem cell transplant are not superior to mismatched unrelated donor transplantation. Blood Meeting. 20-23 October 2019, Perth
2. Katherine Budgen, **Cameron Curley**. Urban-rural survival outcomes in acute myeloid leukaemia patients in Queensland. HSAZ, Blood 2019 – Perth, WA 20-23 October
3. **Rakin Chowdhury, Jason Butler, Ashleigh Scott**. Single-centre Australian experience of allogeneic haematopoietic progenitor cell transplantation in adult acute T-Lymphoblastic Leukaemia/Lymphoma. HSAZ, Blood 2019 – Perth, WA 20-23 October
4. Michael Dickinson, **Jason Butler**, Robin Gasiorowski, Sushrit Patil, Chan Cheah, Leanne Berkahn. PLIMATH: A Phase II study of Pembrolizumab as Frontline Treatment of Patients with Hodgkin Lymphoma (HL) considered Unsuitable for ABVD: An Australasian, Investigator-led Trial in Progress. HSAZ, Blood 2019 – Perth, WA 20-23 October
5. **Gianna Pastore, Kirk Morris, Waqas Bokhari, Nicholas Weber, Jason Butler, Steven Lane, Siok Tey, Elango Pillai, Ashleigh Scott, Glen Kennedy, Cameron Curley**. Cisplatin induced acute kidney injury in the treatment of mantle cell lymphoma, a single centre retrospective series. HSAZ, Blood 2019 – Perth, WA 20-23 October
6. **Caitlin Thirunavukarasu, Nicholas Weber, Kirk Morris, Elango Subramonia Pillai, Cameron Curley, Jason Butler, Glen Kennedy**. Real world outcomes post novel agent induction and autologous stem cell transplant (ASCT) in newly diagnosed multiple myeloma. HSAZ, Blood 2019 – Perth, WA 20-23 October

Poster Presentations (cont)

7. **Hannah George, Elango Subramonia Pillai, Cameron Curley, Kirk Morris, Nicholas Weber, Waqas Bokhari, Jason Butler, Glen Kennedy.** Opportunity for improved palliative care practice in haematology units. HSANZ, Blood 2019 – Perth, WA 20-23 October
8. Iland H, Reynolds J, Boddy A, Khoo L, Yuen S, Bryant C, Gasiorowski R, Wei A, **Lane SW**, Harrup R, Marlton P, Risteski C. 15.06.2019 “ALLG APL5: A comparative bioavailability study of encapsulated oral arsenic trioxide and intravenous arsenic trioxide in patients with acute promyelocytic leukemia undergoing consolidation therapy.” European Hematology Association, Annual Scientific Meeting, Amsterdam.

Details of staff that completed their PhDs in 2019 within your department / research group

Name <i>(RBWH Staff in bold)</i>	Name of Project	Completed Date	University Affiliation
Dr Andrea Henden	Anti-leukaemia effects of type I and type III Interferons	May 2019	UQ
Dr Victoria Ling	Factors that regulate response to chemotherapy in myelodysplastic syndromes and acute myeloid leukaemia	June 2019	UQ
Dr Nienke Zomerdijk	The psychosocial impact of donating haematopoietic stem cells on adult related donors	December 2019	UQ

Other communications and outputs:

REVIEW PAPERS AND COMMENTARIES

Zhang P, Tey SK. Adoptive T Cell Therapy Following Haploidentical Hematopoietic Stem Cell Transplantation. *Front Immunol.* 2019 Aug 6; 10:1854. Review. Doi: 10.3389/fimmu.2019.01854 (PDF available online)

TEY SK, Hill GR. Chronic Graft-Versus-Host Disease: Therapeutics at Last? *The Hematologist – American Society of Hematology News and Reports.* 2019; 16(3): 6 -7.

PUBLISHED REVIEWS, EDITORIALS AND CORRESPONDENCE

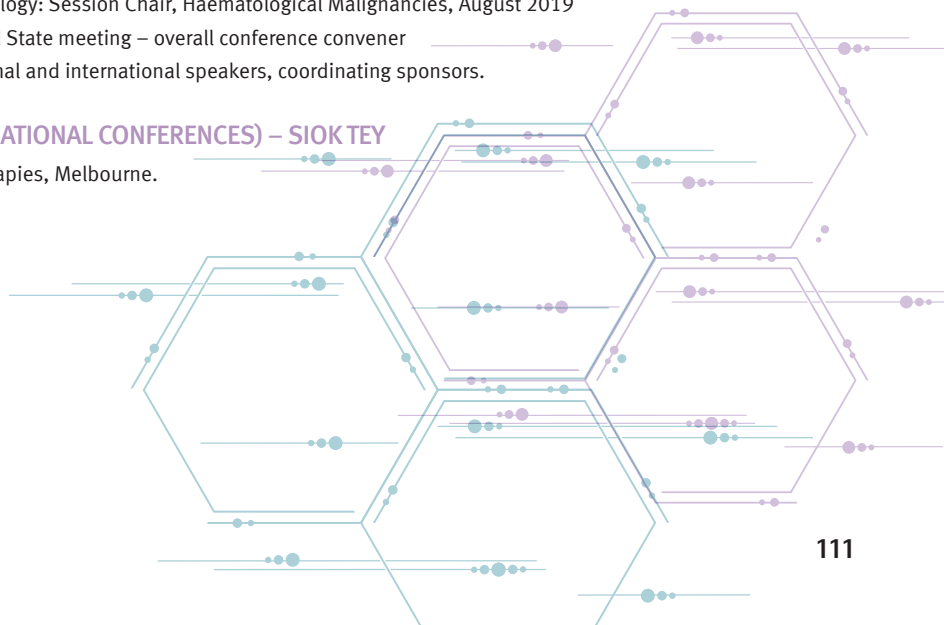
1. **Lane SW.** Inflammation in del(20q): A MST opportunity? **Blood** 2019. 134(20):1685-1686. DOI 10.1182/blood.2019003028
2. Heidel FH, **Lane SW.** Benefit/ Risk Profile of AOP2014 in Low-risk patients with PV (Low-PV). *Clinical Trials Corner. The Hematologist*, 2019 Nov
3. Straube J, **Lane SW.** TARGETing genetic drivers of MPN at single cell resolution, **The Hematologist**, 2019 Sep
4. **Ling YV, Lane SW.** Piecing together the bone marrow niche, **The Hematologist**, 2019 July (Cover article)
5. Forsyth CJ, Chan WH, Grigg AP, Cook NC, Lane SW, Burbury KL, Perkins AC, Ross DM. Recommendations for the use of pegylated interferon-alpha in the treatment of classical myeloproliferative neoplasms. **Intern Med J.** 2019 49(8): 948-54
6. **Lane SW.** Unravelling the loops of resistance in ALL, **The Hematologist**, 2019 May
7. **Lane SW.** Beating AML: Know Your Enemy, **The Hematologist**, 2019 March, 12
8. Yuan Y, Mediwake H, Bokhari SW, Holley A, **Lane SW.** Acute promyelocytic leukaemia with marked symptomatic hyperleukocytosis. **Br J Haem** 2019 186(5), 649.

SESSION CHAIR (NATIONAL AND INTERNATIONAL CONFERENCES) – STEVE LANE

- Blood 2019: Session chair – Multiple myeloma, Perth, Australia
- International Society of Experimental Hematology: Session Chair, Haematological Malignancies, August 2019
- Haematology Society of Australia and NZ, Qld State meeting – overall conference convener
- Including chairing a session, arranging national and international speakers, coordinating sponsors.

SESSION CHAIR (NATIONAL AND INTERNATIONAL CONFERENCES) – SIOK TEY

- 05.19 – International Society of Cellular Therapies, Melbourne.



HAEMOPHILIA CENTRE



Dr Jane Mason
A/Director of Haemophilia
Cancer Care Services RBWH

2019 was an exciting year for the Queensland Haemophilia Centre (QHC) working in collaboration with the Clinical Research Unit Cancer Care Services and the Cellular Therapy/ BMT Laboratory. As part of our participation in an ongoing phase 3 gene therapy study (BMN 270-301) we provided 4 severe haemophilia A patients with a single infusion of an AAV5-FVIII intravenous gene therapy vector.

For most individuals with severe haemophilia A, lifelong home intravenous infusions of recombinant factor VIII concentrate are required every second day to maintain factor levels and prevent serious bleeds. The possibility that a once off infusion of gene therapy will lead to sustained liver production of factor VIII (and remove the need for any ongoing intravenous therapy) is a very exciting prospect for our patient cohort and the wider haemophilia community. The use of an intravenous AAV gene therapy vector aimed at long term cure of an inherited disease has not previously been undertaken in QLD. Successful participation in this study has enabled us to develop experience and further our local operating procedures around safe administration of Genetically Modified Organism (GMO) based therapies. The QHC looks forward to being involved in further gene therapy studies in both Haemophilia A and Haemophilia B in 2020. The QHC also continue as an active site in a multi-centre phase 3 study evaluating the efficacy of a factor VIII mimetic (Emicizumab) given via monthly subcutaneous injection. We continue to collaborate with the Australian Haemophilia Centre’s Directors Organisation (AHCDO) in projects involving

Australian Bleeding Disorder’s Registry (ABDR) and via this framework recently provided clinical and laboratory data pertaining to patients who received access to novel extended half-life (EHL) clotting factor concentrates via the recent National Blood Authority Interim Arrangement.

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Renee Squires, Jane Mason	Joanne Beggs	Prospective study of Von Willebrand Factor (VWF) assay abnormalities correlated with clinical bleeding symptoms in an unselected group of patients with Myeloproliferative Neoplasm (MPN)

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	Service Line Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Sponsor: Hoffmann-La Roche	Jane Mason, Beryl Zeissink, Alex Connolly	A Study to Evaluate the Efficacy, Safety, Pharmacokinetics, and Pharmacodynamics of Emicizumab Given Every 4 Weeks in Participants With Hemophilia A (HAVEN 4)
Sponsor: BioMarin	Jane Mason, Nicholas Weber, Michelle Spanevello	A Prospective Non-Interventional Study of Bleeding Episodes, Factor VIII Infusions, and Patient-Reported Outcomes in Individuals with Severe Haemophilia A
Sponsor: BioMarin	Jane Mason, Nicholas Weber, Michelle Spanevello	A Phase 3 Open-Label, Single-Arm Study to Evaluate the Efficacy and Safety of BMN 270, an Adeno-Associated Virus Vector-Mediated Gene Transfer of Human Factor VIII in Hemophilia A Patients with Residual FVIII levels <1 IU/dL Receiving Prophylactic FVIII Infusions

2019 Research Publications

Journal Articles

1. O'Brien B, **Mason J**, Kimble R. Bleeding Disorders in Adolescents with Heavy Menstrual Bleeding: The Queensland Statewide Paediatric and Adolescent Gynaecology Service. *Journal of pediatric and adolescent gynecology*. 2019;32(2):122-7
2. **Mason JA**, Robertson JD. Extreme skewing of X-inactivation: Rethinking severe haemophilia in women and girls. *Haemophilia*. 2019; 25(4): e286-e287.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Orals Presentations

1. **Mason JA**. Gene therapy in Haemophilia A. HSAZQLD Meeting. 23rd March 2019, Brisbane.

Poster Presentations

1. Jackson M, **Connolly A**, **Mason JA**. Chest wall pseudotumour in a patient with severe haemophilia A and an inhibitor. International Society of Thrombosis and Haemostasis Congress. July 2019, Melbourne
2. **Mason JA**, Parikh S, Curtin J, McRae S, Barnes C, Tapp H, Russell S, Carter T, Pidcock M, Hitchins S, Brown SA, Tran H, Robertson JD. Impact of the SIPPET study on management of Australian PUPs. International Society of Thrombosis and Haemostasis Congress. July 2019, Melbourne
3. Webzell S, **Connolly A**. Current Nursing Workloads and Implications for the Future Within Adult Haemophilia Treatment Centres in Australia. International Society of Thrombosis and Haemostasis Congress. July 2019, Melbourne. Haemophilia Foundation Australia Conference, October 2019, Sydney. Blood conference November 2019, Perth
4. **Connolly A**, **Zeissink B**. Case study of a haemophiliac pseudotumour in a patient with severe haemophilia A with a high titre inhibitor. Haemophilia Foundation Australia Conference, October 2019, Sydney
5. **Riley L**. Connecting the Haemophilia Community Through Art. Haemophilia Foundation Australia Conference, October 2019, Sydney.

Other communications and outputs



CANCER CARE NURSING PROFESSORIAL PRECINCT



Michael Smith
Nursing Director
Cancer Care Services RBWH

The Cancer Nursing Professorial Precinct is a strategic collaboration between nurses in Cancer Care Services, Royal Brisbane and Women's Hospital (RBWH) and academics in the School of Nursing, Queensland University of Technology (QUT). The Precinct is led by Professor Patsy Yates and operationalised by the Nursing Executives, and Nurse Researchers who are in joint positions between the hospital and university. The aim of the Precinct is to build capacity for embedding research and innovation into day-to-day clinical practice and develop a world-class academic comprehensive cancer centre that improves patient outcomes. The Precinct is creating a thriving culture of research that delivers continuous service improvement and evidence-based care.

Focus areas for the Precinct's research program continue to include vascular access device management, prevention of bloodstream infections, survivorship care, palliative care and patient reported outcome measures. A key strength of the Cancer Nursing Professorial Precinct lies in the team's ability to collaborate widely. In 2019, RBWH cancer nurses worked with academic institutions including QUT, Griffith University, University of Queensland, QIMR, Microba, and Bond University. Collaborations also occurred with the Princess Alexandra Hospital, Leukaemia Foundation, Cancer Nurses Society of Australia,

Haematology Society of Australia and New Zealand and with researchers in USA. These collaborations continue to enhance the quality and impact of the research conducted in Cancer Care Services at the RBWH.

Our vision:

The Precinct has a vision to embed nursing-led research across the service line to improve service provision, patient outcomes and experiences. In 2019, the Nursing Research Internship program was introduced, which expanded on the existing 12-week Evidence Based Practice program. The program provides nursing staff with support, resources and guidance to develop and lead their own research project. Nurses enrolled in the program choose a topic which is relevant to their clinical practice and aligned to the needs of the service line. The interns collaborate broadly with the multidisciplinary team in addition to partnering with universities and research institutes. This initiative truly is translational with findings driving nursing practice and in turn improving patient outcomes and experience. Presentations on the establishment of this innovative program have received awards at national conferences. Research is being conducted around the reach, effectiveness, adoption, implementation and maintenance of this program so we can embed research from the ground up in our clinical areas.

Research highlights:

Nursing research continued to grow in 2019 with 20 nursing-led projects conducted in the department and research funding secured from various organisations. Nurses in Cancer Care Services are well represented in leadership positions in professional bodies and are invited speakers at local, national and international conferences. Cancer Care Services has a strong culture of nurses pursuing post-graduate study and research higher degrees. In 2019, several nurses continued or commenced such studies and were awarded competitive scholarships. A key highlight was Dr Nicole Gavin being awarded a PhD. Dr Gavin's work was also acknowledged in several awards including: Best Clinical Practice / Innovation Paper at Cancer Nurses Society of Australia Annual Congress 2019; Best Nursing Research Award Herston Symposium 2019; and Best Nursing Presentation at Blood 2019. Dr Elise Button was awarded a QUT Outstanding Thesis Award for her PhD completed in 2018. The group continues to publish nursing-led research in quality academic journals and focus on translation of findings into the service line to fast-track benefits to patients and families.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Brigid Scanlon	PhD QUT (2019-2021)	What factors affect culturally and linguistically diverse populations accessing Cancer Care Services in Brisbane North	Jo Durham, Mark Brough, David Wyld
Robyn Matthews	Master of Applied Science <i>(Research)</i> , QUT (2018-2019)	Exploring the education needs of health care professionals in relation to end-of-life care in the acute care setting	Raymond Chan, Elise Button , Patsy Yates
Natasha Roberts	PhD QUT (2016-2019)	Patient Reported Outcomes in a Medical Oncology Setting	Monika Janda, Kim Alexander, David Wyld
Midori Nagasaki	PhD, University of Queensland (2019-2021)	Improving mucositis care in people undergoing stem cell transplantation	Karen Whitfield, Glen Kennedy, Alexandra Clavarino, Elise Button

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Nicole Gavin	Nurse researcher	0.3	QUT (2017-current)	School of Nursing (no particular program)	QUT
Elise Button	Nurse researcher	0.2	QUT (2017-current)	School of Nursing (no particular program)	QUT

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	Research Program	Affiliated University/ies
Patsy Yates	Distinguished Professor	Lead, Cancer Care Nursing Professorial Precinct	Queensland University of Technology. Centre for Palliative Care Research and Education

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Nicole Gavin	Julie Flynn , Emily Larsen, Nicole Marsh, Joan Webster <i>(Griffith University)</i>	Cancer caRE: The risk factors of vEnous access failuRe (CARETaKER Study)
Nicole Gavin	Gillian Nasato, Sarah Northfield, Glen Kennedy, David Wyld, Michael Smith, Alison Alexander , Nicole Marsh, Emily Larsen, Krispin Hajkowitz <i>(ID)</i> , Trent Atkinson <i>(DMI)</i> , Barbara Hewer <i>(VASE)</i> , Fiona Coyer <i>(QUT)</i> , Patsy Yates, Peter Mollee <i>(PAH)</i>	Central Venous Access Device Registry
Natasha Roberts	Medical Oncology, Radiation Oncology, Haematology Cancer Care Services, RBWH	Poster Project: A study to describe oncology patient perceptions of research
Natasha Roberts	Haryana Dhillon <i>(Uni of Syd)</i> , Jan Davis <i>(Box Hill)</i> , Craig Gedye <i>(Mater Newcastle)</i> , Australia New Zealand Urogenital and Prostate Cancer Trials Group	Patient Experience of Participating in a Clinical Trial
Elise Button	Elise Button , Patsy Yates, Sara Baniahmadi, Marghie Murgo, Naomi Poole, Angie Dalli	QUality CompreheNsive End-of-Life Care: SStandard Five (QUANTum) study
Elise Button	Elise Button, Nicole Gavin , Jason Butler, Michael Smith, Patsy Yates	Exploring the values, preferences, choices for care, and decision making of people with a haematological malignancy, their carer and health care professions (EXPLORE) study
Elise Button	Elise Button, Nicole Gavin, Natasha Roberts , Greg Merlo, Jason Butler, Patsy Yates	Identifying risk of deteriorating and dying in people with a haematological malignancy (IDENTIFY study)
Veronica Percival	Nicole Gavin, Jenni Leutenegger, Elise Button	Post-dural puncture headache following intrathecal chemotherapy via lumbar puncture (LP). How long should patients remain recumbent? (The PLANE Study)

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Lisa Wong	Nicole Gavin, Elise Button, Therese Hayes, Jenni Leutenegger, Michael Smith	Improving Care of Sepsis and early detection of deteriorating patients in Cancer Care Services
Brigid Scanlon	Jo Durham, Mark Brough, David Wyld	What factors affect culturally and linguistically diverse populations accessing Cancer Care Services in Brisbane North
Nicole Gavin	Nicole Gavin, Emily Russell, Paul Klages, Tracy Glynn, Melissa Eastgate, Jenni Leutenegger, Eve Hutchinson, Amanda Sutherland, David Paterson <i>(UQCCR)</i> , Claire Rickard <i>(GU)</i> , Nicole Angel <i>(Microba)</i>	Exploring changes in gastrointestinal tract microbiome and their influence on mucosal barrier injury laboratory confirmed bloodstream infection in patients diagnosed with high risk features of acute myeloid leukaemia (The Microbiome Study)
Claire Wessling	Nicole Gavin, Emily Russell, Paul Klages, Tracy Glynn, Melissa Eastgate, Jenni Leutenegger, Eve Hutchinson, Amanda Sutherland, Carolina Sandler <i>(QUT IHB)</i> , Samantha Keogh <i>(QUT IHB)</i> , Bronwyn Clark <i>(UQ)</i> , Greg Merlo <i>(UQ)</i> , Jaimi Greenslade <i>(RBWH)</i> , Krispin Hajkowicz <i>(RBWH)</i>	A Pilot Randomised Controlled Trial exploring the administration of intravenous antibiotics via stationary intravenous pole and pump versus portable CADD pump to improve patient outcomes and hospital-acquired complications in patients diagnosed with cancer (The Active Trial)
Francesca Boyte	Nicole Gavin, Glen Kennedy, Grant Partridge, Therese Hayes	Will priming intravenous administration sets with monoclonal antibodies reduce the incidence of hypersensitivity reactions? A randomised Controlled Trial
Natasha Roberts	Gary Power, Helene Jacm, Michael Smith, David Wyld, Teresa Brown, Leonie Naumann, Erin Molloy, Suzette Fox, Greg Lewis, Mandy Fairclough, Maree Gier, Kieron Barker, Therese Hayes, Jenni Leutenegger, Nicole Gavin, Elise Button	A co-designed implementation science strategy with clinicians, consumers and researchers to structure improved nurse-led symptom management in medical oncology care
Allanah Watling	Nicole Gavin	Best dosage and route of topical lignocaine to improve patient comfort and tolerability during the insertion of an enteral tube: a systematic review
Mary-Ellen Yarker	Carol Windsor, Jennifer Fox	The role of oncology nurse in shared-decision making for patients undergoing radiation and/or chemotherapy treatment
Rae Blades	Patsy Yates, Raymond Chan, Steven McPhail	A cost-effectiveness analysis of a silicone gel (StrataXRT [®]) for prophylaxis and management of Radiation Induced Skin Injury in head and neck cancer patients
Justine Leach	Raymond Chan, Patsy Yates	Nurse-led Clinics in Cancer Care Services
Robyn Matthews	Raymond Chan, Patsy Yates, Elise Button	End-of-life care education and training essentials of health professionals in the acute care setting
Julie Flynn	Claire Rickard, Samantha Keogh, Li Zhang, Amanda Ullman	Decontamination of central venous catheter needleless connectors

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Glen Kennedy, Patsy Yates, Jane Turner, Anthony Smith	Elise Button	A Multi-centre Randomised Controlled Trial of a Nurse-led Survivorship Intervention for EmpoweriNG pAtients with HodGkin's and Non-Hodgkin's Lymphoma after trEatment: (The ENGAGE Trial)
Claire Rickard, Samantha Keogh, Li Zhang, Amanda Ullman	Julie Flynn	Decontamination of central venous catheter needleless connectors
Carol Douglas	Sarah Northfield	The Care Of the Dying Evaluation (CODE) Project: A survey of bereaved persons in an Australian acute care setting
Kathryn Hurree, Midori Nakagaki, Karen Adcock, Karen Whitfield, Carol Douglas, Michael Smith, David Wyld, Glen Kennedy	Nicole Gavin, Elise Button	Educating patients – their way: A co-design approach to develop patient education videos regarding medication administration and supportive cares
Claudia Rutherford, University of Sydney	Natasha Roberts	Systematic Review of Quality of Life in gynaecological cancer
International Society for Quality of Life Proxy Task Force	Natasha Roberts	Proxy reported patient reported outcomes measures
Quality of life office, University of Sydney	Natasha Roberts	Patient reported outcomes in clinical practice
RBWH Diversity Group	Natasha Roberts, Brigid Scanlon	Diversity at RBWH

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Nicole Gavin	Best Clinical Practice or Innovation Paper	Cancer Nurses' Society of Australia Congress 2019
Elise Button	Outstanding Thesis Award 2018	Queensland University of Technology
Nicole Gavin	Best Nursing Paper	Blood 2019
Nicole Gavin	Best Nursing Research Award	Herston Symposium 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Nicole Gavin	Keogh S, Totsika M, Alexander K <i>(QUT)</i>	An evaluation of biofilm formation in standard versus perforated peripheral intravenous catheters (micro-SURF): an in vitro study	Institute of Health and Biomedical Innovation Chronic Disease and Ageing Theme Program Collaboration Scheme 2018	\$10,024	\$10,024	2018-2019
Nicole Gavin	Keogh S, Marquart L, Marsh N, Totsika M and Saxby C <i>(Alliance for Vascular Access Teaching and Research Group)</i>	Standard versus perforated peripheral intravenous catheter (SURF Trial): a pilot randomised controlled trial	Metro North Collaborative Research Grants 2019	\$49,410	\$0	2019-2020
Veronica Percival and Nicole Gavin	Cancer Care Services	Post-dural puncture headache following intrathecal chemotherapy via lumbar puncture (LP). How long should patients remain recumbent?	Hornery Family and Cancer Care Services Fundraising Grant 2018	\$4,800	\$4,800	2018-2019
Kathryn Hurree, Midori Nakagaki, Karen Adcock, Nicole Gavin, Elise Button, Karen Whitfield, Carol Douglas, Michael Smith, David Wyld, Glen Kennedy	Cancer Care Services	Educating patients – their way: A co-design approach to develop patient education videos regarding medication administration and supportive cares	Metro North Hospital and Health Services SEED Innovation 2018	\$82,631	\$82,631	2018-2019
Veronica Percival and Nicole Gavin	Cancer Care Services	Post-dural puncture headache following intrathecal chemotherapy via lumbar puncture (LP). How long should patients remain recumbent?	Royal Brisbane and Women's Hospital Diamond Care Grant 2019	\$40,000	\$20,000	2018-2019
Veronica Percival and Nicole Gavin	Cancer Care Services	Post-dural puncture headache following intrathecal chemotherapy via lumbar puncture (LP). How long should patients remain recumbent?	Rosemary Bryant	\$25,000	\$5,000	2019-2020
Natasha Roberts	Cancer Care Services	Patient Reported Outcomes in a Medical Oncology Setting (iPROMOS)	Royal Brisbane and Women's Hospital Post-Graduate Scholarship 2018	\$36,868	\$36,868	2018-2019
Elise Button, Nicole Gavin, Jason Butler, Michael Smith, Patsy Yates	Cancer Care Services	Exploring the values, preferences, choices for care, and decision making of people with a haematological malignancy, their carer and health care professions (EXPLORE) study	Royal Brisbane and Women's Hospital Diamond Care Grant 2018	\$29,571	\$10,000	2018-2020
Elise Button, Jason Butler, Patsy Yates	Cancer Care Services	Best practice care for people with a haematological malignancy who are at risk of deteriorating and dying (PROMOTE) study	Royal Brisbane and Women's Hospital Post-Doctoral Fellowship 2019	\$50,000	\$25,000	2018-2019

Research Grants (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Natasha Roberts	Cancer Care Services	A co-designed implementation science strategy with clinicians, consumers and researchers to structure improved nurse-led symptom management in medical oncology care	Royal Brisbane and Women's Hospital Diamond Care Grant 2019	\$39,027	\$0	2019-2020
Amanda Ullman, Natasha Roberts , Nicole Marsh, Emily Larsen, Claire Rickard	Nursing and Midwifery Research Centre	Consumer-led innovation to implement improvements in central venous access device management: the Vascular Access Project	Royal Brisbane and Women's Hospital Diamond Care Grant 2019	\$38,775	\$0	2019-2020

2019 Research Publications

Journal Articles

1. **Button E, Gavin NC**, Chan RJ, Chambers S, Butler J, & Yates P. (2019). Harnessing the power of clinician judgement. Identifying risk of deteriorating and dying in people with a hematological malignancy: A Delphi. *Journal of Advanced Nursing* 75(1) 161-174
2. **Northfield S, Button E**, Wyld D, **Gavin NC**, Nasato G & Yates P. (2019) Taking care of our own: A narrative review of cancer care services-led models of care providing emergent care to patients with cancer. *European Journal of Oncology Nursing*
3. Ullman A, Kleidon T, Turner K, Gibson V, Dean A, Cattanach P, Pitt C, Woosley J, Marsh N, **Gavin NC**, Takashima M & Rickard C. (2019) Skin complications associated with pediatric central venous access devices: Prevalence, incidence and risk. *Journal of Pediatric Oncology Nursing*
4. **Button E**, Bolton M, Chan R, Chambers S, Butler J, Yates P. 2019. A palliative care model and conceptual approach suited to clinical malignant haematology. *Palliative Medicine*
5. **Flynn, J**, Larsen, E., Keogh, S., Ullman, A., & Rickard, C. (2019). Methods for microbial needleless connector decontamination: A systematic review and meta-analysis. *American Journal of Infection Control*
6. Larsen E, **Gavin NC**, Marsh N, Rickard C, Runnegar N & Webster J. (2019) A Systematic Review of Central Line-Associated Bloodstream Infection (CLABSI) Diagnostic Reliability and Error. *Infection Control and Hospital Epidemiology*
7. Ullman A, Kleidon T, Turner K, Gibson V, Dean A, Cattanach P, Pitt C, Woosley J, Marsh N, **Gavin NC**, Takashima M & Rickard C. (2019) Skin complications associated with pediatric central venous access devices: Prevalence, incidence and risk. *Journal of Pediatric Oncology Nursing*. (accepted)
8. **Northfield S, Button E**, Wyld D, **Gavin NC**, Nasato G & Yates P. (2019) Taking care of our own: A narrative review of cancer care services-led models of care providing emergent care to patients with cancer. *European Journal of Oncology Nursing*
9. **Roberts NA**, Mudge A, Alexander K, Wyld D, Janda M (2019). The iPROMOS protocol: a stepped-wedge study to implement routine patient-reported outcomes in a medical oncology outpatient setting. *BMJ Open* 9(2): e027046
10. Chan RJ, Blades R, Jones L, Downer TR, Peet S, **Button E**, Wyld D, McPhail S, Doolan M, Yates P (2019) A single-blind, randomised controlled trial of StrataXRT® – a silicone-based film-forming gel dressing for prophylaxis and management of radiation dermatitis in patient with head and neck cancer. *Radiotherapy and Oncology*
11. Nakagaki M, **Button E**, Keating A, Marsh J, Mitchell C, Birchley A, Kennedy G. (2019). Hyperhydration is Not Necessary for High Dose Melphalan in Stem Cell Transplantation. *Bone Marrow Transplantation*
12. **Button E**, Northfield S, Smith M, Wyld D, Yates P. (2019). How do cancer care services in Australia take care of their patients when they require emergency care? We need more evidence. *Australian Health Review*
13. **Roberts NA**, Mudge A, Alexander K, Wyld D, Janda M (2019). Factors in Randomized Controlled Trials Reported to Impact the Implementation of Patient-Reported Outcome Measures Into Routine Care: Protocol for a Systematic Review. *JMIR Research Protocols*
14. Ortiz E, **Scanlon B**, Mullens A, Durham J. Effectiveness of Interventions for Hepatitis B and C: A Systematic Review of Vaccination, Screening, Health Promotion and Linkage to Care Within Higher Income Countries (2019). *Journal of Community Health* 44, 1-18
15. **Roberts NA**, Mudge A, Alexander K, Wyld D, Janda M (2019). What is needed by staff to implement PROMs into routine oncology care? A qualitative study with the multi-disciplinary team. *European Journal of Cancer Care*.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Percival, V.** 'The PLANE Study. HSNZ Queensland Branch Meeting ASM, 23 March 2019
2. **Scanlon, B.** 'Quality of life perceived by patients with high risk haematological malignancy and indicators of potential deterioration – qualitative data.' HSNZ Queensland Branch Meeting ASM, 23 March 2019
3. **Roberts, N.** 'The Rainy Day Project'. Care at End of Life Innovators Workshop 2019. 22 March 2019
4. **Button, E.** 'The Rainy Day Project'. Statewide Forum for Care at the End of Life 2019. May 2019
5. **Gavin NC.** Estimating Prevalence of Impaired Skin surrounding devices in cancer care: the preliminary results of a prospective study. Invited speaker. Pre-congress workshop. Cancer Nurses' Society of Australia 2019

Invited Speakers *(cont)*

6. **Gavin NC.** Improving vascular access complications for people diagnosed with cancer. Invited Speaker. Australia Vascular Access Society Annual Scientific Meeting 2019
7. **Roberts, NA.** Implementing PRO-CTCAE in routine medical oncology outpatient care using iPARIHS. Oral presentation pre-conference workshop. ISOQOL Congress San Diego, 20-23 October 2019
8. **Roberts, NA.** Insights from a PRO measures implementation study co-designed by patients, clinicians and researchers. Symposium oral presentation. ISOQOL Congress San Diego, 20-23 October 2019
9. **Gavin NC,** Marsh N & Flynn J. In the line of duty: improving the performance of PICCs. Research results from an Australian hospital. Invited Speaker. Association for Vascular Access Annual Scientific Meeting October 2019 Las Vegas
10. **Gavin NC.** Developing a registry to improve the outcomes of patient with a CVAD diagnosed with cancer. Invited Speaker. Association for Vascular Access Annual Scientific Meeting October 2019 Las Vegas
11. **Gavin NC.** A new way to look at catheter-related infections in stem cell transplant patients receiving intravenous nutrition. Invited speaker. Transplant Nurses Association October 2019 Brisbane
12. **Gavin NC & Barrie JM.** Hands up for hand hygiene. Invited speaker. Metro North Safety and Quality Forum October 2019 Brisbane
13. **Roberts, NA,** Dhillon, H. What is the participant's experience of an ANZUP clinical trial? Preliminary findings'. Australia and New Zealand Urogenital and Prostate Cancers Clinical Trials Group Annual Scientific Meeting, Brisbane 22-25 July 2019.

Oral Presentations

1. **Button E,** Scanlon B. The physical, psychosocial and spiritual wellbeing of patients with a haematological malignancy who are near the end of life. Oral presentation. Blood 2019, Perth
2. **Button E.** The Rainy Day Care project pilot. Oral presentation. Blood 2019, Perth
3. **Gavin NC.** Developing a research internship. Oral presentation. Cancer Nurses' Society of Australia 2019
4. **Gavin NC.** Peripherally inserted central catheter outcomes polyurethane versus endexo (PIC COMAPRE): feasibility results of a pilot randomised control trial. Oral presentation. Australian Vascular Access Society Annual Scientific Meeting 2019
5. **Gavin NC.** Developing a research internship. Oral presentation. Cancer Nurses' Society of Australia June 2019 Melbourne
6. **Gavin NC.** Hands up for hand hygiene in cancer care. Oral presentation. Cancer Nurses' Society of Australia June 2019 Melbourne
7. **Gavin NC,** Somerville M, Ullman A, Kleidon T, Marsh N, Larsen E, Campbell J, Mihala G & Rickard C. Estimating prevalence of impaired skin surrounding devices in cancer care: the preliminary results of a prospective study (EPISODE). Herston Symposium October 2019 Brisbane
8. Rutherford C, Campbell R, Muller F, **Roberts N,** Tinsely M, Speerin R, Soars L, Butcher A, King M. Enablers and barriers to implementing patient-reported outcome measures (PROMs) in clinical settings: a meta-review of reviews. ISOQOL Congress San Diego, 20-23 October 2019.

Poster Presentations

1. **Percival, V.H.,** Gavin N.C., Curley, C., Leutenegger, J., Partridge, G., Button, E. 'Supporting nursing staff to care for people with a haematological malignancy who receive a lumbar puncture via development of an assessment tool'. BLOOD 2019, Perth, 20-23 October 2019
2. **Roberts, NA,** Alexander, K, Wyld, D, Janda, M. What really happens when Patient-Reported Outcome Measurements (PROMs) are implemented in a busy clinic? Poster presentation. Herston Healthcare Symposium, Brisbane
3. Jacmon, H, **Scanlon, B,** Battersby, C, James, C, RBWH Diversity Working Group
4. **Roberts, NA.** Diversity at RBWH. Poster presentation. Herston Healthcare Symposium, Brisbane
5. **Gavin NC,** Lippiatt R, Hayes T, Northfield S, Somerville M, Larsen E, Marsh N & Rickard C. Improving vascular access care for patients diagnosed with cancer. Cancer Nurses' Society of Australia June 2019 Melbourne
6. **Gavin NC,** Lippiatt R, Hayes T, Northfield S, Somerville M, Larsen E, Marsh N & Rickard C. Improving vascular access care for patients diagnosed with cancer. Herston Symposium October 2019 Brisbane
7. **Roberts, N,** Western, R, Cubitt, A, Keller, J, Ives, A, Wyld, D. 'Patient Understanding of Research in an Oncology Setting'. ACTA International Clinical Trials Conference 2019, Sydney, 2-5 October 2019
8. **Roberts, NA,** Dhillon, H. 'What is the participant experience of a clinical trial? Insights from a qualitative study with GU patients'. 2019 COSA Annual Scientific Meeting, being held from 12th-14th November at the Adelaide Convention Centre
9. **Keating A,** Frederikson P, Williams D, Nakagaki M & Johnstone S, Collaborative communication is key to delivering better patient outcomes in acute bone marrow transplant and haematology patients.' BLOOD 2019, Perth, 20-23 October 2019
10. **Watling A,** Gavin N, Button E. Best dosage and route of topical lignocaine to improve patient comfort and tolerability during the insertion of an enteral tube: a systematic review. BLOOD 2019, Perth, 20-23 October 2019
11. **Scanlon B,** Durham J. Barriers to health access for women during forced displacement: An exploratory study. Poster presentation. European Public Health Conference, Marseilles, France, November 2019.

Details of staff that completed their PhDs in 2019 within your department / research group

Name <i>(RBWH Staff in bold)</i>	Name of Project	Completed Date	University Affiliation
Dr Nicole Claire Gavin	The effect of parenteral nutrition on microbial growth and its influence on catheter-related infection in patients with a central venous access device	February 2019	School of Nursing and Midwifery, Griffith University

MEDICAL ONCOLOGY



Dr David Wyld
Director Medical Oncology
Deputy Director of Clinical Research
Cancer Care Services RBWH

The Cancer Care Services Medical Oncology (MO) Department provides clinical services to the Metro North HHS district through its staff managing patients at RBWH, North Lakes, TPC and Caboolture. The unit continued to successfully expand its research portfolio in 2019. Below are a few selected highlights from the department in 2019.

An essential part of any academic clinical oncology service is having an active clinical trials unit. The MO department has a comprehensive clinical trials program which continues to be recognised for its conduct of high-quality clinical research, which is a credit to all involved. 2019 was again a very busy year, with an average of 51 actively recruiting studies per month, and 126 studies active in total in 2019. 295 new patients were recruited in 2019 (an 11% increase from 2018), with 879 patients in total on study at some point in 2019, and 687 remaining on study at the end of the year. The number of publications from departmental staff continues to grow each year. The group had almost 50 manuscripts published in 2019, including publications in *The Lancet*, *The Journal of Clinical Oncology*, *Cancer Discovery*, *Annals of Oncology* and the *Journal of Gynaecologic Oncology*. In addition, over 60 abstracts were presented in oral or poster format at national and international meetings.

A major milestone in 2019 was the commencement of patient recruitment for an innovative project evaluating anti-PD1 checkpoint inhibition combined with RANKL blockade in operable NSCLC. This project was developed and is being led by A/Prof Brett Hughes and Dr Elizabeth Ahern from RBWH, in conjunction

with Prof Mark Smyth at QIMR. The project is being conducted at RBWH, TPC and 2 other Qld sites, with its major translational component being undertaken by M Smyth at QIMR. Probably the major highlight over the last few months of 2019 has been several departmental staff being part of teams that have received significant research grant funding, which will lead to several major new projects within the department in the near future. Staff were part of both recently announced Cancer Council Queensland Accelerating Collaborative Cancer Research (ACCR) Grants (each \$2,000,000 over 4 years) – LUCKISTARS: Lung cancer knowledge in immunogenomics to stratify therapeutic resistance and sensitivity (Brett Hughes, Elizabeth Ahern) and PROMISE: patient-Reported Outcome Measures in cancer care: a hybrid effectiveness-Implementation trial to optimise symptom control and health service experience (David Wyld, Melissa Eastgate). Matthew Burge was part of a MRFF International Clinical Trials Grant (\$981,313), POLEM Trial: Avelumab plus fluoropyrimidine-based chemotherapy as adjuvant treatment for stage III dMMR or POLE exonuclease domain mutant colon cancer: A phase III randomised study. Brett Hughes was part of an MRFF Rapid Applied Research Translation Program grant (\$1,150,000).

Supervised Post-Graduate Research Students

Name <i>(RBWH Staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Ali Dulfikar	PhD QUT	Pilot feasibility study of exercise in grade II, III and IV glioma while receiving radiation therapy with or without chemotherapy	Zarnie Lwin , Fiona Naumann, Mark Pinkham, Elizabeth Pinkham, Gabriel Siqueira Trajano
Elizabeth Ahern	PhD UQ 2015	Targeting RANK/RANKL in combination immunotherapy using murine and translational models of melanoma, prostate and other solid organ malignancies	Mark Smyth, Michele Teng, David Wyld
Natasha Roberts	PhD QUT 2016-2019	Patient Reported Outcomes in a Medical Oncology Setting	Monika Janda, Kim Alexander, David Wyld
Rahul Ladwa	MPhil UQ 2017	Predictors of dosimetry and response to peptide receptor radionuclide therapy	David Wyld , Stephen Rose, Nicholas Dowson
Darshit Thaker	MPhil UQ 2017	Implementation of Comprehensive Geriatric assessment (CGA) for patients older than 70 years in medical oncology clinic to facilitate decision making and provision of supportive management	David Wyld, Sunil Lakhani

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Dr Anna Kuchel	Research Fellow			Medical Oncology	Queensland Health
Dr Elizabeth Ahern	Research Fellow			Medical Oncology	Queensland Health
Annette Cubitt	Manager, Clinical Trials Unit			Clinical Trials Unit Medical Oncology	Queensland Health
Jenny Campbell	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Amy Ives	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Andrea McKenzie	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Wendy Pritchard	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Megan Ward	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Natasha Roberts	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Gel Bolanos	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Diana Lewis	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Julie McClelland	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Jasmine Brady	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Krystal Perera	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Lourdes Pamposa	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Sarah McGuckin	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Michelle Cybulski	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Jade Allan	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Erin Purdon	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Andrea Junghans	Clinical Trial Coordinator			Clinical Trials Unit Medical Oncology	Queensland Health
Jennifer Lonton	Research Development Officer			Clinical Trials Unit Medical Oncology	Queensland Health
Danni Church	Research Development Officer			Clinical Trials Unit Medical Oncology	Queensland Health
Denise Flynn	Research Administration Officer			Clinical Trials Unit Medical Oncology	Queensland Health

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
David Wyld, Matthew Burge	Rachel Neale, Vanessa Beesley	PRO-NET: Patient reported outcomes in people with neuroendocrine tumours
Natasha Roberts, David Wyld	Monika Janda , Kim Alexander	Patient Report Outcomes (PROs) in a medical oncology setting: A low risk project to identify staff perceptions about the use of PRO data in a clinical setting
Zarnie Lwin	Alex Broom <i>(UNSW)</i>	Cultural biographies, medical knowledges: A sociological study at the intersection of cancer and culture
Matthew Burge	Melissa Eastgate, David Wyld, Shu Lee , Euan Walpole <i>(PAH)</i>	Prospective evaluation of FOLFIRINOX for metastatic or locally advanced Pancreatic Cancer
David Wyld	Louisa Gordon, John Leyden, Kate Wakelin, Michael Michael, Nick Pavlakis	F-NET Project: Financial Outcomes in people with Neuro-Endocrine Tumours
Matthew Burge	Paul Thomas, David Wyld, Melissa Eastgate , Stephen Rose, Nick O'Rourke, Davis Cavallucci, Richard Bryant	Imaging the CXCR-4 Chemokine receptor with a novel PET tracer in pancreatic cancer
Matthew Burge	Paul Thomas, Andrew Stevenson, David Wyld (CCS), Melissa Eastgate , Stephen Rose, David Clark, Craig Harris, Damien Petersen, David Taylor, Carina Chow, Paul Tesar <i>(DMI)</i> , Michelle Grogan	A pilot study of CXCR-4 PET scanning in operable rectal cancer
David Wyld	Matthew Burge, Raymond Chan , Jane Turner, Patsy Yates, Melissa Eastgate , Rachael Neale, Vanessa Beesley	PREPARES: Patients and Relatives affected by Pancreatic cancer: Referral, Education and Support feasibility trial
David Wyld	Julie Moore, Mark Wan	Neuroendocrine Tumours: Epidemiologic trends in Queensland
Brett Hughes	Elizabeth Ahern , Bill Dougall, Mark Smyth <i>(PAH)</i>	Pharmacodynamics of Pre-Operative PD1 Checkpoint Blockade and Receptor Activator of NF-κB Ligand (RANKL) Inhibition in Non-Small Cell Lung Cancer (NSCLC) – a phase 1B/2 trial. POPCORN
Natasha Roberts <i>(Cancer Care Services/Queensland University of Technology)</i>	Monika Janda , Kim Alexander, David Wyld	Patient Reported Outcomes in the Medical Oncology Setting (iPROMOS)
Melissa Eastgate	Anna Kuchel, David Wyld	Medical Oncology Clinical Activity Review
David Wyld	David Chan (Sydney), S Singh, A Thawer, C Fingrut, R Yelamanchila (Canada)	Understanding the Barriers to the Development of a Shared Care Model for the Treatment of Patients with Neuroendocrine Tumours (NETs): Optimization of care between NET Speciality Centres and General/Local/Community Oncologist
Melissa Eastgate	Anna Kuchel	Financial planning concerns in patients with advanced melanoma – a research study into patient and clinician perspectives
David Wyld	Julie Moore, Nancy Tran, Michael Wyld	Neuroendocrine Neoplasms in the Paediatric, Adolescent and Young Adult Population in Queensland, Australia
David Wyld	Julie Moore, Nancy Tran, Ben Lawrence, Kate Parker, Sharon Pattison	Neuroendocrine neoplasms in the paediatric adolescent and young adult population – comparing New Zealand and Queensland Australia
Natasha Roberts	Haryana Dhillon, Phillip Parente, Craig Gedye, Australia New Zealand Urogenital and Prostate Cancer Trials Group	Patient Experience of Participating in a Clinical Trial
Natasha Roberts <i>(Cancer Care Services/Queensland University of Technology)</i>	Medical Oncology, Radiation Oncology, Haematology Cancer Care Services, RBWH	Poster Project: A study to describe oncology patient perceptions of research
Melissa Eastgate	Geoffrey Bryant, Mathew Burge, Darshit Thaker, David Wyld	Colorectal cancer patient reported outcomes: putting theory into practice

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Brett Hughes <i>(Cancer Care Services)</i> , Elizabeth Ahern <i>(Cancer Care Services/Queensland Institute of Medical Research Berghofer)</i>	Martin Batstone, Mark Smyth and Bill Dougall <i>(QIMR)</i>	Expression of novel immune markers in mucosal head and neck squamous cell carcinoma (HNSCC) specimens
Melissa Eastgate, Elizabeth Ahern <i>(Cancer Care Services/Queensland Institute of Medical Research Berghofer)</i> Anna Kuchel	Ailin Lepetier, Jason Madore, Mark Smyth <i>(QIMR)</i>	Multiplex immunofluorescence assessment of melanoma biopsies and response to immunotherapy
Brett Hughes, Elizabeth Ahern <i>(Cancer Care Services/Queensland Institute of Medical Research Berghofer)</i>	Martin Batstone, Mark Smyth and Bill Dougall <i>(QIMR)</i>	Immune Biomarker Evaluation in Oral Mucosal Squamous Cell Carcinoma: a prospective tissue collection
Clare Senko, Brett Hughes, Zarnie Lwin	Gary Pratt , Kwun Fong, Julie Moore	Evaluating the prognostic significance of significant weight loss in patients with stage III non-small cell lung cancer undergoing definitive chemoradiation
Matthew Burge	David Wyld , David Pattison, Fiona Paxton-Hall, Kathy You	Outcome and toxicity of salvage therapy with 177 Lu-dotatate in patients with metastatic neuroendocrine tumours
David Wyld	Julie Moore, Nathan Dunn, Nancy Tran	Small Intestinal Neuroendocrine neoplasms in Qld – 2001 – 2015. Stage at diagnosis and survival
Zarnie Lwin	Alexander Broom <i>(UNSW)</i> , Claire Wakefield, Emma Kirby <i>(UNSW)</i> , Barbara Prainsack, Mustafa Khasraw, Katherine Kenny, Stephanie Raymond	Precision and the Person: A sociological study of therapeutic innovation in cancer care
Zarnie Lwin	Emma Kirby <i>(UNSW)</i>	Informal care and living with glioma
Melissa Eastgate	Rosalind Jeffrey <i>(Neurosurgery)</i> , Margaret Cummings <i>(Pathology)</i> , Elizabeth Ahern, Anna Kuchel , Shu Lee <i>(Medical Oncology Ipswich)</i> , Michael Colditz <i>(Neurosurgery)</i>	Clinicopathologic feature predicting survival after brain metastasectomy in melanoma
Wessling C, Gavin N	Russell E, Glynn T, Eastgate M, Hajkowicz K, Klages P, Leutenegger J , Sandler C, Clark B, Hutchinson E, Sutherland A	A Randomised Controlled Trial exploring the administration of intravenous antibiotics and fluids via intravenous pole and pump versus portable CADD pump to improve mobility in patients diagnosed with cancer (The Active Trial)
Elizabeth Ahern	Brett Hughes, Zarnie Lwin	Exploring the rate of hospital admissions due to immune therapy toxicities in two tertiary cancer centres

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff n bold)</i>	Research Project Title
Australasian Gastrointestinal Trials Group	Matthew Burge <i>(Cancer Care Services)</i>	INTEGRATE II A Randomised Phase III Double Blind Placebo Controlled Study of regorafenib in Refractory Advanced GastroOesophageal Cancer
Australasian Gastrointestinal Trials Group	Matthew Burge <i>(Cancer Care Services)</i>	ACTICCA-1 study: Adjuvant Chemotherapy With Gemcitabine and Cisplatin Compared to Observation After Curative Intent Resection of Cholangiocarcinoma and Muscle Invasive Gall Bladder Carcinoma (ACTICCA-1 Trial)
Australasian Gastrointestinal Trials Group	David Wyld <i>(Cancer Care Services)</i>	CONTROL NETS: Phase II multi-arm, randomised open label trial of Lutetium-177 Octreotate peptide receptor radionucleotide therapy, capecitabine/temozolamide chemotherapy, or the combination in the first – or second-line treatment of low to intermediate grade gastroenteropancreatic neuroendocrine tumours
Walter and Eliza Hall Institute, Colorectal Translational Oncology Group	Matthew Burge <i>(Cancer Care Services)</i>	ctDNA in Pancreatic Cancer
Australasian Gastrointestinal Trials Group	Matthew Burge <i>(Cancer Care Services)</i>	DOCTOR: A Randomised Phase II Trial of Pre-operative Cisplatin, 5 Fluorouracil and Docetaxel or Cisplatin, 5 Fluorouracil, Docetaxel plus Radiotherapy based on poor early response to standard chemotherapy for resectable adenocarcinoma of the oesophagus and/or OG Junction
Ludwig Institute for Cancer Research	Matthew Burge <i>(Cancer Care Services)</i>	Circulating Tumour DNA as a Sensitive and Specific Marker of Response to Therapy and of Occult Disease in Colorectal Cancer – for resectable CRC liver mets pts
Walter and Eliza Hall Institute	Matthew Burge <i>(Cancer Care Services)</i>	DYNAMIC: Circulating Tumour DNA Analysis Informing Adjuvant Chemotherapy in Stage II Colon Cancer
Walter and Eliza Hall Institute	Matthew Burge <i>(Cancer Care Services)</i>	Evaluation of temporal dynamics of RAS Mutation emergence in Cell Free DNA (cfDNA) in response to first-line cetuximab anti-EGFR therapy in Patients with Metastatic Colorectal Cancer
Centre for Medical Psychology and Evidence Based Decision Making	Matthew Burge <i>(Cancer Care Services)</i>	CHALLENGE: A Phase III study of the impact of a Physical Activity program on Disease-Free Survival in patients with high risk Stage II or Stage III Colon Cancer: a randomised controlled trial (CO.21)
Australasian Gastrointestinal Trials Group/National Cancer Centre, Singapore	Melissa Eastgate <i>(Cancer Care Services)</i>	ASCOLT: Aspirin for Dukes C and high risk Dukes B Colorectal Cancers – an international, multi-centre, double blind, randomised placebo controlled Phase III trial (AGITG)
Walter and Eliza Hall Institute	Matthew Burge <i>(Cancer Care Services)</i>	ctDNA as a Marker of Complete Pathological Response and Long Term Outcome for Locally Advanced Rectal Cancer Treated with Pre-operative Chemoradiotherapy
Ludwig Institute for Cancer Research	Matthew Burge <i>(Cancer Care Services)</i>	Circulating Tumour DNA as a Marker of Occult Disease in Stage II Colorectal Cancer and Response to Therapy in Metastatic Colorectal Cancer
Australasian Gastrointestinal Trials Group	Matthew Burge <i>(Cancer Care Services)</i>	MODULATE: Modulation of the tumour microenvironment using either vascular disrupting agents or STAT3 inhibition in order to synergise with PD1 inhibition in microsatellite stable, refractory colorectal cancer. (AGITG)
Australasian Gastrointestinal Trials Group/ Walter and Eliza Hall Institute	Matthew Burge <i>(Cancer Care Services)</i>	DYNAMIC-III: Circulating Tumour DNA Analysis Informing Adjuvant Chemotherapy in Stage III Colon Cancer: A Multicentre Phase II/III Randomised Controlled Study (AGITG, WEHI)
Australasian Gastrointestinal Trials Group/ Walter and Eliza Hall Institute	Matthew Burge <i>(Cancer Care Services)</i>	DYNAMIC-Pancreas: Circulating Tumour DNA Analysis Informing Adjuvant Chemotherapy in Early Stage Pancreatic Cancer: A Multicentre Randomised Study (WEHI, AGITG)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh <i>(Cancer Care Services)</i>	VELIA (M13-694) A Phase 3 Placebo Controlled Study of Carboplatin/Paclitaxel With or Without Concurrent and continuous Maintenance Veliparib in Subjects with Previously Untreated Stages III or IV High Grade Serous Epitheal Ovarian, Fallopian Tube, or Primary Peritoneal Cancer
Australia New Zealand Gynaecological Oncology Group	Alison Hadley <i>(Cancer Care Services)</i>	OUTBACK - A PHASE III trial of adjuvant chemotherapy following chemoradiation as primary treatment for locally advanced cervical cancer compared to chemoradiation alone
Australia New Zealand Gynaecological Oncology Group	Jeff Goh <i>(Cancer Care Services)</i>	PARAGON: A study to assess the activity of anastrozole, an aromatase inhibitor, in women with oestrogen receptor and/or progesterone receptor positive (ER/PR+ve) and therefore potentially hormone responsive recurrent or metastatic gynaecological cancers

Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Australia New Zealand Gynaecological Oncology Group	Jeff Goh <i>(Cancer Care Services)</i>	OVAR 2.21: A prospective randomized Phase III trial of carboplatin/ gemcitabine/ bevacizumab vs. carboplatin/pegylated liposomal doxorubicin/ bevacizumab in patients with platinum-sensitive recurrent ovarian cancer
Australia New Zealand Gynaecological Oncology Group	Jeff Goh <i>(Cancer Care Services)</i>	ICON 8: an international trial comparing weekly chemotherapy with 3 weekly chemotherapy for women with ovarian cancer, fallopian tube cancer or primary peritoneal cancer
Australia New Zealand Urogenital and Prostate Cancer Trials Group	David Wyld <i>(Cancer Care Services)</i>	Phase III BEP Trial: A randomised phase 3 trial of accelerated versus standard BEP chemotherapy for participants with intermediate and poor-risk advanced germ cell tumours
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Aneta Suder <i>(Cancer Care Services)</i>	ENZAMET Trial: A randomised phase 3 trial of enzalutamide in first line androgen deprivation therapy for metastatic prostate cancer
Cooperative Trials Group for Neuro-oncology	Zarnie Lwin <i>(Cancer Care Services)</i>	ACED: Randomised phase II study of acetazolamide plus dexamethasone versus dexamethasone alone for management of cerebral oedema in recurrent or progressive high grade gliomas
Cooperative Trials Group for Neuro-oncology	Zarnie Lwin <i>(Cancer Care Services)</i>	VERTU - Veliparib, Radiotherapy and Temozolomide trial in Unmethylated MGMT Glioblastoma: A Randomised Phase II study of veliparib + radiotherapy (RT) with adjuvant temozolomide (TMZ) + veliparib versus standard RT + TMZ followed by TMZ in newly diagnosed glioblastoma (GBM) with unmethylated O (6)-methylguanine-DNA methyltransferase
Cooperative Trials Group for Neuro-oncology	Po-Ling Inglis <i>(Cancer Care Services)</i>	CATNON: Phase III trial comparing no adjuvant chemotherapy versus adjuvant therapy until progression for anaplastic glioma without 1p/19q loss. An EORTC/NCI-C/RTOG/MRC/HUB/ intergroup study
Australia New Zealand Breast Cancer Trials Group	Michelle Nottage <i>(Cancer Care Services)</i>	PALbociclib CoLLaborative Adjuvant Study: A Randomized Phase III Trial of Palbociclib With Standard Adjuvant Endocrine Therapy Versus Standard Adjuvant Endocrine Therapy Alone for Hormone Receptor Positive (HR+) / Human Epidermal Growth Factor Receptor 2 (HER2)-Negative Early Breast Cancer. PALLAS
Australia New Zealand Breast Cancer Trials Group	Po-Ling Inglis <i>(Cancer Care Services)</i>	Penelope B: Phase III study evaluating palbociclib (PD-0332991), a Cyclin-Dependent Kinase (CDK) 4/6 Inhibitor in patients with hormone-receptor-positive, HER2-normal primary breast cancer with high relapse risk after neoadjuvant chemotherapy
Kathleen Houston, Sunshine Coast Oncology Research Group	Michelle Nottage <i>(Cancer Care Services)</i>	TAPS: Gabapentin for taxane acute pain syndrome – a phase III randomised, placebo-controlled, crossover trial
Australia New Zealand Breast Cancer Trials Group/Breast International Group	Michelle Nottage <i>(Cancer Care Services)</i>	TEXT-Bone: A substudy of the TEXT trial to evaluate serial bone markers for bone remodeling, serial growth factors, and bone mineral density
Australia New Zealand Breast Cancer Trials Group/Breast International Group	Michelle Nottage <i>(Cancer Care Services)</i>	TEXT: A Phase III Trial Evaluating the Role of Exemestane plus GnRH analogue as Adjuvant Therapy for premenopausal women with endocrine responsive breast cancer
Australia New Zealand Breast Cancer Trials Group/Breast International Group	Michelle Nottage <i>(Cancer Care Services)</i>	An international multi-centre study of tamoxifen vs. Anastrozole in postmenopausal women with hormone sensitive ductal carcinoma in situ (DCIS) IBIS II
Australia New Zealand Breast Cancer Trials Group/ECOG-ACrIN	Po-Ling Inglis <i>(Cancer Care Services)</i>	TAILORx Program for the Assessment of Clinical Cancer Tests (PACCT-1): Trial Assigning Individualized Options for Treatment: The TAILORx Trial
Australia New Zealand Breast Cancer Trials Group/Breast International Group	Michelle Nottage <i>(Cancer Care Services)</i>	Suppression of Ovarian Function Trial (SOFT) A Phase III Trial Evaluating the Role of Ovarian function Suppression and the Role of Exemestane as Adjuvant therapies for premenopausal women with Endocrine responsive breast cancer
Walter and Eliza Hall Institute	Matthew Burge <i>(Cancer Care Services)</i>	Pancreatic cancer: Understanding Routine Practice and Lifting End results (PURPLE) A Prospective Pancreatic Cancer clinical registry
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh <i>(Cancer Care Services)</i>	KEYPAD: Proposed phase 2 trial of pembrolizumab and denosumab in advanced clear-cell renal cell carcinoma (ccRCC) progressing after a VEGF-TKI
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh <i>(Cancer Care Services)</i>	UNISoN – anzUp Nivo->ipi+Nivo Sequential Non-clear cell - Proposed Phase II Sequential Cohort Trial Of Single Agent Nivolumab, Then Combination Ipilimumab + Nivolumab In Metastatic Or Unresectable Non-Clear Cell Renal
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh <i>(Cancer Care Services)</i>	TheraP: A randomised phase 2 trial of 177 Lu-PSMA617 theranostic versus cabazitaxel in men with progressive metastatic castration resistant prostate cancer

Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Natasha Roberts <i>(Cancer Care Services)</i>	The Patient Experience of Participating in a Clinical Trial
Cooperative Trials Group for Neuro-oncology	Zarnie Lwin <i>(Cancer Care Services)</i>	NUTMEG: A Randomized Phase II Study of Nivolumab and TeMozolomide vs Temozolomide in newly diagnosed Elderly Glioblastoma
Australasian Gastrointestinal Trials Group	Matthew Burge <i>(Cancer Care Services)</i>	LIBERATE – phase II study evaluating liquid biopsies to profile metastatic colorectal cancer
Australasian Gastrointestinal Trials Group	Matthew Burge <i>(Cancer Care Services)</i>	A randomised phase 2 study of Panitumumab monotherapy versus fluoropyrimidine and bevacizumab as first line therapy for RAS wild type metastatic colorectal cancer. (MONARCC study)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh <i>(Cancer Care Services)</i>	Phase II clinical trial of the PARP inhibitor, olaparib, in HR-deficient metastatic breast and relapsed ovarian cancer in patients without germline mutations in BRCA1 and BRCA2: The EMBRACE study
Australia New Zealand Gynaecological Oncology Group/United Kingdom Medical Research Council	Jeffrey Goh <i>(Cancer Care Services)</i>	ICON 9: to assess the efficacy, safety and tolerability of maintenance cediranib in combination with olaparib therapy compared to single agent cediranib maintenance in women with relapsed platinum sensitive ovarian, fallopian tube or primary peritoneal cancer. (ANZGOG/UK MRC)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh <i>(Cancer Care Services)</i>	iPRIME - A phase II study of durvalumab and tremilumab in combination with carboplatin and paclitaxel, as neoadjuvant treatment for newly diagnosed, advanced high grade serous ovarian cancer (ANZGOG)
Australia and New Zealand Melanoma Trials Group	Melissa Eastgate <i>(Cancer Care Services)</i>	A Phase Ib/II Trial of Ipilimumab-Nivolumab-Denosumab and Nivolumab-Denosumab in Patients with Unresectable Stage III and IV Melanoma. (ANZMTG 01.15.) CHARLI
Australia and New Zealand Melanoma Trials Group	Melissa Eastgate <i>(Cancer Care Services)</i>	A randomised phase III study of duration of Anti-PD-1 therapy in metastatic melanoma (STOP-GAP) (ANZMTG)
Australian Lung Cancer Trials Group	Brett Hughes <i>(Cancer Care Services)</i>	NIVORAD - A randomised phase 2 trial of nivolumab and stereotactic ablative body radiotherapy in advanced non-small cell lung cancer, progressing after first or second line chemotherapy.
Australian Lung Cancer Trials Group/ European Thoracic Oncology Platform	Brett Hughes <i>(Cancer Care Services)</i>	STIMULI: Small cell lung carcinoma Trial with nivolumab and Ipili-MUab in Limited disease. A randomised open-label phase II trial of consolidation with nivolumab and ipilimumab in limited-stage SCLC after chemo-radiotherapy. (ALTG, ETOP)
Melbourne Health	Michelle Nottage <i>(Cancer Care Services)</i>	NOMINATOR: GENOMIC MATCHING TREATMENT FOR RARE CANCERS Feasibility of performing genomic testing of rare cancers to match the cancer to treatment
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Jeffrey Goh <i>(Cancer Care Services)</i>	UNICAB: A phase II trial of single agent cabozantinib in patients with locally advanced or metastatic non-clear cell renal cell carcinoma post immunotherapy or who are unsuitable for immunotherapy (ANZUP 1802)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh <i>(Cancer Care Services)</i>	MOCCA – A Multicentre Phase II randomised trial of MEDI4736 versus physician's choice chemotherapy in recurrent ovarian clear cell adenocarcinomas
Bryan Day QIMR Berghofer Medical Research Institute	Po Ling Inglis , <i>(Cancer Care Services)</i> , Rosalind Jeffree (Neurosurgery)	Novel Therapies for Brain Cancer
Rebecca Mercieca-Bebber <i>(University of Sydney)</i>	Natasha Roberts <i>(Cancer Care Services)/Queensland University of Technology)</i>	Quality of life end-points in clinical trials
Quan Tran, <i>(Cancer Care Services, The Prince Charles Hospital)</i>	Brett Hughes, Zarnie Lwin <i>(Cancer Care Services)</i> , David Smith, Andrew Schmidt <i>(The Prince Charles Hospital)</i>	Identifying perceived barriers to physical activity in patients with lung cancer at two Brisbane-based institutions
Kate Roberts <i>(Princess Alexandra Hospital)</i> , Ken O'Byrne <i>(Queensland University of Technology)</i>	Brett Hughes, Zarnie Lwin <i>(Cancer Care Services)</i>	A multi-institutional retrospective audit of patients with metastatic malignancy treated with nivolumab through the Open Access Scheme at the Princess Alexandra Hospital, the Royal Brisbane and Womens' Hospital, and The Prince Charles Hospital

Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Lisa Guccione (PMCC), Penelope Schofield (Swinburne University), Michael Michael (PMCC), Mustafa Khasraw (RNSH), Timothy Price (TQEH), Nick Pavlakis (RNSH), Megan Rogers (PMCC), Karla Gough (PMCC), Grace Kong (PMCC), Simone Leyden (Unicorn Foundation), John Leyden (Unicorn Foundation)	David Wyld (Cancer Care Services)	DEFINING NETs – Defining the supportive care needs and psychological morbidity of patients with Functioning versus Non-Functioning Neuroendocrine Tumours (NETs)
Manoj Bhatt (Nuc Med)	David Wyld, Matthew Burge , (Cancer Care Services), Rahul Ladwa (PAH) Peter Garcia, David Pattison, Kevin Lee, Samuel Kyle, Nicholas Dowson, Jye Smith (Nuclear Medicine), Steven Goodman, Stephen Rose (CSIRO)	Pilot project to assess liver metastases by comparing novel, dynamic and static functional imaging, and also morphological imaging with standard of care in WHO Grade I and Grade II Neuroendocrine Tumour (NET)
Claudia Rutherford (Quality of Life Office, University of Sydney)	Natasha Roberts (Cancer Care Services)/Queensland University of Technology	Systematic Review of Quality of Life Measures
University of New South Wales	David Wyld (Cancer Care Services), Robert Henderson (Neurology)	Peripheral Neuropathy in Chemotherapy-treated Patients: Predictors, Assessment strategies and Functional Outcomes IN FOCUS Study (Identifying Neurological and Functional Outcomes in Cancer Survivors Study)
University of New South Wales	David Wyld (Cancer Care Services), Robert Henderson (Neurology)	IN FOCUS: The use of duloxetine for the treatment of chemotherapy-induced peripheral neuropathy
Olivia Newton-John Cancer Research Institute	Po-Ling Inglis (Cancer Care Services)	A phase I safety and bioimaging trial of KB004 in patients with glioblastoma
International Society for Quality of Life	Natasha Roberts (Cancer Care Services)	Proxy reported patient reported outcomes measures
Walter and Eliza Hall Institute	Zarnie Lwin (Cancer Care Services)	EX-TEM: Phase III Trial of Extended Temozolomide in Newly Diagnosed Glioblastoma (WEHI)
Amanda Love (Endocrinology), Marianne Elston (NZ), Richard Carrol (NZ), Eva Segelov (Monash)	David Wyld (Cancer Care Services)	Assessment of hypopituitarism rates following peptide receptor radionuclide therapy for neuroendocrine tumours
John Clouston, Roger Bain (Medical Imaging)	Melissa Eastgate (Cancer Care Services)	The Metro North Interventional Oncology database: a prospective observational cohort study examining outcomes for interventional oncology procedures
Sunil Lakhani (University of Queensland) Amy Reed (UQCCR), Christopher Pyke (Mater), Cameron Snell (Mater), Nicole McCarthy (Wesley), Ken O'Byrne (PAH), Valentine Hyland (Pathology), Owen Ung (Surgery), Natasha Woodward (Mater), Euan Walpole (PAH), Peter Simpson (UQ), Stephen Rose (CSIRO), Fares Al-Ejeh (QIMR)	Po-Ling Inglis, Ben Green (Cancer Care Services)	High risk breast cancer genomic sequencing project platform Queensland wide
Claudia Rutherford, Madeleine King, (Quality of life office, University of Sydney)	Natasha Roberts (Cancer Care Services)	Patient reported outcomes in clinical practice
Patsy Yates (Palliative Care)	David Wyld (Cancer Care Services), Kimberly Alexander, Christine Miskowski, Raymond Chan, Alexandra McCarthy, Steven McPhail, Helen Skerman	A sequential multiple assignment randomised trial (SMART) of nursing interventions to reduce pain associated with chemotherapy induced peripheral neuropathy

Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Teresa Brown <i>(Nutrition and Dietetics)</i>	Judy Bauer <i>(University of Queensland)</i> , Brett Hughes <i>(Cancer Care Services)</i> Elizabeth Ahern <i>(Cancer Care Services)</i>	“Sarcopenia in HNSCC patients undergoing definitive concurrent CRT and associations with clinical outcomes”
Rahul Ladwa <i>(PAH)</i>	David Wyld, Matthew Burge <i>(Cancer Care Services)</i> , David Pattison <i>(Nuc Med)</i>	Assessing response to Peptide Receptor Radionuclide Therapy in Neuroendocrine Tumours: Case series of “pseudoprogression”
Breast Cancer Trials, Austrian Breast and Colorectal Cancer Study Group <i>(ABCSCG)</i>	Michelle Nottage, Po-Ling Inglis <i>(Cancer Care Services)</i>	BRCA-P. A Randomized, Double-Blind, Placebo-Controlled, Multi-Center, International Phase 3 Study to determine the Preventive Effect of Denosumab on Breast Cancer in Women carrying a BRCA1 Germline Mutation
Hao-Wen Sim, Helen Wheeler, Kathryn Field, David Espinoza, Michael Buckland, Kimberly Kaufman	Zarnie Lwin, Benjamin Chua <i>(Cancer Care Services)</i>	PICCOG: PARP and Immune Checkpoint inhibitor COmbination for relapsed IDH-mutant high-grade Glioma

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Anna Kuchel	Best Abstract Presentation	Cancer Care Research Retreat, Cancer Care Services, RBWH

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Patsy Yates , Kimberly Alexander, Christine Miaskowski, Raymond Chan, Alexandra McCarthy, Steven McPhail, David Wyld , Helen Skerman	Medical Oncology	A sequential multiple assignment randomised trial (SMART) of nursing interventions to reduce pain associated with chemotherapy induced peripheral neuropathy	NHMRC APP1129532	\$713,418	\$178,355	2017-2020
Matthew Burge	Medical Oncology	MONARCC Study: A randomised Phase 2 study of panitumumab monotherapy versus panitumumab and 5 Fluorouracil as first line treatment for RAS and RAF wild type metastatic colorectal cancer (mCRC)	Australian Gastro-Intestinal Group Innovation Fund	\$100,000	\$33,333	2017-2019
Medical Oncology Clinical Trials Unit	Medical Oncology	Clinical Trials Data Management Grant	Queensland Cancer Fund	\$77,000	\$77,000	2019
Brett Hughes, Elizabeth Ahern , Bill Dougall, Mark Smyth	Medical Oncology	Pre-operative evaluation of anti-PD1 checkpoint inhibition (Nivolumab) with RANKL blockage (Denosumab) in patients with operable stage I-IIIa NSCLC	Amgen	\$940,370 (697,000 US\$)	\$470,185	2018-2019
Geoff Bryant, Melissa Eastgate, David Wyld, Matt Burge	Medical Oncology	Structured symptom reporting for patients with colorectal cancer undergoing chemotherapy	Metro North Hospital and Health Service SEED Grant	\$126,770	\$63,385	2018-2019

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Kwun Fong, Andreas Moeller, Rayleen Bowman, Zarnie Lwin, Brett Hughes	Medical Oncology	Novel biomarkers for lung cancer	NHMRC Project Grant	\$610,591	\$203,530	2019-2021
Zarnie Lwin , Alexander Broom, Claire Wakefield, Emma Kirby, Barbara Prainsack, Mustafa Khasraw, Katherine Kenny, Stephanie Raymond	Medical Oncology	Precision and the Person: A sociological study of therapeutic innovation in cancer care	Australian Research Council (Discovery)	\$470,650	\$470,650	2019
Kathryn Hurree, Elise Button, Midori Nakagaki, Nicole Gavin, Adcock K, Karen Whitfield, Douglas C, Michael Smith, David Wyld , Glen Kennedy	Medical Oncology	Educating patients – their way: A co-design approach to develop patient education videos regarding medication administration and supportive cares	Metro North Hospital and Health Service SEED Innovation grant	\$82,631	\$41,315	2018–2019
Janette Vardy, Haryana Dhillon, Kerry Courneya, Chris Booth, Chris O'Callaghan, John Zalberg, Matthew Burge	Medical Oncology	CHALLENGE: Colon Health And Life Long Exercise ChAnGE	NHMRC Project Grant	\$1,121,891	\$224,378	2019-2023
Melissa Eastgate, Anna Kuchel, Elizabeth Ahern , Rosalind Jeffree	Medical Oncology	Clinicopathologic feature predicting survival after brain metastasectomy in melanoma	2019 Phoebe Eales Melanoma Research Grant	\$39,350	\$19,675	2019-2020
David Wyld , Danica Cossio, Julie Moore, Phillipa Youl, Nancy Tran	Medical Oncology	Patterns of care for patients diagnosed with neuroendocrine cancer in Queensland	Ipsen Australia Research Grant	\$49,814	\$24,907	2019-2020
Hao-Wen Sim, Helen Wheeler, Zarnie Lwin , Kathryn Field, Benjamin Chua , David Espinoza, Michael Buckland, Kimberley Kaufman.	CCS DRO, DMO	PICCOG: PARP and Immune Checkpoint inhibitor Combination for relapsed IDH-mutant high-grade Glioma	NHMRC	\$1,391,472.20		2019-2023
Brett Hughes	Medical Oncology	Monitoring of Non-small cell lung cancer patients by liquid biopsy	RBWH 2019 Project Grant	\$15,000	\$30,00	2019-2020

2019 Research Publications

Journal Articles

1. **Ahern E, Cubitt A**, Ballard E, Teng MWL, Dougall WC, Smyth MJ, Godbolt D, Naidoo R, Goldrick A, **Hughes BGM**. Pharmacodynamics of Pre-Operative PD1 checkpoint blockade and receptor activator of NfκB ligand (RANKL) inhibition in non-small cell lung cancer (NSCLC): study protocol for a multicentre, open-label, phase 1B/2, translational trial (POPCORN). *Trials*. 2019; 20(1):753. doi: 10.1186/s13063-019-3951-x
2. Antonarakis ES, Piulats JM, Gross-Goupil M, **Goh J**, Ojamaa K, Hoimes CJ, Vaishampayan U, Berger R, Sezer A, Alanko T, de Wit R, Li C, Omlin A, Procopio G, Fukasawa S, Tabata K, Park SH, Feyerabend S, Drake CG, Wu H, Qiu P, Kim J, Poehlein C, de Bono JS. Pembrolizumab for Treatment-Refractory Metastatic Castration-Resistant Prostate Cancer: Multicohort, Open-Label Phase II KEYNOTE-199 Study. *JCO*. 2019 Nov 27 DOI: 10.1200/JCO.19.01638 [Epub ahead of print]
3. Broom A, Kirby E, Kokanović R, Woodland L, **Wyld D**, de Souza P, Koh ES, **Lwin Z**. Individualising difference, negotiating culture: Intersections of culture and care. *Health (London)*. 2019 Feb 13. doi: 10.1177/1363459319829192. [Epub ahead of print]
4. Broom J, Broom A, Good P, **Lwin Z**. Why is optimisation of antimicrobial use difficult at the end of life? *Intern Med J*. (2019);49(2):269-271. doi: 10.1111/imj.14200
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7. Burtneß B, Harrington KJ, Greil R, Soulières D, Tahara M, de Castro G, Psyrrri A, Basté N, Neupane P, Bratland A, Fuereder T, **Hughes BGM**, Mesía R, Ngamphaiboon N, Rordorf T, Ishak WZW, Hong R, Mendoza RG, Roy A, Zhang Y, Gumuscu B, Cheng JD, Jin F, Rischin D on behalf of the Pembrolizumab alone or with chemotherapy versus cetuximab with chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): a randomised, open-label, phase 3 study KEYNOTE-048 Investigators. *Lancet*. 2019; 394(10212):1915-1928. DOI: [https://doi.org/10.1016/S0140-6736\(19\)32591-7](https://doi.org/10.1016/S0140-6736(19)32591-7)
8. Button E, Northfield S, Smith M, **Wyld D**, Nasato G, Yates P. How do cancer care services in Australia take care of their patients when they require emergency care? We need more evidence. *Aust Health Rev*. 2019 Oct 17. doi: 10.1071/AH19118. [Epub ahead of print]
9. Chan RJ, Blades R, Jones L, Downer TR, Peet SC, Button E, **Wyld D**, McPhail S, Doolan M, Yates P. A single-blind, randomised controlled trial of StrataXRT® – A silicone-based film-forming gel dressing for prophylaxis and management of radiation dermatitis in patients with head and neck cancer. *Radiother Oncol*. 2019; 139:72-78. doi: 10.1016/j.radonc.2019.07.014
10. Chan S, **Ahern E**, Chaudhry S, **Hughes B**. Bilateral acute anterior uveitis: a rare ocular side effect of erlotinib. *British Medical Journal Case Rep*. 2019 Dec 15;12(12). pii: e232868. doi: 10.1136/bcr-2019-232868
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12. Day BW, Lathia JD, Bruce ZC, D'Souza RCJ, Baumgartner U, Ensbeß KS, Lim YC, Stringer BW, Akgül S, Offenhäuser C, Li Y, Jamieson PR, Smith FM, Jurd CLR, Robertson T, **Inglis PL**, **Lwin Z**, Jeffrey RL, Johns TG, Bhat KPL, Rich JN, Campbell KP, Boyd AW. The dystroglycan receptor maintains glioma stem cells in the vascular niche. *Acta Neuropathol*. 2019 Aug 28. doi: 10.1007/s00401-019-02069-x. [Epub ahead of print]
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15. Guccione L, Gough K, Drosowsky A, Fisher K, Price T, Pavlakis N, Khasraw M, **Wyld D**, Ransom D, Kong G, Rogers M, Leyden S, Leyden J, Michael M, Schofield P. Defining the Supportive Care Needs and Psychological Morbidity of Patients With Functioning Versus Nonfunctioning Neuroendocrine Tumors: Protocol for a Phase 1 Trial of a Nurse-Led Online and Phone-Based Intervention. *JMIR Res Protoc*. 2019; 8(12): e14361. doi: 10.2196/14361
16. Heng S, **Hughes B**, Hibbert M, Khasraw M, **Lwin Z**. Traveling With Cancer: A Guide for Oncologists in the Modern World. *J Glob Oncol*. 2019 5:1-10. doi: 10.1200/JGO.19.00029
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18. Kirby E, Broom A, Karikios D, Harrup R, **Lwin Z**. Exploring the impact and experience of fractional work in medicine: a qualitative study of medical oncologists in Australia. *British Medical Journal Open*. 2019; 9(12): e032585. doi: 10.1136/bmjopen-2019-032585
19. Kirby ER, Kenny KE, Broom AF, Oliffe JL, Lewis S, **Wyld DK**, Yates PM, Parker RB, **Lwin Z**. Responses to a cancer diagnosis: a qualitative patient-centred interview study. *Support Care Cancer*. 2019 Apr 24. doi: 10.1007/s00520-019-04796-z. [Epub ahead of print]
20. Kok PS, Beale P, O'Connell RL, Grant P, Bonaventura T, Scurry J, Antill Y, **Goh J**, Sjoquist K, DeFazio A, Mapagu C, Amant F, Friedlander M, on behalf of the PARAGON Investigators. PARAGON (ANZGOG-0903): a phase 2 study of anastrozole in asymptomatic patients with estrogen and progesterone receptor-positive recurrent ovarian cancer and CA125 progression, *Journal of Gynaecologic Oncology*. [Epub ahead of print] Apr 30, 2019. <https://doi.org/10.3802/jgo.2019.30.e86>
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23. Lee B, Lipton L, Cohen J, Tie J, Javed AA, Li L, Goldstein D, **Burge M**, Cooray P, Nagrial A, Tebbutt NC, Thomson B, Nikfarjam M, Harris M, Haydon A, Lawrence B, Wm Tai D, Simons K, Lennon AM, Wolfgang CL, Tomasetti C, Papadopoulos N, Kinzler KW, Vogelstein B, Gibbs P. Circulating tumor DNA as a potential marker of adjuvant chemotherapy benefit following surgery for localised pancreatic cancer. *Ann Oncol*. 2019 Jun 28. pii: mdz200. doi: 10.1093/annonc/mdz200. [Epub ahead of print]
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25. Lindemann K, Beale P, Rossi E, **Goh J**, Vaughan M, Tenney M, Martyn J, Sommeijer D, Inglesias J, Kremmidiotis G, Simpson J, Doolin E, Lavranos T, Leske A, Veillard A, Espinoza D, Stockler M, Rischin D. (ANZGOG-1103) Phase I study of BNC105P, carboplatin and gemcitabine in partially platinum-sensitive ovarian cancer patients in first or second relapse. *Cancer Chemotherapy and Pharmacology*, Vol 83. 2019 January
26. McCrary JM, Goldstein D, **Wyld D**, Henderson R, Lewis CR, Park SB. Mobility in survivors with chemotherapy-induced peripheral neuropathy and utility of the 6-min walk test. *J Cancer Surviv*. 2019; 13(4): 495-502. doi: 10.1007/s11764-019-00769-7
27. Mileshkin L, Edmondson R, O'Connell RL, Sjoquist KM, Andrews J, Jyothirmayi R, Beale P, Bonaventura T, **Goh J**, Hall M, Clamp A, Green J, Lord R, Amant F, Alexander L, Carty K, Paul J, Scurry J, Millan D, Nottley S, Friedlander M, PARAGON study group. Phase 2 study of anastrozole in recurrent estrogen (ER)/progesterone (PR) positive endometrial cancer: The PARAGON trial - ANZGOG 0903. *Gynecol Oncol*. 2019;154(1):29-37. doi: 10.1016/j.ygyno.2019.05.007
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29. Moroney LB, Helios J, Ward EC, Crombie J, Burns CL, Yeo SQ, Pelecanos A, Spurgin AL, Blake C, Kenny L, Chua B, **Hughes BGM**. Radiotherapy for cutaneous head and neck cancer and parotid tumours: A prospective investigation of treatment related acute swallowing and toxicity patterns. *Supportive Care in Cancer* 2019; 27(2): 573-581
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33. Ratnayake G, Shanker M, Roberts K, Mason R, **Hughes BGM, Lwin Z**, Jain V, O'Byrne K, Lehman M, Chua B. Prior or Concurrent Radiotherapy and Nivolumab Immunotherapy in Non-Small Cell Lung Cancer. *Asia Pacific Journal Clinical Oncology*. 2019 Nov 12. doi: 10.1111/ajco.13242. [Epub ahead of print]
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35. **Roberts NA**, Alexander K, **Wyld D**, Janda M. What is needed by staff to implement PROMs into routine oncology care? A qualitative study with the multi-disciplinary team. *Eur J Cancer Care (Engl)*. 2019 Oct 11: e13167. doi: 10.1111/ecc.13167. [Epub ahead of print]
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38. Semira C, Wong H, **Burge M**, et al. Chemotherapy and biologic use in routine management of metastatic colorectal cancer: is clinical practice following the evidence? *Internal Medicine Journal* 49 (2019) 446-54
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41. Tan JY, Senko C, **Hughes B, Lwin Z**, Bennett R, Power J, Thomson L. The Weighted Activity Unit (WAU) effect: evaluating the cost of Diagnosis Related Group (DRG) coding. *Intern Med J*. 2019 May 20. doi: 10.1111/imj.14373. [Epub ahead of print]
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Journal Articles (cont)

44. van Haeringen B, **Wyld D**, **Burge M**. Prognostic and predictive clinical, pathological, and molecular biomarkers in metastatic colorectal carcinoma – a review. *Australian Medical Student Journal*. 2019; 9(1): 30-35
45. Vasista A, Stockler M, Martin A, Pavlakis N, Sjoquist K, Goldstein D, Gill S, Jain V, Liu G, Kannourakis G, Kim YH, Nott L, Snow S, **Burge M**, Harris D, Jonker D, Chua YJ, Epstein R, Bonaventura A, Kiely B. Accuracy and Prognostic Significance of Oncologists' Estimates and Scenarios for Survival Time in Advanced Gastric Cancer. *The Oncologist*. 2019; 24(11): e1102-e1107
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48. Zeidan Z, **Lwin Z**, Iswariah H, Manawwar S, Karunairajah A, Chandrasegaram MD. Unusual Presentation of a Sigmoid Mass with Chicken Bone Impaction in the Setting of Metastatic Lung Cancer. *Case Reports in surgery* 2019: 1-10. <https://doi.org/10.1155/2019/1016534>
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50. Hofman MS, Emmett L, Violet J, Zhang A, N, Lawrence NJ, Stockler M, Francis RJ, Iravani A, Williams S, Azad A, Martin A, McJannett M, ANZUP Therap team, Davis ID. A randomised phase 2 trial of 177Lu-PSMA-617 theranostic versus cabazitaxel in progressive metastatic castration resistant prostate cancer: (ANZUP 1603). *BJU International*, (2019) <https://doi.org/10.1111/bju.14876> Epub ahead of print 2019 Oct 22 (**Goh J**)
51. Pagani O, Francis PA, Fleming GF, Walley BA, Viale G, Colleoni M, Lang I, Gomez HL, Tondini C, Pinotti G, Di Leo A, Coates AS, Goldhirsch A, Gelber RD, Regan MM for the SOFT and TEXT Investigators and International Breast Cancer Study Group Absolute Improvements in Freedom From Distant Recurrence to Tailor Adjuvant Endocrine Therapies for Premenopausal Women: Results From TEXT and SOFT. *Journal of Clinical Oncology*. (2019) DOI <https://doi.org/10.1200/JCO.18.01967> Epub ahead of print (**Nottage M**).

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Downs E**, **Keating A**, **Butler J**, **Kennedy G**. A Collaborative Approach in the Management of Late Onset Grade IV skin GVHD of an Adolescent Male Post Allogeneic Bone Marrow Transplant. Haematology Association of Australia Annual Scientific Meeting, 2016.
2. **Eastgate M**. Colorectal Cancer Clinical Trials at the RBWH. Brisbane Cancer Conference, 2019. Brisbane Australia
3. **Eastgate M**. Teletrials. Cancer Care Services Research Retreat 2019. Brisbane, Australia
4. **Eastgate M**. The critically unwell patient with cancer, a multidisciplinary challenge. Immunotherapy – a new paradigm in treatment and toxicity. Herston State of the Art Healthcare Symposium 2019. Brisbane Australia
5. **Hughes BGM**. Advances in systemic therapy of head and neck cancer. The Australian Society of Otolaryngology Head and Neck Surgery 2019. Brisbane, Australia
6. **Wyld D**. CONTROL NETs clinical trial update. Australasian Gastro-Intestinal trials Group Annual Scientific Meeting 2019. Adelaide, Australia
7. **Wyld D**. Phase 1 Research and Theranostics. Cancer Care Services Research Retreat 2019. Brisbane, Australia
8. **Wyld D**. The critically unwell patient with cancer, a multidisciplinary challenge. Caring for Culturally and Linguistically Diverse Patients. Herston State of the Art Healthcare Symposium 2019. Brisbane Australia.

Oral Presentations

1. Allan E, **Ives A**, Turner M. Making a difference. Trial e-Filing Systems Clinical Oncology Society of Australia ASM 2019 Adelaide, Australia
2. Clamp AR, Oza AM, Lorusso D, Aghajanian C, Oaknin A, Dean A, Colombo N, Weberpals JI, Scambia G, Leary A, Holloway RW, Gancedo MA, Fong PC, **Goh JC**, O'Malley DM, Armstrong DK, Banerjee S, Garcia-Donas J, Swisher EM, Cameron T, Maloney L, Goble S, Coleman RL, Ledermann JA. Effect of Progression-Free Interval Following Penultimate Platinum-Based Regimen on the Efficacy of Rucaparib Maintenance Treatment in Patients with Platinum-Sensitive, Recurrent Ovarian Carcinoma: An Analysis from the Phase 3 Study ARIEL3. 21st International Meeting of the European Society of Gynaecological Oncology (ESGO) Athens, Greece
3. Coleman RL, Oza AM, Lorusso D, Aghajanian C, Oaknin A, Dean A, Colombo N, Weberpals JI, Clamp AR, Scambia G, Leary A, Holloway RW, Gancedo AM, Fong PC, **Goh JC**, O'Malley DM, Goble S, Cameron T, Bedel J, Ledermann JA. Exploratory analysis of postprogression and patient-centered outcomes in Ariel3: A phase 3, randomized, placebo-controlled study of rucaparib maintenance treatment in patients with recurrent ovarian carcinoma. Gynecologic Cancer Society (IGCS) Global Meeting 2019 Rio de Janeiro, Brazil
4. **Eastgate M**, **Wyld D**. Monitoring testing outcomes and treatment practices in metastatic colorectal cancer. Queensland Clinical Senate, 2019. Brisbane, Australia
5. Fong L, Powderly J, Luke J, Hotson D, Sznol M, George S, Choueri T, Rini B, Hellmann M, Kummar S, Hernandez-Aya L, Mahadevan D, **Hughes BGM**, Markman B, Riese M, Brody J, Renouf D, Heist R, Goodwin R, Wiese A, Emens L, Willingham S, Kwei L, Laport G, Miller R. Refractory Renal Cell Cancer (RCC) Exhibits High Adenosine A2A Receptor (A2AR) Expression and Prolonged Survival Following Treatment with the A2AR Antagonist CPI-444. SITC-ASCO 2019. San Francisco, USA
6. **Hughes BGM**. Advances in systemic therapy of head and neck cancer. The Australian Society of Otolaryngology Head and Neck Surgery 2019. Brisbane, Australia

Oral Presentations (cont)

7. **Kuchel A.** Clinical characteristics of BRAF-mutant metastatic colorectal cancer (mCRC) cases in a real-world cohort study. Cancer Care Services Research Retreat 2019. Brisbane, Australia
8. **Kuchel A, Eastgate M.** Reviewing Medical Oncology clinic activity and models of care to improve the patient experience. Queensland Clinical Senate, 2019. Brisbane, Australia
9. Ledermann JA, Oza AM, Lorusso D, Aghajanian C, Oaknin A, Dean A, Colombo N, Weberpals JI, Clamp AR, Scambia G, Leary A, Holloway RW, Gancedo MA, Fong PC, **Goh JC**, Backes F, Banerjee S, Goble S, Cameron T, Coleman RL. The Effect of Age on Efficacy and Safety Outcomes with Rucaparib: A Post Hoc Exploratory Analysis of ARIEL3, a Phase 3, Randomized, Placebo-Controlled Maintenance Study in Patients with Recurrent Ovarian Carcinoma. Society of Gynaecologic Cancer 50th Annual Meeting 2019. Honolulu, USA
10. Lepletier de Oliveira A, Madore J, O'donnell JS, Johnston RL, **Eastgate M**, Mallardo D, Ascierio P, Massi D, Merelli B, Mandala M, Wilmott JS, Bald T, Stagg J, Routy B, Long GV, Scolyer RA, Waddell N, Dougall WC, Teng MWL, Smyth M. Resistance to immunotherapy is associated with high parenchymal PD1+CD8+/CD8+ T cells (PD1tr) driven by tumor CD155. European Society for Medical Oncology (ESMO) Immunology Congress 2019. Geneva, Switzerland
11. Rischin D, Harrington KJ, Greil R, Soulieres D, Tahara M, de Castro G, Psyri A, Baste N, Neupane PC, Bratland A, Fuereder T, **Hughes BGM**, Mesia R, Ngamphaiboon N, Rordorf T, Ishak WZW, Zhang Y, Jin F, Gumuscu B, Burtneis B. Protocol-specified final analysis of the phase 3 KEYNOTE-048 trial of pembrolizumab (pembro) as first-line therapy for recurrent/metastatic head and neck squamous cell carcinoma (R/M HNSCC). American Society of Clinical Oncology Annual Conference 2019. Chicago, USA
12. **Thaker DA**, Bryant G, **Wyld D**, Leach J, Wheatley H, Garth V. Our experience of nursing/allied health practitioner-led geriatric screening and assessment of elderly oncology patients: a highly accessible model of care. 19th Conference of the International Society of Geriatric Oncology 2019. Geneva, Switzerland. Journal of Geriatric Oncology 10 (6), S61-S63
13. **Thaker D, Wyld D**, Leach J, Wheatley H. Enhancing Screening, Assessment and Intervention for Older Oncology Patients (ESAIOP): MNHHS initiative of Nursing/Allied Health (AH) team led Geriatric Oncology service. Cancer Care Services Research Retreat 2019. Brisbane, Australia.

Posters Presentations

1. **Ahern E, Cubitt A**, Ballard E, Teng MWL, Dougall WC, Smyth MJ, **Hughes BGM**. Preoperative PD1 checkpoint blockade and receptor activator of NFkB ligand (RANKL) inhibition in non-small cell lung cancer (NSCLC) (POPCORN) ASCO-SITC Clinical Immunology Symposium 2019 San Francisco, USA
2. **Ahern E, Kuchel A, Pritchard W, Eastgate M, Wyld D, Burge M** Clinical characteristics of BRAF-mutant metastatic colorectal cancer (mCRC) cases in a real-world cohort study. Australian Gastro-Intestinal Trials Group Annual Scientific Meeting 2019. Adelaide, Australia
3. **Ahern E, Kuchel A, Pritchard W, Eastgate M, Wyld D, Burge M** Clinical characteristics of BRAF-mutant metastatic colorectal cancer (mCRC) cases in a real-world cohort study. Cancer Care Services Research Retreat 2019. Brisbane, Australia
4. Brown T, Banks M, Campbell L, **Hughes B, Ahern E**, C Lin C, Kenny L, Bauer J. Assessment of sarcopenia and malnutrition in patients with head and neck cancer undergoing treatment of curative intent – implications for practice. International Conference on Cachexia, Sarcopenia and Muscle Wasting 2019. Berlin, Germany
5. Chan C, Blades R, Jones L, Button E, **Wyld D**, Yates P. A single-blind, randomized controlled trial of a silicone-based film-forming gel dressing for prophylaxis and management of radiation dermatitis in patient with head and neck cancer. Oncology Nursing Society 44th Annual Congress, 2019 Anaheim, USA
6. Chong C, Jalali A, Wong H, Loft M, Wong R, Lee M, Gately L, Shapiro JD, Kosmider S, Tie J, Ananda S, Ma B, **Burge M**, Jennens R, Tran B, Lee B, Lim L, Dean A, Nott L, Gibbs P. Evolution of RAS mutation analysis in Australasian patients with metastatic colorectal cancer. Australian Gastro-Intestinal Trials Group Annual Scientific Meeting 2019. Adelaide, Australia
7. Coleman RL, Oza AM, Lorusso D, Aghajanian C, Oaknin A, Dean A, Colombo N, Weberpals JI, Clamp RA, Scambia G, Leary A, Holloway RW, Gancedo MA, Fong PC, **Goh JC**, O'Malley DM, Banerjee S, Goble S, Cameron T, Ledermann JA. Post Hoc Exploratory Analysis of Rucaparib in Patients with Platinum-Sensitive Recurrent Ovarian Carcinoma from the Randomized, Placebo-Controlled Phase 3 Study ARIEL3: Effect of a Deleterious Germline or No Germline BRCA Mutation on Efficacy and Safety. Society of Gynaecologic Cancer 50th Annual Meeting 2019. Honolulu, USA
8. Coleman RL, Oza AM, Lorusso D, Aghajanian C, Oaknin A, Dean A, Colombo N, Weberpals JI, Clamp AR, Scambia G, Leary A, Holloway RW, Gancedo MA, Fong PC, **Goh JC**, O'Malley DM, Cameron T, Maloney L, Goble S, Ledermann JA. Exploratory Analysis of the Effect of Maintenance Rucaparib on Postprogression Outcomes in Patients with Platinum-Sensitive Recurrent Ovarian Carcinoma and Updated Safety Data from the Phase 3 Study ARIEL3. American Society of Clinical Oncology 2019. Chicago, USA
9. **Collins S, Ahern E, Kuchel A, Pritchard W**, Whitehall V, **Eastgate M, Wyld D, Burge M**. Trends in RAS testing in metastatic colorectal cancer (mCRC) cases in a real-world cohort study. Australian Gastro-Intestinal Trials Group Annual Scientific Meeting 2019. Adelaide, Australia
10. **Collins S, Ahern E, Kuchel A, Pritchard W**, Whitehall V, **Eastgate M, Wyld D, Burge M**. Trends in RAS testing in metastatic colorectal cancer (mCRC) cases in a real-world cohort study. Cancer Care Services Research Retreat 2019. Brisbane, Australia
11. Dirix L, Vergote I, Denys H, Oza AM, Lorusso D, Aghajanian C, Oaknin A, Dean A, Colombo N, Weberpals JI, Clamp AR, Scambia G, Leary A, Holloway RW, Gancedo MA, Fong PC, **Goh JC**, O'Malley DM, Banerjee S, Goble S, Cameron T, Coleman RL, Ledermann JA. Subgroup Analysis of Rucaparib in Platinum-Sensitive Recurrent Ovarian Carcinoma: Effect of Prior Chemotherapy Regimens in ARIEL3. Belgian Society of Medical Oncology 21st Annual Meeting. 2019. Liege, Belgium
12. Fong L, Powderly J, Luke J, Hotson D, Sznol M, George S, Choueri T, Rini B, Hellmann M, Kummar S, Hernandez-Aya L, Mahadevan D, **Hughes BGM**, Markman B, Riese M, Brody J, Renouf D, Heist R, Goodwin R, Wiese A, Emens L, Willingham S, Kwei L, Laport G, Miller R. Refractory Renal Cell Cancer (RCC) Exhibits High Adenosine A2A Receptor (A2AR) Expression and Prolonged Survival Following Treatment with the A2AR Antagonist CPI-444. Society for Immunotherapy of Cancer 2019. National Harbour, USA
13. Gan HK, Cher L, **Inglis P, Lwin Z**, Lau E, Wichmann C, Ackermann U, Coombs N, Remen K, Guo N, Lee ST, Gong S, Palmer J, Pathmaraj K, O'Keefe G, Scott F, Day BW, Boyd AW, Thomas P, Durrant C, Scott1 AM. Preliminary findings of a phase I safety and bioimaging trial of KB004 (Ifabotuzumab) in patients with glioblastoma. American Association for Cancer Research Annual Meeting 2019. Georgia USA

Poster Presentations (cont)

14. Geva R, Im S, **Lwin Z**, Weils, Xu L, Morosky A, Norwood KG, Chung HC. Phase 2 study of lenvatinib plus pembrolizumab in previously treated patients with solid tumors: LEAP-005. Society for Immunotherapy of Cancer 34th Annual Conference 2019. Maryland, USA
15. Grob JJ, Gonzalez Mendoza R, Basset-Seguín N, Schachter J, Vornicova O, Bauman J, Grange F, Meyer N, Piulats J, Zhang P, Gumuscu B, Swaby R, **Hughes BGM**. KEYNOTE-629: Phase 2 study of pembrolizumab for recurrent/metastatic or locally advanced unresectable cutaneous squamous cell carcinoma. American Association for Cancer Research Annual Meeting 2019. Georgia USA
16. Grob JJ, Gonzalez Mendoza R, Basset-Seguín N, Schachter J, Vornicova O, Bauman J, Grange F, Meyer N, Piulats J, Zhang P, Gumuscu B, Swaby R, **Hughes BGM**. KEYNOTE-629: Phase 2 study of pembrolizumab for recurrent/metastatic or locally advanced unresectable cutaneous squamous cell carcinoma. American Society of Clinical Oncology 2019. Chicago, USA
17. Grob JJ, Gonzalez Mendoza R, Basset-Seguín N, Vornicova O, Schachter J, Joshi A, Meyer N, Grange F, Piulats JM, Bauman JR, Zhang P, Gumuscu B, Swaby RF, **Hughes BGM**. Pembrolizumab for Recurrent/Metastatic Cutaneous Squamous Cell Carcinoma (cSCC): Efficacy and Safety Results From the Phase 2 KEYNOTE-629 Study. European Society of Medical Oncology Congress 2019. Barcelona, Spain
18. Grob JJ, Gonzalez Mendoza R, Basset-Seguín N, Schachter J, Vornicova O, Bauman J, Grange F, Meyer N, Piulats J, Zhang P, Gumuscu B, Swaby R, **Hughes BGM**. KEYNOTE-629: Phase 2 study of pembrolizumab for recurrent/metastatic or locally advanced unresectable cutaneous squamous cell carcinoma. American Association for Cancer Research 2019. Boston, USA
19. Guminski A, Lim AM, Khushalani NI, Schmults CD, Hernandez-Aya L, Modi B, Dunn LA, Hughes BGM, Chang ALS, Hauschild A, Migden MR, Gutzmer R, Alam M, Fury MG, Lowy I, Stankevich E, Li S, Booth J, Jankovic V, Rischin D. Phase 2 Study of Cemiplimab, a Human Monoclonal Anti-PD-1, in Patients with Metastatic Cutaneous Squamous Cell Carcinoma (Group 1): 12-Month Follow-Up. American Society of Clinical Oncology 2019. Chicago, USA
20. Kanjanapan Y, Tran D, Lok S, Gibbs P, De Boer R, Yeo B, Greenberg S, Barnett F, Knott L, Richardson G, Wong R, **Nottage M**, Collins I, Torres J, Lombard J, Johns J, Harold M, Malik L. Impact of prior (neo)adjuvant trastuzumab exposure on the efficacy of HER2 targeted therapy for metastatic breast cancer. San Antonio Breast Cancer Symposium 2019 San Antonio, USA
21. **Kuchel A, Kermond A, Lonton J, Wyld D, Eastgate M**. Royal Brisbane medical oncology clinic activity review. Clinical Oncology Society Australia Annual Scientific Meeting 2019 Adelaide Australia
22. Kumari S, **Burge M** et al. Outcomes following resection of colorectal cancer liver metastases in the older patient. Australian Gastro-Intestinal Trials Group Annual Scientific Meeting 2019. Adelaide, Australia
23. Ladwa R, Pattison D, Smith J, Goodman S, **Burge M**, Rose S, Dowson N, **Wyld DK**. The impact of tumour absorbed dosimetry with survival outcomes after peptide receptor radionuclide therapy in metastatic neuroendocrine tumours. 1394P. European Society of Medical Oncology Congress 2019 Barcelona Spain
24. Lawrence NJ, Stockler MR, Martin AJ, Ford K, Stevanovic AG, **Wyld D**, Walpole ET, Troon S, Hanning FJ, Mallesara G, Weickhardt AJ, Birtle AJ, Davis ID, Grimison PS. P3BEP (ANZUP 1302): An international randomized phase III trial of accelerated versus standard BEP chemotherapy for adult and pediatric male and female patients with intermediate and poor-risk metastatic germ cell tumors (GCTs). ASCO Genitourinary Cancers Symposium 2019. San Francisco USA
25. Ledermann JA, Oza AM, Lorusso D, Aghajanian C, Oaknin A, Dean A, Colombo N, Weberpals JJ, Clamp AR, Scambia G, Leary A, Holloway RW, Gancedo MA, Fong PC, **Goh JC**, O'Malley MD, Cameron T, Maloney L, Goble S, Coleman RL. Effect of Response to Last Platinum-Based Chemotherapy in Patients with Platinum-Sensitive, Recurrent Ovarian Carcinoma in the Phase 3 Study ARIEL3 of Rucaparib Maintenance Treatment. European Society of Medical Oncology Congress 2019 Barcelona Spain
26. Lim LE, Thomas D, Chan D, **Wyld D**, Cehic G, Macdonald W, Tincknell G, Bailey D, **Kuchel A**, Du YT, Pavlakis N, Davis A, Segelov E. Australian multi-centre experience of the use of 177Lu-PRRT for bronchial carcinoid tumours European Society of Medical Oncology Congress 2019 Barcelona, Spain
27. Lok S, Baron-Hay S, Lim E, Blum R, Boyle F, Clarke K, Cuff K, Green M, Malik L, Mok K, Murray N, Nott L, **Nottage M**, Tafreshi A, Tsoi D, Yeo B, Gibbs P, De Boer R. A 'real world' experience of CDK4/6 inhibition with ribociclib and endocrine therapy in hormone receptor positive metastatic breast cancer in Australia. San Antonio Breast Cancer Symposium 2019 San Antonio, USA
28. Mendis SR, Lee B, Lee M, Wong R, Kosmider S, Shapiro JD, Yip D, Steel SA, Nott LM, Jennens R, Lipton LR, **Burge ME**, Field KM, Ananda S, Beck S, Wong H, Gibbs P. Left- versus right-side metastatic colorectal cancer: Teasing out clinicopathologic drivers of disparity in survival. American Society of Clinical Oncology 2019. Chicago, USA
29. Migden MR, Schmults CD, Guminski A, Hauschild A, Lewis KD, Chung CH, Hernandez-Aya L, Lim AM, Chang ALS, Rabinowits G, Thai AA, Dunn LA, **Hughes BGM**, Khushalani NI, Modi B, Schadendorf D, Berking C, Eigentler TK, Meier F, Ulrich C, Li S, Stankevich E, Lowy I, Fury MG, Rischin D. Duration of response (DoR) analysis of cemiplimab, a human monoclonal anti-PD-1, in the phase 2 study of patients with advanced cutaneous squamous cell carcinoma (CSCC). World Conference of Dermatology 2019. Milan, Italy
30. Migden MR, Schmults, CD, Guminski A, Hauschild A, Lewis KD, Chung CH, Hernandez-Aya L, Lim AM, Chang ALS, Rabinowits G, Thai AA, Dunn LA, **Hughes BGM**, Khushalani NI, Modi B, Schadendorf D, Berking C, Eigentler TK, Meier F, Ulrich C, Li S, Stankevich E, Lowy I, Fury MG, Rischin D. Duration of response (DoR) analysis of cemiplimab, a human monoclonal anti-PD-1, in the phase 2 study of patients with advanced cutaneous squamous cell carcinoma (CSCC). European Society of Medical Oncology Congress 2019. Barcelona, Spain
31. Mobasher M, Miller RA, Kwei L, Clark C, Law J, Luciano G, Heist RS, **Hughes BGM**, Markman B, Shepard DR, Fong L. Phase 1/1b Multicenter Trial of the Adenosine A2a Receptor Antagonist Ciforadenant (CPI-444) as Single Agent and in Combination with Atezolizumab in Patients with Advanced Cancers. American Society of Clinical Oncology 2019. Chicago, USA
32. Moor R, Roberts K, Mason R, Gunawan B, Feng S, Hong JH, Von Itzstein M, **Hughes BGM**, Jain V, Bigby K, Azer M, Sanmugarajah J, O'Byrne K. Immune-related Adverse Events and Nivolumab Outcomes in Non-Small Cell Lung Cancer Patients: A multi-institutional, retrospective cohort study. World Conference Lung Cancer 2019. Barcelona Spain
33. **Paxton-Hall F, Wyld D, Burge M**, Pattison D, You K. Outcome and toxicity of salvage therapy with 177 Lu-dotatate in patients with metastatic neuroendocrine tumours. Australasian Gastro-Intestinal trials Group Annual Scientific Meeting 2019. Adelaide, Australia
34. Porceddu S, Batstone M, Chan RJ, Collins M, Douthwaite S, **Hughes BGM**, Kenny L, Ladwa R, Panizza B, Negrello T, Dunn N, Cossio D. Changing demographics and patterns of care in oropharyngeal cancer: a statewide population-based analysis. Clinical Oncology Society Australia Annual Scientific Meeting 2019. Adelaide, Australia

Poster Presentations (cont)

35. Porceddu S, Batstone M, Chan RJ, Collins M, Dowthwaite S, **Hughes BGM**, Kenny L, Ladwa R, Panizza B, Negrello T, Dunn N, Cossio D. Population-wide review of head and neck cancer treatment and mortality; Queensland experience. Clinical Oncology Society Australia Annual Scientific Meeting 2019. Adelaide, Australia
36. Rischin D, Khushalani NI, Schmults CD, Guminski A, Chang ALS, Lewis KD, Lim AM, Hernandez-Aya L, **Hughes BGM**, Schadendorf D, Hauschild A, Stankevich E, Booth J, Li S, Chen Z, Desai J, Lowy I, Fury MG, Migden MR. Impact of prior lines of systemic therapy on the efficacy of cemiplimab, a human monoclonal anti-PD-1, in patients with advanced cutaneous squamous cell carcinoma (CSCC). European Society of Medical Oncology Immuno-Oncology 2019. Geneva, Switzerland
37. **Roberts N**, Alexander K, **Wyld D**, Janda M. What really happens when Patient-Reported Outcome Measurements (PROMs) are implemented in a busy clinic? RBWH Healthcare Symposium 2019. Brisbane, Australia
38. **Roberts N**, Western R, **Cubitt A**, Keller J, **Ives A**, **Wyld D**. Patient Understanding of Research in an Oncology Setting. (Abstract 83). ACTA International Clinical trials Conference 2019. Sydney, Australia
39. Senko C, Moore J, Hay K, **Lwin Z**, **Pratt G**, Fong K, **Hughes BGM**. The prognostic significance of significant weight loss in stage III NSCLC undergoing definitive CRT after FDG-PET staging. World Conference Lung Cancer 2019 Barcelona Spain
40. Sim H, Barnes E, **Lwin Z**, Rosenthal M, Wheeler H, Koh E, Foote M, Fisher L, Leonard R, Hall M, Simes J, Khasraw M. Health-related quality of life (HRQL) in VERTU: A randomized phase II trial of veliparib (V), radiotherapy (RT), and temozolomide (TMZ) for newly diagnosed MGMT unmethylated (uMGMT) glioblastoma (GBM). American Society of Clinical Oncology 2019. Chicago, USA
41. Tahara M, Burtness B, Harrington K, Greil R, Soulières D, de Castro G, Psyri A, Basté Rotllan N, Neupane P, Bratland A, Fuereder T, **Hughes BGM**, Mesia R, Ngamphaiboon N, Rordorf T, 15 Ishak WZW, Roy A, Cheng J, Jin F, Rischin D. Protocol-specified final analysis of the phase 3 KEYNOTE-048 trial of pembrolizumab (pembro) as first-line therapy for recurrent/metastatic head and neck squamous cell carcinoma (R/M HNSCC). Japanese Society of Medical Oncology 2019. Kyoto, Japan
42. **Tam L**, **Cook J**, **Suder A**, **Goh J**, **Kuchel A**. Testicular Cancer Surveillance – How Close are We to Following ANZUP Guidelines? ANZUP ASM 2018 Brisbane Australia
43. Tie J, Cohen J, Wang Y, Li L, Lee M, Wong R, Kosmider S, Wong H, Lee B, **Burge ME**, Yip D, Karapetis CS, Price TJ, Tebbutt NC, Haydon AM, Tomasetti C, Papadopoulos N, Kinzler KW, Vogelstein B, Gibbs P. A pooled analysis of multicenter cohort studies of post-surgery circulating tumor DNA (ctDNA) in early stage colorectal cancer. American Society of Clinical Oncology 2019. Chicago, USA
44. **Thaker DA**, Bryant G, **Wyld D**, Leach J, Wheatley H, Garth V. Our experience of nursing/allied health practitioner-led geriatric screening and assessment of elderly oncology patients: a highly accessible model of care. 19th Conference of the International Society of Geriatric Oncology 2019. Geneva, Switzerland. Journal of Geriatric Oncology 10 (6), S61-S63
45. Wirth L, Leboulleux S, Kiyota N, Tahara M, Muro K, Ahn MJ, Ando Y, Takahashi S, Kim SB, Misir S, Dutcus C, Ren M, Joshi P, **Hughes BGM**, Aller J, Krzyzanowska M, Capdevila J. Influence of Tumor Burden and Eastern Cooperative Oncology Group Performance Status (ECOG PS) at Baseline on Patient (Pt) Outcomes in Lenvatinib Treated Radioiodine-refractory Differentiated Thyroid Cancer (DTC). American Society of Clinical Oncology 2019. Chicago, USA
46. Wong H, **Burge M** et al. Understanding variation in treatment sequences and outcomes in metastatic colorectal cancer: Using real world data to answer real world questions. Australian Gastro-Intestinal Trials Group Annual Scientific Meeting 2019. Adelaide, Australia
47. Wong H, **Burge M** et al. A pooled analysis of Multicentre cohort studies of post-surgery circulating tumour DNA in early stage colorectal cancer. Australian Gastro-Intestinal Trials Group Annual Scientific Meeting 2019. Adelaide, Australia
48. **Wyld D**, Dunn N, Tran N, Moore J. Incidence and survival of Small Intestinal Tumours in Queensland, Australia, 2001-2015. European Neuroendocrine Tumour Society 16th Annual Conference, 2019. Barcelona, Spain
49. Zhang AY, Toner GC, Lawrence NJ, Stockler MR, Martin AJ, Ford K, Stevanovic AG, **Wyld D**, Walpole ET, Troon S, Hanning FJ, Mallesara G, Weickhardt AJ, Birtle AJ, Davis ID, Grimison PS, Australian and New Zealand Urogenital and Prostate Cancer Trials Group. P3BEP (ANZUP 1302): An international randomized phase III trial of accelerated versus standard BEP chemotherapy for adult and pediatric male and female patients with intermediate and poor-risk metastatic germ cell tumors (GCTs). Society of Clinical Oncology, Genitourinary 2019. San Francisco, USA.

RADIATION ONCOLOGY



Dr Graeme Dickie
Director Radiation Oncology
Cancer Care Services RBWH

The culture of inter-disciplinary collaboration and advancing technology in research remains strong for radiation oncology in 2019. The regular Research Core Group meeting helps guide the interests and co-ordinate medical, radiation therapist, physics and nursing streams. The aim and focus of the Radiation Oncology Research group is to promote, support and drive innovation, promote quality initiatives and ensure quality improvement projects deliver evidence-based practice, to ensure safe treatment delivery. Physics and radiation therapy lead most of the investigator-initiated technical studies, with the supervision of higher degrees.

Our department collaborates with several national and international trial groups, including the Tran-Tasman Radiation Oncology Group, Australian Lung Trial Group, Australian and New Zealand Urogenital and Prostate trials group. For some studies with those groups, there is a requirement for independent QA for patient accrual, and our department has been able to meet those standards. As new and emerging technologies are rapidly being assimilated into daily practice, the focus of research outcomes is to implement new technology in a scientific manner. Quality assurance and research into new technology is important to ensure, precision radiotherapy is delivered in a safe, efficient and cost-effective manner. Our department has expanded surface

guided radiotherapy, implemented quality-assured inspiration breath-hold technique and has expanded deformable registration for the planning and dosimetry review situations. The radiation oncology team has been successful in securing grants to proceed with several studies, and in utilising grants obtained through the Herston Biofabrication Institute to implement radiation oncology based projects utilising 3-D printing in a research framework. Radiation Oncology was instrumental in developing a research trials database to record research activity. This database has revolutionised the generation of research reports, facilitates centralised storage of data and has been expanded to include all sections of Cancer Care Services.

The radiation oncology team has had many research achievements in 2019, including:

- **Roger Allison** was formally recognised for his medical excellence with the official opening of the ARPANSA Roger Allison Radiotherapy Quality Centre in Yallambie, Victoria. Dr Allison is a highly regarded Radiation Oncology specialist both in Australia and internationally and has held the position of Chair of the ARPANSA Radiation Health and Safety Advisory Council for many years. This centre will also be used for a variety of partnership projects to facilitate both national and international research in medical imaging.
- **Benjamin Chua** (AI) and team were successful in obtaining an NHMRC grant for \$1 391 474.20 for the PICCOG: PARP and Immune Checkpoint inhibitor Combination for relapsed IDH-mutant high-grade Glioma project. In recognition of his research and teaching activities, he has also obtained his Associate professorship through the University of Queensland.
- **Medical Physics Research Group** received “Highly Commended” in Discovery and Innovation Research Award Category, MNHHS Research Excellence Awards.
- **Brett Hughes, Lizbeth Kenny, Matthew Burge, Ben Chua, Zarnie Lwin** (CI's) and team were successful in obtaining a MRFF Rapid Applied Research Translation Program grant for \$1,150,000 for the Centre for Personalised Analysis of Cancers (CPAC) project.
- **Dianna Binney**, “Radiotherapy quality assurance using statistical process control,” PhD conferred 24/7/2019
- **Tanya Kairn** won the, “Best Diagnostic Imaging Medical Physics,” poster prize at the Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Trent Aland	PhD, QUT (2013-ongoing)	Quality assurance of complex radiotherapy treatments	Tanya Kairn , Jamie Trapp
Diana Binny	PhD, QUT (2015-2019)	Optimizing patient plan deliveries by characterizing treatment planning systems in radiotherapy	Scott Crowe , Tanya Kairn , Jamie Trapp
Rae Blades	MApp Sci, QUT (2016-2019)	A cost-effectiveness analysis of a silicone gel (StrataXRT®) for prophylaxis and management of Radiation Induced Skin Injury (RISI) in head and neck cancer patients	Patsy Yates, Ray Chan, Steven McPhail
Orrie Dancewicz	PhD, QUT (2014-ongoing)	Development and verification of a novel 3D dosimetry technique for tomotherapy.	Scott Crowe , Jamie Trapp, Tim Markwell
Joanna Kapeleris	PhD QUT (2018-2020)	Circulating tumour cells	Chamindie Punyadeera, Lizbeth Kenny
Timothy Liu	PhD	Oral Squamous Cell Carcinoma with intermediate risk factors	Martin Batstone, Benjamin Chua
Daniel McKnight	MSc, QUT (2019)	Radiobiological effectiveness weighted dose profiles for kilovoltage radiotherapy	Scott Crowe , Steven Sylvander, Sarah Maxwell
Johnny Morales	PhD, QUT (2011-2019)	Independent Monte Carlo analysis for stereotactic radiosurgery treatments	Scott Crowe, Jamie Trapp
Juliana Muller Bark	PhD, QUT (2018-ongoing)	Non-invasive biomarkers in glioblastoma	Benjamin Chua , Chamindie Punyadeera, Arutha Kulasinghe, Bryan Day, Rosalind Jeffree
Samuel Peet	PhD, QUT (2016-ongoing)	Out-of-field dose in contemporary radiation therapy	Scott Crowe , Tanya Kairn , Jamie Trapp
James Rijken	PhD, QUT (2017-ongoing)	Dosimetric accuracy for SABR spine radiotherapy treatments	Scott Crowe , Tanya Kairn , Jamie Trapp, Konstantin Momot
Jemma Walsh (nee Devereaux)	Masters, QUT (2017-ongoing)	DIBH (Deep Inspiration Breath Hold)-BREAST Trial. Breath Hold Respiratory Endurance and Spirometry Training	Lisa Nissin, Cathy Hargrave , Julie Burbery, Gregory Rattray
Rachael Wilks	PhD, QUT (2019-ongoing)	Improving brachytherapy treatments with 3D printing	Scott Crowe , Tanya Kairn , Jamie Trapp, Mia Woodruff
Liting Yu	PhD, QUT (2017-ongoing)	Developing new methods of dose evaluation for VMAT patient specific plans	Scott Crowe , Jamie Trapp , Tanya Kairn , Christian Langton
Mohammed Atiah Zahrani	Masters, QUT (2019)	3D printing of radiotherapy phantoms	Scott Crowe , Paul Charles

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Paul Charles	Adjunct Associate Professor	Medical Physics	QUT (2015-current)
Benjamin Chua	Associate Professor UQ, Clinical Associate QIMR, Honorary Associate University of Sydney	Radiation Oncology	QIMR, University of Sydney, UQ
Scott Crowe	Adjunct Associate Professor	Medical Physics	QUT (2015-current)
Allison Dry	RT R&D Co-ordinator	Radiation Therapy	Queensland Health
Jennifer Edmunds	Clinical Trial Co-ordinator	Radiation Oncology	Queensland Health
Catriona Hargrave	State-wide RT Research Fellow. Joint appointment with QUT (<i>School of Clinical Sciences, Faculty of Health</i>)	Radiation Oncology/Radiation Therapy	QUT
Tanya Kairn	Adjunct Associate Professor	Medical Physics	QUT (2013-current)
Jacqui Keller	Manager, Clinical Trials	Radiation Oncology	Queensland Health
Trang Le	Clinical Trial Co-ordinator	Radiation Oncology	Queensland Health
Rob McDowall	Radiation Therapist Consultant	Radiation Oncology/Radiation Therapy	Queensland Health

RBWH Research Staff with research roles, positions or appointments e.g. Coordinators, etc (cont)

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Charmaine Micklewright	Research Assistant	Radiation Oncology	Queensland Health
Elise Obereigner	Research Assistant	Radiation Therapy	Herston Biofabrication Institute (2019–current)
Michelle Ralston	Advanced Radiation Therapist	Radiation Oncology/Radiation Therapy	Queensland Health
Lee Tripcony	Principal Scientist Statistics	Radiation Oncology/Statistics	Queensland Health
Christopher Walsh	RT R&D Co-ordinator	Radiation Therapy	Queensland Health

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Rae Blades/Ray Chan	Melissa Doolan	A cost-effectiveness analysis of a silicone gel (StrataXRT®) for prophylaxis and management of Radiation Induced Skin Injury (RISI) in head and neck cancer patients
Philip Chan	Paul Thomas (<i>HIRF</i>), Robyn Cheuk , Michelle Grogan , Graeme Dickie	Prognostic Value of Assessing Hypoxia in Tumours Using 18FMISO PET During a Course of Radiation Therapy – Proof of Concept Study
Benjamin Chua	Rosalind Jeffree , Chamindie Punyadeera, Zarnie Lwin , Juliana Muller Bark, Yunxia Wan, Arutha Kulasinghe, Xi Zhang, Kai Tang, Bryan Day (<i>QIMR</i>)	The use of non-invasive biomarkers in glioblastoma: A pilot study
Benjamin Chua	Zarnie Lwin , Bryan Day (<i>QIMR</i>)	Using molecular-guided PET/MRI imaging to target hypoxia in glioblastoma: A preclinical study to identify novel pathways and define molecular signatures associated with hypoxia and poor patient outcome
Benjamin Chua	Tristan Shaw	Diagnostic performance of 18-fludeoxyglucose positron emission tomography (FDG-PET) in evaluation of glioma
Emilie Croisier	Judy Bauer, Teresa Brown, Alana Morrissy, Alice Grigg , Philip Chan , Jeffrey Goh	Nutritional outcomes of gynae-oncology patients undergoing pelvic radiotherapy: understanding the patient experience and dietary fibre recommendations for symptom management
Scott Crowe	Paul Charles , Elise Obereigner , Rachael Wilks , Lee Heseltine , Graeme Dickie , Catherine Bettington , Philip Chan , Steven Sylvander , Tanya Kairn	Improving radiation oncology with 3D printing and Biofabrication
Scott Crowe	Tanya Kairn , Katie McMahon (<i>HIRF</i>), Louise Campbell (<i>HIRF</i>), Clare Berry (<i>HIRF</i>)	Characterisation of anatomical variations in the central nervous system
Graeme Dickie	Philip Chan , Rachael Wilks	Pulse Dose Rate Brachytherapy for cervix cancer, Royal Brisbane and Women's Hospital review
Alice Grigg	Catriona Hargrave	Retrospective evaluation of cardiac reduction between free-breathing (FB) and deep inspiration breath-hold (DIBH) radiation therapy for left-sided breast cancer patients
Rosalind Jeffree (RBWH)	Michael Fay (<i>NMH</i>), Jennifer Martin (<i>UON</i>), Paul Thomas (<i>HIRF</i>), Stephen Rose (<i>CSIRO</i>), Nicholas Dowson (<i>CSIRO</i>)	Evaluation of the role of valproate in the treatment of high grade glioma
Tanya Kairn	Scott Crowe , Rachael Wilks , Nancy Yu , Craig Lancaster	In vivo monitoring of total skin electron dose using optically stimulated luminescence dosimeters
Lizbeth Kenny	Sarju Vasani (<i>RBWH</i>)	A Pilot Study of CXCR4 PET for nodal staging of resectable mucosal head and neck Squamous cell carcinoma (HNSCC), including correlation with histopathology immunohistochemistry, sputum and Circulating Tumour Cells
Charles Lin	Benjamin Chua , Lizbeth Kenny , Michelle Nottage , Brett Hughes , Michele Teng, Paul Thomas	A prospective study investigating the efficacy and toxicity of definitive chemo-radiation and immunotherapy (CRIO) in locally and / or regionally advanced cutaneous squamous cell carcinoma

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group/Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Charles Lin	Charles Lin, Megan Carroll, Ryan Somerville, Sarah Grigg	Carcinoma of Head and Neck with Perineural spread: Outcomes After Skull Base Surgery and Adjuvant Radiotherapy
Jasmine Meaghan (SPP), Catherine Bettington, Rob McDowall	Cathy Hargrave, Allison Dry, Jemma Walsh (nee Devereaux)	What anatomical sites will benefit most from contrast-enhanced computed tomography in Radiation Therapy Planning? A review of current literature and standards of practice
Anthony Pagidas, Adrian Celati	Jemma Blyth, Michelle Grogan, Allison Dry, Catriona Hargrave	A Retrospective examination of changes in breast seroma volume and the feasibility of implementing simultaneous integrated boost in the treatment of breast cancer
Kate Stewart	Molly Mee (<i>QUT</i>), Marika Lathouras, Dr Catriona Hargrave	Evaluation of a Deformable Image Registration Quality Assurance Tool for Head and Neck patients in the MIM Maestro System
Kate Stewart	Amelia Brinks (<i>QUT</i>), Dr Catriona Hargrave	Comparison of Dose Estimation Methods utilising Cone Beam CT images of patients receiving Radiation Therapy to Prostate and Head& Neck regions
Christopher Walsh, Richelle Hopkinson	Dr Cathy Hargrave, Allison Dry	Retrospective analysis of Catalyst reference image and radiographically defined radiotherapy treatment isocentres
Jemma Walsh (nee Devereaux)	Jemma Blyth, Elena Blyth, Gregory Rattray, Catriona Hargrave, Lisa Nissin, Julie Burbery	DIBH (Deep Inspiration Breath Hold)-BREaST Trial. Breath Hold Respiratory Endurance and Spirometry Training

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Hao-Wen Sim	Helen Wheeler, Zarnie Lwin (<i>CCS DMO</i>), Kathryn Field, Benjamin Chua (<i>CCS DRO</i>), David Espinoza, Michael Buckland, Kimberly Kaufman	PICCOG: PARP and Immune Checkpoint inhibitor Combination for relapsed IDH-mutant high-grade Glioma
Catriona Hargrave	Alice Grigg (<i>CCS DRO</i>), Jemma Walsh (<i>CCS DRO</i>)	A multi-centre post-implementation review of the deep inspiration breath-hold (DIBH) technique for left-sided breast cancer radiation therapy
Jürgen Götz (<i>UQ Queensland Brain Institute</i>)	Benjamin Chua (<i>CCS DRO</i>), Scott Crowe (<i>CCS DRO</i>), Rob McDowall (<i>CCS DRO</i>)	Therapeutic Ultrasound for the Treatment of Brain Disorders
Henry Marshall (<i>TPCH</i>)	Benjamin Chua (<i>CCS DRO</i>), Luke Nicholls (<i>CCS DRO</i>), Rishendren Naidoo (<i>TPCH</i>), Katrina Hopcraft (<i>TPCH</i>)	CT screening for lung cancer in patients with chronic obstructive pulmonary disease
Peter Gorayski (<i>Adelaide</i>)	Ben Chua (<i>CCS DRO</i>), Charles Lin (<i>CCS DRO</i>), James Jackson (<i>ICON Gold Coast</i>), Michael Venness (<i>Westmead</i>)	Radiotherapy for early stage skin cancer
Danny Rischin (<i>PMCC</i>)	Charles Lin (<i>CCS DRO</i>), Brett Hughes (<i>CCS MO</i>)	Phase III trial of postoperative radiotherapy with or without REGN2810 in high risk cutaneous squamous cell carcinoma of the head and neck (cSCCHN)
Stephen Ackland, (<i>Calvary Mater Newcastle Hospital</i>)	Mathew Burge (<i>CCS MO</i>), Graeme Dickie (<i>CCS DRO</i>)	A randomised, placebo-controlled phase II trial of simvastatin in addition to standard chemotherapy and radiation in preoperative treatment for rectal cancer (SPAR)
Sherene Loi (<i>PMCC</i>)	Robyn Cheuk (<i>CCS DRO</i>), Michelle Grogan (<i>CCS DRO</i>)	TROG 17.05 A randomised phase II trial comparing the efficacy of single fraction or multi-fraction SABR (Stereotactic ablative body radiotherapy) with Atezolizumab in patients with advanced Triple negative breast Cancer (AZTEC)
Michael D. Jenkinson PhD (<i>University of Liverpool</i>)	Catherine Bettington (<i>CCS DRO</i>)	ROAM – TROG 15.02 Radiation versus Observation following surgical resection of Atypical Meningioma: a randomised controlled trial
Arjun Sahgal (<i>CTG</i>)	Benjamin Chua (<i>CCS DRO</i>)	SC24: TD 17.06A Phase III Randomized Feasibility Study Comparing Stereotactic Body Radiotherapy (SBRT) Versus Conventional Palliative Radiotherapy (CRT) For Patients With Spinal Metastases – S Siva and M Foote

Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Vincent Grégoire <i>(EORTC)</i>	Lizbeth Kenny <i>(CCS DRO)</i>	NIMORAL – TROG 14.03 (1219-ROG-HNCG) A blind randomized multicenter study of accelerated fractionated chemo-radiotherapy with or without the hypoxic cell radiosensitizer nimorazole (Nimoral), using a 15 gene signature for hypoxia in the treatment of squamous cell carcinoma of the head and neck
Danny Rischin <i>(PMCC)</i>	Lizbeth Kenny <i>(CCS DRO)</i>	HPV – TROG 12.01 A randomised trial of Weekly Cetuximab And Radiation Versus Weekly Cisplatin and Radiation in Good Prognosis Locoregionally Advanced HPV-Associated Oropharyngeal Squamous Cell Carcinoma
Chamindie Punyadeera <i>(QUT)</i>	Lizbeth Kenny <i>(CCS DRO)</i>	SPIT Study A simple saliva test to diagnose head and neck cancer at an early stage – head and neck cancer detection is a spitting distance away
Rajiv Khanna <i>(QIMR)</i>	Lizbeth Kenny <i>(CCS DRO)</i>	P2191 Development of an Adoptive T Cell Therapy for HPV-Associated Malignancies
David Pryor	Charles Lin <i>(CCS DRO)</i>	TROG 16.03: A multi stage multi centre international randomised trial of Conventional care Or Radioablation (stereotactic body radiotherapy) for Extra-cranial oligometastatic disease in lung, breast and prostate cancer (CORE)
Shankar Siva	Charles Lin <i>(CCS DRO)</i>	TROG 15.03 Focal Ablative STereotactic RADiosurgery for Cancers of the Kidney – A Phase II Clinical Trial (FASTRACK II)
Shankar Siva	Catherine Bettington <i>(CCS DRO)</i>	TROG 13.01 Stereotactic Ablative Fractionated Radiotherapy versus Radiosurgery for Oligometastatic Neoplasia to the Lung: A Randomised Phase II Trial (SAFRON II)
Scott Williams and Paul Nguyen <i>(NHMRC)</i>	Philip Chan <i>(CCS DRO)</i>	ENZARAD Randomised phase 3 trial of enzalutamide in androgen deprivation therapy with radiation therapy for high risk, clinically localised, prostate cancer
Kumar Gogna <i>(RO Mater)</i>	Catherine Bettington <i>(CCS DRO)</i>	SPLIT COURSE A single arm, prospective Phase II study of Split-Course Pelvic Radiotherapy for Locally Progressive, Castrate Resistant Prostate Cancer
Margot Lehman <i>(PAH)</i>	Philip Chan <i>(CCS DRO)</i>	P LUNG – TROG 11.03 A randomised phase III trial of High Dose Palliative Radiotherapy (HDPRT) versus concurrent Chemotherapy HDPRT (C-HDPRT) in patients with good performance status, locally advanced/small volume metastatic NSCLC not suitable for radical chemo-radiotherapy
Peter Graham <i>(SGH)</i>	Robyn Cheuk <i>(CCS DRO)</i>	STARS – TROG 08.06 A randomised comparison of anastrozole commenced before and continued during adjuvant radiotherapy for breast cancer versus anastrozole and subsequent anti-oestrogen therapy delayed until after radiotherapy. (STARS – Study of Anastrozole and Radiotherapy Sequencing)
Boon Chua <i>(PMCC)</i>	Lizbeth Kenny <i>(CCS DRO)</i>	DCIS – TROG 07.01 A randomised phase III study of radiation doses and fractionation schedules in non-low risk ductal carcinoma in situ (DCIS) of the breast
L. Mileshkin <i>(PMCC)</i>	Robyn Cheuk <i>(CCS DRO)</i>	PORTEC – 3 – TROG 08.04 ANZGOG A Randomised phase III trial comparing concurrent chemoradiation and adjuvant chemotherapy with pelvic radiation alone in high risk and advanced stage endometrial carcinoma
Maria Pearse <i>(Auckland City Hospital)</i>	Charles Lin <i>(CCS DRO)</i>	RAVES – TROG 08.03 Radiotherapy Adjuvant versus Early Salvage. A phase III multi-centre randomised trial comparing adjuvant radiotherapy (RT) with early salvage RT in patients with positive margins or extraprostatic disease following radical prostatectomy
Michael Poulsen <i>(RO Mater)</i>	Graeme Dickie <i>(CCS DRO)</i>	MP3 – TROG 09.03 A Phase II Efficacy Study of Chemo-radiotherapy in PET Stage II and III Merkel Cell Carcinoma of the Skin
Gail Ryan <i>(PMCC)</i>	Roger Allison <i>(CCS DRO)</i>	TROG 06.01 Primary chemotherapy with Temozolomide vs. Radiotherapy in patient's with Low Grade Gliomas after stratification for genetic 1P loss: A phase III Study
Australasian Lung Cancer Trials Group	Brett Hughes <i>(CCS)</i> , Phillip Chan <i>(CCS)</i>	NIVORAD – A randomised phase 2 trial of nivolumab and stereotactic ablative body radiotherapy in advanced non-small cell lung cancer, progressing after first or second line chemotherapy

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Roger Allison	World-class research and education centre, "Roger Allison Radiotherapy Quality Centre", opened 15 March 2019	Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)
Radiation Oncology Medical Physics Research Group	"Highly Commended" in Discovery and Innovation Research Award Category	MNHHS Research Excellence Award
Brett Hughes, Lizbeth Kenny, Matthew Burge, Ben Chua, Zarnie Lwin (CI's) and team	MRFF Rapid Applied Research Translation Program grant for \$1,150,000	Centre for Personalised Analysis of Cancers (CPAC) project
Dianna Binney	PhD conferred 24/7/2019	Radiotherapy quality assurance using statistical process control
Tanya Kairn	Best Diagnostic Imaging Medical Physics Poster Prize	Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics, Perth, Australia

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Hao-Wen Sim, Helen Wheeler, Zarnie Lwin , Kathryn Field, Benjamin Chua , David Espinoza, Michael Buckland, Kimberley Kaufman	CCS DRO, DMO	PICCOG: PARP and Immune Checkpoint inhibitor Combination for relapsed IDH-mutant high-grade Glioma	NHMRC	\$1,391,472.20	\$0	2019-2023
PI: Erik Thompson; RBWH CCS CIs: Brett Hughes, Lizbeth Kenny, Matthew Burge, Benjamin Chua, Zarnie Lwin	CCS DRO, DMO	Centre for Personalised Analysis of Cancers (CPAC)	MRFF Rapid Applied Research Translation Program	\$1,150,000	\$0	2/9/2019-30/6/2021
Chamindie Punyadeera, Lizbeth Kenny , Jean Paul Thiery, Brett Hughes , Majid Warkiani, Arutha Kulasinghe	CCS DRO, DMO	Circulating tumour cells: Clinical applications in head and neck cancers	Cancer Australia	\$599,756	\$199,919	2018-2020
Scott Crowe, Paul Charles, Elise Obereigner, Rachael Wilks, Lee Heseltine, Graeme Dickie, Catherine Bettington, Philip Chan, Steven Sylvander, Tanya Kairn, Glenn Kennedy	CCS DRO	Improving radiation oncology with 3D printing and Biofabrication	Herston Biofabrication Institute program grant	\$515,000	\$171,667	2019-2021
Chamindie Punyadeera, Lizbeth Kenny , Chris Perry, Ken O'Byrne, Ian Vela, Arutha Kulasinghe	CCS DRO	Circulating tumour cells in head and neck cancer	Garnette Passe and Rodney Williams Memorial Foundation	\$239,988	\$119,994	2018-2020
Charles Lin	CCS DRO	A prospective study investigating the efficacy and toxicity of definitive chemoradiotherapy and immunotherapy (CRIO) in locally and / or regionally advanced cutaneous squamous cell carcinoma	Astra Zeneca	\$211,000.15	\$69,630	2017-2021
Marina Reeves, Sandra Hayes, Wendy Denmark-Wahnefried, Jennifer Muller, Elizabeth Eakin, Lizbeth Kenny , Catherine Shannon	CCS DRO	Optimising Survivorship: a pilot study evaluating the feasibility, safety and preliminary efficacy of an exercise and dietary intervention for women with metastatic breast cancer	National Breast Cancer Foundation	\$197,179	\$49,294.75	2017-2020
Arutha Kulasinghe, Ken O'Byrne, Chamindie Punyadeera, Colleen Nelson, Riccardo Dolcetti, Brett Hughes , Erik Thompson, Lizbeth Kenny	CCS DRO	Can liquid biopsy provide predictive biomarkers for checkpoint inhibitor response in non-small cell lung cancer	Translational Research Institute Spore grant	\$80,000	\$80,000	2019

Research Grants (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Graeme Dickie	CCS DRO	QCOG Cancer Clinical Trial Data Manager Grant	Queensland Clinical Oncology Group	\$71,000	\$71,000	2019
Benjamin Chua , Bryan Day, Stephen Rose, Paul Thomas , Rosalind Jeffree , Yi-Chieh Lim, Po-ling Inglis , Zarnie Lwin , Jacqui Keller	CCS DRO	Using molecular-guided PET/MRI Using molecular-guided PET/MRI imaging to target hypoxia in glioblastoma: A preclinical study to identify novel pathways and define molecular signatures associated with hypoxia and poor patient outcome	HIRF seed research funding	\$66,498	\$0	2017-2019
Lizbeth Kenny	CCS DRO	CXCR4 PET for nodal staging of resectable mucosal head and neck squamous cell carcinoma (HNSCC)	HIRF seed research funding	\$56,017.50	\$0	2017-2019
Lizbeth Kenny , Chamindie Punyadeera, Brett Hughes , Martin Batstone, Kai Tang	CCS DRO, DMO	Salivary miRNA Panel to Detect Oral Cancer and Oropharyngeal Cancers Early	RBWH Foundation	\$40,000	\$40,000	2019
Samuel Peet	CCS DRO	Out-of-field dose in Contemporary Radiation Therapy	RBWH	\$38,082.52	\$38,082.52	2019
Nancy Yu	CCS DRO	Developing new methods of dose evaluation for IMRT patient specific QA	RBWH	\$38,082.52	\$38,082.52	2019
Erik Thompson, Elizabeth Williams, Ian Vela, Tony Kenna, Cameron snell, Laura Bray, Riccardo Dolecetti, Bryan Day, Benjamin Chua , Zarnie Lwin , Rajiv Khanna	CCS DRO, DMO	Immune Cell Analysis in Tumouroids Towards Modelling Immunotherapy	BDHP	\$17,500	\$17,500	2019-2020
Jennifer Edmunds	CCS DRO	ANZUP Trial/Study Co-ordinator Scholarship	ANZUP	\$650	\$650	2019

2019 Research Publications

Journal Articles

- Asena A, Nilsson S, Smith ST, **Kairn T**, **Crowe SB**, Trapp JV. A method for obtaining three-dimensional measurements of HDR brachytherapy dose distributions using Fricke gel dosimeters and optical computed tomography. *Australas Phys Eng Sci Med*. 2019 Mar;42(1):221-226. doi: 10.1007/s13246-018-0715-y
- Binny D, Aland T, Achibald-Heeren BR, Trapp JV, **Kairn T**, **Crowe SB**. A multi-institutional evaluation of Machine Performance Check (MPC) system on treatment beam output and symmetry using Statistical Process Control. *J App Clin Med Phys*. 2019 Mar;20(3):71-80. doi: 10.1002/acm2.12547
- Binny D, **Lancaster CM**, **Kairn T**, Trapp JV, **Crowe SB**. Radiotherapy quality assurance using statistical process control. *IFMBE Proc*. 2019 Mar;68(3):437-442. doi: 10.1007/978-981-10-9023-3_78
- Chan RJ, Blades R, Jones L, Downer TR, **Peet S**, Button E, **Wyld D**, McPhail S, **Doolan M**, Yates P. A single-blind, randomised controlled trial of StrataXRT[®] – a silicone-based film-forming gel dressing for prophylaxis and management of radiation dermatitis in patient with head and neck cancer. *Radiother Oncol*. 2019 Oct; 139:72-78. doi: 10.1016/j.radonc.2019.07.014
- Chua B**, Jackson JE, **Lin C**, Veness MJ. Radiotherapy for early non-melanoma skin cancer. *Oral Oncol*. 2019 Sep 28; 98:96-101. doi: 10.1016. [Epub ahead of print]
- Crowe SB**, **Kairn T**. Calibration seed sampling for iodine-125 prostate brachytherapy. *IFMBE Proc*. 2019 Mar;68(3):459-462. doi: 10.1007/978-981-10-9023-3_83
- Crowe SB**, **Sylvander S**, **Kairn T**. Radiotherapy dose measurements using a fluorescing quinine solution. *IFMBE Proc*. 2019 Mar;68(3):545-548. doi: 10.1007/978-981-10-9023-3_99
- Dowthwaite S, Panizza B, O'Neill J, Porceddu S, Jackson JE, **Chua B**. Outcomes of primary trans-oral surgical management of early tonsillar squamous cell carcinoma with risk-adapted adjuvant radiotherapy. *Aust J Otolaryngol* 28 Feb 2019; 2:7
- Kairn T**, **Crowe SB**. Application of retrospective data analysis to clinical protocol design: Can the potential benefits of breath-hold techniques for breast radiotherapy be assessed without testing on patients? *Australas Phys Eng Sci Med*. 2019 Mar;42(1):227-233. doi: 10.1007/s13246-019-00725-w
- Kairn T**, **Crowe SB**. Retrospective analysis of breast radiotherapy treatment plans: Curating the “non-curved”. *Journal of Medical Imaging and Radiation Oncology*. 2019 Aug; 63(4):517-529. doi: 10.1111/1754-9485.12892

Journal Articles (cont)

11. **Kairn T, Crowe SB, Peet SC.** Linac leakage dose received by patients treated using non-coplanar radiotherapy beams. *IFMBE Proc.* 2019 Mar;68(3):549-551. doi: 10.1007/978-981-10-9023-3_100
12. **Kairn T, Peet SC, Yu L, Crowe SB.** Long-term reliability of optically stimulated luminescence dosimeters. *IFMBE Proc.* 2019 Mar; 68(3):561-564. doi: 10.1007/978-981-10-9023-3_103
13. **Kairn T, Stephens H, Crowe SB, Peet S.** Optically stimulated luminescence dosimeters as an alternative to radiographic film for performing head-wrap linac leakage measurements. *IFMBE Proc.* 2019 Mar;68(3):553-555. doi: 10.1007/978-981-10-9023-3_101
14. **Kairn T, Zolfaghari S, Papworth D, West M, Schlect D, Crowe SB.** Stereotactic radiosurgery for multiple brain metastases: A dose-volume study. *IFMBE Proc.* 2019 Mar;68(3):443-445. doi: 10.1007/978-981-10-9023-3_79
15. **Khoei S, West M, Kairn T.** Measurement of percentage depth-dose profiles in very small fields. *IFMBE Proc.* 2019 Mar;68(3):557-560. doi: 10.1007/978-981-10-9023-3_102
16. **Kulasinghe A, Hughes BGM, Kenny L, Punyadeera C.** An update: circulating tumor cells in head and neck cancer. *Expert Rev Mol Diagn.* 2019 Dec;19(12):1109-1115. doi: 10.1080/14737159.2020.1688145. Epub 2019 Nov 7
17. **Kulasinghe A, Kapeleris J, Kenny L, Warkiani M, Vela I, Thiery J, O'Byrne K, Punyadeera C.** Abstract 1333: Isolation, characterization and expansion of circulating tumor cells in solid cancers. *Cancer Res* July 1 2019 (79) (13 Supplement) pp. 1333; DOI: 10.1158/1538-7445.AM2019-1333
18. **Milewski C, Peet SC, Sylvander SR, Crowe SB, Kairn T.** Optimising a radiotherapy optical surface monitoring system to account for the effects of patient skin contour and skin colour. *IFMBE Proc.* 2019 Mar;68(3):451-454. doi: 10.1007/978-981-10-9023-3_81
19. **Moroney LB, Helios J, Ward EC, Crombie J, Burns CL, Yeo SQ, Pelecanos A, Spurgin AL, Blake C, Kenny L, Chua B, Hughes BGM.** Radiotherapy for cutaneous head and neck cancer and parotid tumours: a prospective investigation of treatment-related acute swallowing and toxicity patterns. *Support Care Cancer.* 2019 Feb;27(2):573-581. doi: 10.1007/s00520-018-4352-5. Epub 2018 Jul 17
20. **Moroney LB, Ward EC, Helios J, Crombie J, Burns CL, Blake C, Comans T, Chua B, Kenny L, Hughes BGM.** Evaluation of a speech pathology service delivery model for patients at low dysphagia risk during radiotherapy for HNC. *Support Care Cancer.* 2019 Jul 27. doi: 10.1007/s00520-019-04992-x
21. **Müller Bark J, Kulasinghe A, Chua B, Day BW, Punyadeera C.** Circulating biomarkers in patients with glioblastoma. *Br J Cancer.* 2019 Oct 31. doi: 10.1038/s41416-019-0603-6
22. **Ratnayake G, Shanker M, Roberts K, Mason R, Hughes BGM, Lwin Z, Jain V, O'Byrne K, Lehman M, Chua B.** Prior or concurrent radiotherapy and nivolumab immunotherapy in non-small cell lung cancer. *Asia Pac J Clin Oncol.* 2019 Nov 12. doi: 10.1111/ajco.13242
23. **Rijken J, Bhat M, Crowe S, Kairn T, Trapp J.** Linear accelerator bunker shielding for stereotactic radiotherapy. *Phys Med Biol.* 2019 Nov; 64(21): 21NT04. doi: 10.1088/1361-6560/ab4916
24. **Rijken J, Bhat M, Crowe S, Trapp J.** Conservatism in linear accelerator bunker shielding. *Australasian Physical and Engineering Sciences in Medicine.* 2019 Sep; 42(3):781-787. doi: 10.1007/s13246-019-00782-1
25. **Rijken J, Kairn T, Crowe S, Trapp J.** Effect of arc length on skin dose from hypofractionated volumetric modulated arc radiotherapy treatments of the lung and spine. *Med Dosim.* 2019 Oct;44(4):309-314. doi: 10.1016/j.meddos.2018.11.002
26. **Rijken J, Schachenmayr H, Crowe S, Kairn T, Trapp J.** Distributive quality assurance and delivery of stereotactic ablative radiotherapy treatments amongst beam matched linear accelerators: A feasibility study. *Journal of Applied Clinical Medical Physics.* 2019 Apr 4; 20(4). pii: 99-105. doi: 10.1002/acm2.12567
27. **Shaw TB, Jeffree RL, Thomas P, Goodman S, Debowski M, Lwin Z, Chua B.** Diagnostic performance of 18F-fluorodeoxyglucose positron emission tomography in the evaluation of glioma. *J Med Imaging Radiat Oncol.* 2019 Aug 1. doi: 10.1111/1754-9485.12929
28. **Smith S, Boase N, Masters K, Hosokawa K, Asena A, Crowe S, Kairn T, Trapp J.** A very low diffusion Fricke gel dosimeter with functionalised Xylenol Orange-PVA (XOPVA). *Phys Med Biol* 2019 Oct; 64:205017. doi: "10.1088/1361-6560/ab430c
29. **Tang KD, Baeten K, Kenny L, Frazer IH, Scheper G, Punyadeera C.** Unlocking the Potential of Saliva-Based Test to Detect HPV-16-Driven Oropharyngeal Cancer. *Cancers (Basel).* 2019 Apr 3;11(4). pii: E473. doi: 10.3390/cancers11040473
30. **Turner J, Yates P, Kenny L, Gordon LG, Burmeister B, Hughes BGM, McCarthy AL, Perry C, Chan RJ, Paviour A, Skerman H, Batstone M, Mackenzie L.** The ENHANCES study: a randomised controlled trial of a nurse-led survivorship intervention for patients treated for head and neck cancer. *Support Care Cancer.* 2019 Dec;27(12):4627-4637 Epub 2019 Apr 2. doi: 10.1007/s00520-019-04748-7
31. **Yu L, Kairn T, Crowe SB.** Retrospective audit of patient specific quality assurance results obtained using helical diode arrays. *IFMBE Proc.* 2019 Mar;68(3):447-450. doi: 10.1007/978-981-10-9023-3_80
32. **Yu L, Kairn T, Trapp J, Crowe SB.** A modified gamma analysis method for dose distribution comparisons. *Journal of Applied Clinical Medical Physics.* 2019 Jul; 20(7):193-200. doi: 10.1002/acm2.12606
33. **Yu L, Tang TLS, Cassim N, Livingstone A, Cassidy D, Kairn T, Crowe SB.** Analysis of Dose Comparison Techniques for Patient Specific Quality Assurance in Radiation Therapy. *J Appl Clin Med Phys.* 2019 Nov; 20(11): 189-198. doi: 10.1002/acm2.12726
34. **Zhang P, Raju J, Ullah MA, Au R, Varelias A, Gartlan KH, Olver SD, Samson LD, Sturgeon E, Zomerdijk N, Avery J, Gargett T, Brown MP, Coin LJ, Ganesamoorthy D, Hutchins C, Pratt GR, Kennedy GA, Morton AJ, Curley CI, Hill GR, Tey SK.** Phase I Trial of Inducible Caspase 9 T Cells in Adult Stem Cell Transplant Demonstrates Massive Clonotypic Proliferative Potential and Long-term Persistence of Transgenic T Cells. *Clin Cancer Res.* 2019 Mar 15;25(6):1749-1755. doi: 10.1158/1078-0432.CCR-18-3069. Epub 2019 Feb 14.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Blades R.** Cost-effectiveness and radiation dermatitis: A NUM's approach. *Cancer Nurses Society of Australia Annual Congress.* 20-22 June 2019. Melbourne, Australia
2. **Blades R.** StrataXRT "An ounce of prevention is worth a pound of cure". *Cancer Nurses Society of Australia Annual Congress.* 20-22 June 2019. Melbourne, Australia

Invited Speakers (cont)

3. **Charles P.** Overview of Herston Biofabrication Institute. Progress and Research in Medical Physics 28 June 2019. Sunshine Coast University Hospital
4. **Cheuk R.** Paediatric brachytherapy. Australasian Brachytherapy Group 28th Annual Scientific Meeting, Brisbane, Australia. February 2019
5. **Cheuk R.** Cranial Radiotherapy – Post treatment effect and Radionecrosis. Neurosurgical Society of Australasia paediatric Neuro-oncology CPD workshop, Brisbane, Australia. March 2019
6. **Chua B.** Neuro-oncology for the Radiologist. Australia and New Zealand Society of Neuroradiology Annual Scientific Meeting. Adelaide, Australia. March 2019
7. **Crowe SB.** Personalized phantoms through 3D printing. ESTRO 38, 26 April 2019. Milan, Italy
8. **Crowe SB.** 3D printing of quality assurance phantoms. Progress and Research in Medical Physics 28 June 2019. Sunshine Coast University Hospital
9. **Kairn T.** Bulk retrospective analysis of radiotherapy treatment data: Looking back from the front of the pack. Engineering and Physical Sciences in Medicine/Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
10. **Kairn T.** Communicating risk from a Radiation Oncology perspective. ACPSEM Queensland Symposium. Brisbane, Australia. September 2019
11. **Kenny L.** A new guide to ethical principles for the use of AI in medicine. Key note speaker on behalf of RANZCR. Health Informatics Conference. Melbourne, Australia. August 2019
12. **Kenny L.** Artificial Intelligence in Healthcare. Health Informatics Society of Australia. Melbourne, Australia. February 2019
13. **Kenny L.** Australian Collaborative Networks Updates Overview QLD and MNHHS. National Particle Therapy Symposium. Brisbane, Australia. March 2019
14. **Kenny L.** Ethics of AI in Medicine. AI Machine Learning and Robotics in Healthcare Conference. Sydney, Australia. October 2019
15. **Kenny L.** Ethics of AI in Medicine. RANZCR Auckland, New Zealand. October 2019
16. **Kenny L.** Importance of Quality Assurance in IO: Lessons Learned from Radiation Oncology. Society of Interventional Oncology (SIO) Boston, Massachusetts. June 2019
17. **Kenny L.** Innovating Health Series; Artificial Intelligence. Health Informatics Society of Australia. Brisbane, Australia. March 2019
18. **Kenny L.** Medical machine learning – Australian healthcare in the age of artificial intelligence. General Practice Conference and Exhibition (GPCE) Sydney. May 2019
19. **Kenny L.** Potential Cure and the Concept of Oligo Metastatic Disease. TROG 31st Annual Scientific Meeting. Melbourne, Australia. March 2019
20. **Kenny L.** Radiobiology: sensitive and resistant tumours. European Congress of Interventional Oncology (ECIO) Netherlands. April 2019
21. **Kenny L.** Radiotherapy – ERB and SABR: The essentials of radiotherapy. TROG 31st Annual Scientific Meeting. Melbourne, Australia. March 2019
22. **Kenny L.** The CIRSE Quality Assurance System in IO – lessons learnt from Radiation Oncology. Asia Pacific Congress of International Oncology (APCIO). Kuala Lumpur. October 2019
23. **Kenny L.** The Importance of Quality Patient Care and Patient Pathways. TROG 31st Annual Scientific Meeting. Melbourne, Australia. March 2019
24. **Kenny L.** The role of radiotherapy, in the session on, Current management of metastatic lesions from breast cancer. Barcelona, Spain. September 2019
25. **Kenny L.** The State of Play. National Particle Therapy Symposium. Brisbane, Australia. March 2019
26. **Kenny L.** The Value of Particle Therapy to Australia. National Particle Therapy Symposium. Brisbane, Australia. March 2019
27. **Lathouras M.** “Dosimetric Implications in Radiation Therapy Planning & Treatment of Aeroform® (Tissue Expander system) Carbon Dioxide (CO₂) Filled Breast Implants.” Accuray Symposium 2019, The Westin, Perth, (25/05/2019).

Oral Presentations

1. **Blades R.** The Strata Trial Phase III RCT Findings. Cancer Nurses Society of Australia Annual Congress. 20-22 June 2019. Melbourne, Australia
2. Byrnes K, **Kairn T.** Comparison and verification of multiple radiotherapy TPS in modelling radiation transport through a metal spine implant in a water equivalent phantom. Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
3. **Chan S.** Does the external surface represent the tumour position in patients undergoing radiotherapy to the thorax/abdomen? Surfing the Ray Conference, Gold Coast, Queensland. November 2019
4. **Charles P.** The transition from novice to expert of a Radiation Oncology Medical Physicist performing radiation dosimetry. Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
5. **Crowe SB.** Improving radiation oncology with 3D printing & Biofabrication. Herston Biofabrication Institute Conference, Brisbane, Australia March 2019
6. **Crowe SB.** Particle therapy updated from the Australasian College of Physical Scientists & Engineers in Medicine. National Particle Therapy Symposium, Brisbane, Australia March 2019
7. **Crowe S, Kairn T, Sylvander S, Lancaster C.** Case study: the disappearing skull. Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
8. **Dickie G.** Cervix cancer treated by pulse dose rate brachytherapy. Australasian Brachytherapy Group Annual Scientific Meeting, Brisbane, Australia. February 2019
9. **Fogarty G.** Investigating the use of patient reported outcome measures for breast cancer patients. Surfing the Ray conference, Gold Coast, Queensland. November 2019
10. **Huang Y.** Adolescent and young adult patients' education strategies. Surfing the Ray conference, Gold Coast, Queensland. November 2019
11. **Kairn T.** Monte Carlo derived corrections for a non-water-equivalent brachytherapy applicator material. Australasian Brachytherapy Group Annual Scientific Meeting, Brisbane, Australia February 2019

Oral Presentations (cont)

12. **Kairn T, Peet S, Livingstone A.** Monte Carlo calculations of radiotherapy dose in “homogeneous” anatomy. Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
13. **Kairn T, Stephens H, Deans C.** Accuracy of optically stimulated luminescence dosimeter measurements of skin dose from high dose rate brachytherapy. Engineering and Physical Sciences in Medicine/Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
14. **Lathouras M.** “Dosimetric Implications in Radiation Therapy Planning & Treatment of Aeroform® (Tissue Expander system) Carbon Dioxide (CO₂) Filled Breast Implants.” ASMIRT/AACRT2019 Conference, Adelaide 28-31 March 2019
15. **Lathouras M.** The curious case of the invisible cranium. Surfing the Ray conference, Gold Coast, Queensland. November 2019
16. **Moloney T.** The evolution of breast tumour bed boost: a literature review. Surfing the Ray conference, Gold Coast, Queensland. November 2019
17. **Pagidas A.** A Retrospective Examination of Changes in Breast Seromas During Radiation Therapy. ASMIRT/AACRT2019 Conference, Adelaide 28-31 March 2019
18. **Stewart K.** Implementing Deformable Image Registration at the Royal Brisbane. ASMIRT/AACRT2019 Conference, Adelaide 28-31 March 2019
19. **Walsh C.** CATALYST™ : Implementing Surface Guided Radiation Therapy (SGRT) – The Royal Brisbane and Women’s Hospital experience. ASMIRT/AACRT2019 Conference, Adelaide 28-31 March 2019
20. **Wilks R.** Commissioning the Varian 3D Ring Applicator. Australasian Brachytherapy Group Annual Scientific Meeting, Brisbane, Australia February 2019.

Poster Presentations

1. **Blades R, Chan R, Yates P, McPhail S.** Cost-effectiveness of StrataXRT versus Sorbolene for radiodermatitis in head and neck cancer patients: a trial based economic evaluation. CNSA (Melb) June 2019
2. **Blades R, Chan R, Yates P, McPhail S.** Cost-effectiveness of StrataXRT versus Sorbolene for radiodermatitis in head and neck cancer patients: a trial based economic evaluation. Oncology Nursing Society conference (Anaheim USA) April 2019
3. **Charles P, Livingstone A, Kairn T, Crowe SB.** Clinical quality assurance of 3D printed patient specific radiotherapy devices. Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
4. **Crowe SB.** Optimal assay sizes for intraoperatively planned iodine-125 brachytherapy. Australasian Brachytherapy Group Annual Scientific Meeting, Brisbane, Australia. February 2019
5. **Crowe SB, Whittle E, Jones C, Kairn T.** Dosimeter selection for small field percentage depth dose and tissue-maximum-ratio measurements. ESTRO 38, April 2019
6. **Kairn T, Ikeda Y, West M, Schlect D, Crowe S,** “Retrospective review of brain dose from cranial stereotactic radiosurgery treatments of metastases” (e-poster), ESTRO 38, Milan, Italy, 2019
7. **Kairn T, Wilks R, Yu L, Crowe SB.** Monitoring total skin electron therapy using optically stimulated luminescence dosimeters. ESTRO 38. April 2019
8. **Kairn T, Berry C, Campbell L, McMahon K, Peet S, Crowe SB.** Appearance and minimisation of respiratory motion artefacts in thoracic MRI images of prone patients. Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
9. **Kairn T, Brown G, Choma K, Dawes J, Sylvander SR, Yin Y, Crowe SB.** Design and use of a modular system of 3D printed blocks to model heart and lung tissue in a breast radiotherapy phantom. Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
10. **Kairn T, Crowe SB.** Electron radiotherapy and gas-filled temporary tissue expanders. Engineering and Physical Sciences in Medicine / Asia-Oceania Congress of Medical Physics, Perth, Australia. 2019. 28-30 October 2019
11. **Obereigner E.** Constructing patient-specific 3D printed mouth-pieces: a proof of concept study. Herston Biofabrication Institute Conference, Brisbane, Australia. March 2019
12. **Roberts NA, Cubitt A, Western R, Keller J, Ives A, Wyld D.** Patient Understanding of Research in an Oncology Setting. ACTA International Clinical Trials Conference, Sydney, Australia. 2-5 October 2019
13. **Wilks R.** 3D printed patient specific vaginal moulds for brachytherapy. Herston Biofabrication Institute Conference, Brisbane, Australia. March 2019.

Other communications and outputs

1. **Blades R.** Cost-effectiveness and radiation dermatitis: A NUM’s approach. RBWH Nursing Ground Rounds June 2019
2. **Blyth J.** State-wide Radiation Therapy Research Videoconference series: Breast PROMS/PREMS. 09/07/2019
3. **Crowe S.** BIOFAB Update. Cancer Care Services Research Retreat, October 2019
4. **Dry A.** ASMIRT Qld Branch Careers & Professional Development Seminar: Graduate Preparation Series. 27/07/2019
5. **Dry A.** Developments in Radiation Therapy. Allied Health Head and Neck Peer Education Series: State-wide Videoconference (03/04/2019)
6. **Dry A, Bryant D, Walsh J, Walsh C, Grigg A, Pagidas A, Moloney T, Fogarty G, Vidler K, Smith L.** Cancer Preceptorship for Primary Health Care Providers Program, Cancer Care Services, RBWH. 20/07/2019
7. **Mee M (Stewart K PI).** ASMIRT Student Papers Presentation Night: Russell Strong Auditorium, PAH: Evaluation of a Deformable Image Registration Quality Assurance Tool for Head and Neck patients in the MIM Maestro System. 15/10/2019
8. **Obereigner E.** 3D Printing at Cancer Care Services RBWH. Australian Society of Medical Imaging & Radiation Therapy (ASMIRT) Qld. Branch Meeting (04/06/2019)
9. **Stewart K.** Mee M (QUT): “Evaluation of a Deformable Image Registration Quality Assurance Tool for Head and Neck patients in the MIM Maestro software.” State-wide Radiation Therapy Research and Development Collaborative Group, Videoconference, 11th March 2019.

ALLIEDHEALTHPROFESSIONS



Dr Clare Burns
Advanced Speech Pathologist
(Cancer Care)
Speech Pathology Department

Allied Health Professions have continued to build strength and diversity in cancer care related research across 2019. Our research activity has encompassed multidisciplinary teams within the fields of radiation oncology, medical oncology, haematology/BMT, and included other key services such as QIMR, QLD PET Service, Gastroenterology, Centre for Breast Health, and Infectious Diseases. We have continued to extend and build strong collaborations across Australia with specialist cancer care services including the Princess Alexandra Hospital, Peter MacCallum Cancer Centre, Royal Prince Alfred Hospital, and the academic centres of The University of Queensland, Queensland University of Technology, Griffith University, Bond University, and Deakin University.

In 2019, our innovative research has developed new methods for the evaluation of lymphoedema, screening for malnutrition, a model of care for the delivery of proactive enteral nutrition post allogeneic haematopoietic cell transplant, and a low risk dysphagia pathway for patients undergoing radiotherapy for head and neck cancer. The quality of Allied Health research has continued to receive national and international recognition across 2019. Dr Teresa Brown (Nutrition and Dietetics) was awarded the UQ Dean's Award for Outstanding Higher Degree by Research, Sarah Anderson (Nutrition and Dietetics) was awarded best oral at the British Association for Parenteral and Enteral Nutrition Annual Conference, and Laura Moroney (Speech Pathology) won best PhD student presentation at the Australia and New Zealand Speech Pathology Conference. Our research

teams have also been recognised locally with the RBWH Head and Neck Cancer Service receiving Highly Commended in the Clinical Research category at the Metro North HHS Research Excellence Awards, Allied Health Professions winning the Service Line Award for the Speech Pathology and Dietetics Head and Neck Cancer Service, and Nutrition and Dietetics (lead) winning the Health Practitioner Research Award at the 2019 Herston Healthcare Symposium. Dr Clare Burns and Laura Moroney also received an Excellence Awards in Research/Knowledge Translation from the Queensland Health Speech Pathology Advisory Committee.

Over the last year, Allied Health Professions staff have been awarded 15 new grants totalling over \$650,000, published 9 peer reviewed publications and presented 31 presentations at 9 international and 10 national conferences related to cancer care research. Allied Health Professions have also continued to grow in research capacity and capability across 2019. Key outcomes in this area have included Laura Moroney (Speech Pathology) submitting her PhD thesis in September, and six Allied Health clinical staff enrolled in research higher degrees supported by Post Graduate Research Scholarships from the RBWH Foundation and The University of Queensland. All students are supervised by clinical and research staff within Allied Health and the wider multidisciplinary team, and projects are embedded within RBWH to support the translation of outcomes to benefit both cancer care patients and services alike.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Joanne Hiatt	PhD, UQ (2017-2023)	Nutrition throughout head and neck cancer treatment: patient experience and adherence, barriers and enablers to enteral feeding recommendations	Merrilyn Banks, Teresa Brown, Judy Bauer
Sarah Andersen	PhD, UQ (2015-2019)	Investigating nutrition support during allogeneic stem cell transplantation	Judy Bauer, Merrilyn Banks, Olivia Wright
Emilie Croisier	PhD, UQ (2018-2021)	Nutritional outcomes of gynaecology patients undergoing pelvic radiotherapy: understanding the patient experience and dietary recommendations for symptom management	Judy Bauer, Teresa Brown
Jasmine Jones	PhD, UQ (2018-2021)	Understanding the regional and remote head and neck cancer patient services journey	Liz Ward, Clare Burns, Rebecca Nund, Laurelie Wall
Laura Moroney	PhD, UQ (2015-2019)	Dysphagia and related toxicities in head and neck patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy	Liz Ward, Jane Crombie, Clare Burns
Sarah Wilson	MPhil, UQ (2018-2022)	Assessment of dysphagia following laryngectomy	Bena Cartmill, Clare Burns

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position <i>(Conjoint fellow, Adjunct, Honorary)</i>	Research Program	Affiliated University/ies
Teresa Brown	Research Coordinator, Associate Lecturer	Nutrition in cancer care	University of Queensland (2018-current)
Clare Burns	Clinician Research Fellow, Honorary Lecturer	Speech pathology and technology enabled health care	Metro North HHS (2019-2022) University of Queensland (2017-2020)
Maree Grier	Adjunct Lecturer	School of Psychology	University of Queensland (2018-current)
Hildegard Reul-Hirche	Honorary Research Position	Physiotherapy in cancer care	N/A

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Laura Moroney	Liz Ward (<i>Centre for Functioning and Health Research [CFAHR]; UQ</i>), Jane Crombie, Jennifer Helios, Clare Burns, Ann-Louise Spurgin, Liz Kenny, Brett Hughes, Clare Blake	Dysphagia and related toxicities in head and neck patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy
Clare Burns	Liz Ward (<i>CFAHR; UQ</i>), Jasmine Foley (<i>UQ</i>), Rebecca Nund (<i>UQ</i>), Laurelie Wall (<i>UQ; MSHHS</i>), Maurice Stevens, Lizbeth Kenny	Understanding the regional and remote Head and Neck Cancer (HNC) patient services journey
Clare Burns	Elizabeth Ward (<i>UQ</i>), Claire Blake, Liz Kenny , Rachael Villiers (<i>CQHHS</i>), Mia Hemingbrough (<i>CQHHS</i>), Tracy Comans (<i>UQ</i>), Kerrie-Anne Frakes (<i>CQHHS</i>), Phil Greenup (<i>QH</i>)	Implementation of a telepractice service providing specialist swallowing, nutrition, and communication intervention for patients with head and neck cancer
Clare Burns	Liz Ward (<i>CFAHR; UQ</i>), Annie Hill (<i>UQ</i>), Ben Keir (<i>Medical Physics</i>), Sharon Kelly (<i>ENT</i>), Linda Porter (<i>Medical Imaging</i>), Nick Phillips (<i>Medical Imaging</i>)	Conducting instrumental assessments of adult dysphagia via telehealth
Claire Blake	Teresa Brown, Rainbow Lai (<i>UQ</i>), Laura Moroney, Jennifer Helios, Brett Hughes, Liz Kenny , Anita Pelecanos (<i>QIMR</i>), Judy Bauer (<i>UQ</i>)	Nutrition outcomes and toxicities from tomotherapy in head and neck cancer patients
Claire Blake	Teresa Brown, Laura Moroney, Jennifer Helios, Brett Hughes, Liz Kenny , Anita Pelecanos (<i>QIMR</i>)	Enteral Nutrition outcomes and toxicities from tomotherapy in head and neck cancer patients

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Claire Blake	Merrilyn Banks (<i>Nutrition and Dietetics</i>), Mark Appleyard (<i>Gastroenterology</i>)	Cost effectiveness of Dietitian-led PEG service
Claire Blake	Elise Treleaven , Anna Edwards (<i>UQ</i>), Teresa Brown	Evaluation of pre-treatment model of care in patients with head and neck cancer
Claire Blake	Elise Treleaven , Ally di Bella , Teresa Brown , Adrienne Young (<i>Nutrition and Dietetics</i>), Jenni Leutenegger , David Wyld	Implementation of patient-led malnutrition screening in the cancer care ambulatory setting
Emilie Croisier	Alana Morrissy (<i>UQ</i>), Teresa Brown , Alice Brigg , Philip Chan , Jeffrey Goh , Judy Bauer (<i>UQ</i>)	The clinical and nutritional implications of pelvic radiotherapy in gynaecology oncology patients, an observational study
Joanne Hiatt	Teresa Brown , Merrilyn Banks (<i>Nutrition and Dietetics</i>), Judy Bauer (<i>UQ</i>)	Patient experience of nutrition care across three treatment modalities for the management of head and neck cancer
Joanne Hiatt	Angela Byrnes	Implementation of enteral feeding protocol for patients on 8AN ward
Sarah Andersen	Merrilyn Banks (<i>Nutrition and Dietetics</i>), Glen Kennedy , Teresa Brown , Nicholas Weber , Judy Bauer (<i>UQ</i>)	Staff perceptions, barriers and enablers to enteral feeding during allogeneic stem cell transplantation
Sarah Andersen	Merrilyn Banks (<i>Nutrition and Dietetics</i>), Glen Kennedy , Teresa Brown , Nicholas Weber , Judy Bauer (<i>UQ</i>)	Nutrition support during allogeneic transplantation in Australian adult bone marrow transplantation units
Sarah Andersen	Madison Jefferis (<i>UQ</i>), Cameron Curley , Teresa Brown , Judy Bauer (<i>UQ</i>)	Investigating the effect of malnutrition on clinical outcomes post allogeneic stem cell transplantation
Teresa Brown	Jane Crombie , Ann-Louise Spurgin , Aaron Chan (<i>UQ</i>), Kathleen Dwyer , Merrilyn Banks (<i>Nutrition and Dietetics</i>), Brett Hughes , Judy Bauer (<i>UQ</i>), Charles Lin , Liz Kenny	Revalidation of swallow and nutrition guidelines in tomotherapy
Teresa Brown	Ray Chan (<i>PAH</i>), Angela Byrnes , Alex Molassiotis (Hong Kong), Patsy Yates (<i>QUT</i>), Gillian Nasato , Elise Button , Andrea Marshall (<i>Griffith</i>), Liz Isenring (<i>Bond University</i>), David Wyld , Melissa Eastgate , Nicole Gavin	A patient-family-centred intervention to promote nutrition in advanced cancer patients: a pilot randomised controlled trial
Teresa Brown	Louise Cooney (<i>PAH</i>), Louise Elvin-Walsh (<i>PAH</i>), Eliza Kern , Suzie Ahern , David Smith (<i>QIMR</i>), Liz Kenny , Brett Hughes , Sandro Porceddu (<i>PAH</i>), Ingrid Hickman (<i>PAH</i>), Bena Cartmill (<i>PAH</i>)	Comparison of nutrition and clinical outcomes in H&N cancer patients following reactive and proactive nutrition support approaches
Teresa Brown	Merrilyn Banks (<i>Nutrition and Dietetics</i>), Brett Hughes , Charles Lin , Liz Kenny , Louise Campbell (<i>Qld PET Service</i>), Judy Bauer (<i>UQ</i>)	Assessment of sarcopenia and malnutrition in patients with head and neck cancer undergoing treatment of curative intent – implications for practice
Leonie Naumann	Jennifer Paratz (<i>Physiotherapy</i>), Michelle Cottrell (<i>Physiotherapy</i>), Hildegard Reul Hirche , Clare Burns , Tracy Comans (<i>UQ</i>), Anna Finnane (<i>UQ</i>), Trevor Russell (<i>UQ</i>)	Pilot study of education and monitoring for early lymphoedema detection being delivered by telehealth to patients after breast cancer surgery
Kirsty Quince	Leonie Naumann , Michelle Cottrell (<i>Physiotherapy</i>), Hildegard Ruel-Hirche , Kowsalya Murugappan (<i>Centre for Breast Health, RBWH</i>)	Incidence of lymphoedema following lymph node removal in the surgical treatment of breast cancer: a retrospective audit
Leonie Naumann	Hildegard Ruel-Hirche , Amanda Pigott (<i>UQ</i>), Jodie Nixon (<i>PAH</i>)	Advanced lymphedema course quality evaluation
Robyn Scheer		The lymphoedema arm measurement study – Winter vs summer
Robyn Scheer	Nicole Andrews (<i>OT</i>), Erin Crofton (<i>OT</i>)	The effect of limb position on leg circumference measurements in patients diagnosed with lower limb lymphoedema
Ashleigh Scott, Glen Kennedy , Katie McMahon, Olivier Salvado, Kate Thompson and Ada Lo	Ada Lo , Kate Thompson	MINERAL: Magnetic Resonance Imaging and Quantitative susceptibility mapping (MRI-QSM) of brain iron to identify chemotherapy-associated neurocognitive impairment (CANI) in Acute Myeloid Leukemia (AML)

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Melissa Eastgate <i>(Cancer Care Services)</i>	Shu Fen Lee, David Wyld, Teresa Brown	Patient perceptions of diet and cancer – survey of cancer care patients
Nicole Gavin <i>(Cancer Care Services)</i>	Glen Kennedy, David Patterson <i>(Infectious Diseases)</i> , Claire Rickard <i>(Griffith Uni)</i> , Sarah Andersen, Elise Button, Rebecca Lippiatt	Exploring changes in gastrointestinal tract microbiome and their influence on mucosal barrier injury laboratory confirmed bloodstream infection in patients diagnosed with high risk features of acute myeloid leukaemia
Nicole Gavin <i>(Cancer Care Services)</i>	Glen Kennedy , Claire Rickard <i>(Griffith Uni)</i> , Patrick Harris <i>(UQ)</i> , Sarah Andersen, Elise Button, Rebecca Lippiatt	Improving central-line associated bloodstream infection diagnosis in malignant haematology patients with parenteral nutrition (Improving CLABSI Trial)
Nicole Kiss <i>(Deakin University)</i>	Anna Boltong <i>(Cancer Council)</i> , Merran Findlay <i>(RPA)</i> , Belinda Steer <i>(Peter Macallum)</i> , Jenelle Loeliger <i>(Peter Mac)</i> , Teresa Brown, Liz Isenring <i>(Bond)</i> , Judy Bauer <i>(UQ)</i>	Australian cancer clinician's awareness, perceptions and practices regarding to cancer-related malnutrition and sarcopenia
Alice Pashley <i>(UQ)</i>	Teresa Brown, Belinda Lehn, Robert Hodge <i>(ENT)</i> , Judy Bauer <i>(UQ)</i>	Investigating the effects of nutritional status on post-operative complications in patients with head and neck cancer undergoing laryngectomy and pharyngolaryngectomy
Judy Bauer <i>(UQ)</i>	Teresa Brown, Marilyn Banks <i>(Nutrition and Dietetics)</i> , Brett Hughes, Charles Lin, Liz Kenny, Louise Campbell <i>(Qld PET Service)</i>	Comparison of body composition methods in head and neck cancer patients undergoing chemoradiotherapy – PET-CT vs BIA
Lee Reid, Jurgen Fripp, Stephen Rose, Marita Prior, Rosalind Jeffree, David Walker, Hamish Alexander, Parnesh Raniga, Julie Trinder, Kate Thompson and Ada Lo	Ada Lo, Kate Thompson	Predicting Surgery-induced Neurological Deficits using CONSULT. A study to measure the ability of CONSULT tractography software to predict surgery-induced neurological deficits
Ashleigh Scott, Glen Kennedy, Katie McMahon, Olivier Salvado, Kate Thompson and Ada Lo	Ada Lo, Kate Thompson	MINERAL: Magnetic Resonance Imaging and Quantitative susceptibility mapping (MRI-QSM) of brain iron to identify chemotherapy-associated neurocognitive impairment (CANI) in Acute Myeloid Leukemia (AML)

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
RBWH Head and Neck Cancer Service	Clinical Research Award – Highly commended	MNHHS Research Excellence Awards 2019
Allied Health Professions - Speech Pathology and Dietetics Head and Neck Cancer Service	Service Line Award	QuARRIES Awards 2019
Sarah Andersen	Best oral communication	British Association for Parenteral and Enteral Nutrition (BAPEN) Annual Conference, November 2019
Claire Blake, Anna Edwards, Elise Treleven, Teresa Brown, Brett Hughes, Charles Lin, Lizbeth Kenny, Marilyn Banks, Judy Bauer	Health Practitioner Research Award	Herston Healthcare Symposium 2019
Teresa Brown	2017 Dean's Award for Outstanding Higher Degree by Research Theses	University of Queensland – awarded 5 th March 2019
Clare Burns	Excellence Award in Research/Knowledge Translation	Queensland Health Speech Pathology Advisory Committee (QHSPAC) Annual Forum, 10 th September 2019, Brisbane
Laura Moroney	Best PhD Student Oral Presentation	Speech Pathology Australia Conference, 5 th June 2019, Brisbane
Laura Moroney	Excellence Award in Research/Knowledge Translation	Queensland Health Speech Pathology Advisory Committee (QHSPAC) Annual Forum, 10 th September 2019, Brisbane

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Claire Blake, Ally di Bella, Teresa Brown, Adrienne Young, Jenni Leutenegger, David Wyld	Nutrition and Dietetics; Cancer Care	Implementation of patient-led malnutrition screening in the cancer care ambulatory setting	RBWH Foundation Diamond Grant	\$40,000	\$20,000	2018-2019
Midori Nakagaki, Glen Kennedy, Cameron Curley, Michael Smith, Therese hays, Jenni Leutenegger, Annett Barnes, Caroline Stewart, Teresa Brown, Rebecca Fichera, Leonie Naumann, Angela O'Malia, Ian Coombes, Karen Whitfield, Emma Foley, Suzette Fox, Nicole Gavin, Justin Brennan	Pharmacy, Cancer Care Services Nutrition and Dietetics, Physiotherapy, Social Work	Implementation and Evaluation of a Nurse- Allied Health Multidisciplinary Post-Bone Marrow Transplant Clinic	MNHHS SEED Innovation Fund	\$81,150	\$11,813	2019
Natasha Roberts <i>(Cancer Care Services, RBWH), Leonie Naumann</i>	Physiotherapy and Cancer Care	Nurse-led symptom management in medical oncology care	RBWH Foundation Diamond Care Grants 2019	\$39,027	\$9,825.00	2019-2020
Leonie Naumann, Jennifer Paratz, Hildegard Reul-Hirche, Michelle Cottrell, Clare Burns, Anna Finnane (UQ), Tracy Comans (UQ), Trevor Russell (UQ)	RBWH Physiotherapy and University of Queensland	A telehealth model for education and monitoring of early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: a pilot cohort study	Health Practitioner Research Scheme	\$29,929	\$14,964.50	2018-2019
Leonie Naumann, Jennifer Paratz, Hildegard Reul-Hirche, Michelle Cottrell, Clare Burns, Anna Finnane, Tracy Comans, Trevor Russell, Kirsty Quince	RBWH Physiotherapy, Speech Pathology and University of Queensland	A telehealth model for education and monitoring of early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: a pilot cohort study	RBWH Foundation Diamond Care Grants 2019	\$12,816	\$12,816	2019-2020
Clare Burns	Speech Pathology	Enhancing speech pathology dysphagia services through telepractice	Metro North Clinician Research Fellowships	\$175,000	\$43,000	2019-2022
Liz Ward (CFAHR, UQ), Clare Burns, Nicky Graham (QH), Rebecca Nund (UQ), Laurelie Wall (UQ), Jasmine Foley, Wendy Comben (QH), Emily Missenden (QH)	Speech Pathology	Enhancing SP outpatient models of care in regional services for patients with Head and Neck Cancer	Health Practitioner Research Scheme	\$95,808	\$28,830	2019-2020
Leonie Naumann	Physiotherapy	A telehealth model for education and monitoring of early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: a pilot cohort study	RBWH Foundation Diamond Care Grant	\$12,816		2019-2020
Nadia de Silva, Lindy Jeffree <i>(Neurosurgery), David Copland (UQ)</i>	Speech Pathology	Development of an innovative intra-operative language testing battery for patients with brain tumours	RBWH Diamond Care Grant	\$28,202.50	\$14,101	2019-2020

2019 Research Publications

Journal Articles

1. **Andersen S**, Weber N, Kennedy G, **Brown T**, **Banks M**, Bauer J. [Tolerability of proactive enteral nutrition post allogeneic haematopoietic progenitor cell transplant: a randomised comparison to standard care](#). *Clinical Nutrition*. DOI: 10.1016/j.clnu.2019.06.012
2. **Andersen, S.**, Staudacher, H., Weber, N., Kennedy, G., Varelias, A., **Banks, M.** & Bauer, J. (2019). Pilot study investigating the effect of enteral and parenteral nutrition on the gastrointestinal microbiome post-allogeneic transplantation. *British Society for Haematology*. doi: 10.1111/bjh.16218
3. **Brown T.** Patients with HPV-associated oropharyngeal head and neck cancer have higher rates of weight loss and increased supportive needs. *J Medical Radiation Sciences* Published online 19 December 2019 Vol 66 Issue 4 pages 226-228. doi.org/10.1002/jmrs.360
4. **Burns, C.L.**, Wishart, L.R., Kularatna, S., Ward, E.C. (in press). Knowing the costs of change: An introduction to health economic analyses and considerations for their use in implementation research. *Speech, Language and Hearing*. DOI: 10.1080/2050571X.2019.1693750
5. **Burns, C. L.**, Ward, E. C., Gray, A., Baker, L., Cowie, B., Winter, N., ... Turvey, J. (2019). Implementation of speech pathology telepractice services for clinical swallowing assessment: An evaluation of service outcomes, costs and consumer satisfaction. *Journal of Telemedicine and Telecare*, 25(9), 545–551. <https://doi.org/10.1177/1357633X19873248>
6. **Di Bella, A., Croisier E, Blake C,** Pelecanos A, **Brown T,** Bauer J. (2019). Assessing the concurrent validity and inter-rater reliability of patient-led screening using the Malnutrition Screening Tool (MST) in the ambulatory cancer care outpatient setting. *Journal of the Academy of Nutrition and Dietetics*. Published online 28 December 2019. Doi.org/10.1016/j.jand.2019.10.015
7. Gane EM, McPhail SM, Hatton AL, Panizza BJ, **O’Leary SP.** Neck and Shoulder Motor Function following Neck Dissection: A Comparison to Healthy Control Subjects. *Otolaryngology-Head and Neck Surgery*. 2018 DOI: 10.1177/0194599818821885
8. **Moroney L,** Ward EC, **Helios J, Crombie J, Burns C.L., Blake C.,** Comans, T., **Kenny L., Chua B., Hughes B.** (2019). The RBWH head and neck cancer low risk speech pathology pathway: Evaluation of an alternative supportive care service delivery model. *Supportive Care in Cancer*, doi:10.1007/s00520-019-04992-x
9. Steele M, Janda M, Vagenas D, Ward L, Cornish B, Box R, Gordon S, Matthews M, Poppitt S, Plank L, Yip W, Rowan A, **Reul-Hirche H,** Obermair A, Hayes S. A bioimpedance spectroscopy-based method for diagnosis of lower-limb lymphoedema. *Lymphatic Research and Biology*. 2019 Sept 5 doi: 10.1089/lrb.2018.0078 (Epub ahead of print).

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Burns, C.L.** Interdisciplinary Dysphagia Clinical Programs: How do we develop? Dysphagia Research Society. 7th March 2019. San Diego, California
2. **Burns, C.L.,** Ward, E.C. Communications from clinic to community using technology & telepractice: Implications for dysphagia practice. Dysphagia Research Society. 7th March 2019. San Diego, California
3. Ward, EC., & **Burns, C.L.** Using technology & telepractice: Implications for dysphagia practice. Speech Pathology Australia Conference. 7th June 2019. Brisbane.

Oral Presentations

1. **Andersen S.** Nutrition Support and the gastrointestinal microbiome, a systematic review and pilot study. BAPEN Annual Conference, Belfast, November 2019
2. **Blake, C., Edwards, A., Treleaven, E., Brown, T., Hughes, B., Lin, C., Kenny, L., Banks, M.,** Bauer, J. Evaluation of Nutrition Outcomes Post-Implementation of a Pre-Treatment Model Of Care For Patients With Head And Neck Cancer Receiving Chemoradiotherapy. Herston Healthcare Symposium, Brisbane September 2019
3. **Blake, C., Edwards, A., Treleaven, E., Brown, T., Hughes, B., Lin, C., Kenny, L., Banks, M.,** Bauer, J. Nutrition Outcomes Post-Implementation of a Pre-Treatment Model Of Care For Patients With Head And Neck Cancer Receiving Chemoradiotherapy. Herston Healthcare Symposium, Brisbane September 2019
4. **Burns, C.L.** Evaluation of service outcomes, costs and consumer engagement following implementation of telepractice services for swallowing assessments. Herston State of the Art Healthcare symposium. 12th September 2019, Brisbane
5. **Burns, C.L.** Speech Pathology Telepractice Services. Queensland Health Speech Pathology Advisory Committee Annual Forum. 9th September 2019, Brisbane
6. **Burns, C.L.** An Evaluation of Service Outcomes, Costs, and Consumer Engagement Following Implementation of a Telepractice Service for Swallowing Assessments. Successes and Failures in Telehealth Conference, 21-23 October 2019, Gold Coast
7. **Burns, C.L.** A Clinician Researchers journey. Cancer Care Research Retreat, 24th October 2019, RBWH Education Centre
8. **Hiatt J, Brown T, Lewis CA, Banks M,** Bauer J. Patient and carer experience of nutrition care throughout and beyond treatment for head and neck cancer: a systematic review and meta-synthesis. Australia & New Zealand head & neck Cancer Society ASM, Adelaide, September 2019
9. **Irwin-Hobbs T and Brennan, J.** The 5C Group – Building connections between patients and carers on the ward: Social Work-facilitated group work in Haematology and Bone Marrow Transplant. Oncology Social Work Australia Conference, Hobart, Australia, 21-22 Nov 2019
10. Jefferis, M., **Andersen, S., Brown, T., Curley, C.,** Bauer, J. Effect of malnutrition on clinical outcomes post allogeneic stem cell transplantation. DAA National Conference, Brisbane August 2019

Oral Presentations (cont)

11. **Moroney, L., Helios, J., Ward, E., Crombie, J., Burns, C.L., Blake, C.,** Pelecanos, A., Comans, T., **Kenny, L., Chua, B., Hughes, B.** Outcomes of a new speech pathology service for "low risk" patients receiving radiation for HNC: Is it safe and efficient? Herston State of the Art Healthcare symposium. 9th September 2019, Brisbane
12. **Moroney, L., Helios, J., Ward, E., Crombie, J., Burns, C.L., Blake, C.,** Pelecanos, A., Comans, T., **Kenny, L., Chua, B., Hughes, B.** Outcomes of a new speech pathology service for "low risk" patients receiving radiation for HNC: Is it safe and efficient? Queensland Health Speech Pathology Advisory Committee Annual Forum. 9th September 2019, Brisbane
13. **Moroney, L., Helios, J., Ward, E., Crombie, J., Burns, C.L., Blake, C.,** Pelecanos, A., Comans, T., **Kenny, L., Chua, B., Hughes, B.** Outcomes of a new speech pathology service for "low risk" patients receiving radiation for HNC: Is it safe and efficient? Speech Pathology Australia National Conference. 5th June 2019, Brisbane
14. **Quince K, Burns C, Fischera R, Crofton E, Naumann L, Thomas P.** The critically unwell patient with cancer: a multidisciplinary challenge. The Herston Healthcare Symposium – State of the Art. Brisbane, September 2019
15. Waters M, Brebner N, Fielding B, Chaplain A, Bransdon M, **de Jersey SJ.** Allied health in cancer care, electronically capturing what we do to inform succession planning from a skills based perspective. National Allied Health Conference. Brisbane August 2019.

Poster Presentations

1. **Blake, C., Edwards, A., Treleaven, E., Brown, T.,** Hughes, B., Lin, C., Kenny, L., **Banks, M.,** Bauer, J. Nutrition Outcomes Post-Implementation of a Pre-Treatment Model Of Care For Patients With Head And Neck Cancer Receiving Chemoradiotherapy. Herston Healthcare Symposium, Brisbane September 2019
2. **Brown T, Banks M, Campbell L, Hughes B, Ahern E, Lin C, Kenny L,** Bauer J. Assessment of sarcopenia and malnutrition in patients with head and neck cancer undergoing treatment of curative intent – implications for practice. Society for Sarcopenia, Cachexia and Wasting Disorders, Berlin, December 2019
3. **Burns, C.L.,** Ward, E., Gray, A., Baker, L., Cowie, B., Rusch, R., Winter, N., Bignell, S., & Turvey, J. Evaluation of service outcomes, costs and consumer engagement following implementation of telepractice services for swallowing assessments. Herston State of the Art Healthcare symposium. 9th September 2019, Brisbane
4. **Croisier, E.,** Morrissy, A, **Brown, T.,** Grigg, A., Chan, P., Goh, J., Bauer, J. The Clinical and Nutritional implications of Pelvic Radiotherapy in Gynaecology Oncology Patients, an Observational Study. Herston Healthcare Symposium, Brisbane September 2019
5. **Croisier E, Brown T,** Bauer J. The efficacy of dietary fibre modification for managing gastrointestinal toxicity symptoms in gynae-oncology patients undergoing pelvic radiotherapy: a systematic review. ANZGOG Conference, Sydney, March 2019
6. **Croisier, E., Brown, T., Bauer, J.** The role of dietary fibre in managing gastrointestinal toxicity symptoms in gynaecology patients undergoing pelvic radiotherapy DAA National Conference, Brisbane August 2019
7. **Croisier, E.,** Morrissy, A, **Brown, T.,** Grigg, A., Chan, P., Goh, J., Bauer, J. The Clinical and Nutritional implications of Pelvic Radiotherapy in Gynaecology Oncology Patients, an Observational Study. Herston Healthcare Symposium, Brisbane September 2019
8. **Jefferis, M., Andersen, S., Brown, T.,** Curley, C., and Bauer, J. Effect of malnutrition on clinical outcomes post allogeneic stem cell transplantation. Herston Healthcare Symposium, Brisbane September 2019
9. **Kiss N, Bauer J, Boltong A, Brown T, Isenring E, Loeliger J, Steer B, Findlay M.** Australian Cancer Clinicians' awareness, perceptions and practices regarding cancer-related malnutrition & sarcopenia. AuSPEN, Adelaide, November 2019
10. **Kiss N, Bauer J, Boltong A, Brown T, Isenring E, Loeliger J, Steer B, Findlay M.** Australian Cancer Clinicians' awareness, understandings and perceptions regarding cancer-related malnutrition & sarcopenia. Clinical Oncological Society of Australia (COSA) ASM, Adelaide, November 2019
11. **Kiss N, Bauer J, Boltong A, Brown T, Isenring E, Loeliger, Steer B, Findlay M.** Australian cancer clinicians' awareness, perceptions and practices regarding cancer-related malnutrition and sarcopenia. MASCC, San Francisco, June 2019
12. **Pashley A, Brown T, Lehn B, Hodge R,** Bauer J. Investigating the effects of nutritional status on post-operative complications in a head and neck surgical population. Clinical Oncological Society of Australia (COSA) ASM, Adelaide, November 2019
13. **Taubert, S.,** Ward, E., **Burns, C.L., Bassett, L., Porter, L.,** Burfein, P. Implementation and Evaluation of speech pathology-led referring process for videofluoroscopic studies. Speech Pathology Australia National Conference. 3rd June 2019. Brisbane.

Other communications and outputs:

Staff Member	Details
Clare Burns	An update on Speech Pathology intervention in Head and Neck Cancer: Current pathways, practices and considerations. Speech Pathology Australia Live Webinar 31 st January 2019
Laura Moroney	PhD Thesis 'Dysphagia and related toxicities in head and neck patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy' submitted to University of Queensland, 24 th September 2019



CRITICAL CARE & CLINICAL SUPPORT SERVICES

CRITICAL CARE & CLINICAL SUPPORT SERVICES



Dr Mark Mattiussi
Executive Director
Critical Care and
Clinical Support Services

The RBWH Critical Care and Clinical Support Service team live and breathe research as an integral part of their clinical services. The 2019 report demonstrates commitment from the entire team to advancing healthcare in their services through research and the translation of that research into clinical practice.

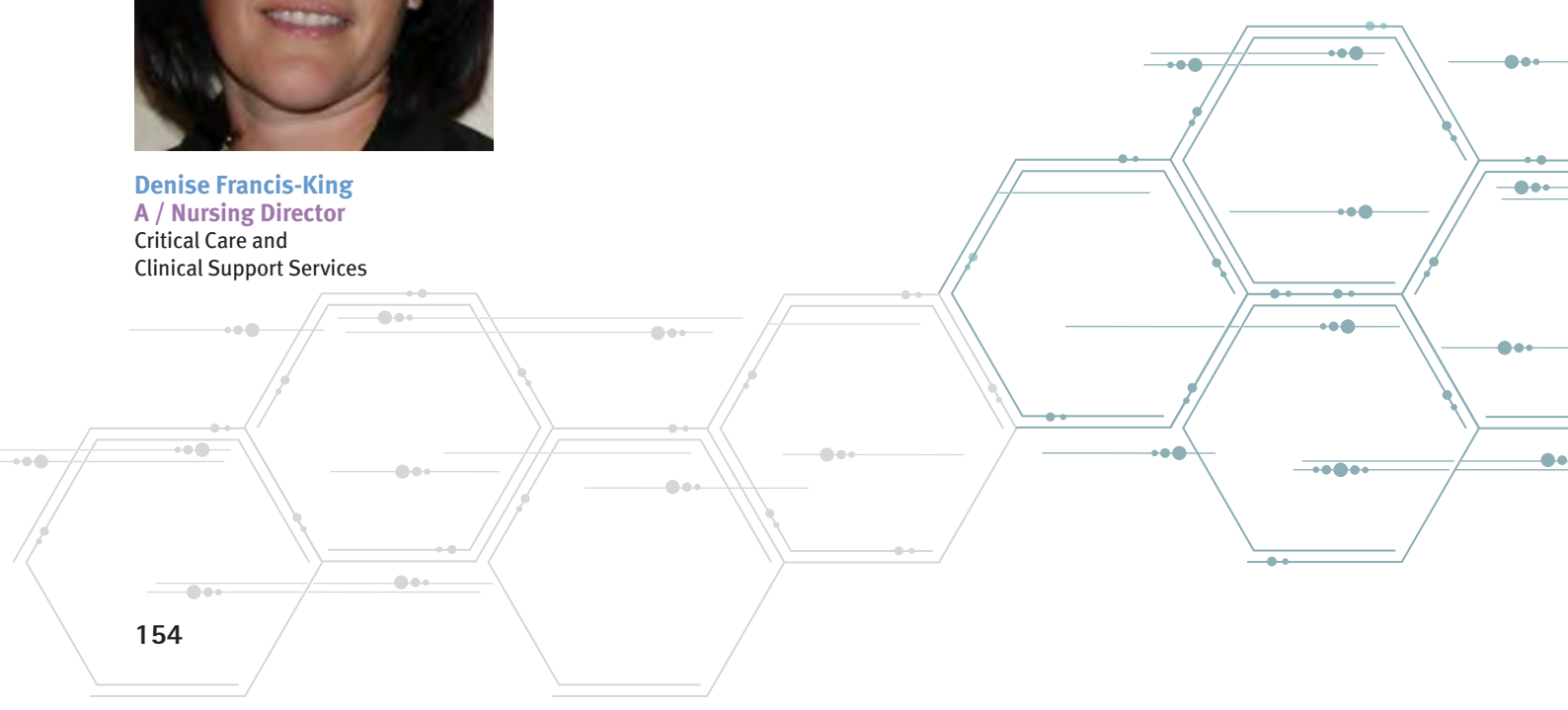
Our research team continue to be recognised for their work, by their peers and others within MNHHS, their partner organisation and by national expert panels and beyond. The research team's enthusiasm, heartfelt passion and their extraordinary efforts see them holding a place on the national and international research stage which they justifiably deserve.

The Critical Care and Clinical Support Services researchers hold pride of place amongst the world's most highly cited research and scientific thought leaders. Our researcher's work, trials and publications have, and continue to, influence the way clinical medicine is practiced nationally and across the world in emergency, trauma, critical and intensive care.

Our researchers place great emphasis and focus on partnering and collaboration as this dramatically increases the capacity and capability for research and each service describes their partnerships within the 2019 report. Our team of clinicians and researchers are well published in their specialty areas in peer reviewed journals, text books and beyond. This report highlights their work and achievements over 2019. The RBWH Critical Care and Clinical Support Service Researchers and their collaborating partners can be extremely proud of their achievements.



Denise Francis-King
A / Nursing Director
Critical Care and
Clinical Support Services



EMERGENCY & TRAUMA CENTRE

In 2019, our clinician researchers conducted new and ongoing medical and health services research projects on a broad range of themes related to emergency medicine, nursing and allied health, including pre-hospital care. We collaborated extensively with other RBWH departments as well as external organisations. A new collaboration with CSIRO and The University of Queensland was established to study the clinical applications of candidate biomarkers for traumatic brain injury, and our partnership with investigators in Far North Queensland has helped to secure funding to study cardiac health in Aboriginal and Torres Strait Islanders. We commenced a unique clinical trial of activity kits to help patients with dementia avoid becoming confused and disoriented while in our care.

We continued to grow our own research capacity with an increase in the number of clinical nurses engaging in research activities. Over the last year, our achievements have been reported in 25 academic papers, two invited talks and eight presentations at domestic and international conferences. We congratulate Louise Cullen and Jaimi Greenslade, together with Wil Parsonage from Cardiology, for their recent co-authored publication in The New England Journal of Medicine. We congratulate all our researchers who were the recipients of grant funding, and Jaimi Greenslade for receiving an Advance Queensland Research Fellowship.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Brandon Allwood	MPhil, QUT (2018-2021)	Improving patient's pain through a standardised nurse-initiated medication regime	Fiona Coyer, James Hughes
Abdulmalik Almutairi	MNursing, QUT	Factors influencing the time to appropriate antibiotics in patients with bacteraemia presenting to the ED	James Hughes
Samuel Brookfield	PhD, UQ (2018-2021)	Critical Ethnography of Methamphetamine Recovery	Lisa Fitzgerald, Linda Selvey, Lisa Maher
Elizabeth Doran	MPhil, UQ (2018-2022)	ED pharmacists extended scope of practice	Louise Cullen
Laura Foran	MPhil, QUT (2017-2019)	Clinical presentation characteristics of Aboriginal and Torres Strait Islander patients presenting to an Emergency Department with suspected Acute Coronary Syndrome	Louise Cullen, Jaimi Greenslade
Byju Jacob	MAAdvancedNPrac <i>(Emergency Nursing)</i> , QUT	The Effectiveness of Triage Accuracy in an Emergency Department affecting patient flow: An integrative literature review	Martha Mansah, James Hughes
Daniel Lancini	PhD, UQ (2016-2020)	Atrial fibrillation in hospitalised patients	Louise Cullen , Paul Martin
Caitlin Lock	MPhil, QUT	Evaluation of clinical pharmacist medication review in ED and its impact on hospital length of stay for admitted older medical patients	Louise Cullen
Siegfried Perez	PhD, UQ (2016-2020)	Data Extraction from Electronic Health Records for a Chest Pain Clinical Data Registry	Louise Cullen, Jaimi Greenslade
Laura Scott	MPhil, UQ (2018-2020)	Long term outcomes for patients undergoing accelerated chest pain assessment strategies	Louise Cullen, Jaimi Greenslade

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Venkat Acholi	Emergency Physiotherapist	0.05	In-kind	Physiotherapy defined scope of practice (prescribing)	
Di Atkinson	Research Nurse	0.05	In-kind	Therapeutic Activity Kits	
Daniel Bodnar	Senior Lecturer		In-kind	Pre-hospital and Emergency Care	The University of Queensland

RBWH Research Staff with research roles, positions or appointments e.g. Coordinators, etc (cont)

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Anthony Brown	Professor of Emergency Medicine / Adjunct Professor	0.30	External, In-kind	Emergency Medicine	The University of Queensland / Queensland University of Technology
Nathan Brown	Senior Lecturer	1.00	Operational	Emergency Care	The University of Queensland
Emily Brownlee	Research Nurse	0.30	External	Chest pain	
Julia Brownlie	Nurse Practitioner	0.05	In-kind	Emergency nurse practitioner in early pregnancy, Anti-D	
John Burke	Adjunct Associate Professor	0.10	In-kind	ED models of care	Queensland University of Technology
Kevin Chu	Director of Emergency Research	0.20	In-kind	Emergency Medicine, Headache	The University of Queensland / Queensland University of Technology
Louise Cullen	Professor	0.40	In-kind	Chest pain, biomarkers	Queensland University of Technology / The University of Queensland
Laura Foran	Research Nurse	0.80	External	Chest pain	Queensland University of Technology
Nikesh Gopal Kumar	Project Officer	0.10	In-kind	Health Services	
Jaimi Greenslade	Associate Professor/ Principal Research Fellow	1.0	External	Chest pain pathways	Queensland University of Technology / The University of Queensland
Tracy Hawkins	Research Nurse	0.2	External	Chest pain/Syncope	
Janelle Heine	Emergency Physiotherapist	0.05	In-kind	Physiotherapy defined scope of practice (prescribing)	
Leonie Higgs	Research Nurse	0.05	In-kind	Therapeutic Activity Kits	
Angela Hills	Research Nurse	0.3	External	Blood Cultures	
James Hughes	Conjoint Senior Nursing Research Fellow	1.00	Operational (0.2), External (0.8)	Emergency Nursing, Pain	Queensland University of Technology
Catherine Hurn	Senior Lecturer	0.05	In-kind	Trauma	The University of Queensland
David Kramer	Clinician Researcher	0.05	In-kind	Physiotherapy defined scope of practice (prescribing)	
Trent Lipp	Senior Lecturer	0.05	In-kind	Trauma	The University of Queensland
Bill Lukin	Senior Lecturer	0.05	In-kind	Emergency care of frail and elderly, ED palliative care	The University of Queensland
Anna-Lisa Lyrstedt	Research Nurse	0.4	External	Brain injury biomarkers	
Jacqueline Marks	Clinician Researcher		In-kind	Domestic violence	
Alexandra Markwell	Senior Lecturer		In-kind	Domestic violence	The University of Queensland
Ellyse McCormick	Research Nurse	0.70	External	Chest pain	
Clancy McDonald	Clinician Researcher	0.05	In-kind	Integrated care for vulnerable patients	
Gary Mitchell	Senior Lecturer	0.10	In-kind	Brain injury biomarkers	The University of Queensland
Jacob O'Gorman	Clinician Researcher	0.05	In-kind	Intubation practices in EDs	
Mercedes Ray	Research Nurse	0.30	External	Blood Cultures	
David Rosengren	Senior Lecturer	0.05	In-kind	Alcohol-related presentations	The University of Queensland
Sean Rothwell	Senior Lecturer	0.05	In-kind	Emergency medicine	The University of Queensland
Rina Savage	Senior Lecturer	0.05	In-kind	ED opioid prescribing	The University of Queensland
Matilda Schmidt	Adjunct Lecturer	0.05	In-kind	Emergency nurse practitioner in early pregnancy, Anti-D	Queensland University of Technology
Emma Staines	Research Nurse	0.30	External	Brain injury biomarkers	
Frances Williamson	Senior Lecturer	0.05	In-kind	Trauma	The University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	Research Program	Affiliated University/ies
Jacque Chui	Summer Research Scholar	Pain	The University of Queensland
Joseph Potter	Medical Student Volunteer	Patient reported outcome measures of pain in the ED	The University of Queensland
Jacob Serena	Medical Student Volunteer	Pre-hospital retrievals	The University of Queensland
Euiyeong Son	Vacation Research Experience Student	Pre-hospital pain care	Queensland University of Technology
Alixandra Wong	Summer Research Scholar	Patient reported outcome measures of pain in the ED	The University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Daniel Bodnar	Emma Bosley (QAS), Stephen Rashford (QAS), Mark Shirran (GCUH), Catherine Hurn (ETC) , Matthew Meister, Glenn Ryan (PAH)	Queensland pre-hospital study identifying which trauma patients are at risk of bleeding to death
Daniel Bodnar	Zoe Stevens (UQ), Stephen Rashford (QAS), Michael Handy (Trauma Service) , Sue Williams (RBWH Blood Bank)	A retrospective, observational study examining the coagulation, full blood count and blood gas profiles for trauma patients receiving pre-hospital packed red blood cell transfusions
Daniel Bodnar	Nathan Brown (ETC) , Stephen Rashford (QAS), Jacob Serena (UQ)	A retrospective study of the effect of pre-notification of Retrieval Services Queensland by the Queensland Ambulance Service on pre-hospital transfer times of patients with ST elevation myocardial infarctions to percutaneous coronary intervention centres
Julia Brownlie	Jaimi Greenslade (ETC) , Louise Cullen (ETC) , James Hughes (ETC)	Emergency nurse practitioner in early pregnancy
John Burke	Gerald Fitzgerald (QUT)	Four-hour rule project – validation and impact of the four-hour rule in the ED: a large data linkage study
Kevin Chu	Judith Bellapart (DICM) , Craig Winter (Neurosurgery) , Rosalind Jeffree (Neurosurgery) , Jeffrey Lipman , Jacobus Ungerer (Pathology Qld), Anita Pelecanos (QIMR Berghofer), Anthony Brown (ETC) , Nathan Brown (ETC)	Timing of lumbar puncture for the detection of xanthochromia in suspected subarachnoid haemorrhage
Kevin Chu	Nathan Brown (ETC) , James Hughes (ETC)	The incidence and characteristics of missed subarachnoid haemorrhage diagnosis in Queensland from 2009 to 2018
Kevin Chu	Anthony Nguyen (Australian eHealth Research Centre, CSIRO)	Preventing missed diagnoses through automated reconciliation of ED medical records
Kevin Chu	Lyn Griffiths (QUT), James Hughes (ETC) , Robert Smith (QUT), Nathan Brown (ETC) , Larissa Haupt (QUT), Peter Donovan (Pharmacology)	A pilot genome-wide association study of response to second-line treatment for migraine
Louise Cullen	William Parsonage (Cardiology)	Basel Syncope Evaluation Study (Basel IX)
Louise Cullen	Jaimi Greenslade (ETC) , William Parsonage (Cardiology) , Adam Scott (Cardiology) , Jacobus Ungerer (Pathology Queensland), Tracey Hawkins (ETC) , Gerben Keijzers (GCUH), Julia Crilly (Griffith University), Nicholas Graves (QUT), Ariel Ho (UQ)	Examining translation of research into improved assessment for heart attack
Louise Cullen	John Fraser, Kiran Shekar, Liam Byrne, Obonyo Nchfatso, Connie Boon, Louise See Ho, Margaret Passmore, Kathryn Maitland	Too much of a good thing; does fluid resuscitation worsen septic shock?
Louise Cullen	Tracey Hawkins (ETC) , Jaimi Greenslade (ETC)	Cannulation rates in the Emergency Department intervention trial
Jaimi Greenslade	Louise Cullen (ETC) , William Parsonage (RBWH Cardiology) , Nicholas Graves (QUT), Siegfried Perez (Logan Hospital), Fran Kinnear (TPCH), Christian Hamilton-Craig (TPCH), Niranjana Gaikwad (TPCH), Tracey Hawkins (ETC)	Limit of detection in the emergency department (LEGEND) trial: a pre-post intervention trial of a clinical decision rule to rule out acute myocardial infarction

Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Debra Harcourt	Leonie Cartledge-Gaan (<i>Internal Medicine</i>), Clancy McDonald (<i>ETC</i>), John Burke (<i>ETC</i>), Anthony Nesbit (<i>Patient Flow Unit</i>), Amanda Dines (<i>Executive Services</i>)	Working together to connect care: emergency department frequent presenters response project
Leonie Higgs	Di Atkinson (<i>ETC</i>), Nathan Brown (<i>ETC</i>), Leanne Bennett (<i>ETC</i>), Dave Kramer (<i>ETC</i>), Greg Merlo (<i>UQ</i>), Linda Schnitker (<i>QUT</i>), James Hughes (<i>ETC</i>)	A pragmatic randomised controlled trial of the effects of therapeutic activity kits in emergency department patients with dementia and responsive behaviours
James Hughes	Brandon Allwood (<i>ETC</i>), Jacqui Chiu (<i>UQ</i>), Kevin Chu (<i>ETC</i>), Nathan Brown (<i>ETC</i>)	Exploring Current Pain Practices in the Emergency and Trauma Centre
James Hughes	Lee Jones (<i>QUT</i>), Nathan Brown (<i>ETC</i>), Kevin Chu (<i>ETC</i>)	Development and testing of patient-reported outcome measures of pain care in the emergency department
Gary Mitchell	Louise Cullen (<i>ETC</i>), Cliff Pollard (<i>MNHHS/JTI</i>), Nathan Brown (<i>ETC</i>), Warwick Locke (<i>CSIRO</i>), Jason Ross (<i>CSIRO</i>), Jack Taylor (<i>ETC</i>), Fatimah Nasrallah (<i>UQ</i>), Michael O'Sullivan (<i>Neurology</i>)	The characteristics of brain-origin circulating cell-free DNA in adult emergency department patients with suspected mild traumatic brain injury
Tina Moriarty	Kevin Chu (<i>ETC</i>), Daniel Bodnar (<i>ETC</i>)	Roll-overs in field triage (RIFT)
Mercedes Ray	Julian Williams (<i>ETC</i>), James Hughes (<i>ETC</i>), Melisa Dixon (<i>ETC</i>), Angela Hills (<i>ETC</i>), Jill Duncan (<i>ETC</i>), Dr Jacqui Harper (<i>Path Qld</i>)	Identification of blood culture quality and current practices in the emergency and trauma centre
Philip Richardson	Elizabeth Doran (<i>Pharmacy</i>), Kevin Chu (<i>ETC</i>), Jaimi Greenslade (<i>ETC</i>)	Medication & Fluid orders in the Emergency Department: Examining the incidence of error and adverse events
Matilda Schmidt (<i>ETC</i>)	James Hughes (<i>ETC</i>), Kim Lai (<i>ETC</i>), Julia Brownlie (<i>ETC</i>), Amy Arnold (<i>Women's and Newborn Services</i>)	Identifying the Usage and Appropriateness of Anti-D Immunoglobulin in the Pregnant Female Presenting to the Emergency Department
Julian Williams	David Paterson (<i>Infectious Diseases Unit</i>), Graeme Nimmo (<i>Microbiology</i>), Jaimi Greenslade (<i>ETC</i>), Katherine Doucet, Kevin Chu (<i>ETC</i>), Jeffrey Lipman , Anthony Brown (<i>ETC</i>)	Identifying risk factors for MRSA
Julian Williams	James Hughes (<i>ETC</i>), Melisa Dixon (<i>ETC</i>), Angela Hills (<i>ETC</i>), Jill Duncan (<i>ETC</i>), Dr Jacqui Harper, Dr Jaimi Greenslade (<i>ETC</i>)	A prospective intervention study to improve the quality of blood cultures in the Emergency and Trauma Centre – The Bugs in Bottles Project

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Anthony Bell (<i>The Wesley Hospital</i>)	John Burke (<i>ETC</i>)	State-wide Workforce and Activity-Based Funding Modelling for Queensland Emergency Departments (SWAMPED)
Caitlin Lock (<i>The Wesley Hospital</i>)	Ian Coombes (<i>Pharmacy</i>), Louise Cullen (<i>ETC</i>)	Evaluation of clinical pharmacist medication review in ED and its impact on hospital length of stay for admitted older medical patients
Doug Morel (<i>Redcliffe Hospital</i>)	Kevin Chu (<i>ETC</i>)	What influences the choice made by patients between emergency department and primary healthcare for acute illness?
Nam Nguyen (<i>Royal Adelaide Hospital</i>)	Anthony Brown (<i>ETC</i>)	The utility of the Glasgow-Blatchford score in predicting clinical outcome and stratifying the need for therapeutic intervention in hospitalised patients with upper gastrointestinal bleeding: a prospective validating study
Julia Crilly (<i>Griffith University and GCUH</i>)	David Rosengren (<i>ETC</i>), Sean Rothwell (<i>ETC</i>), Jill Duncan (<i>ETC</i>), Nathan Brown (<i>ETC</i>)	Evaluating the impact of alcohol on emergency department presentations (ETOH)
Shane George (<i>GCUH</i>)	Catherine Hurn (<i>ETC</i>), Anthony Holley (<i>DICM</i>)	Fibrinogen early in children with severe trauma study (FEISTY Junior)
Thomas Torpie (<i>GCUH</i>)	James Hughes (<i>ETC</i>), James Ready (<i>ETC</i>)	Domestic and family violence screening in the emergency department
Richard Skoien (<i>RBWH Gastroenterology</i>)	Anthony Brown (<i>ETC</i>)	Examination of health outcomes associated with paracentesis in patients admitted with decompensated cirrhosis

Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Christopher Reid <i>(Curtin University of Technology, WA)</i>	Louise Cullen (ETC)	Centre for Research Excellence in Cardiovascular Outcomes Improvement
John Fraser (TPCH)	Louise Cullen (ETC)	Cardiovascular haemodynamics in an ovine model of brain stem death
Frances Kinnear (TPCH)	Kevin Chu (ETC)	A randomised controlled trial of interventional versus conservative treatment of primary spontaneous pneumothorax
Stephen Rashford (QAS)	Daniel Bodnar (ETC)	A prospective blinded evaluation of the sensitivity and specificity of pre-hospital Focussed Abdominal Sonogram for Trauma (FAST)
Mark Cruickshank <i>(RBWH Physiotherapy)</i>	Venkat Acholi (ETC), Janelle Heine (ETC), David Kramer (ETC)	Physiotherapy defined scope of practice (prescribing)
Julia Crilly <i>(Griffith University and GCUH)</i>	Jaimi Greenslade (ETC), James Hughes (ETC)	Morale, stress and coping strategies of staff working in the emergency department: A national and international comparison
Paul Haber <i>(RPAH, University of Sydney)</i>	Clancy McDonald (ETC)	Reconnecting after a suicide attempt (RAFT) – feasibility study
Mahender Samtani <i>(RBWH Physiotherapy)</i>	Jennifer Paratz (Physiotherapy), Shaun O’Leary (Physiotherapy), Venkat Acholi (ETC), Janelle Heine (ETC), David Kramer (ETC), Louise Cullen (ETC)	Comparison of two exercise approaches for the management of low back pain in the emergency department setting
Kirsten Vallmuur (QUT)	Nathan Brown (ETC)	Understanding serious quad bike-related injuries in Queensland and Northern Territory: Comparing circumstances, patterns, severity, costs and outcomes
Fran Kinnear (TPCH)	Clancy McDonald (ETC), James Hughes (ETC), Amanda Petrie (USC)	Impact of legislation changes to involuntary orders on emergency department presentations: a retrospective chart audit
Flavia Huygens (QUT)	James Hughes (ETC), Julian Williams (ETC), Graeme Nimo (Pathology Qld)	Testing of InfectID® using blood samples
Jane Nikles (UQ)	Rina Savage (ETC)	Extracting the musculoskeletal injury data from the results of an Emergency Department intervention to optimise discharge prescribing
Lucy Thomas (UQ)	Kevin Chu (ETC), Andrew Wong (Neurology), Ian Parker (Physiotherapy), Claire Muller (Neurology)	Validation of a diagnostic support tool for early recognition of cervical arterial dissection in people with acute neck pain and headache in primary care
Katrina Starmer <i>(Cairns Hospital)</i>	Louise Cullen (ETC), Laura Foran (ETC), Jaimi Greenslade (ETC), William Parsonage (Cardiology), Nathan Brown (ETC), Louise McCormack (Cardiology)	Prevalence of coronary artery disease in Aboriginal and Torres Strait Islander people presenting to the Emergency Department with suspected acute coronary syndrome

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Jaimi Greenslade	Advance Queensland Research Fellowship	

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups /Departments	Project Title	Granting Body	Total of funds awarded	Years
Starmer K, Cullen L , Starmer G, Foran L , Greenslade J , Parsonage W , Brown NJ , McCormack L	Emergency and Trauma Centre	Prevalence of coronary artery disease in Aboriginal and Torres Strait Islander people presenting to the Emergency Department with suspected acute coronary syndrome	Emergency Medicine Foundation	\$115,000	2020-2022
Schnitker L, Beattie E, Arends G, Hughes J		Implementing the DARE-ED into Practice: Can it Work?	Queensland University of Technology. QUT HADPC Seed Funding	\$10,000	2019-2020

Research Grants (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups /Departments	Project Title	Granting Body	Total of funds awarded	Years
Hughes J, Higgs L, Atkinson D, Brown NJ, Kramer D, Schnitker L, Merlo G	Emergency and Trauma Centre	A pragmatic randomised controlled trial of the effects of therapeutic activity kits on emergency department patients with dementia and responsive behaviours –The TACK Study	Rosemary Bryant Foundation Seeding Grant	\$9,357.00	2019-2020
Greenslade J, Cullen L, Parsonage W, Perez S, Kinnear F, Hamilton-Craig C, Gaikwad N, Brain D	Emergency and Trauma Centre	The Limit of Detection in the Emergency Department (LEGEND) trial: A stepped-wedge intervention trial of a clinical decision rule to rule out acute myocardial infarction	Emergency Medicine Foundation Leading Edge Grant	\$93,240	2020-2021
Greenslade J, Cullen L, Parsonage W, Perez S, Graves N		The Limit of Detection in the Emergency Department Trial (LEGEND)	Medical Research Future Fund (MRFF) Rapid Applied Research Translation Program	\$194,682	2019-2020
Louise Cullen, William Parsonage, Louise McCormack, Raibhan Yadav, Luke Lawton, Sarah Ashover, Tanya Milburn, Laura Foran		Validation of an accelerated diagnostic protocol for Aboriginal and Torres Strait Islander patients presenting to an emergency department (ED) with suspected Acute Coronary Syndrome	Medical Research Future Fund (MRFF) Rapid Applied Research Translation Program	\$235,254	2019-2020

2019 Research Publications

Journals

1. Toloo GS, Bahl N, Lim D, FitzGerald G, Wraith D, **Chu K**, et al. General practitioner-type patients in emergency departments in Metro North Brisbane, Queensland: A multisite study. *Emerg Med Australas*. 2019
2. Platz E, Jhund PS, Girerd N, Pivetta E, McMurray JJV, Peacock WF, Masip J, Martin-Sanchez FJ, Miro O, Price S, **Cullen L**, et al. Expert consensus document: Reporting checklist for quantification of pulmonary congestion by lung ultrasound in heart failure. *Eur J Heart Fail*. 2019;21(7):844-51
3. Obonyo NG, Byrne L, Tung J-P, Simonova G, Diab SD, Dunster KR, Passmore MR, Boon AC, See Hoe L, Engkilde-Pedersen S, Esguerra-Lallen A, Fauzi MH, Pimenta LP, Millar JE, Fanning JP, Van Haren F, Anstey, Chris M. **Cullen L**, et al. Pre-clinical study protocol: Blood transfusion in endotoxaemic shock. *MethodsX*. 2019;6:1124-32
4. Neumann JT, Twerenbold R, Ojeda F, Sörensen NA, Chapman AR, Shah ASV, Anand A, Boeddinghaus J, Nestelberger T, Badertscher P, Mokhtari A, Pickering JW, Troughton RW, **Greenslade J, Parsonage W**, Mueller-Hennessen M, Gori T, Jernberg T, Morris N, Liebetrau C, Hamm C, Katus HA, Münzel T, Landmesser U, Salomaa V, Iacoviello L, Ferrario MM, Giampaoli S, Kee F, Thorand B, Peters A, Borchini R, Jørgensen T, Söderberg S, Sans S, Tunstall-Pedoe H, Kuulasmaa K, Renné T, Lackner KJ, Worster A, Body R, Ekelund U, Kavsak PA, Keller T, Lindahl B, Wild P, Giannitsis E, Than M, **Cullen LA**, et al. Application of High-Sensitivity Troponin in Suspected Myocardial Infarction. *New England Journal of Medicine*. 2019;380(26):2529-40
5. Nestelberger T, Boeddinghaus J, **Greenslade J, Parsonage WA**, Than M, Wussler D, Lopez-Ayala P, Zimmermann T, Meier M, Troester V, Badertscher P, Koechlin L, Wildi K, Anwar M, Freese M, Keller DI, Reichlin T, Twerenbold R, **Cullen L**, Mueller C, Apace Adapt Investigators. Two-Hour Algorithm for Rapid Triage of Suspected Acute Myocardial Infarction Using a High-Sensitivity Cardiac Troponin I Assay. *Clin Chem*. 2019;65(11):1437-47
6. **Lukin B, Greenslade J**, Kearney AM, Douglas C, **Howell T**, Barras M, et al. Conversion of other opioids to methadone: a retrospective comparison of two methods. *BMJ Support Palliat Care*. 2019
7. Kline TV, **Savage RL, Greenslade JH, Lock CL, Pattullo C**, Bell AJ. Affecting emergency department oxycodone discharge prescribing: an educational intervention. *Emerg Med Australas*. 2019;31(4):580-86
8. Keijzers G, Macdonald SP, Udy AA, Arendts G, Bailey M, Bellomo R, Blecher GE, Burcham J, Delaney A, Coggins AR, Fatovich DM, Fraser JF, Harley A, Jones P, Kinnear F, May K, Peake S, Taylor DM, **Williams J**, Williams P. The Australasian Resuscitation In Sepsis Evaluation: FLUID or vasopressors In Emergency Department Sepsis, a multicentre observational study (ARISE FLUIDS observational study): Rationale, methods and analysis plan. *Emerg Med Australas*. 2019;31(1):90-6
9. Judge C, Eley RM, Miyakawa-Liu M, **Brown NJ**, McCosker L, Livesay G, **Hughes JA**, Vallmuur K. The characteristics of accidental injuries from power tools treated at two emergency departments in Queensland. *Emerg Med Australas*. 2019;31(3):436-43
10. **Greenslade JH**, Wallis MC, Johnston A, Carlström E, Wilhelms D, Thom O, et al. Development of a revised Jalowiec Coping Scale for use by emergency clinicians: a cross-sectional scale development study. *BMJ Open*. 2019;9(12):e033053
11. **Greenslade JH**, Wallis M, Johnston ANB, Carlström E, Wilhelms DB, Crilly J. Key occupational stressors in the ED: an international comparison. *Emerg Med J*. 2019(In press)
12. Forbes M, Byrom L, van der Steenstraten I, **Markwell A**, Bretherton H, Kay M. Resilience on the Run – an evaluation of a wellbeing program for medical interns. *Intern Med J*. 2019(In press)

Journals (cont)

13. Elder E, Johnston ANB, Wallis M, **Greenslade JH**, Crilly J. Emergency clinician perceptions of occupational stressors and coping strategies: A multi-site study. *Int Emerg Nurs*. 2019;45:17-24
14. **Duncan J, Brown NJ, Lock C, Trudgett S, Rothwell S, Rosengren D, Hughes JA**. Increasing the rate of documentation of security interventions in the emergency department: big orange security sticker (BOSS) project. *J Nurs Care Qual*. 2019(In Press)
15. **Duncan J, Brown NJ, Hughes JA, Trudgett S, Crilly J, Rothwell S, Rosengren D**. Security interventions are frequently undocumented in emergency department clinical notes. *Emerg Med Australas*. 2019;31(5):797-804
16. du Fay de Lavallaz J, Badertscher P, Nestelberger T, Zimmermann T, Miro O, Salgado E, Christ M, Geigy N, **Cullen L**, et al. B-Type Natriuretic Peptides and Cardiac Troponins for Diagnosis and Risk-Stratification of Syncope. *Circulation*. 2019;139(21):2403-18
17. du Fay de Lavallaz J, Badertscher P, Nestelberger T, Flores D, Miro O, Salgado E, Christ M, Geigy N, **Cullen L**, et al. Circadian, weekly, seasonal, and temperature-dependent patterns of syncope aetiology in patients at increased risk of cardiac syncope. *Europace: European pacing, arrhythmias, and cardiac electrophysiology : journal of the working groups on cardiac pacing, arrhythmias, and cardiac cellular electrophysiology of the European Society of Cardiology*. 2019;21(3):511-21
18. Crilly J, **Greenslade JH**, Johnston A, Carlström E, Thom O, Abraham L, et al. Staff perceptions of the emergency department working environment: An international cross-sectional survey. *Emerg Med Australas*. 2019;31(6):1082-91
19. **Chu K**, Windsor C, Fox J, **Howell T**, Keijzers G, Eley R, Kinnear F, Fury J, Thom O, **Brown NJ, Brown AFT**. Factors influencing variation in investigations after a negative CT brain scan in suspected subarachnoid haemorrhage: a qualitative study. *Emerg Med J*. 2019;36:72-7
20. Bell KJL, Doust J, Glasziou P, **Cullen L**, Harris IA, Smith L, et al. Recognizing the Potential for Overdiagnosis: Are High-Sensitivity Cardiac troponin Assays an Example? *Ann Intern Med*. 2019;170:259-61
21. Badertscher P, du Fay de Lavallaz J, Hammerer-Lercher A, Nestelberger T, Zimmermann T, Geiger M, Imahorn O, Miro O, Salgado E, Christ M, **Cullen L**, et al. Prevalence of Pulmonary Embolism in Patients With Syncope. *J Am Coll Cardiol*. 2019;74(6):744
22. Xu H, Johnston ANB, Greenslade JH, Wallis M, Crilly J. Stressors and coping strategies of emergency department nurses and doctors: A cross-sectional study. *Australasian Emergency Care*. 2019; 22:180-186
23. Nestelberger T, **Cullen L**, Lindahl B, Reichlin T, **Greenslade JH**, Giannitsis E, Christ M, Morawiec B, Miro O, Martín-Sánchez FJ, Wussler DN, ... Mueller C. Diagnosis of acute myocardial infarction in the presence of left bundle-branch block. *Heart*. 2019; 105: 1559-1567
24. Derek P Chew, Kristina Lambrakis, Andrew Blyth, Anil Seshadri, Michael JR Edmonds, Tom Briffa, **Louise A Cullen**, Stephen Quinn, Jonathan Karon, Anthony Chuang, Adam J Nelson, Deborah Wright, Matthew Horsfall, Erin Morton, John K French, Cynthia Papendick. "A Randomized Trial of a 1-Hour Troponin T Protocol in Suspected Acute Coronary Syndromes: The Rapid Assessment of Possible ACS In the Emergency Department with High Sensitivity Troponin T (RAPID-TnT) Study." *Circulation*. 2019;140(19):1543-56
25. Martin P Than, John W Pickering, Yader Sandoval, Anoop SV Shah, Athanasios Tsanas, Fred S Apple, Stefan Blankenberg, **Louise Cullen**, Christian Mueller, Johannes T Neumann, Raphael Twerenbold, Dirk Westermann, Agim Beshiri, Nicholas L Mills, M13 Collaborative. "Machine Learning to Predict the Likelihood of Acute Myocardial Infarction." *Circulation*. 2019;140 (11): 899-909.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Hughes J**. Falls in the Emergency Department. Princess Alexandra Hospital Health Symposium; Brisbane, Australia. July 2019
2. **Cullen L**. Cardiac troponin: More than RI and RO acute myocardial infarction (Session Chair: Acute Cardiac Emergencies). European Society of Cardiology Congress; Paris, France. August 2019.

Oral Presentations

1. Vu T, Nguyen A, **Brown N, Hughes J**. Identifying patients with pain in emergency departments using conventional machine learning and deep learning. 17th Annual Workshop of the Australian Language Technology Association; Sydney, Australia. 4-6 December, 2019
2. **Hughes J, Brown N**, Chiu J, **Chu K**. The Contribution of Time To First Analgesic Medication In Emergency Department Length Of Stay. International Conference for Emergency Nursing; Adelaide, Australia. October, 2019
3. **Hills A, Ray M, Hughes JA, Dixon M, Greenslade J, Harper J**, et al. Turning up the volume on suboptimal blood culture collection practices. International Conference for Emergency Nursing; Adelaide, Australia. October, 2019
4. **Hills A, Ray M, Hughes JA, Dixon M, Duncan J, Greenslade J**, et al. Patient factors influencing the quality of blood culture collection in the adult emergency department. International Conference for Emergency Nursing; Adelaide, Australia. October, 2019
5. **Chu K**. Drug treatment of primary headache in an Australian emergency department. 18th International Conference on Emergency Medicine; Seoul, Republic of Korea. 12-15th June, 2019

Poster Presentations

1. Moriarty S, **Brown N**, Waller M, **Chu K**. Vehicle rollover is not an independent predictor of trauma injury severity. Australasian College for Emergency Medicine 36th Annual Scientific Meeting; Hobart. 17-21 November, 2019
2. **Hughes J**, Chiu J, **Brown N, Allwood B, Chu K**. The Contribution of Time To First Analgesic Medication In Emergency Department Length Of Stay. Herston Healthcare Symposium; Brisbane, Australia. September, 2019
3. Chen M, **Chu K**. Outcomes of patients presenting with abdominal pain in the emergency department. Royal Australasian College of Surgeons (RACS) 88th Annual Scientific Congress; Bangkok, Thailand. 6-10th May, 2019

GENETIC HEALTH QUEENSLAND

Genetic Health Queensland (GHQ) is a state-wide service which provides clinical genetics services for all age groups. In addition to frequent participation in educational sessions at RBWH, the Queensland Children's Hospital (QCH) and regional centres, GHQ's contribution to national and international research studies continues to grow.

In 2019, GHQ continued its close involvement in the Australian Genomic Health Alliance (AGHA) (a \$25 million 5-year grant from the NHMRC to preparing Australia for the Genomics Revolution in Healthcare) and have made a significant contribution to the development and success of a number of the Australian Genomics clinical and infrastructure projects. To date, GHQ is participating in most AGHA rare disease and cancer flagships, including but not limited to, ICCOn hereditary cancer (Dr Helen MarFan), Cardiovascular Genetic Disorders (Co-lead: Prof Julie McGaughan), HIDDEN renal (Dr Chirag Patel), KidGen (Dr Chirag Patel) and Acute Care (Dr Chirag Patel). In addition, Prof Julie McGaughan is the state lead for the AGHA National Diagnostic and Research Network and an active member in the subprojects: clinical variant reclassification, National clinical consent (chair), and MSAC application pipeline. Highlights of our AGHA accomplishments for 2019 include: Recruitment of the first rapid WGS trio in Australia for the Acute Care flagship; As at January 2020 we have recruited over 119 participants for the ICCOn, Cardiac, HIDDEN, KIDGEN and Acute Care flagships, making GHQ RBWH one of the highest achieving recruitments sites in Australia; The Australian Genomics National Clinical Genomic Consent Form and accompanying materials were piloted in Queensland and Victoria from January to June this year. These are now available online and are adaptable; and GHQ is also working with PQ and MNHHS on a project to bring WGS to Queensland.

The Cardiovascular Genetics AGHA Flagship, led by GHQ Director Prof Julie McGaughan, started recruiting participants in April this year with the very first participant recruited to the flagship from GHQ, and to date, we have now recruited 48 participants from a target total of 150. Further, a sub-study of this flagship - Investigation of current models of care for genetic heart disease in Australia: A National Clinical Audit, which started at GHQ in late 2018, before being rolled out nationally in the first half of 2019, has now completed data collection. 553 diagnostic cardiac cases were included in the audit across 11 Australian public hospitals. Data analysis and manuscript preparation are now underway.

Prof McGaughan continues to be involved in the Clinical Committee and Disease and Gene Selection Committee of MacKenzie's Mission – A \$20 million research study of reproductive genetic carrier screening for approximately 500 debilitating genetic conditions. National recruitment is being rolled out from January 2020 with recruitment of QLD participants beginning early 2021.

Several other research projects have commenced at Genetic Health Queensland this year including: Association between uterine serous carcinoma and BRCA mutation study, ICCOn Qualitative study, TTNtv penetrance study, Evaluation of Mismatch Repair genetic testing undertaken at Genetic health QLD, a review of the first 11 years of the Cardiac Genetics services at GHQ and ANGELS – Applying Novel Genomic approaches to Early-onset and suspected Lynch Syndrome colorectal and endometrial cancers. Others have now concluded, such as Young people with LI Fraumeni Syndrome and ELSI survey (QGHA).

2019 was a huge year for research at GHQ. Our Clinicians' and Genetic Counsellors' involvement in research and education collaborations has resulted in 28 publications this year as well as presentations at a variety national and international conferences and other health professional groups and non-government organisations. A strong group of research personnel, based at GHQ, are ensuring we continue to build and expand the foundation for ongoing important research collaborations both within the RBWH and with an increasing number of external institutions.

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Prof Julie McGaughran	Professor		In-Kind	Australian Genomics Health Alliance (AGHA)	
	Cardiovascular Genetic Disorders Flagship Co-Lead			Mackenzie's Mission (Australian, Reproductive Carrier Screening Project)	
	Committee Member			Better Indigenous Genetic Health (BIG) Project	
	Site PI		In-Kind		UQ
Dr Michael Quinn	Queensland State Project Officer for Australian Genomics	1	External	AGHA	
Dr Lindsay Fowles	Genetic Counsellor for Australian Genomics (Renal flagship)	1	External	AGHA (0.2FTE), KidGen (0.8FTE)	UQ
Ms Rachel Austin	Research Genetic Counsellor, Flagship Coordinator	0.6	External/operational	AGHA – ICConand Cardiac flagship, RBWH Research Foundation, ANGELS, CaPP3, BIG project, ICCon Qual study	
Dr Helen Marfan	Co-Investigator		In-Kind	AGHA, ICCon, ANGELS, CaPP3, USC and BRCA	
Dr Rachel Susman	Co-Investigator		In-Kind	AGHA, ICCon, Genetics of Sebaceous skin lesions	
Dr Chirag Patel	Co-Lead QLD Renal Genetic Program		In-Kind	KidGen Collaborative, AGHA Renal Genetics and HIDDEN Flagships	
	Acute Care Flagship state-Lead		In-Kind	AGHA Acute Care Flagship	
	Project PI		External	QGHA Cardiac Flagship	
Ms Linda Wornham	AGHA Cardiac Genetic counsellor	0.3	External	AGHA Cardiac flagship	
A/Prof Andrew Mallett	Clinical Fellow, Co-Lead QLD Renal Genetics Program, National Director AGHA			KidGen Collaborative, AGHA Renal Genetics and HIDDEN Flagships	UQ
Ms Jan Wakeling	Research Genetic Counsellor		In-kind	AGHA ICCon flagship, ANGELS	
Dr Megan Higgins	Principle Investigator		In-kind	Evaluation of Mismatch Repair (MMR) genetic testing undertaken at Genetic Health Queensland	
Dr Jonathan Rodgers	Principle Investigator		In-kind	A review of the first 11 years of the Cardiac Genetics service at Genetic Health Queensland	
Dr Mohammad Al-Shinnag	Co-Investigator		In-Kind	Association between uterine serous carcinoma and BRCA mutation (USC and BRCA)	
Ms Julie White	Genetic counsellor Research	0.4	Operational	USC & BRCA, AGHA ICCon, ANGELS, BIG project	
Dr Karin Van Spaendonck-Zwarts	Co-investigator		In-Kind	AGHA Cardiac Flagship, TTNtv penetrance study	
Ms Melanie Tom	Genetic counsellor	0.2	External	AGHA Mitochondrial and Brain Malformation flagships (ended 30 June 2019)	

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Julie McGaughan	Prof Chris Semsarian (<i>Co lead</i>), AGHA Flagship, Linda Wornham (<i>GC</i>), Rachel Austin (<i>Coord</i>), Dr Michael Quinn (<i>PO</i>), Dr Karin Van Spaendonck-Zwarts	Cardiovascular Genetic Disorders Flagship (AGHA)
A/Prof Andrew Mallett	Prof Julie McGaughan , Dr Chirag Patel , AGHA Renal Flagship	Applying genomics to inherited tubulointerstitial and cystic kidney diseases in Australia (RBWH Foundation research grant)
A/Prof Andrew Mallett	Andrew Mallett , Mohammad Al-Shinnag , Helen Mar Fan , Rachel Susman	Clinical audit of BHD, HLRCC and VHL at RBWH
A/Prof Andrew Mallett	AGHA Renal Flagship, Dr Chirag Patel (<i>CI</i>), Prof Julie McGaughan (<i>PI</i>), Dr Lindsay Fowles (<i>GC</i>)	KidGen—renal genetics flagship (HIDDEN)
Dr Megan Higgins	Helen Mar Fan	Evaluation of Mismatch Repair (MMR) genetic testing undertaken at Genetic Health Queensland
Dr Mohammad Al-Shinnag , Dr Helen MarFan	Dr Jonas Bjorkman, Dr Shu Fen Lee	Association between uterine serous carcinoma and BRCA mutation (USC and BRCA)
Dr Jonathan Rodgers	Prof. Julie McGaughan	A review of the first 11 years of the Cardiac Genetics service at Genetic Health Queensland

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Kathryn North	Prof Julie McGaughan	Australia Genomics Health Alliance (AGHA)
AGHA ICon Cancer Flagship	Prof Julie McGaughan , Dr Helen Marfan , Rachel Austin , Dr Rachel Susman , Jan Wakeling (<i>GC</i>), Julie White (<i>GC</i>)	AGHA: Preparing Australia for genomic medicine
A/Prof Zornitza Stark, Dr Sebastian Lunke	Dr Chirag Patel , Prof Julie McGaughan , Dr Michael Quinn	AGHA Acute Care flagship
Prof Ingrid Winship (<i>Led</i>)	Dr Rachel Susman	Genetics of Sebaceous Skin Lesions Study
BIG project team – Prof Margaret Kelaher (<i>Led</i>)	Julie McGaughan (<i>PI</i>), Julie White , Rachel Austin (<i>CRA</i>)	Better Indigenous Genetic (BIG) Health Services
ICon Partnership (<i>Led by Paul James and Gillian Mitchell</i>)	Prof Julie McGaughan , Dr Rachel Susman , Rachel Austin	<ol style="list-style-type: none"> 1. The Inherited Cancer Connect (ICon) database: a national database of carriers of germline mutations in cancer predisposition genes predisposing to hereditary cancer syndromes. 2. Evaluation of the eviQ genetic testing guidelines and risk-management for people with hereditary cancer syndromes: Audit of Familial Cancer Clinics (eviQ project)
IMRC (<i>Led by Jeanette Reece</i>)	Rachel Susman , Rachel Austin	A worldwide study of cancer risk for Lynch syndrome, as part of the International Mismatch Repair Consortium (IMRC)
IMPACT (<i>Led by Geoffrey Lindeman</i>)	Rachel Susman	Identification of Men with a genetic predisposition to Prostate Cancer: Targeted screening in men at higher genetic risk and controls (IMPACT)
kConFab (<i>Led by Stephen Fox</i>)	Julie McGaughan	The Kathleen Cunningham National Research Consortium For Research on Familial Breast Cancer
QIMR-Berghofer (<i>Led by Barbara Leggett</i>)	Helen Mar Fan	Identification of the Gene Causing Hereditary Flat Adenoma Syndrome (RBWH Research Foundation grant)
Prof Finlay Macrae (<i>Led</i>)	Dr Helen Marfan (<i>PI</i>), Rachel Austin (<i>CRA</i>)	A randomised double-blind dose noninferiority. Trial of aspirin in Lynch syndrome. CaPP3
QGHA ELSI working group, Dr Miranda Vidgen (<i>Led</i>)	Prof Julie McGaughan (<i>PI</i>)	The use of genomic data from medical records in research: Patient opinion survey (ELSI sub study)
A/Prof Dan Buchanan	Dr Rachel Susman , Dr Helen Marfan , Jan Wakeling , Rachel Austin , Julie White	ANGELS: Applying Novel Genomic approaches to Early-onset and suspected Lynch Syndrome colorectal and endometrial Cancer
Prof Bettina Meiser	Dr Rachel Susman , Rachel Austin	A qualitative study to explore patient attitudes and system enablers to establishing a national genomics registry of inherited cancer predisposition
Prof Diane Fatkin	Dr Karin van Spaendonck-Zwarts	Molecular Mechanisms of Inherited Cardiomyopathies and Arrhythmias (TTNtv Penetrance study)

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Andrew Mallett, Chirag Patel, Julie McGaughran	Renal department, GHQ	Applying genomics to inherited tubulointerstitial and cystic kidney diseases in Australia	RBWH Foundation	\$40,000	\$40,000	2019
Julie McGaughran (CI)	GHQ	AGHA: Preparing Australia for Genomic Medicine	NHMRC	Nationally \$5 million annually for 5 years	Difficult to calculate at this stage	2016-2021
Dr Jonas Borkman, Dr Helen Marfan , Dr Shu Fen Lee	GHQ, Pathology Queensland	Association between uterine serous carcinoma and BRCA mutation	SERC	\$21,600	Approx. \$5400	2019-2020
Dr Rachel Susmant	GHQ	A qualitative study to explore patient attitudes and system enablers to establishing a national genomics registry of inherited cancer predisposition (ICCon partnership)	Cancer Council NSW	\$33,632.50	0	2019-2020
Dr Chirag Patel	GHQ	Clinical whole genome sequencing in the diagnosis of paediatric genetic disorders	QGHA	\$975,600	0	2019-2021

2019 Research Publications

Journal Articles

- Akinrinade, O., Heliö, T., Lekan Deprez, R. H., Jongbloed, J. D. H., Boven, L. G., van den Berg, M. P., . . . **Spaendonck-Zwarts, K. Y. v.** . . . Koskenvuo, J. (2019). Relevance of Titin Missense and Non-Frameshifting Insertions/Deletions Variants in Dilated Cardiomyopathy. *Scientific Reports*, 9(1), 4093
- Assia Batzir, N., Kishor Bhagwat, P., Larson, A., Coban Akdemir, Z., Baglaj, M., Bofferding, L., **Fan, H. M.** . . . Wangler, M. F. Recurrent Arginine Substitutions in the ACTG2 Gene are the Primary Driver of Disease Burden and Severity in Visceral Myopathy. *Human Mutation*
- Beal, B., Hayes, I., **McGaughran, J.**, Amor, D. J., Miteff, C., Jackson, V., . . . Goel, H. (2019). Expansion of phenotype of DDX3X syndrome: six new cases. *Clinical Dysmorphology*, 28(4), 169-174
- Borowsky, J., Setia, N., Rosty, C., Conrad, R., **Susman, R.**, Misdraji, J., . . . Brown, I. S. (2019). Spectrum of gastrointestinal tract pathology in a multicenter cohort of 43 Cowden syndrome patients. *Modern Pathology*, 32(12), 1814-1822. doi:10.1038/s41379-019-0316-7
- Bredrup, C., Stokowy, T., **McGaughran, J.**, Lee, S., Sapkota, D., Cristea, I., . . . Houge, G. (2019). A tyrosine kinase-activating variant Asn666Ser in PDGFRB causes a progeria-like condition in the severe end of Penttinen syndrome. *European Journal of Human Genetics*, 27(4), 574-581
- Chan, S., **Patel, C.**, & Mallett, A. J. (2019). Pilot clinical and validation study of the PROPCKD score in clinical practice amongst patients with Autosomal Dominant Polycystic Kidney Disease. *Nephrology*
- Cogné, B., Ehresmann, S., Beaugard-Lacroix, E., Rousseau, J., Besnard, T., Garcia, T., . . . **McGaughran, J.** . . . Campeau, P. M. (2019). Missense Variants in the Histone Acetyltransferase Complex Component Gene TRRAP Cause Autism and Syndromic Intellectual Disability. *The American Journal of Human Genetics*, 104(3), 530-541
- Cowan, J., **Spaendonck-Zwarts, K. Y. v.**, & Hershberger, R. E. (2019). Dilated Cardiomyopathy. In *Clinical Cardiogenetics* (3rd ed.)
- Gabbett, M. T., Laporte, J., Sekar, R., Nandini, A., **McGrath, P.**, Sapkota, Y., . . . Fisk, N. M. (2019). Molecular Support for Heterogonesis Resulting in Sesquizygotic Twinning. *The New England Journal of Medicine*, 380(9), 842-849
- Giudice-Naim, P., Downs, J., Wong, K., Wilson, D., Ta, D., **Gattas, M.**, . . . Leonard, H. (2019). The incidence, prevalence and clinical features of MECP2 duplication syndrome in Australian children. *Journal of Paediatrics And Child Health*, 55(11), 1315-1322
- Gröbner, R., Kapferer-Seebacher, I., Amberger, A., Redolfi, R., Dalonneau, F., Björck, E., . . . **Milnes, D.** . . . Zschocke, J. (2019). C1R Mutations Trigger Constitutive Complement 1 Activation in Periodontal Ehlers-Danlos Syndrome. *Frontiers in Immunology*, 10(2537)
- Haas, M. A., Boughtwood, T. F., **Quinn, M. C.**, & Genomics, A. (2019). The ethics approval process for multisite research studies in Australia: changes sought by the Australian Genomics initiative. *The Medical Journal of Australia*, 211(10), 440-444.e441
- Higgins, M., Fan, H. M., & McGaughran, J.** (2019). NF1, How to Treat. *Australian Doctor*
- Jansen, M., Baas, A. F., **Spaendonck-Zwarts, K. Y. v.**, Ummels, A. S., Wijngaard, A. v. d., Jongbloed, J. D. H., . . . Dooijes, D. (2019). Mortality Risk Associated With Truncating Founder Mutations in Titin. *Circulation: Genomic and Precision Medicine*, 12(5)
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Journal Articles (cont)

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24. Pennings, M., Schouten, M. I., van Gaalen, J., Meijer, R. P. P., de Bot, S. T., Kriek, M., . . . **van Spaendonck-Zwarts, K.**... Kamsteeg, E.-J. (2020). KIF1A variants are a frequent cause of autosomal dominant hereditary spastic paraplegia. *European Journal of Human Genetics*, 28(1), 40-49
25. Sekiguchi, F., Tsurusaki, Y., Okamoto, N., Teik, K. W., Mizuno, S., Suzumura, H., . . . **Patel, C.**, Matsumoto, N. (2019). Genetic abnormalities in a large cohort of Coffin–Siris syndrome patients. *Journal of Human Genetics*, 64(12), 1173-1186
26. Škorić-Milosavljević, D., Tjong, F. V. Y., Barc, J., Backx, A. P. C. M., Clur, S.-A. B., **van Spaendonck-Zwarts, K.**, . . . Postma, A. V. (2019). GATA6 mutations: Characterization of two novel patients and a comprehensive overview of the GATA6 genotypic and phenotypic spectrum. *American Journal of Medical Genetics. Part A*, 179(9), 1836-1845
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29. Westra, D., Schouten, M. I., Stunnenberg, B. C., Kusters, B., Saris, C. G. J., Erasmus, C. E., . . . **van Spaendonck-Zwarts, K. Y.** Voermans, N. C. (2019). Panel-Based Exome Sequencing for Neuromuscular Disorders as a Diagnostic Service. *Journal of neuromuscular diseases*, 6(2), 241-258.

Book Chapters / Letters

1. Jason R. Cowan, **Karin Y. van Spaendonck-Zwarts** and Ray E. Hershberger. (2019) Dilated Cardiomyopathy. Clinical Cardiogenetics, 3rd edition.

Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **McGrath, P.** Screening and Diagnosis in Pregnancy. Metro North GP Alignment Programme, 2019
2. **McGrath, P.** Genetic Carrier Screening. Department of Obstetric Medicine, 2019
3. **Fowles, L.** Genetic conditions: Introduction to family histories and inheritance patterns. Orthoptics Australia Queensland Branch Education Day, 2019
4. **Marfan, H.** Opportunities and challenges of practicing cancer genetics in the digital age. QLD Health Cancer Forum 2019: transforming care in the digital age, 2019
5. **Higgins, M.** TSC – genetics, features, management and how to access genetic services. Tuberous Sclerosis support day presentation, 2019
6. **Sane, V.** Neuroendocrine tumours and genetic testing. Unicorn Foundation meeting, 2019
7. **Marfan, H.** Update from the GHQ Cancer Genetics Service: Endocrinology. SEQ Adult Endocrinology education meeting, 2019
8. **Ryan, Bree.** Genetic counselling. Robina Health Precinct, 2019
9. **Patel, Chirag.** Genetic Kidney Disease (+Genetic Testing). ANZSN Trainee Course, 2019
10. **Higgins, M.** Genetic Health Queensland referral pathway. Indigenous Genomics Health Literacy Project, 2019
11. **Patel, C.** Growth disorders and genomics. Paediatric endocrine education meeting, 2019
12. **Fowles, L.** Clinical Genetics: How to access? What to expect? Ethnic Communities Council of Queensland, 2019.

Invited Speakers (cont)

13. **Higgins, M.** Impact of genomics on clinical care. Pathology Queensland Genomics workshop, 2019
14. **Milnes, D.** Ethical issues in preconception carrier screening. Fertility Society of Australia conference (international), 2019
15. **Sane, V.** Cancer genetics. Cancer Care Workshop, The Prince Charles Hospital, 2019
16. **Fowles, L.** Role of genetic counselling in ADPKD. Australian and New Zealand Scientific Meeting on Polycystic Kidney Disease (ANZ-PKD), 2019
17. **Marfan, H.** Mainstreaming of genetic testing for breast cancer patients. PAH Breast Surgical Dept, 2019
18. **Berkman, J.** Decision-making in predictive testing for neurodegenerative disorders. HGSA Qld branch meeting, 2019
19. **McGaughran, J.** Introduction to ethics of genetic testing in Australia (vs USA). RCPA Introductory short course in genetics and molecular pathology, 2019
20. **McGaughran, J** and Ingles, J. Constitutional Cardiomyopathy. RCPA Introductory short course in genetics and molecular pathology, 2019.

Oral Presentations

1. **McGaughran, J., Austin, R.** Current models of care for genetic heart disease: A national clinical audit. Cardiovascular flagship F2F meeting 2019. Melbourne
2. **Patel, C.** Personalised medicine: every bodies' business? World Science festival Brisbane 2019. Brisbane
3. **Susman, R.** Genetics and GI Tract cancer predisposition syndromes. Gastroenterological Nurses College of Australia National Conference 2019, Melbourne
4. **Milnes, D.** Incorporating preconception carrier screening into your practice – implementation of the revised RANZCOG statement for prenatal screening. RANZCOG Bush to Beach conference 2019. Gold Coast
5. **Fowles, L.** Workshop: Urgent genetic counselling in intensive care: An interactive workshop of cases from Australian Genomics Acute Care project. Presenters: Dr Michelle de Silva, A/Prof Zornitza Stark, Dr Lindsay Fowles, Ms Tenielle Davis, Ms Gemma Brett, 2019 Melbourne
6. **MarFan, H.** Familial Leukemia and Variants of Uncertain Significance (chair). Familial Aspects of Cancer Research and Practice Family Cancer Clinic Day 2019. Kingscliff
7. **McGaughran, J., Samsarian, C.** Cardiovascular Genetic Disorders Mega Flagship. Genomics in Australian Healthcare: Foundations To Future 2019. Melbourne
8. **Patel, C.** Clinical genome sequencing in paediatric genetic disorders. Herston Healthcare symposium 2019. Brisbane
9. **Fowles, L.** Genetic testing consent and counselling: Considerations when personalising diagnosis and management. Herston State of the Art Healthcare Symposium 2019. Brisbane
10. **MarFan, H.** Breast cancer MDT session (panellist). RBWH GP Symposium 2019. Brisbane
11. **MarFan, H.** Genetics and reconstruction: Controversial indications for risk reducing mastectomy. Australian Society for Breast Disease; 12th Scientific meeting - Precision, Innovation and the Future 2019. Gold Coast.

Poster Presentations

1. Tundini, E...**MarFan, H.** Implementing Gene Curation for Hereditary Cancer Susceptibility in Australia: Achieving Consensus on Genes with Clinical Utility. ACMG April 2019. Seattle, USA
2. **Sane, V., Mar Fan, H.** Overview of ASAP Clinic: New management approach to action urgent oncology referrals at Genetic Health Queensland. BDHP cancer seminar 28 May 2019. And kConFab 1 August 2019
3. **Rodgers, J., McGaughran, J.** 12 years of the Queensland Cardiac Genetics Clinic. ESHG, 15-18 June 2019, Gothenburg
4. U. Dressel, A. Davidson, N.Waddell, J. Pearson, Emma Tadini, A.B Spurdle, **H. Mar Fan**, P.A. James, G. Mitchell, ICon and Ward R.L. The Australian Genomics Hereditary Cancer Flagship: Where we are and where we are going. August 2019, Kingcliffe
5. **Higgins, M., MarFan, H.** Does universal immunohistochemistry for mismatch repair proteins increase the yield of pathogenic variants detected in Lynch Syndrome? HGSA, 3 August 2019, Wellington, NZ
6. Kaur, S...**Milnes, D.** Kinesinopathies: Emerging role in mutation negative Rett and Rett-like patients. ASHG Annual Meeting, 15-19 October 2019. Houston, USA
7. Davidson, A., Dressel, U., **Marfan, H., et al.** The Australian Genomics and Hereditary Cancer Connect Hereditary Cancer Syndrome Project. Biomed Link RHD Symposium November 2019. Melbourne.

HYPERBARIC MEDICINE

Highlights included collaboration with international researchers to design a global outcome registry and collaboration with University of Tasmania and Royal Hobart Hospital to further develop a national data registry of outcomes. Both the steering committees are being developed in tandem to ensure the data dictionaries are common to both. The National registry is at beta testing stage and featured at our National Scientific Conference in Sydney.

Additionally, we have designed a multicentre randomised controlled trial which is a collaboration between four State units looking into the use of Hyperbaric Oxygen treatment in Idiopathic Sudden Sensorineural Hearing Loss. This is a collaborative effort with ENT and Hyperbaric Physicians across Australia.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Yena Huang	Diploma of Diving and Hyperbaric Medicine	HBOT in radiation induced cystitis at RBWH; a retrospective outcome analysis	Susannah Sherlock

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Yena Hwang	Honorary			Teaching and Hyperbaric Med	University of Queensland
Dr Susannah Sherlock	Senior Clinical Lecturer	0.25	Operational	HBOT in Idiopathic Sudden Sensorineural Hearing Loss	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Susannah Sherlock	Prof M Bennett (<i>POW, Sydney</i>), Dr Sharon Kelly (<i>RBWH ENT</i>), Dr N Banham (<i>FSH, Perth</i>), Dr David Kramer , Dr A Tabah, Dr D Cooper (<i>Tas</i>), Dr A Fock (<i>Alfred, Melb</i>), Dr C Jelliffe (<i>Townsville</i>) Ms Mandy Way, Ms Carla Rose	Steroids and Hyperbaric Oxygen for Sudden Sensorineural Hearing Loss (SHOOSH): a randomised controlled trial
Dr Susannah Sherlock	Prof M Bennett	Steroids and Hyperbaric Oxygen for Sudden Sensorineural Hearing Loss (SHOOSH): a pilot study to calculate sample size for RCT
Dr Susannah Sherlock	Robyn Verghese	Audit of referral patterns for use of Hyperbaric Oxygen Treatment (HBOT) for Idiopathic Sudden Sensorineural Hearing Loss (ISSHL) in Australia and New Zealand 2010-2015

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Susannah Sherlock	Dr Sharon Kelly (<i>ENT surg</i>), Ms Carla Rose (<i>Audiology</i>), Ms Mandy Way (<i>QIMR Berghoffer</i>)	Steroids and Hyperbaric Oxygen for Sudden Sensorineural Hearing Loss (SHOOSH): a randomised controlled trial
Dr Susannah Sherlock	Ms Martha Zakrewski (<i>QIMR</i>)	Randomised controlled trial of effect of Hyperbaric Oxygen Treatment on saliva microbiome in patients with xerostomia after radiotherapy for head and neck cancer

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups /Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Susannah Sherlock	Hyperbaric Med	Randomised controlled trial of effect of Hyperbaric Oxygen Treatment on saliva microbiome in patients with xerostomia after radiotherapy for head and neck cancer	ANZCA	\$20,000	nil	2014-2019

2019 Conference Presentations – Invited Speaker, Oral and Poster

Poster Presentations

1. **S Sherlock**, Audit of Practice in Australasian hyperbaric units on the incidence of central nervous system oxygen toxicity. *HTNA conf Aug 2019 Sydney Australia*.

INTENSIVE CARE SERVICES

It was a highly successful year for research productivity and growth within the department. Professor Kevin Laupland was recruited from Canada to become the new Director of Research, Intensive Care Services, RBWH and QUT. Professor Laupland's research interests include the epidemiology and outcome of critical illness with a focus on severe infections especially bloodstream infections. The departmental research output was evidenced by more than 60 publications. These included two publications in the *New England Journal of Medicine* (SPICE III Prof Michael Reade and vena cava filters in trauma Dr Anthony Holley and Prof Jeffrey Lipman). Research funding awarded by department members exceeded 1 million dollars. Collaborative research involving multiple disciplines was evident locally, nationally, and internationally.

Local efforts were extensively supported by the RBWH Research Staff including the multi-centred BLING III study that is the largest clinical trial investigating antibiotic dosing in serious infections. The **CaBoOM** collaboration between **C**algary, **B**risbane, **H**ong Kong, **N**ew **O**rleans (Ochsner), and **N**imes-**M**ontpellier was established with the first study (Attire) initiated. Departmental members played a major role in the supervision of advanced research trainees. Notably RBWH intensivists Drs. Judith Bellapart and Jayesh Dhanani were awarded PhD degrees and have been successful at acquiring research funding to support their career advancement (MNHHS Fellowship Grant Dr. Jayesh Dhanani, MNHHS-QUT Project grants (Dr. Judith Bellapart). Professor Jason Roberts named Australia's leading researcher in both the Communicable Diseases and Critical Care categories in The Australian's 2019 Research magazine. Professor Jeffrey Lipman conferred title of Fellow of the International Society of Antimicrobial Chemotherapy.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
David Mackintosh	ICU SR	Febrile neutropenia in cancer patients admitted to ICU: an analysis of short and long term outcomes according to ventilation strategy	Jayesh Dhanani, Michael Reade
Meyrelle Fernandes	ICU SR	Safety and efficacy of a novel computerised insulin protocol in the ICU: a retrospective analysis CICM project	Jayesh Dhanani, David Liu
Elissa Milford	PhD, UQ, 6 years	Effects on the glycocalyx of resuscitation with immunomodulatory drugs and cryopreserved blood products in preclinical and clinical trauma	Michael Reade, Tung, Dean
Gabrielle Simonova	PhD, UQ, 3 years	Effect of storage conditions and duration on the clinical effect of platelet and red blood cell transfusion	Michael Reade, Dean, Tung
Paul Lee-Archer	PhD, UQ, 5 years	A randomised controlled trial of dexmedetomidine to lessen postoperative agitation in children undergoing elective surgery or radiology	Michael Reade, Long, Sternberg
Adam Mahoney	PhD, UQ, 6 years	Observational studies of critical care practice in the management of severe burns patients in Australia and New Zealand	Michael Reade, Vallmuur, Cameron
Anthony Holley	PhD, UQ, 6 years	Observational studies of critical care practice in the management of severe burns patients in Australia and New Zealand	Jeremy Lipman, J Cohen, Michael Reade, Vallmuur, Cameron
Andrew Flint	PhD, Monash, 6 years	Retrospective analysis of the effect of platelet transfusion on infection complications in critical illness	Michael Reade, Zoe McQuilten, Elizabeth Wood
Gavin Day	MPH, QUT, 2 years	Does a supervisor's leadership have an effect on burnout in Army clinicians? A multivariable analysis of two validated survey instruments	Michael Reade
Patrick Biggins	MD, UQ, 2 years	Does delay to neurosurgical intervention after trauma affect outcome? If so, what (if any) delay is acceptable? Analysis of Queensland Health data	Michael Reade, Vallmuur, Cameron
Jordan Wiebe	MD, UQ, 2 years	An audit of off-label medications in Australian critical care practice	Michael Reade, Jeffrey Lipman
Cody Frear	MD/PhD, UQ, 6 years	A bibliometric analysis of Australian intensive care medicine academic output, 2000-2018	Michael Reade
Terrance English	MBBS, Deakin	Predictors of platelet transfusions in cardiac surgical patients	Michael Reade, Zoe McQuilten

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
J Lipman, J Dulhunty, J Roberts, T Starr	O Cotta (UQ), Associate Professor Joshua Davis (John Hunter Hospital, NSW), Professor Jan De Waele (Ghent University), Professor Simon Finfer, Dr Parisa Glass, Professor John Myburgh, Ms Dorrilyn Rajbhandari, Dr Colman Taylor (The George Institute) Dr Shay McGuinness (Auckland City Hospital), Professor Sandra Peake (The Queen Elizabeth Hospital), Dr Andrew Rhodes (St George's Healthcare NHS Trust), Dr Charudatt Shirwadkar (Blacktown Hospital, NSW)	BLING III Study A phase III randomised controlled trial of continuous beta-lactam infusion compared with intermittent beta-lactam dosing in critically ill patients
J Lipman, J Roberts	O Cotta (UQ)	Optimising ceftriaxone dosing for critically ill patients with severe pneumonia
J Lipman, J Roberts		An Observational Pharmacokinetic study of Ceftolozane-Tazobactam in Intensive Care Unit in patients with and without continuous renal replacement therapy.
J Lipman, J Roberts	N Kumta (Q Health)	"A prospective observational pharmacokinetic evaluation of the plasma and cerebrospinal fluid concentrations of a single dose ceftolozane/tazobactam in infected critically ill patients with an indwelling external ventricular drain"
G Pang, J Pincus	S O'Donoghue, R Roach (Q Health)	An Observational Study to assess aspiration risk using gastric ultrasound in ventilated ICU patients prior to extubation
J Lipman	S Parker, S Wallis (UQ)	Validation of microsampling versus traditional blood sampling for antibiotic pharmacokinetics
J Cohen, D Lui, A Livermore, M Reade J Roberts	A Humbert (UQ), N Reza (TPCH), A Udy (The Alfred)	Pharmacokinetics of Transdermal Nicotine replacement therapy patches in the ICU: A prospective observational pharmacokinetic study of nicotine/cotinine concentrations in critically ill smokers receiving transdermal NRT patches
N Kumta, J Lipman, J Roberts		The Pharmacokinetics of Ceftriaxone, Meropenem, Piperacillin-Tazobactam and Vancomycin in the Cerebrospinal Fluid of Critically Ill Patients with Uninflamed Meninges
J Cohen, G Nethathe		A Comparison of the Total and Free Cortisol Response to a Standard Short Synacthen Test in Patients with Traumatic Brain Injury
J Cohen	A/Prof Antje Blumenthal (UQ), Prof Bala Venkatesh, Dr James Walsham (Qld Health)	HREC/18/QRBW/290: Examining the WNT pathway in sepsis Winter
D Lui, ICS Research Coordination team, M Reade, J Pincus, E Hallt, L Dalgleish, K Herbst	A Humbert (UQ)	Project ID: 44026 A randomised, double-blind, single-centre, placebo-controlled trial of low-dose clonidine infusion to improve sleep in postoperative patients in the High Dependency Unit CLONES

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Adelaide Charlton	N Widdecombe	Validation of a 10-minute spontaneous breathing trial to predict time to circulatory death in organ donation candidates
J Winearls (Qld Health)	A Holley	Fibrinogen Concentrate vs. Cryoprecipitate in under 18-year olds
Professor Stephen Bernard Australian and New Zealand Intensive Care Research Centre	M Reade, A Holley	Pre-hospital Anti-fibrinolytics for Traumatic Coagulopathy and Haemorrhage (The PATCH Study) A multi-centre randomised, double-blind, placebo-controlled trial of pre-hospital treatment with tranexamic acid for severely injured patients at risk of acute traumatic coagulopathy

Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
The George Institute of Health	J Lipman	A multi-centre, blinded, randomised, controlled trial (RCT) to determine whether fluid resuscitation and therapy with a “balanced” crystalloid solution (Plasma-Lyte 148®) decreases 90-day mortality in critically ill patients requiring fluid resuscitation when compared to the same treatment with 0.9% sodium chloride (saline)
K Denny	J Lipman	Recognising Sepsis in SIRS Trial (RESIST)
E Raby (<i>WA Health</i>)	J Lipman, C Heney	Evolution of Beta lactam resistance in pseudomonas aeruginosa during treatment of major burn injury
G Eastwood Australian and New Zealand Intensive Care Research Centre	M Reade	Targeted Therapeutic Mild Hypercapnia After Resuscitated Cardiac Arrest A Phase III Multi-Centre Randomised Controlled Trial
Australian and New Zealand Intensive Care Research Centre	J Lipman	HREC/18/CALHN/443 Nutrition prescription in Australian and New Zealand intensive care units: A point-prevalence audit
Merck Sharp and Dohme (<i>Australia</i>) Pty Limited	J Lipman, J Gowardman	A Phase III, Randomized, Double-Blind, Active Comparator-Controlled Clinical Trial to Study the Safety, Tolerability, and Efficacy of Imipenem/ Cilastatin/Relebactam (MK-7655A) Versus Piperacillin/Tazobactam in Subjects with Hospital-Acquired Bacterial Pneumonia or Ventilator-Associated Bacterial Pneumonia
K Chu (<i>Qld Health</i>)	J Lipman	Timing of Lumbar puncture for the detection of xanthochromia in subarachnoid haemorrhage
Roche	J Gowardman, J Pincus, G Pang	A phase 3 randomized, double-blind, active-controlled study to assess the efficacy and safety of baloxavir marboxil plus oseltamivir, versus oseltamivir alone in hospitalized patients with severe influenza

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Jeffrey Lipman	Recipient of ISAC Fellow Award 2019 (FISAC)	International Society of Antimicrobial Chemotherapy

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Bellapart J, Laupland KB, Nasrallah F	ICU	Diagnostic sensitivity of plasma endothelin-1 for cerebral vasospasm after subarachnoid hemorrhage	Royal Brisbane and Women’s Foundation/ Metro North Collaborative Research Grant	\$40,000	\$0.00	2019-2020
Roberts J, Lipman J, Cotta MO, Kruger P, Schlapbach L, Irwin A, Shekar K, Comans T, Paterson P, Harris P, Ungerer J, McWhinney B,	ICU	Personalising Antibiotic Therapy to Improve Outcomes in Patients with Severe Infections	BDHP/ MRFF Rapid applied research Translation Program	\$332,868	\$0.00	2019-2021
Dhanani J, Reade M, Eley V, Williams J	ICU	Pharmacokinetics of inhaled fentanyl and morphine.	MNHS Collaborative Research Grant	\$50,000	\$0.00	2019-2020
Shay McGuinness, Rachael Parke, Ross Freebairn, Seton Henderson, Colin McArthur, Sally Roberts, Paul Young, Joel Dulhunty and Jeffrey Lipman	ICU	BLING III	Medical Research Institute of New Zealand	\$1,195,807	\$0.00	2019-2020
Holley A, Lipman J, Cohen J, Reade M	ICU	A Prospective Evaluation of Australasian Critical Care Burns Patient	Jamieson Trauma Institute Project Funding	\$86,207	\$0.00	2019-2020

Research Grants (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Roberts JA, Lipman J, Paterson DL, Harris P, Kruger P, Dorofaeff T, Schlapbach L, Beatson S, Schembri M	ICU	Reducing time to appropriate antibiotics and optimal doses to treat sepsis using rapid whole genome sequencing combined with dosing software	MRFF Rapid Applied Research Translation Program Grant	\$250,829	\$1,656	2019-2020
Roberts JA, Luque S, Zeitlinger M, Sime F	ICU	Screening anti-fungal exposure in intensive care unit: The SAFE-ICU study	European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Study Group Research Grants	\$47,200	\$21,573.74	2019-2020

2019 Research Publications

Journal Articles

- Abraham J, Sinollareddy M, Roberts MS, Williams P, Peake SL, **Lipman J, Roberts JA**. Plasma and interstitial fluid population pharmacokinetics of vancomycin in critically patients with sepsis. *Int J Antimicrob Agents*. 2018 Oct 5. pii: S0924-8579(18)30280-2. doi: 10.1016/j.ijantimicag.2018.09.021. In Press
- Dhaese SAM, Farkas A, Colin P, **Lipman J**, Stove V, Verstraete AG, **Roberts JA**, De Waele JJ. Population pharmacokinetics and evaluation of the predictive performance of pharmacokinetic models in critically ill patients receiving continuous infusion meropenem: a comparison of eight pharmacokinetic models. *J Antimicrob Chemother*. 2019 Feb 1;74(2):432-441
- Koulenti D, Parisella FR, Xu E, **Lipman J**, Rello J. The relationship between ventilator-associated pneumonia and chronic obstructive pulmonary disease: what is the current evidence? *Eur J Clin Microbiol Infect Dis*. 2019 Jan 24. doi: 10.1007/s10096-019-03486-2. In Press
- Paul SK, **Roberts JA, Lipman J**, Deans R, Samanta M. A Robust Statistical Approach to Analyse Population Pharmacokinetic Data in Critically Ill Patients Receiving Renal Replacement Therapy. *Clin Pharmacokinet*. 2019 Feb;58(2):263-270
- Despoina Koulenti, Andrew Song, Aaron Ellingboe, MohdHafiz Abdul-Aziz, Patrick Harris, Emile Gavey, **Jeffrey Lipman**. Infections by multidrug-resistant Gram-negative Bacteria: What's new in our arsenal and what's in the pipeline? *Int J Antimicrob Agents*. 2018 Oct 27. pii: S0924-8579(18)30303-0. doi: 10.1016/j.ijantimicag.2018.10.011
- Heffernan AJ, Sime FB, **Lipman J, Dhanani J**, Andrews K, Ellwood D, Grimwood K, **Roberts JA**. Intrapulmonary pharmacokinetics of antibiotics used to treat nosocomial pneumonia caused by gram-negative bacilli: a systematic review. *Int J Antimicrob Agents*. 2018 Nov 22. pii: S0924-8579(18)30336-4. doi: 10.1016/j.ijantimicag.2018.11.011
- Yasser Sakr, Ulrich Jaschinski, Xavier Wittebole, Tamas Szakmany, **Jeffrey Lipman**, Silvio A. Namendys-Silva, Ignacio Martin-Loeches, ICON Investigators, Marc Leone,8 Mary-Nicoleta Lupu,9 and Jean-Louis Vincent;Sepsis in Intensive Care Unit Patients: Worldwide Data From the Intensive Care over Nations Audit. *Open Forum Infect Dis*. 2018 Nov 19;5(12): ofy313. doi: 10.1093/ofid/ofy313. eCollection 2018 Dec
- De Backer D, Cecconi M, **Lipman J**, Machado F, Myatra SN, Ostermann M, Perner A, Teboul JL, Vincent JL, Walley KR.Challenges in the management of septic shock: a narrative review. *Intensive Care Med*. 2019 Feb 11. doi: 10.1007/s00134-019-05544-x. (In press)
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29. Ho KM1, **Holley A2**, **Lipman J3**. Vena Cava filters in severely-injured patients: One size does not fit all. 2019 Aug;38(4):305-307. doi: 10.1016/j.accpm.2019.07.003
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Journal Articles (cont)

45. Dhaese SAM1, Colin P2, Willems H3, Heffernan A4, Gadeyne B3, Van Vooren S5, Depuydt P3, Hoste E3, Stove V6, Verstraete AG6, **Lipman J7, Roberts JA8**, De Waele JJ3. Saturable elimination of piperacillin in critically ill patients: implications for continuous infusion. [Epub ahead of print]
46. Alexis Tabah 1 , Matteo Bassetti 2 , Marin H Kollef 3 , Jean-Ralph Zahar 4 , José-Artur Paiva 5 , Jean-Francois Timsit 6 7 , **Jason A Roberts** 8 9 10 , Jeroen Schouten 11 , Helen Giamarellou 12 , Jordi Rello 13 14 , Jan De Waele 15 , Andrew F Shorr 16 , Marc Leone 17 , Garyphallia Poulakou 18 , Pieter Depuydt 15 , Jose Garnacho-Montero 19 Antimicrobial De-Escalation in Critically Ill Patients: A Position Statement From a Task Force of the European Society of Intensive Care Medicine (ESICM) and European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Critically Ill Patients Study Group (ESGCIIP) 2019 Nov 28 [Online ahead of print]
47. **John Robert Gowardman** 1 Acute Laryngeal Injury Following Mechanical Ventilation: Revisiting the Known Unknowns Crit Care Med
48. Connor B Reid 1, Lisa Steele 2, Kelsey Pasquill 2, Elizabeth C Parfitt 1, **Kevin B Laupland** 3 4 5 6 Occurrence and Determinants of Klebsiella Species Bloodstream Infection in the Western Interior of British Columbia, Canada 2019 Dec 19
49. **Kevin B Laupland** 1 2 3, Kelsey Pasquill 4 , Gabrielle Dagasso 5 , Elizabeth C Parfitt 5 , Lisa Steele 4 , Henrik C Schonheyder 6 Population-based Risk Factors for Community-Onset Bloodstream Infections 2019 Dec 19 [Online ahead of print]
50. **Michael C Reade** 1 Addressing High Practice Variability in Reported Management of Burns Dec 2019
51. **Anthony D Holley** 1 , **Michael C Reade** 2 , **Jeffrey Lipman** 2 , Anthony Delaney 3 , Andrew Udy 4 , Richard Lee 3 , Edward Litton 5 , Winston Cheung 6 , Andrew Turner 7 , Tessa Garside 8 , Lewis Macken 3 , Benjamin Reddi 9 , Mark Kol 6 , Alex Kazemi 10 , Asim Shah 11 , Shane Townsend 2 , Jeremy Cohen 2 Survey of Critical Care Practice in Australian and New Zealand Burn Referral Centres Dec 2019
52. **Laupland KB**, Pasquill K, Dagasso G, Parfitt EC, Steele L, Schonheyder HC. Population-based risk factors for community-onset bloodstream infections. *Eur J Clin Micro Infect Dis* 2019 (Epub ahead of print)
53. Reid CB, Steele L Pasquill K, Parfitt EC, **Laupland KB**. Occurrence and determinants of Klebsiella species bloodstream infection in the western interior of British Columbia, Canada. *BMC Infect Dis* 2019;19(1):1070
54. Denny K, Kumar A, Timsit JF, **Laupland KB**. Extra-cardiac endovascular infections in the critically ill. *Intensive Care Med* (Epub ahead of print)
55. **Laupland KB**, Pasquill K, Parfitt EC, Steele L. Bloodstream infection due to beta-hemolytic streptococci: A population-based comparative analysis. *Infection* 2019;47(6):1021-1025
56. **Laupland KB**, Tabah A, Kelway C, Lipman J. Does intermittent pneumatic compression PREVENT thrombosis in the ICU? *Anaesth Crit Care Pain Med* 2019;38(4):303-304
57. **Laupland KB**, Pasquill K, Parfitt EC, Dagasso G, Gupta K, Steele L. In-hospital death is a biased measure of fatal outcome from bloodstream infections. *Clin Epidemiol* 2019; 11:47-52
58. Timsit JF, Bassetti M, Cremer O, Daikos G, de Waele J, Kallil A, Kipnis E, Kollef M, **Laupland K**, Paiva JA, Rodríguez-Baño J, Ruppé É, Salluh J, Taccone FS, Weiss E, Barbier F. Rationalizing antimicrobial therapy in the ICU: a narrative review. *Intensive Care Med.* 2019 45(2):172-189
59. Valiquette L, **Laupland KB**. Looking beyond the laboratory is not preposterous. *JAMMI* 2019 (Epub ahead of press)
60. **Laupland KB**, Valiquette L. Presenteeism: Symptom of an ailing medical practice model for Canadian physicians? *JAMMI* 2019;4(3):136-138
61. Carignan A, Valiquette L, **Laupland KB**. Impact of climate change on emerging infectious diseases: Implications for Canada. *JAMMI* 2019;4(2):55-59.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

JEREMY COHEN

1. Cortisol, Aldosterone, Vitamin C in Septic Shock: World Congress of Intensive Care Melbourne
2. Evolution of the Hot Case: World Congress of Intensive Care Melbourne.

JEFFREY LIPMAN

1. Logan Hospital Research and Innovation Symposium Keynote April 2019
2. Antimicrobial Masterclass for Acute Care Clinicians QE II Hospital Brisbane June 2019
3. Short Course in Critical Infection 2019 Mater Hospital Brisbane Sept 2019
4. Neil Widdicombe Brett Hoggard and Daniel Best. Integrated Systems and Telehealth in Support of Critical Aeromedical Transfers. WADEM Congress on Disaster and Emergency Medicine 7 May 2019 • Brisbane, Australia.

Oral Presentations

JEFFREY LIPMAN

1. 46th Annual Meeting of the Japanese Society of Intensive Care Medicine, Kyoto, March 2019
2. Meeting in Tokyo – March 2019
3. Euro Asia, ESICM, Taiwan, April 2019
4. Malaysian Society of Anaesthesiologists and College of Anaesthesiologists, Ipoh, July 2019
5. 10th Thai Critical Care Congress , Bangkok, August 2019
6. Scientific Meeting – Hanoi University of Pharmacy, Ho Chi Minh City, Vietnam, October 2019
7. 40th Annual Scientific meeting of Korean Society of Critical Care Medicine, Seoul, April 2020.

PROFESSOR TESS CRAMOND MULTIDISCIPLINARY PAIN CENTRE



A/Prof Paul Gray
Director
PTCMPC

The Profess Tessa Cramond Multidisciplinary Pain Centre (PTCMPC) has continued to build research involvement and collaborations throughout 2019. It is the vision of this Centre to continue this growth.

The highlights for 2019 were:

- Dr Nicole Andrews (Occupational Therapist) being awarded a ‘Queensland and National iAwards for her work with the PainROADMAP. This was a well-deserved award as she continues her work in developing and validating an activity App to be used in patients with persistent pain. Dr Andrews is involved in many other research initiatives that are detailed in this report
- The PTCMPC was awarded a grant from Metro North Research to appoint a Research Development Officer. This appointment will greatly accelerate the research platform of the Centre
- The PTCMPC is excited and committed to developing new and ongoing research initiatives and collaborations. This is especially so as the Centre prepares for the move to the Surgical, Treatment and Rehabilitation Services building in 2021.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Erin Crofton	PhD (2018-present)	Is sensory sensitivity a factor in non-adherence with compression garments post-burn	Pamela Meredith (CQU), Jenny Strong, Paul Gray
Genevieve O'Donoghue	PhD CQU (2018-2020)	Couples, attachment and chronic pain	Pamela Meredith (CQU), Jenny Strong, Nicole Andrews

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Nicole Andrews	Postdoctoral Research Fellow	0.8	External	RECOVER Injury Research Centre	The University of Queensland
Jenny Strong	Honorary Research Fellow of the PTCMPC		In-kind	Occupational Therapy, RBWH, Research Program	The University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	Research Program	Affiliated University/ies
Scott Farrell	Honorary Research Fellow of the PTCMPC	Radiologic properties of symptomatic zygapophyseal joints in chronic whiplash: a case-control study	RECOVER Injury Research Centre, University of Queensland
Julie Vermeir	Honorary Research Student of the PTCMPC	Gamified Web-based Attentional Bias Modification Training for Adults with Chronic Pain	Queensland University of Technology

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Nicole Andrews	Belinda Long (OT), Jenny Strong, Sue Laracy (OT)	Evaluation of occupational therapy interventions within the orthopaedic physiotherapy screening clinic
Nicole Andrews	Marlien Varnfield (CSIRO), David Ireland (CSIRO)	Towards understanding how much is too much for individuals with chronic pain
Nicole Andrews	Olivia Zheng (Trauma Service), Jodie Ross (Trauma Service), Venerina Johnston (UQ), Elise Gane (UQ), Esther Smits (UQ), Charlotte Brakenridge (UQ), Paul Gray , Michael Rudd (Trauma Service)	An investigation of the prevalence, impact, and management of chronic pain post trauma at a tertiary public hospital
Nicole Andrews	David Ireland (CSIRO), Marlien Varnfield (CSIRO), Cate Sinclair (Pain Specialists Australia), Michael Deen (MSHHS), Kathleen Cooke (St Vincents), Helen Rowe (The Therapy Space), Atiyeh Vaezipour (UQ), Esther Smits (UQ)	Is app gamification effective in increasing consumer engagement and satisfaction? An evaluation of gamification for a chronic pain monitoring app
Nicole Andrews	Venerina Johnston (UQ), Genesta Nicolson , Michael Handy (Trauma Service), Robyn Charles (Trauma Service)	Evaluating the use of the 'Leading the Way in Your Recovery' resource

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Atiyeh Vaezipour (UQ), Mark Horswill (UQ), Oscar-Oviedo Trespalacios (CARRS-Q), Venerina Johnston (UQ), Patricia Delhomme (IFSTTAR)	Nicole Andrews (PTCMPC)	Improving the management of driving behaviour in individuals with chronic pain
Charlotte Brakenridge (UQ), Venerina Johnston (UQ), Esther Smits (UQ), Elise Gane (UQ)	Nicole Andrews (PTCMPC)	Impact of interventions on work-related outcomes for individuals with musculoskeletal injuries after road traffic crash: a systematic review
Charlotte Brakenridge (UQ), Venerina Johnston (UQ), Michelle Smith (UQ), Sjaan Gomersall (UQ)	Nicole Andrews (PTCMPC)	Identifying optimal sit-stand recommendations for office workers with low back pain
Esther Smits (UQ), Venerina Johnston (UQ), Charlotte Brakenridge (UQ), Elise Gane (UQ)	Nicole Andrews (PTCMPC)	Recovery following a road traffic crash – a Delphi study
Monika Hasenbring (Ruhr-University of Bochum, Germany), Gerold Ebenbichler, (Vienna Medical University, Austria)	Nicole Andrews (PTCMPC)	Overactivity in chronic pain, the role of pain related endurance and neuromuscular activity – An interdisciplinary, narrative review.
Jessica Thackeray (UQ), Sophie Bowen (UQ), Cory Poll (UQ), Pamela Meredith (CQU)	Nicole Andrews (PTCMPC), Jenny Strong (PTCMPC)	“Can Sensory and Attachment-Informed approaches be used to modify perceptions of pain?”
Robyn Scheer (OT), Erin Crofton (OT)	Nicole Andrews (PTCMPC)	The effect of limb position on leg circumference measurements in patients diagnosed with lower limb lymphoedema
Lynn DeBar (Kaiser Permanente Centre for Health Research, Portland, USA), Meghan Mayhew (Kaiser Permanente Centre for Health Research, Portland, USA)	Nicole Andrews (PTCMPC)	PPACT administrative supplement for research on sleep disturbances and impact on chronic pain
Venerina Johnston (UQ), Melissa Kendall (MSHHS), Donna Valiant (UQ), Ray Quinn (MSHHS), Ben Turner (MSHHS), Hannah Gullo (UQ), Charlotte Brakenridge (UQ)	Nicole Andrews (PTCMPC)	Review of vocational rehabilitation services for persons with brain injury within Queensland

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Nicole Andrews	Pain ROADMAP – Winner Research & Development Project of the Year 2019	Queensland iAwards
	Pain ROADMAP Merit Award for Data Insights Innovation of the Year 2019	
	Pain ROADMAP Merit Award for Community Services Market 2019	
Nicole Andrews	Pain ROADMAP – Merit Award for Research and Development Project of the Year 2019	Australian iAwards
	Pain ROADMAP – Merit Award for Data Insights Innovation of the Year 2019	
Jenny Strong	Award for Excellence in Research Learning and Innovation	CAHRLI June 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Erin Crofton, Jennifer Strong, Pamela Meredith (CQU), Paul Gray	Occupational Therapy and PTCMPC	Is sensory sensitivity a factor in non-adherence with compression garments post-burn	RBWH Foundation scholarship	\$38,082.52	\$38,082.52	2019-2020
Atiyeh Vaezipour (UQ), Nicole Andrews , Mark Horswill (UQ), Oscar-Oviedo Trespalacios (CARRS-Q), Venerina Johnston (UQ), Patricia Delhomme (IFSTTAR)	PTCMPC and OT	Improving the management of driving behaviour in people with chronic pain: perspectives of people with chronic pain and health professionals	RACV Safety Research Fund	\$74,630	\$20,000	2019-2020
Nicole Andrews , David Ireland (CSIRO), Marlien Varnfield (CSIRO)	PTCMPC and OT	An evaluation of the usability of a pediatric version of the Pain ROADMAP App	APS/APRA/CFK Clinical Research Grant	\$30,000	\$12,400	2019-2020

2019 Research Publications

Journal Articles

- Brakenridge, Charlotte L., Gane, Elise M., Smits, Esther J., **Andrews, Nicole E.** and Johnston, Venerina (2019) Impact of interventions on work-related outcomes for individuals with musculoskeletal injuries after road traffic crash: a systematic review protocol. *Systematic Reviews*, 8 1: 247. doi:10.1186/s13643-019-1178-2
- Ireland, David and **Andrews, Nicole** (2019). Pain ROADMAP: A mobile platform to support activity pacing for chronic pain. *Stud Health Technol Inform.* 266:89-94. doi: 10.3233/SHTI190778
- Hasenbring, Monika I., **Andrews, Nicole E.**, Ebenbichler, Gerold, Overactivity in Chronic Pain, the Role of Pain Related Endurance and Neuromuscular Activity – An Interdisciplinary, Narrative Review. *The Clinical Journal of Pain*. Publish Ahead of Print. doi: 10.1097/AJP.0000000000000785
- Crofton, Erin**, Meredith, Pamela, **Gray, Paul**, O'Reilly, Sarah, and **Strong, Jenny** (2019). Non-adherence with compression garment wear in adult burns patients: A systematic review and meta-ethnography. *Journal of the International Society for Burn Injuries*. <https://doi.org/10.1016/j.burns.2019.08.011>.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

- Andrews, N.** Over-exercising and pain? Moving on With Pain Symposium, Aarhus, Denmark, November 2019.

SKININTEGRITYSERVICE

Dr Jill Campbell – recipient of the RBWH Foundation Robert and Janelle Bird Early Career Research Fellowship and awarded the health Innovation, Investment and Research Office Nursing and Midwifery Early Career Research Fellowship.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Lizanne Dalglish	PhD, QUT (2018-current)	Microcirculatory Dysfunction and Skin Failure in Critically ill patients: An exploratory study	Professor Fiona Coyer, Dr Kathleen Finlayson, Dr Jill Campbell
Harn-Rong (Nancy) Wang	Master of Nursing	Pressure Injury development in critically ill patients with cervical spine precautions: The Inspect study	Professor Fiona Coyer, Dr Jill Campbell

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Dr Jill Campbell	Joint appointment	0.2	RBWH and QUT		QUT
Monica Stankiewicz	Honorary research fellow	0.6	RBWH		Griffith University

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Jill Campbell <i>(RBWH site PI)</i>	Brigid Gillespie <i>(Griffith Uni)</i> , Rachel Walker <i>(PAH)</i> , Wendy Chaboyer <i>(Griffith Uni)</i> , Marie Cooke <i>(Griffith Uni)</i> , and Jennifer Whitty. AI: Lukman Thalib, Sharon Latimer, Donna McClean, Jill Campbell, Rosalind Probert	Efficacy and Effectiveness of Prophylactic fOam dressings in the prevention of sacral pressure injuries in at-risk hospitalised patients: The EEPOC Trial. National Health and Medical Research Council (NHMRC) Project Grant (2018)

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Jill Campbell	RBWH Skin Integrity Services	Towards a better understanding of continence management in the acute care setting; A multisite exploratory study'	RBWH Foundation Robert and Janelle Bird Early Career Research Fellowship	\$100,000	\$50,000	2019-2020
Dr Jill Campbell	RBWH Skin Integrity Services	Towards improved understanding of incontinence and incontinence-associated dermatitis in the acute care setting	Health Innovation, Investment and Research Office Nursing and Midwifery Early Career Research Fellowship	\$20,000	Nil	2019-2020

2019 Research Publications

Journal Articles

1. **Campbell J**, Cook JL, Doubrovsky A, Vann A, Mcnamara G, Coyer F (2019). Exploring incontinence-associated dermatitis in a single centre intensive care unit. *Journal Wound Ostomy Continence Nursing*. 46(5):401-407
2. Dalgleish L, **Campbell J**, Finlayson K, Coyer F (2019). Acute Skin Failure in the Critically Ill Adult Population: A Systematic Review (Accepted for publication)
3. Coyer F, **Campbell J**, Doubrovsky a. Efficacy of an incontinence-associated dermatitis intervention for critically ill patients in intensive care; an open label pilot randomised control trial. *Adv Skin & Wound Care*. Accepted 29 August 2019
4. Webster, J., Scuffham, P., **Stankiewicz, M.**, & Chaboyer, W.P. 2019 Negative pressure wound therapy for skin grafts and surgical wounds healing by primary intention. *The Cochrane Library*
5. **Stankiewicz, M.**, Gordon, J., Dulhunty, J., Brown, W., Pollock, H. & Barker-Gregory, N. 2019. A cluster controlled clinical trial of two prophylactic sacral dressings in the prevention of sacral pressure injuries in critically ill patients, *Wound Practice and Research* 27(1) 21-26
6. **Stankiewicz, M.**, Gordon, J., Rivera, J. Khoo, A., Nessen, A. & Goodwin, M. 2019. Clinical management of ileostomy high-output stomas to prevent electrolyte disturbance, dehydration and acute kidney injury: a quality improvement activity. *Journal of Stomal Therapy Australia*, 39 (1) 8-10.

Book Publications

1. **Coleman, K.** & Neilsen, G., 2019 Wound care: A practical guide for maintaining skin integrity. Elsevier Chatswood.

Book Chapters / Letters

1. **Coleman, K.** 2019 Healable vs non-healable wounds, *Wound care: A practical guide for maintaining skin integrity*. Elsevier Chatswood. Chapter 3 p 35-46
2. **Coleman, K.** 2019 Traumatic Wounds, *Wound care: A practical guide for maintaining skin integrity*. Elsevier Chatswood. Chapter 4 p 47-64
3. Sandy-Hodgetts, K., Capper, T., **Stankiewicz, M.**, 2019 Surgical and Perinatal wounds, *Wound care: A practical guide for maintaining skin integrity*. Elsevier Chatswood. Chapter 5 p 65-76
4. Simm, J. & **Campbell, J.** 2019 Skin integrity issues, *Wound care: A practical guide for maintaining skin integrity*. Elsevier Chatswood Chapter 8 p113-134
5. **Smith, D.**, Parker, C., & Finlayson, K., Conditions affecting the lower limbs, *Wound care: A practical guide for maintaining skin integrity*. Elsevier Chatswood. Chapter 9 p135-152
6. **Smith, D., Hocking, K.**, 2019 How to individualise your wound management plan, *Wound care: A practical guide for maintaining skin integrity* Chapter 12p 199-208.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Campbell J** (2019). Pressure injury and incontinence-associated dermatitis; What's the difference? ACT Wounds Australia Symposium. Australian launch of the 2019 NPIAP/EPUAP and PPIA International Pressure Injury Guideline Canberra ACT December 2019
2. **Campbell J** (2019). Skin in the game: protecting vulnerable skin and CVAD securement. Pre-Congress Symposium. Skin anatomy and Physiology. Cancer Nurse's Society Australia National Congress. June 2019, Melbourne Australia
3. **Campbell J** (2019). *Incontinence-associated dermatitis; Accepted but unacceptable*. Herston State of the Art Healthcare Symposium. Royal Brisbane and Women's Hospital, Brisbane September 2019
4. **Stankiewicz M** (2019). Wound Expert Forum: Managing and preventing complex wounds. Invited speaker for Smith & Nephew, Melbourne 11th June and Brisbane 13th June.

Poster Presentations

1. Walker R, Gillespie B, Chaboyer W, Cook M, Whitty J, Thalib L, Probert R, **Campbell J**, McLean D, Latimer S, Sladdin I (2019). Efficacy and Effectiveness of Prophylactic fOam dressings in the prevention of sacral pressure injuries in at risk hospitalised patients: the EEPOC trial. Princess Alexandra Hospital Health Symposium, July 30-August 2, 2019 Brisbane.

Other communications and outputs

1. **Campbell J.** (Small working group member - Populations with specific pressure injury needs) in European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA: 2019
2. **Campbell J.** Invited expert panel member Consensus position paper skin frailty. Hosted by the International Skin Tear Advisory Panel, October 2019 London UK.



INTERNAL MEDICINE SERVICES

INTERNAL MEDICINE SERVICES



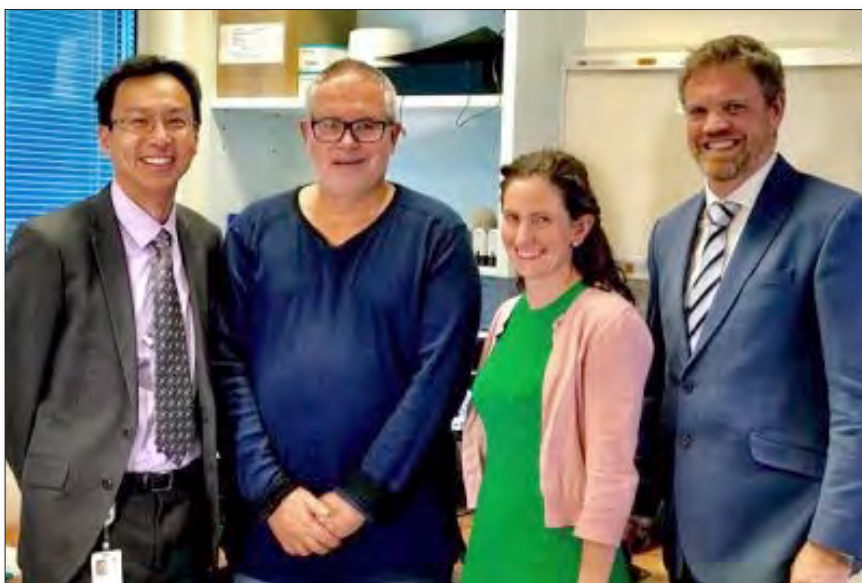
Prof. Keshwar Baboolal
Executive Director
Internal Medicine Services, RBWH

Internal Medicine Services has a deep history of involvement in advancing healthcare through research. This is achieved through the tireless efforts of dedicated staff across many disciplines and in all departments. In 2019, collaborations continued to be strong with our university and industry partners, as well as historical links with other health care providers and facilities both in Queensland and across Australia. IMS researchers also have many international collaborators that ensure that our contributions are benefiting not only our own patients, but also health care across the globe.

Having an active research culture not only adds to the body of knowledge of health care, it also allows our patients to access the latest therapies and diagnostics and newest medicines.

IMS staff across all disciplines actively participate and share their research outcomes within the RBWH Symposium, national and international conferences, publications and health forums. The IMS Research teams have received many grants and awards to support their research endeavours through the, RBWH Foundation Research Awards, Special Grants and funding from sources such as NHMRC, among others.

Each department has highlighted their Research achievements, listed those staff involved, documented their publications and presentations and nominated Post Graduate Research Students. This exhaustive list, while extremely impressive, still does not highlight the hours and hours of work that goes into each and every piece of research that is undertaken within this campus.



RBWH patient Chris Harrison (*second from left*) was suffering from the debilitating effects of Parkinson's Disease, until he received life changing Deep Brain Stimulation treatment. Chris is now getting back to the things he loves like fishing and hiking with his family thanks to the treatment he received from the amazing, [#RBWH Neurology team](#)



DEPARTMENT OF CARDIOLOGY

About this service:

The cardiology department has a broad investigator-driven research program with a focus on health service research/evaluation. This research has grown from clinicians improving models of care with interdisciplinary collaboration.

Highlights of 2019:

A *telehealth model of stress testing and Holter monitoring* has continued to flourish, with multiple new regional sites commenced across QLD.

To promote ongoing education of doctors and cardiac scientists, the second *Cardiac Imaging in Cardiomyopathies and Heart Failure meeting* was held in Sydney, showcasing the expertise built up around the cardiomyopathy clinic and multimodality cardiac imaging.

We have unique *cardiac obstetric* (collaboration with Internal Medicine and Obstetric Medicine) and *cardiac genetic* (collaboration with Genetic Health Queensland) *clinics* that receive state-wide referrals.

Other research interests include chest pain evaluation (collaboration with Emergency and Internal Medicine departments), using salivary biomarkers to detect presymptomatic heart disease (collaboration with QUT), and investigating the feasibility of training nurses to perform echocardiography to assess left ventricular function.

Benefits for clinical practice:

Tele-stress testing and Holter monitoring has reduced waiting times, increased access (especially Indigenous patients), decreased inequity and improved service quality for regional centres. *Accelerated Chest pain Risk Evaluation (ACRE)* is being actively translated into clinical practice throughout Queensland. We have a *Cardiac Catheter Laboratory database* with comprehensive mandatory complication tracking, which informs the *Queensland Cardiac Outcomes Registry (QCOR)-Intervention*. We also inform *QCOR-Heart Failure, QCOR-Cardiac Rehabilitation and QCOR-EP/pacing*, which are tracking healthcare measures for patients across Queensland.

Editorial and other key positions held:

- Professor and Clinical Director, Australian Centre for Health Service Innovation, Queensland University of Technology
- Metro North Heart Lung Executive
- Associate Editor, Heart Lung Circulation (2 staff members)
- Editorial board for Cardiac Failure Review
- Editorial board for Medicine Today
- Editorial board for Cardiology Today
- Associate Cardiac Editor, Australasian Journal of Ultrasound in Medicine
- European Cardiac Obstetric Registry (only Australian representative)
- Australian Government Medical Services Advisory Committee (MSAC)
- Royal Australasian College of Physicians Specialist Advisory Committee – QLD representative
- National Heart Foundation Research Committee
- CSANZ Board
- CSANZ Education Trust Board of Trustees
- CSANZ Scientific Committee
- CSANZ Queensland Regional Secretary
- European Society of Cardiology Congress Abstract Review Committee
- European Commission independent expert
- Medicare Benefits Schedule Review Cardiac Services Clinical Committee
- Australian Government Department of Health Clinical Quality Registries Expert Advisory Group
- Australian Genomics Health Alliance- Cardiovascular Genetic Disorders Flagship
- Australian Cardiac Genetic Testing (AGCT) collaborative
- Australia and New Zealand Alliance for Cardiovascular Trials Scientific Advisory Committee
- Brisbane Diamantina Health Partners Evidence and Innovation in Clinical Care Theme Leadership Group
- Queensland Heart Failure Service Steering Committee (Co-chair)
- Queensland Cardiovascular Research Network Steering Committee
- President ANZ Cardiac Magnetic Resonance (ANZCMR)
- Society of Cardiovascular Computed Tomography Education Committee.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Roberts, Tiffany	MPhil	Rural Hospital Chart Audit on Cardiac Investigations	Adam Scott , Robert Mullins
Martin, Curtis	Honours	Remote Control Exercise Stress Testing	Adam Scott
Poulter, Rohan	PhD, UQ <i>(from 2012)</i> <i>(part-time, deferred)</i>	Evaluating the diagnostic performance of dual energy cardiac computed tomography	John Atherton, John Younger
Lo, Ada	PhD, UQ <i>(from 2014)</i> <i>(part-time)</i>	Identification of new echocardiographic parameters in distinguishing between familial cardiomyopathy genotypic positive patients with and without phenotypic expression	John Atherton , Arnold Ng, William Wang, Kristyan Guppy-Coles, Sandhir Prasad
Lancini, Daniel	PhD, UQ <i>(from 2015)</i> <i>(part-time)</i>	Atrial fibrillation in the hospital setting	Paul Martin, Sandhir Prasad, John Atherton, Louise Cullen, Robert Boots
Prasad, Sandhir	PhD, UQ <i>(from 2017)</i> <i>(part-time)</i>	Left ventricular diastolic dysfunction following myocardial infarction: prevalence, predictors and prognosis	John Atherton, John Younger, Kristyan Guppy-Coles
Conradie, Andre	MPhil, UQ <i>(from 2016)</i> <i>(part-time)</i>	Determining an absolute risk model (calculator) to optimise the use of DAPT in patients presenting with acute coronary artery syndromes. use of DAPT in patients presenting with acute coronary artery syndromes	John Atherton , Stephen Worthley, D Eccleston
Wicramasingha Arachchilage, Nuwan	Master App Sci (Res), QUT <i>(from 2017)</i>	The clinical utility of salivary galectin-3 in heart failure	Chamindie Punyadeera, Nathan Subramaniam, John Atherton
McCreanor, Victoria	PhD, QUT <i>(graduated 2019)</i>	Identifying high value care for stable coronary artery disease in Australia. Prof Nick Graves	N Graves, A Barnett, William Parsonage
Nirmal Gautam	PhD, QUT <i>(from 2020)</i>	Current situation and Lifestyle Management to Combat for Non-Communicable Diseases in Australia	Sanj Kularatna, David Brain, William Parsonage
Michael Bishop	Grad Cert <i>(from 2019)</i>	TBC	William Parsonage
Dane Robinson	Grad Cert <i>(from 2019)</i>	TBC	William Parsonage
Jeffrey Rowland	Grad Cert <i>(graduated 2019)</i>	Implementation of 4F employing gamification	William Parsonage , Elizabeth Whiting
Anthony Bligh	Grad Cert <i>(graduated 2019)</i>	CBTp evaluation – Metro North Mental Health Implementation	William Parsonage , Ross Young

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Programt	Affiliated University/ies
Leeanne Palethorpe	Clinical trials coordinator		Research funded (clinical trials)	Cardiology clinical trials	No
Linda Hindom	Clinical trials coordinator		Research funded (clinical trials)	Cardiology clinical trials	No
Lydia Lilwall	Clinical trials coordinator		Research funded (clinical trials)	Cardiology clinical trials	No
William Parsonage	Professor and Clinical Director	0.2	Queensland University of Technology	Australian Centre for Health Service Innovation	Queensland University of Technology <i>(2016-current)</i>
William Parsonage	Senior Lecturer	NA	In-kind	Faculty of Medicine	University of Queensland <i>(2003-current)</i>
Adam Scott	Adjunct Professor	NA	In-kind	Faculty of Health	Queensland University of Technology <i>(2009–2021)</i>
John Atherton	Professor of Cardiology and Heart Failure Management	NA	In-kind	Faculty of Science, Health, Education and Engineering	University of Sunshine Coast <i>(2017-2020)</i>
John Atherton	Adjunct Professor	NA	In-kind	Faculty of Health	Queensland University of Technology <i>(2018-2020)</i>
John Atherton	Associate Professor	NA	In-kind	Faculty of Medicine	University of Queensland <i>(2002-current)</i>

RBWH Research Staff with research roles, positions or appointments e.g. Coordinators, etc (cont)

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
John Atherton	Honorary Fellow	NA	In-kind	Department of Medicine, Royal Melbourne Hospital, Faculty of Medicine, Dentistry and Health Sciences	The University of Melbourne (2017-2021)
Arun Dahiya	Adjunct Associate Professor	NA	In-kind	Faculty of Health	Griffith University (2015-current)
Sandhir Prasad	Associate Professor	NA	In-kind	Faculty of Medicine, Dentistry and Health	Griffith University (2019-current)
Louise McCormack	Senior Lecturer	NA	In-kind	Faculty of Medicine	University of Queensland
Louise McCormack	Royal Brisbane Clinical Unit Medical Student Coordinator	0.2 FTE	External	Faculty of Medicine	University of Queensland
Kris Guppy-Coles	Honorary Research Fellow	0.4 FTE	Heart Foundation Vanguard Grant	Cardiology, RBWH	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Adam Scott	Adam Scott, Alice McDonald, Tiffany Roberts, John Atherton, Paul Scuffham	Tele-Cardiac Investigations to support rural/regional hospitals
Kristyan Guppy-Coles, John Atherton, Sandhir Prasad	Arun Dahiya, Arnold Ng, Kym Smith, Ada Lo, Sam Hillier	Novel 3D echocardiography techniques of left ventricular functional assessment: utilisation in routine clinical practice and screening
Ada Lo, John Atherton, Kristyan Guppy-Coles	Arnold Ng, William Wang, Sandhir Prasad	Identification of new echocardiographic parameters in distinguishing between familial cardiomyopathy genotypic positive patients with and without phenotypic expression
Sandhir Prasad, John Atherton, John Younger, Kristyan Guppy-Coles	Liza Thomas, Tony Stanton, James Anderson, Ada Lo, Joanne Sippel, Christopher Kwan, Kym Smith	Left ventricular diastolic dysfunction following myocardial infarction: prevalence, predictors and prognosis
Sandhir Prasad, John Atherton, Kristyan Guppy-Coles, Po-Ling Inglis, Joanne Sippel	Kym Smith, Ada Lo, Arun Dahiya	Evaluation of oncology staff performing 3D-echocardiographic left ventricular function assessment for monitoring chemotherapy-induced cardiotoxicity
Kristyan Guppy-Coles, Sandhir Prasad, John Atherton, Ada Lo	Kym Smith, Patrick Beard, James Armstrong, Terena Truloff	Feasibility and accuracy of assessing left ventricular systolic function by measuring mitral annular excursion using a hand-held echocardiography device with an automated atrioventricular-plane tracking algorithm
Cullen L, Parsonage W, McCormack L, Greenslade J	Cullen L, Parsonage W, McCormack L , Milburn T, Starmer G, Stone R, Starmer K, Greenslade J	The impact of ImpACT: A protocol to improve emergency chest pain assessment
Daniel Lancini, Paul Martin, Sandhir Prasad	Rob Boots	New onset atrial fibrillation in the critically ill
Daniel Lancini, Paul Martin, Sandhir Prasad	Louise Cullen, Jaimi Greenslade	Atrial fibrillation in the emergency chest pain presentation
Arun Dahiya, Rick Jackson <i>(Logan Hospital)</i>	Arun Dahiya	Advanced Cardiovascular Imaging in Patients with Myotonic Dystrophy

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Chamindie Punyadeera, John Atherton , Benjamin Schulz, Goce Dimeski, Karam Kostner <i>(QUT)</i>	John Atherton	Novel diagnostics for heart failure
Robyn Clark, Alexandra McCarthy, John Atherton , Bogda Koczwarra, Narelle Berry, Tania Marin, Kerri Gillespie, Jonathon Foote, Sina Vatandoust. <i>(Flinders University)</i>	John Atherton	Development of a cardiotoxicity cardiovascular risk assessment tool
Sanjoy Paul, Olga Montvida, John Atherton , Kerenafali Klein, Julius Agbeve <i>(QIMR)</i>	John Atherton	Evaluation of the association of old and new anti-diabetes drugs with the risk of heart failure in patients with type 2 diabetes
Joseph Selvanayagam, Sanjay Prasad, Andrew McGavigan, Graham Hillis, Werner Jung, Laurent Billot, Suchi Grover, John Atherton <i>(SAHMR)</i>	John Atherton, John Younger, Paul Martin	Cardiovascular Magnetic Resonance GUIDEd management of mild-moderate left ventricular systolic Heart Failure (CMR GUIDE HF)
Briffa T, Cullen L , Chew D, Knuiman M, Fatovich D, Hickman P, Parsonage W , Nedkoff L, Sanfilippo F, Hillis G, Mitra B, Wilkes G, Schneider H, Rankin J, Karnon J, Scanlan S, Stapleton S, Mather V	William Parsonage, Louise Cullen	Is highly-sensitive troponin testing advancing clinical practice, improving outcomes and cost-effective in the investigation and management of chest pain in the Emergency Department?
Elizabeth Sullivan, Rachael Cordina Dominica Zentner, Michael Peek Rachael Cordina, Lisa Simmons Lawrence Lam, David Celermajer, Wendy Pollock, Karin Lust , Jon Hyett, William Parsonage , Zhuoyang Li	William Parsonage	Australasian Maternity Outcomes Surveillance System (AMOSS) longitudinal study of first-time NSW/ACT mothers with heart disease and their babies
Tom Marwick, Liza Thomas, Andrew Taylor, Andrew Spencer, Andre La Gerche, Con Tam, Sherene Loi, Peter Mollee, John Atherton , Paul Harnett <i>(Baker IDI)</i>	John Atherton, Sandhir Prasad, Joanne Sippel, Arun Dahiya, Louise McCormack, John Younger	Benefit of 2D-strain surveillance in improving cardiovascular outcomes in cancer patients undergoing cardiotoxic chemotherapy
Sanjeeva Kularatna, Nicholas Graves, William Parsonage <i>(AusHSI/QUT)</i>	William Parsonage	Feasibility of using Smartphone app to collect patient reported outcome measurement on patients with cardiovascular disease
Sanjeeva Kularatna, Paul Scuffham, William Parsonage , Joshua Byrnes, Gang Chen, John Atherton <i>(AusHSI, QUT, Griffith)</i>	William Parsonage, John Atherton	Development of cardiovascular disease specific multi attribute utility instrument to assist utility measurement in cardiovascular conditions; a case for economic evaluations
William Parsonage , Victoria McCreanor, Alexandra Nowbar, Christopher Rajkumar, Adrian Barnett, Darrel P Francis, Nicholas Graves, William Boden, William Weintraub, Rasha Al-Lamee	William Parsonage	Cost-effectiveness analysis of percutaneous coronary intervention for single vessel coronary artery disease: An economic evaluation of the ORBITA trial

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Adam Scott	Winner m-Health and Coronary Artery Disease Pitch Session	European Society of Cardiology Congress, Paris, France

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Briffa T, Cullen L , Chew D, Knuiman M, Fatovich D, Hickman P, Parsonage W , Nedkoff L, Sanfilippo F, Hillis G, Mitra B, Wilkes G, Schneider H, Rankin J, Karnon J, Scanlan S, Stapleton S, Mather V	Cardiology and Emergency Medicine	Is highly-sensitive troponin testing advancing clinical practice, improving outcomes and cost-effective in the investigation and management of chest pain in the Emergency Department?	National Health and Medical Research Council (Project Grant APP1122792)	\$1,197,000.00		2017-2020
T Marwick, L Thomas, A Taylor, A Spencer, A La Gerche, C Tam, S Loi, P Mollee, J Atherton , P Harnett	Cardiology and Oncology	Benefit of 2D-strain surveillance in improving cardiovascular outcomes in cancer patients undergoing cardiotoxic chemotherapy	National Health and Medical Research Council (Project Grant APP 1119955)	\$2,391,979.00	\$478,395.80	2017-2021

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Adam Scott, John Atherton	Tele-Cardiac Investigations/ Cardiology RBWH	Statewide Tele-Cardiac Investigations	Health Improvement Unit, Metro North HHS, Qld Health	\$1,629,000.00	\$543,000.00	2017-2019
J Atherton, C Punyadeera, X Zhang, N Karunathilake, K Guppy-Coles	Cardiology	Salivary protein panel to detect heart failure early	Royal Brisbane and Women's Hospital Project Grant	\$29,294.00	\$29,294.00	2019
J Greenslade, L Cullen, W Parsonage, S Perez, N Graves	Cardiology and Emergency Medicine	The Limit of Detection in the Emergency Department Trial (LEGEND)	Medical Research Future Fund (MRFF) Rapid Applied Research Translation Program	\$194,682		2019-2021
J Greenslade, L Cullen, W Parsonage, S Perez, F Kinnear, Hamilton-Craig, N aikwad, D Brain	Cardiology and Emergency Medicine	The Limit of Detection in the Emergency Department Trial (LEGEND).	Emergency Medicine Foundation	\$93,240		2019-2020

2019 Research Publications

Journal Articles

- Roos-Hesselink JW, Baris L, Johnson M, De Backer J, Otto C, Marelli A, Jondeau G, Budts W, Grewal J, Sliwa K, **Parsonage WA**, Maggioni A, Hagen IM, Vahanian A, Tavazzi L, Elkayam U, Boersma E, Hall R. Pregnancy outcomes in women with cardiovascular disease: evolving trends over 10 years in the ESC Registry Of Pregnancy And Cardiac disease (ROPAC). *Eur Heart J* 2019; 40:3848-55
- Lam CSP, Castillo R, Ho DT, Kasliwal RR, Khurana R, Naik S, Omland T, **Parsonage WA**, Phrommintikul A, Tobing D, Yiu KKH. High-sensitivity troponin I for cardiovascular risk stratification in the general asymptomatic population: Perspectives from Asia-Pacific. *Int J Cardiol* 2019; 282:93-8
- Nestelberger T, **Cullen L**, Lindahl B, Reichlin T, **Greenslade J**, Giannitsis E, Christ M, Morawiec B, Miro O, Martín-Sánchez FJ, Wussler DN, Koechlin L, Twerenbold R, **Parsonage WA**, Boeddinghaus J, Gimenez MR, Puelacher C, Wildi K, Buerge T, Badertscher P, DuFaydeLavallaz J, Strebel I, Croton L, Bendig G, Osswal S, Pickering JW, Than M, Mueller C. Diagnosis of acute myocardial infarction in the presence of left bundle branch block. *Heart* 2019; 0:1-9. doi:10.1136/heartjnl-2018-314673
- Neumann JT, Twerenbold R, Ojeda F, Sørensen NA, Chapman AR, Shah ASV, Anand A, Boeddinghaus J, Nestelberger T, Badertscher P, Mokhtari A, Pickering JW, Troughton RW, **Greenslade J**, **Parsonage WA**, Mueller-Hennessen M, Gori T, Jernberg T, Morris N, Liebetrau C, Hamm C, Katus HA, Münzel T, Landmesser U, Salomaa V, Iacoviello L, Ferrario MM, Giampaoli S, Kee F, Thorand B, Peters A, Borchini R, Jørgensen T, Söderberg S, Sans S, Tunstall-Pedoe H, Kuulasmaa K, Renné T, Lackner KJ, Worster A, Body R, Ekelund U, Kavsak PA, Keller T, Lindahl B, Wild P, Giannitsis E, Than M, **Cullen LA**, Mills NL, Mueller C, Zeller T, Westermann D, Blankenberg S. Application of high-sensitivity troponin in suspected myocardial infarction. *New Engl J Med* 2019; 380:2529-40
- McCreanor V, **Parsonage WA**, Whiteman DC, Olsen C, Barnett AG, Graves N. Pharmaceutical use and costs in patients with coronary artery disease, using Australian observational data. *BMJ Open* 2019;9: doi: 10.1136/bmjopen-2019-029360
- Nestelberger T, Boeddinghaus J, **Greenslade J**, **Parsonage WA**, Than M, Wussler D, Lopez-Ayala P, Zimmermann T, Meier M, Troester V, Badertscher P, Koechlin L, Wildi K, Anwar M, Freese M, Keller DJ, Reichlin T, Twerenbold R, Cullen L, Mueller C. Two-hour algorithm for rapid triage of suspected acute myocardial infarction using a high-sensitivity cardiac troponin I assay. *Clin Chem* 2019; 65:1437-47
- Dawson AJ, Krastev Y, **Parsonage WA**, Peek M, **Lust K**, Sullivan EA. Experiences of women with cardiac disease in pregnancy: a systematic review and metasynthesis. *BMJ Open* 2018;8: doi: 10.1136/bmjopen-2018-022755. (not included in 2018 report)
- Kavsak PA, Neumann JT, **Cullen L**, Than M, Shortt C, **Greenslade J**, Pickering JW, Ojeda F, Ma J, Clayton N, Sherbino J, Hill SA, McQueen M, Westermann D, Sørensen NA, **Parsonage WA**, Griffith L, Mehta SR, Devereaux PJ, Richards M, Troughton R, Pemberton C, Aldous S, Blankenberg S, Worster A. Clinical chemistry score versus high-sensitivity cardiac troponin I and T tests alone to identify patients at low or high risk for myocardial infarction or death at presentation to the emergency department. *CMAJ* 2018;190: E974-E984. (not included in 2018 report)
- Sekuloski S, Batzloff MR, **Griffin P**, **Parsonage WA**, Elliott S, Hartas J, O'Rourke P, Marquart L, Pandey M, Rubin FA, Carapetis J, **McCarthy J**, Good MF. Evaluation of safety and immunogenicity of a group A streptococcus vaccine candidate (MJ8VAX) in a randomized clinical trial. *PLoS ONE* 2018;13: e0198658. (not included in 2018 report)
- Zhang X, Broszczak D, Kostner K, **Guppy-Coles KB**, **Atherton J**, Punyadeera C. Salivary protein panel to diagnose systolic heart failure. *Biomolecules* 2019; 9:766 (doi:10.3390/biom9120766)- accepted 19/11/19
- Prasad SB**, Camuglia A, **Lo A**, Holland DJ, **Guppy-Coles K**, Whalley G, Thomas L, **Atherton J**. Hemodynamic validation of the E/e' ratio as a measure of left ventricular filling pressure in patients with non-ST elevation myocardial infarction. *Am J Cardiol* 2019 (in press) – accepted 13/11/19
- Brieger D, **Atherton J**, Newton P. ESC Congress Paris 2019: conference highlights. *Cardiology Today* 2019;9(2):81-91
- Hopper I, Connell C, Briffa T, De Pasquale CG, Driscoll A, Kistler PM, Macdonald PS, Sindone A, Thomas L, **Atherton J**. Nutraceuticals in heart failure: A systematic review. *J Cardiac Fail* 2019 (in press) – accepted 30/10/19
- Zhang X, Karunathilaka N, Senanayake S, Subramaniam N, Chan W, Kostner K, Fraser J, **Atherton J**, Punyadeera C. The potential prognostic utility of salivary galectin-3 concentrations in heart failure. *Clin Res Cardiol* 2019 (in press)- accepted 24/9/19

Journal Articles (cont)

15. **Prasad SB, Guppy-Coles KB**, Holland D, Stanton T, Krishnasamy R, Whalley G, **Atherton J**, Thomas L. Echocardiographic predictors of all-cause mortality in patients with left ventricular ejection fraction > 35%: Value of guideline based assessment of diastolic dysfunction. *IJC Heart and Vasculature* 2019; 24: (in press)- accepted 1/9/19. doi.org/10.1016/j.ijcha.2019.100407
16. Tee SL, Sindone A, Roger S, **Atherton J**, Amerena J, D'Emden M, Erlich J, De Pasquale C. Hyponatremia in Heart Failure. *Int Med J* 2019 (in press) – accepted 26/8/19
17. Clark RA, Marin T, McCarthy AL, Grover S, Peters R, Karapetis CS, **Atherton J**, Koczwara B. Cardiotoxicity after cancer treatment: a process map of the patient treatment journey. *Cardio-Oncology* 2019; 5:14
18. Deed G, **Atherton J**, **d'Emden M**, Rasalam R, Sharma A, Sindone A. Managing cardiovascular risk in type 2 diabetes: What do the cardiovascular outcome trials mean for Australian practice? *Diab Ther* 2019; 10:1625-43
19. **Atherton J**, Audehm R, Connell C. Heart failure guidelines. A concise summary for the GP. *Medicine Today* 2019; 20:14-24
20. **Prasad S, Guppy-Coles K**, Stanton T, **Armstrong J**, Krishnasamy R, Whalley G, **Atherton J**, Thomas L. Relation of left atrial volumes in patients with myocardial infarction to left ventricular filling pressures and outcomes. *Am J Cardiol* 2019; 124:325-33
21. **Guppy-Coles KB, Prasad SB, Smith KC, Lo A, Beard P, Ng A, Atherton J**. Accuracy of cardiac nurse acquired and measured three-dimensional echocardiographic left ventricular ejection fraction: comparison to echosonographer. *Heart Lung Circ* 2019 (in press)- accepted 10/4/19
22. **Prasad S**, Holland DJ, **Atherton J**, Whalley G. New diastology guidelines: Evolution, validation and impact on clinical practice. *Heart Lung Circ* 2019; 28:1411-20. (commissioned review)
23. Triposkiadis F, Butler J, Abboud FM, Armstrong PW, Adamopoulos S, **Atherton J**, Backs J, Bauersachs J, Burkhoff D, Bonow RO, Chopra VK, de Boer RA, de Windt L, Hamdani N, Hasenfuss G, Heymans S, Hulot J-S, Konstam M, Lee RT, Linke WA, Lunde IG, Lyon AR, Maack C, Mann DL, Mebazaa M, Mentz RJ, Nihoyannopoulos P, Papp Z, Parissis J, Pedrazzini T, Rosano G, Rouleau J, Seferovic PM, Shah AM, Starling RC, Tochetti CG, Trochu J-N, Thum T, Zannad F, Brutsaert DL, Segers VF, De Keulenaer GW. The continuous heart failure spectrum. Moving beyond an ejection fraction classification. *Eur Heart J* 2019; 40:2155-163
24. Grover S, Lloyd R, Perry R, Lou PW, Haan E, Yeates L, Woodman R, **Atherton J**, Semsarian C, Selvanayagam JB. Assessment of myocardial oxygenation, strain and diastology in MYBPC3-related hypertrophic cardiomyopathy: a cardiovascular magnetic resonance and echocardiography study. *Eur Heart J Cardiovasc Imaging* 2019; 20:932-8
25. Montvida O, Green J, **Atherton J**, Paul S. Treatment with incretins does not increase the risk of pancreatic diseases compared to older anti-hyperglycaemic drugs, when added to metformin: real world evidence in people with type 2 diabetes. *Diabet Med* 2019; 36:491-8
26. Metra M, Teerlink JR, Cotter G, Davison BA, Felker GM, Filippatos G, Greenberg BH, Pang PS, Ponikowski P, Voors AA, Adams KF, Anker SD, Arias-Mendoza A, Avendaño P, Bacal F, Böhm M, Bortman G, Cleland JGF, Cohen-Solal A, Crespo-Leiro MG, Dorobantu M, Echeverría LE, Ferrari R, Golland S, Goncalvesová E, Goudev A, Køber L, Lema-Osores J, Levy PD, McDonald K, Manga P, Merkely B, Mueller C, Pieske B, Silva-Cardoso J, Špinar J, Squire I, Stępińska J, Van Mieghem W, von Lewinski D, Wikström G, Yilmaz MB, Hagner N, Holbro T, Hua TA, Sabarwal SV, Severin T, Szecsódy P, Gimpelewicz C; RELAX-AHF-2 Committees Investigators. Effects of serelexin in patients with acute heart failure. *New Engl J Med* 2019; 381:716-26. (**Atherton J**: National PI)
27. Fabris E, van't Hof A, Hamm CW, Lapostolle F, Lassen JF, Goodman SG, ten Berg JM, Bolognese L, Cequier A, Chettibi M, **Hammett CJ**, Huber K, Janzon M, Merkely B, Storey RF, Zeymer U, Cantor WJ, Kerneis M, Diallo A, Vicaut E, Montalescot G. Pre-Hospital administration of Ticagrelor in diabetic patients with ST-elevation myocardial infarction undergoing primary angioplasty: A sub-analysis of the ATLANTIC trial. *Catheter Cardiovasc Interv* 2019; 93(7):e369-377
28. Fabris E, van't Hof A, Hamm CW, Lapostolle F, Lassen JF, Goodman SG, ten Berg JM, Bolognese L, Cequier A, Chettibi M, **Hammett CJ**, Huber K, Janzon M, Merkely B, Storey RF, Zeymer U, Tsatsaris A, Cantor WJ, Kerneis M, Diallo A, Vicaut E, Montalescot G. Clinical impact and predictors of complete ST segment resolution after primary percutaneous coronary intervention: A sub-analysis of the ATLANTIC trial. *Eur Heart J Acute Cardiovasc Care* 2019; 8(3): 208-217
29. **Lancini D, Shetty R**. Tension pneumothorax: A Brugada phenocopy and ST-elevation myocardial infarction mimic. *Eur Heart J* 2019 (accepted for publication, undergoing editorial process)
30. **Lancini D, Shetty R**. Spontaneous transcatheter migration of a ventriculoperitoneal shunt. *Eur Heart J* 2019 Sep 12 (Epub ahead of print)
31. **Boyle S**, Jesuthasan LSB, Jenkins C, Challa P, Ranjan S, **Dahiya A**. Coronary-Cameral fistula. *Circ Cardiovasc Imaging* 2019 May;12(5):e008691
32. Reyaldeen R, Burrage M, Jeffries C, Lim R, **Dahiya A**. Tetralogy of Fallot, bicuspid valves and a single origin coronary: uncorrected and asymptomatic. *Heart Lung Circ.* 2019;28(3):e26-e28
33. **Dahiya A, Chao C, Younger J, Hammett C**. Early diagnosis of a systemic disease by CMR prevents complications SCMR COTW Number 19-04.

Books

1. **Atherton J (Supplement Editor)**: Focus on heart failure. *Medicine Today* 2019;20(10 Suppl):1-40.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Atherton J**. GenesisCare Annual Cardiology Symposium, Brisbane, November 2019. Topic: Heart failure guidelines and research update (Guest keynote lecture)
2. **Atherton J**. GenesisCare Annual Cardiology Symposium, Brisbane, November 2019. Panel discussion: Optimal management of heart failure

Invited Speakers (cont)

3. **Atherton J.** Cardiac Imaging in Cardiomyopathies 2019, Westmead Hospital, Sydney, November 2019. (Australasian Society for Ultrasound in Medicine (ASUM)) Topic: Guideline-based imaging in HFrEF
4. **Atherton J.** Cardiac Imaging in Cardiomyopathies 2019, Westmead Hospital, Sydney, November 2019. (Australasian Society for Ultrasound in Medicine (ASUM)) Topic: Screening for heart failure: Is imaging a solution?
5. **Atherton J.** HealthEd National Webcast, October 2019. Topic: Shifting paradigms in prevention and management of heart failure- Implications for GP's and cardiologists
6. **Atherton J.** Australian Atherosclerosis Society (AAS), Victoria University, Melbourne, October 2019. Topic: Genetic testing for heart disease 2019
7. **Atherton J.** Australian Clinical Trials Alliance (ACTA) International Clinical Trials Conference 2019, International Convention Centre (ICC), Sydney, October 2019. Topic: Late-breaking discoveries: Breakthroughs in heart failure treatment
8. **Atherton J.** 24th ASEAN Federation Congress of Cardiology (24th AFCC) in conjunction with the 28th Annual Scientific Meeting of the Indonesian Heart Association, Jakarta, Indonesia, September 2019. Topic: ADHF: Turning pitfalls into opportunities
9. **Atherton J.** 24th ASEAN Federation Congress of Cardiology (24th AFCC) in conjunction with the 28th Annual Scientific Meeting of the Indonesian Heart Association, Jakarta, Indonesia, September 2019. Topic: How to deal with HFpEF
10. **Atherton J.** 24th ASEAN Federation Congress of Cardiology (24th AFCC) in conjunction with the 28th Annual Scientific Meeting of the Indonesian Heart Association, Jakarta, Indonesia, September 2019. Topic: Genetic testing in cardiovascular disease: Current applications in daily practice
11. **Atherton J.** ImpediMed Heart Failure Medical Advisory Board, Philadelphia, Pennsylvania, USA. Topic: Heart failure management guidelines – The role of remote/ at-home monitoring
12. **Atherton J.** WFUMB 2019 Congress – The World Congress for Ultrasound – ASUM 2019, Melbourne Convention and Exhibition Centre, Melbourne, September 2019. Topic: Screening for LV dysfunction – role of ultrasound
13. **Atherton J.** South Australian Health and Medical Research Institute (SAHMRI) Clinical Trials Forum, Paris, France, September 2019. Topic: European Society of Cardiology Heart Failure Update
14. **Atherton J.** 67th Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand, Adelaide Convention Centre, Adelaide, August 2019. Topic: HF and AF – when to consider ablation
15. **Atherton J.** 2019 Cardiology Masterclass, Western Australian Heart and Vascular Research Institute and The Harry Perkins Institute of Medical Research, Perth, July 2019. Topic: The role of precision medicine – Biomarkers and genetic testing in the patient with a failing heart
16. **Atherton J.** 4th Heart Failure Congress 2019, Brisbane Convention and Exhibition Centre, Brisbane, June 2019. Topic: Workshop: Challenging case studies with panel discussion – complex multi-comorbidities
17. **Atherton J.** Canberra Hospital Dinner Meeting, Canberra, June 2019. Topic: Management of heart failure according to the guidelines
18. **Atherton J.** Advanced Echo Symposium Dinner Meeting, Brisbane, May 2019. Topic: Guideline-based imaging in heart failure
19. **Atherton J.** Royal Australian College of General Practitioners 61st Clinical Update Weekend, Brisbane Convention and Exhibition Centre, Brisbane, May 2019. Topic: Chronic heart failure
20. **Atherton J.** ADVANCE Symposium, Park Royal Hotel, Melbourne, March 2019. Topic: Workshop- HFrEF management after RAAS blockers and beta blockers
21. **Dahiya A.** ASUM Cardiac Imaging in Cardiomyopathies Meeting, Westmead Hospital, Sydney, November 2019. Topic: Cardiac Imaging in HCM
22. **Dahiya A.** ASUM Cardiac Imaging in Cardiomyopathies Meeting, Westmead Hospital, Sydney, November 2019. Topic: Cardiac Imaging in ARVD
23. **Dahiya A.** Advanced Echo Symposium, Brisbane Convention and Exhibition Centre, Brisbane, May 2019. Topic: Multimodality imaging in ARVC
24. **Dahiya A.** Advanced Echo Symposium, Brisbane Convention and Exhibition Centre, Brisbane, May 2019. Topic: Read with an expert in complex cardiac imaging cases
25. **Dahiya A.** Amyloidosis 2019 Scientific meeting – PA Amyloidosis Centre, May 2019. Topic: Cardiac imaging in Amyloidosis
26. **Dahiya A.** World Congress of Ultrasound in Medicine, Melbourne Convention and Exhibition Centre, Melbourne, September 2019. Topic: Cardiac Imaging in ARVC
27. **Dahiya A.** World Congress of Ultrasound in Medicine, Melbourne Convention and Exhibition Centre, Melbourne, September 2019. Topic: Multimodality imaging in Adult congenital heart disease cases
28. **Hammett CJ.** Asia Pacific Thrombosis Management Conference 2019. Sydney, October 2019. Topic: Plenary and Workshops: Balancing Thromboembolic and Bleeding Risks in Stroke Prevention
29. **Hammett CJ.** COMPASS Summit: Optimizing Patient Care in CAD and/or PAD Patients in Asia Pacific, Seoul, Korea, March 2019. Topic: Workshops: Who are the right patients for the Vascular dose of Rivaroxaban?
30. **Hammett CJ.** STEMI Experts 2019. Sydney October 2019. Topic: Queensland STEMI Healthcheck (QCOR and QAS STEMI data review)
31. **Hammett CJ.** Cardiac Society of Australia and New Zealand 67th Annual Scientific Meeting, Adelaide, August 2019. Topic: Managing NVAF Patients with Renal Impairment; Balancing Thromboembolic and Bleeding Risks
32. **Hammett CJ.** Cardiac Society of Australia and New Zealand 67th Annual Scientific Meeting, Adelaide, August 2019. Topic: Clinical Conundrums. Antiplatelet and antithrombotic therapy for ACS
33. **Hammett CJ.** Thrombosis 360 Masterclass, Sydney, June 2019. Topic: Workshop: Treating the patient with concurrent AF and ACS
34. **Hammett CJ.** Bayer Thrombosis College Cardiovascular Alliance 5th Annual Meeting, Sydney, May 2019. Topic: Plenary talk and workshops – Dual Pathway Inhibition (Antiplatelets and Antithrombotics) – The new standard in Vascular Protection?
35. **Hammett CJ.** SAHMRI Heart Symposium Adelaide, May 2019. Topic: Antiplatelets and Antithrombotics in Cardiovascular Disease
36. **Lo A.** Cardiac Imaging in Cardiomyopathies 2019, Westmead Hospital, Sydney, November 2019. (Australasian Society for Ultrasound in Medicine (ASUM)) Topic: Tips and Tricks in Echocardiography of Hypertrophic Cardiomyopathy

Invited Speakers (cont)

37. **Lo A.** WFUMB 2019 Congress – The World Congress for Ultrasound – ASUM 2019, Melbourne Convention and Exhibition Centre, Melbourne, September 2019. Topic: Echocardiographic Assessment of Aortic Regurgitation
38. **Lo A.** WFUMB 2019 Congress – The World Congress for Ultrasound – ASUM 2019, Melbourne Convention and Exhibition Centre, Melbourne, September 2019. Topic: Echocardiographic Assessment of Aortic Stenosis
39. **Lo A.** WFUMB 2019 Congress – The World Congress for Ultrasound – ASUM 2019, Melbourne Convention and Exhibition Centre, Melbourne, September 2019. Topic: Simple Adult Congenital Heart Disease
40. **Parsonage WA.** Evidence to Practice: Heart Symposium, 2019, South Australian Health and Medical Research Institute, Adelaide
41. **Parsonage WA.** National Heart Foundation Australia, Women & Heart Disease Forum: Advances in understanding risk, diagnosis and management. Sydney, June 2019. Topic: Update on the final ROPAC (Registry Of Pregnancy And Cardiac disease)
42. **Parsonage WA.** Toowoomba Hospital Grand Rounds, September 2019. Topic: Value based healthcare
43. **Parsonage WA.** Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 2019. Topic: Risk stratification of Women with Cardiac Disease in Pregnancy
44. **Prasad SB.** ASUM Cardiac Imaging in Cardiomyopathies Meeting, Westmead Hospital, Sydney, November 2019. Topic: Cardiac Imaging in Heart Failure with Preserved Ejection Fraction
45. **Prasad SB.** World Congress of Ultrasound in Medicine, Melbourne Convention and Exhibition Centre, Melbourne, September 2019. Topic: Diastolic Stress Echocardiography: Practical Aspects
46. **Prasad SB.** Advanced Echo Symposium, Brisbane Convention and Exhibition Centre, Brisbane, May 2019. Topic: Diastolic Stress Test
47. **Prasad SB.** Advanced Echo Symposium, Brisbane Convention and Exhibition Centre, Brisbane, May 2019. Topic: Mixed Valvular Heart Disease
48. **Prasad SB.** Westmead Hospital Cardiology Grand Round, Westmead Hospital, Sydney, November 2019. Topic: New Diastology Guidelines
49. **Younger JF.** Imagine 2019: Innovation and Translation in Imaging Summit. Brisbane. September 2019. Topic: Accelerating Cardiac MRI In Australia
50. **Younger JF.** Essential Percutaneous Intervention Course. Sydney. 28th November 2019. Topic: Optimising Ct Image Acquisition For TAVI
51. **Younger JF.** Thrombo 360 Masterclass. Sydney. June 2019. Topic: Assessing Ischaemia in 2019 – MRI, CT and Nuclear.

Abstracts (Orals/Posters)

1. Nestelberger T, Boeddinghaus J, **Greenslade J, Cullen L, Parsonage WA**, Troester V, Koechlin L, Rubini M, Badertscher P, Puelacher C, Twerenbold R, Mueller C, APACE and ADAPT investigators. Two-hour algorithm for early diagnosis of acute myocardial infarction using a novel high-sensitivity cardiac troponin I assay. *Eur Heart J* 2019;40(Suppl 1): ehz748.0489
2. **Jonathan R, McGaughran J, Atherton J.** 11 years of the Queensland cardiac genetics service. 52nd Conference of the European-Society-of-Human-Genetics (ESHG), Gothenburg Sweden, Jun 15-18, 2019. *Eur J Hum Genet* 2019; 27:1309-10
3. **Lo A, Guppy-Coles K, Ng A, Mew T, Dahiya A, Prasad S, Atherton J.** Exaggerated myocardial torsion may contribute to dynamic left ventricular outflow tract obstruction in patients with hypertrophic cardiomyopathy. *Heart Lung Circ* 2019;28: S170-S171
4. **Prasad S, Guppy-Coles K,** Stanton T, Krishnaswamy R, **Armstrong J,** Whalley G, **Atherton J,** Thomas L. Which is the best measure of left atrial size following myocardial infarction: minimal or maximal volume? Insights from prognostic and haemodynamic validation. *Heart Lung Circ* 2019;28: S278-S279
5. **Lancini D, Prasad S, Boots R, Guppy-Coles K, Atherton J, Martin P.** Echocardiographic findings in critically unwell patients with new onset atrial fibrillation. *Heart Lung Circ* 2019;28: S212
6. Johnson R, Peters S, Ingles J, Correnti G, Ingrey A, Mountain H, Zentner D, Thompson T, Oates E, Ronan A, Pachter N, Haan E, Van Spaendonck-Zwarts K, Semsarian C, **McGaughran J, Atherton J,** James P, Fatkin D. Penetrance of dilated cardiomyopathy in families with truncating TTN variants: a national perspective. *Heart Lung Circ* 2019;28: S140
7. **Lancini D, Prasad S, Boots R, Guppy-Coles K, Atherton J, Martin P.** New onset atrial fibrillation in the critically ill: burden and predictors. *Heart Lung Circ* 2019;28: S220
8. **Sowden N, Lancini D, Basso T, Guppy-Coles K, Hayman S, Malhotra G, Atherton J, Prasad S.** Clinical value of routine echocardiography prior to coronary angiography in patients in non-ST-elevation myocardial infarction. *Heart Lung Circ* 2019;28: S241
9. **Guppy-Coles K, Prasad S, Lo A, Smith K, Truloff T, Beard P, Armstrong J, Atherton J.** Feasibility and accuracy of assessing left ventricular systolic function by measuring mitral annular excursion using a hand-held echocardiography device with an automated atrioventricular-plane tracking algorithm. *Heart Lung Circ* 2019;28: S248.

Other communications and outputs

1. **Atherton J.** Australian Diabetes Society live stream panel discussion: SGLT2 inhibitors in heart failure- an update from the World Congress of Cardiology and European Society of Cardiology Congress 2019, Paris, France
2. **Atherton J.** Cardiology Today: World Congress of Cardiology and European Society of Cardiology Congress 2019, Paris, France: Highlights from days 1-4 and panel discussion on day 4.

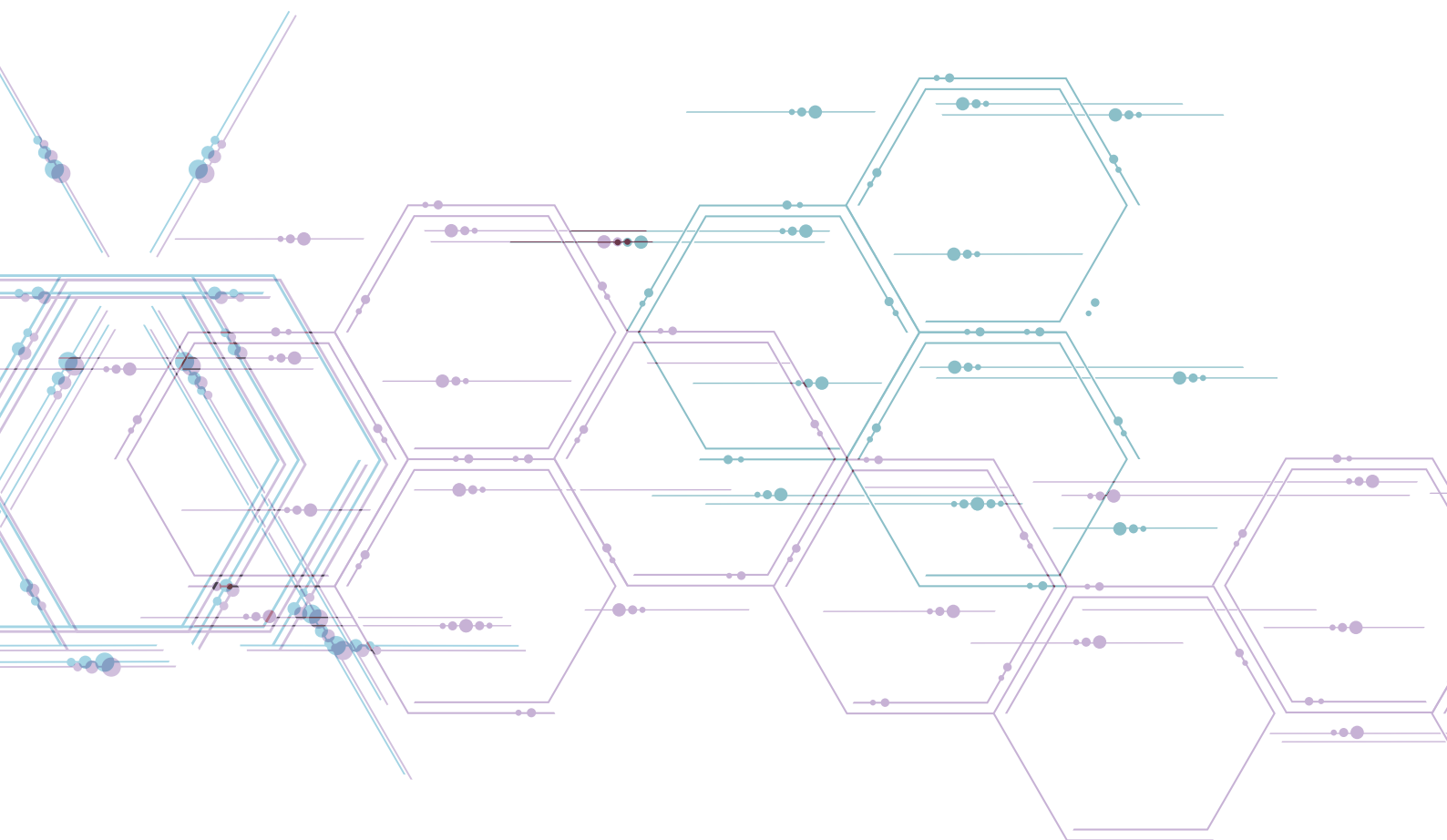


DEPARTMENT OF CLINICAL IMMUNOLOGY & ALLERGY

Research project on patients with Idiopathic Anaphylaxis commenced by Drs Gardner, Prentice, Tan, Gillis and Scott.

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Logan Gardner	Drs Roger Prentice, Zihao Tan, David Gillis, James Scott	Determination of added benefit of a comprehensive assessment of alternative aetiology in patients classified as Idiopathic Anaphylaxis (IA) and assessment of the psychological impact of the condition



DEPARTMENT OF CLINICAL PHARMACOLOGY

The Department of Clinical Pharmacology has a number of research focuses, across multiple professional disciplines, reflecting the multidisciplinary makeup of the department. Research staff work collaboratively with the Department of Pharmacy, in areas related to medication safety, the quality use of medicines.

Clinical Pharmacology continues to work collaboratively with other hospitals within Metro North Hospital and Health Service (*Prince Charles Hospital, Caboolture Hospital, Metro North IT*) and Brisbane (*Princess Alexandra Hospital*) and QIMR Berghofer. In addition, the department continues to focus on the role of individualised feedback, of both nursing and medical staff, related to the safety of prescribing and administration of medicines. Karen Davies, Clinical Nurse Consultant for Medication Safety continues to pursue this work and continues with her PhD studies. A particular focus of medication safety relates to inpatient anticoagulant use. A RBWH foundation grant was utilised to attempt to elucidate a therapeutic range for enoxaparin in renal impairment.

Further, we have started a large study, in collaboration, assessing the benefits of implementing an electronic prescribing system at RBWH and Caboolture Hospital. Research is also expanding into the safety and appropriate use of opioids not only within RBWH, but Metro North and Queensland. Collaborative research within the Emergency and Trauma Centre determining the prevalence and characteristics of medication-related presentations to the emergency department. Collaboration with Endocrinology validating a response to a therapy risk stratification system for Medullary Thyroid Cancer. A National collaboration with multiple universities (*University of Queensland, University of New South Wales, Murdoch Children's Research Institute and Curtin University of Technology*) investigating medication re-purposing to reduce risk of ovarian cancer and extend survival. Lastly, Dr Donovan, Director of Clinical Pharmacology, continues to expand his research interests in the cost-effectiveness of health care and continues to work collaboratively with researchers from within and external to RBWH, including a successful NHMRC project grant in collaboration with, amongst others, QIMR Berghofer.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Karen Davies	PhD, UQ <i>(2016-2020)</i>	Medication administration evaluation and feedback tool	Karen Whitfield, Ian Coombes , Sam Keogh
Benita Suckling	M. Phil, USYD <i>(2019-2022)</i>	Impact of simple analgesia supply at hospital discharge on adherence and opioid consumption	Champika Pattullo; Peter Donovan

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Peter Donovan	Michael Barras (<i>Princess Alexandra Hospital</i>), Ian Coombes, Jason Roberts , Ms Carla Scuderi (<i>Pharmacy</i>), Charles Denaro (<i>Internal Medicine</i>), John Atherton, Ms Bonnie Tai (<i>Prince Charles Hospital</i>), Ms Anita Pelecanos (<i>QIMR Berghofer</i>)	Development of a therapeutic range for enoxaparin in patients with renal impairment

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Peter Donovan	Nicola Harper , Dr Danielle Stowasser, Natasha Truloff (<i>Metro North IT</i>), Ian Coombes, (<i>Pharmacy</i>), Charles Denaro (<i>Internal Medicine</i>), Timothy Dunn (<i>Caboolture Hospital Pharmacy</i>), Anita Pelecanos (<i>QIMR Berghofer</i>)	Evaluation of the Implementation of Electronic Prescribing using Interrupted Time-Series Analysis at Two Hospitals in Queensland
Karen Davies	Karen Davies , Ian Coombes , Samantha Keogh , Karen Hay, and Karen Whitfield	Medication Administration Evaluation and Feedback Tool Design and Validation
Peter Donovan	Peter Donovan , Alison Mudge , Jenny Martin (<i>Uni Newcastle</i>), Michael Barras (<i>Princess Alexandra Hospital</i>), James Rowland	Interventions to improve safety and quality in the management of anticoagulants for therapeutic indications in hospital inpatients: systematic review
Peter Donovan	Tahlia Gentle , Donald McLeod , Assoc. Prof Susan Jordan, (<i>University of Queensland</i>), Champika Pattullo , Mark Daghish , Assoc. Prof Anthony Bell, Wesley Hospital, Brisbane	Opioid Prescribing and Associated Harm in Queensland: A whole of population linkage study
Benita Suckling	Champika Pattullo , Peter Donovan , Shirley Hu (<i>University of Queensland</i>), Bill Loveday (Medications and Regulations, <i>Queensland Health</i>)	Rates of Opioid Dispensing and Opioid-related Harms 2010-2018 – The Queensland Experience
Benita Suckling	Jonathan Penm (<i>University of Sydney</i>), Asad Patanwala (<i>University of Sydney</i>), Champika Pattullo , Peter Donovan	Impact of simple analgesia supply at hospital discharge on adherence and opioid consumption
Peter Donovan	Alexis Dermegoglou (<i>Cairns Hospital</i>), Nicola Hinton (<i>Cairns Hospital</i>), Gaurav Puri (<i>Cairns Hospital</i>), Carolyn Allen (<i>Sunshine Coast University Hospital</i>), Clare Cutmore , Heike Krause , Hua Bing Yong (<i>Princess Alexandra Hospital</i>), Jacqueline Cotungo (<i>Princess Alexandra Hospital</i>), Jade Eccles-Smith, Jay Leckie (<i>Clinical Excellence Queensland</i>), Jennifer Abel (<i>Logan Hospital</i>), Kay Dean (<i>West Morteon HHS</i>), Kerry Porter (<i>Princess Alexandra Hospital</i>), Roisine Warwick (<i>Redland Hospital</i>), Lee Allam (<i>Princess Alexandra Hospital</i>)	Queensland Inpatient Diabetes Survey 2019

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Susan Jordan (<i>University of Queensland</i>), Prof Sallie-Anne Pearson (<i>University of New South Wales</i>), Dr Nirmala Pandeya (<i>University of Queensland</i>), Assoc Prof Michael Coory (<i>Murdoch Children's Research Institute</i>), Dr Katrina Spillsbury (<i>Curtin University of Technology</i>)	Peter Donovan	IMPROVE – Investigating Medication Re-Purposing to Reduce risk of Ovarian cancer and Extend survival
Louise Cullen (<i>Emergency and Trauma Centre</i>)	Nathan Brown , Peter Donovan , Ian Coombes , Jaimi Greenslade , David Hughes , Elizabeth Doran	Prevalence and characteristics of medication-related presentations to the emergency department. Emergency and Trauma Centre, Royal Brisbane and Women's Hospital
Phillip Robinson (<i>Rheumatology</i>)	Peter Donovan , Nicola Dalbeth (<i>University of Auckland, Auckland Hospital</i>)	A Health Economic Analysis Colchicine Therapy for Gout Prophylaxis
Ian Coombes (<i>Pharmacy</i>)	Peter Donovan , Charles Mitchel (<i>UQ</i>) Brooke Myers, Christy Noble, (<i>Gold Coast University Hospital, Griffith University</i>)	Improving Intern Medical Officer Prescribing through an Intervention of Self-Assessment and Feedback
Don McLeod (<i>Endocrinology</i>)	Peter Donovan , Roger Allison (<i>Cancer Care</i>), Susan Thomas (<i>Cancer Care</i>), Lee Tripcony (<i>Cancer Care</i>)	Validating a response to therapy risk stratification system for Medullary Thyroid Cancer
Champika Pattullo (<i>Clinical Pharmacology</i>)	Benita Suckling , Peter Donovan , Lisa Hall (<i>Queensland University of Technology</i>)	Development, implementation and outcomes of an adaptable OXYCODONE Quality Improvement STRATEGY: Steps towards opioid stewardship

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Karen Davies	2019 Health Round Table Medication Safety Improvement Outstanding Innovation	2019 Health Round Table Medication Safety Improvement Group

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Susan Jordan (<i>Queensland Institute of Medical Research Berghofer</i>), Prof Sallie-Anne Pearson (<i>University of New South Wales</i>), Dr Nirmala Pandeya (<i>University of Queensland</i>), Assoc Prof Michael Coory (<i>Murdoch Children's Research Institute</i>), Dr Katrina Spillsbury (<i>Curtin University of Technology</i>), Dr Peter Donovan	Clinical Pharmacology, Internal Medicine and Aged Care	IMPROVE – Investigating Medication Re-Purposing to Reduce risk of Ovarian cancer and Extend survival	National Health and Medical Research Council	\$438,313	\$95,104	2017-2021
Karen Davies	Clinical Pharmacology	Medication Administration Evaluation and Feedback Tool Design and Validation	RBWH Foundation	\$38,082.52	\$38,082.52	2019

2019 Research Publications

Journal Articles

- Brooke Bullock, Ian Coombes**, Charles Mitchell, **Peter Donovan**, Jenny Whitty, A Systematic review of the costs and cost-effectiveness of clinical pharmacists on hospital ward rounds. *Expert Review of Pharmacoeconomics & Outcomes Research*, July 2019
- Madeline E Duke, Fiona L Britten**, Carel Pretorius, **Peter Donovan**. Maternal Metypapone Use During Breastfeeding: Safe for the Breastfed Infant. *Journal of the Endocrine Society*, March 2019
- Brooke Bullock, Peter Donovan**, Charles Mitchell, Jenny Whitty, **Ian Coombes**. The impact of a pharmacist on post-take ward round prescribing and medication appropriateness. *International Journal of Clinical Pharmacy*, Jan 2019
- Peter Donovan**, David Arroyo, **Champika Pattullo**, Anthony J Bell. Trends in opioid prescribing in Australia: a systematic review. *Australian health review*. Epub ahead of print. DOI: 10.1071/AH18245
- Mudge A, McRae P, Donovan P, Reade M**. A multidisciplinary quality improvement program for older patients admitted to a vascular surgery ward. *Internal Medicine Journal* epub ahead of print 10 June 2019
- Davies, K.M., Coombes, I. D., Keogh, S.**, Hays K., & **Whitfield, K. M.** Medication administration evaluation tool design: An expert panel review. *Collegian*, 2019. 26(1): p. 118-124
- Davies, K.M., Coombes, I. D., Keogh, S.**, Hays K., Hurst, C. & **Whitfield, K. M.** Medication Administration Evaluation and Feedback Tool: Simulation Reliability Testing. *Clinical Simulation in Nursing*, 2019. 32: p. 1-7
- Donovan P**, Arroyo D, **Pattullo C**, et al. Trends in Opioid Prescribing in Australia: A Systematic Review. *Aust Health Rev* Published Online First: 12 November 2019. doi: 10.1071/AH18245.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

- Davies K. M.** Nursing Expert Panel member. Health Round Table Medication Safety Workshop. July 2019. Brisbane, Australia
- Madan A.** Therapeutic Drug Monitoring – Free Drug Measurements. Australian Association for Clinical Biochemistry Queensland Meeting. July 2019. Brisbane, Australia
- Suckling B. M.** Opioid Stewardship – Looking Locally. Medicines Management 2019, The 46th Society of Hospital Pharmacist (SHPA) National Conference; November 15-16; Gold Coast, Australia.

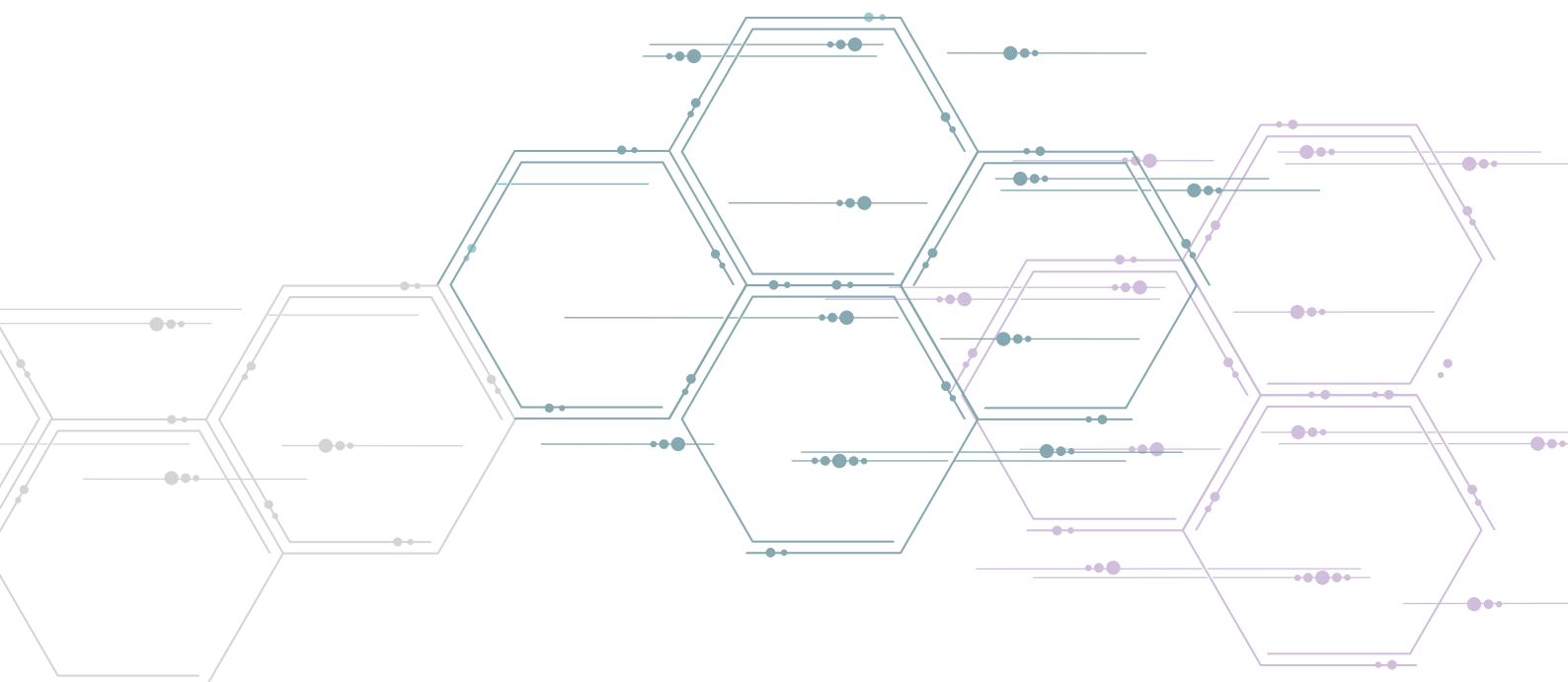


Oral Presentations

1. **Davies K. M., Coombes, I. D., Keogh, S., Hay, K., & Whitfield, K. M.** Medication Administration Evaluation and Feedback Tool: Clinical Inter-rater Reliability. The National Nursing Forum. August 2019. Hobart, Australia
2. **Davies, K. M., Coombes, I. D., Keogh, S., Hay, K., & Whitfield, K. M.** (2019). Medication Administration Evaluation and Feedback Tool (MAEFT). Health Round Table 1908 Medication Safety Improvement Group; 2019 June 19-20; Brisbane, Australia
3. **Madan A, Donovan P & Lander C.** Monitoring for Valproate Toxicity in Patients with Hypoalbuminaemia. ASCEPT-PAGANZ 2019 Joint Scientific Meeting. November 2019. Queenstown, New Zealand
4. **Madan A, Risetto T, Trenerry H, & Donovan P.** The Perils of Antiepileptic Toxicity. ASCEPT Clinical Pharmacology Weekend. May 2019. Sydney, Australia
5. **Pattullo C., Thomson J., Suckling, B. M., Taylor S., Bell A.** Towards Statewide Opioid Stewardship: The adaptation and implementation of the RBWH Opioid Prescribing Toolkit in Emergency Departments. 28th Annual Royal Brisbane and Women's Hospital (RBWH) Healthcare Symposium 2019; September 9-12; Brisbane, Australia
6. **Pattullo C., Thomson J., Suckling, B. M., Taylor S., Bell A.** Towards Statewide Opioid Stewardship: The adaptation and implementation of the Opioid Prescribing Toolkit in Emergency Departments. Autumn Symposium 2019, Australasian College of Emergency Medicine; May 23-24; Brisbane, Australia
7. **Pattullo C., Thomson J., Suckling B. M., Taylor S., Donovan P., Bell A.** Towards Statewide Opioid Stewardship: The adaptation and implementation of the Opioid Prescribing Toolkit in Emergency Departments. Medicines Management 2019, The 46th Society of Hospital Pharmacist (SHPA) National Conference; November 15-16; Gold Coast, Australia
8. **Pattullo C., Thomson J., Suckling B. M., Taylor S., Donovan P., Bell A.** Towards Statewide Opioid Stewardship: The adaptation and implementation of the Opioid Prescribing Toolkit in Multiple Emergency Departments. 36th ACEM Annual Scientific Meeting 2019; Australasian College of Emergency Medicine; November 17-21; Hobart, Australia.

Poster Presentations

1. **Davies, K. M., Coombes, I. D., Keogh, S., Hay, K., & Whitfield, K. M.** Medication Administration Evaluation and Feedback Tool: Design and Validation. Poster at: 28th Annual Royal Brisbane and Women's Hospital (RBWH) Healthcare Symposium 2019; September 9-12; Brisbane, Australia
2. **Davies, K. M., Coombes, I. D., Keogh, S., Hay, K., & Whitfield, K. M.** Medication Administration Evaluation and Feedback Tool: Design and Validation. Poster at: Medicines Management 2019, The 46th Society of Hospital Pharmacist (SHPA) National Conference; November 15-16; Gold Coast, Australia
3. **Madan A, Donovan P, & Lander C.** Monitoring for Phenytoin Toxicity in Patients with Hypoalbuminaemia. ASCEPT-PAGANZ 2019 Joint Scientific Meeting. November 2019. Queenstown, New Zealand
4. **Madan A, Suckling B, Pattullo C, & Donovan P.** Inpatient Use of Sustained Release Tapentadol – An Audit of Prescribing and Discharge Communication at a Tertiary Hospital. ASCEPT-PAGANZ 2019 Joint Scientific Meeting. November 2019. Queenstown, New Zealand
5. **Madan A, Risetto T, Trenerry H, & Donovan P.** Status Epilepticus and Encephalopathy or Valproate and Phenytoin Toxicity. TAPNA 2019 Scientific Meeting. May 2019. Gold Coast, Australia
6. **Robinson, P, Donovan, P.** Colchicine Prophylaxis of Gout Flares When Commencing Allopurinol Is Very Cost Effective: A Health Economic Analysis. ACR/ARP International Annual meeting. November 2019.





DEPARTMENT OF ENDOCRINOLOGY & DIABETES

The Department of Endocrinology and Diabetes is staffed by 13 medical, two administrative, four allied health professionals, two research nurses, three diabetes nurse educators, one podiatrist, one dietitian and three scientists.

Clinical services provided include in-patient consultative services at RBWH and specialised out-patient clinics at RBWH and Bundaberg Hospital. The department contributes to the State-wide Thyroid Cancer Clinic held with members of Cancer Care Services. It also supports the Obstetric Endocrine Clinic service for Women's and Newborn Services. It provides outreach services to Bundaberg and telehealth services in maternity health, endocrinology and complex Type 2 Diabetes to regional hospitals in the Central zone.

Clinical research activities include an active clinical trials unit. Chronic disease funding is underwriting projects in management of Diabetes in Pregnancy and Type 2 Diabetes. The Conjoint Endocrine Laboratories, a joint venture of Internal Medicine Services and Pathology Queensland undertakes studies at a basic science level of placental iodide and thyroid hormone handling as well as assessing testosterone transport and action.

Professor Emma Duncan has a major role within the Department to promote and undertake research. There are now three doctoral students. The department has developed strong links with several research departments and has started major clinical studies in several areas including:

- HIV disease and bone
- Pheochromocytoma and bone disease
- Genetics of Pheochromocytoma
- Genetics of Thyroid Cancer
- Genetics of Skeletal Dysplasia
- Genetics of Osteogenesis imperfecta
- Genome wide association studies of osteoporosis.

Associate Professor Don McLeod leads the thyroid service and is pursuing research in aspects of the epidemiology of Thyroid Cancer and Graves' disease.

The department has developed the first gestational diabetes decision support tool for the management of diabetes. Data on all patients managed in the department is now captured at every clinic visit. This has led to the potential to do clinical trials and outcome audit of all patients with diabetes in pregnancy. This has led to collaboration with the Departments of Obstetric Medicine and Neonatology.

ON-GOING RESEARCH PROJECTS:

Basic Science

- Placental handling of thyroid hormone and iodine
- The role of HDL in thyroid hormone transport
- Testosterone transport and action in androgen-dependent tissues.

CLINICAL TRIALS:

8 Studies

- Diabetes and cardiovascular disease
- GLP/GIP combination therapy
- Novel growth hormone antagonist therapies
- Thyroid cancer.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Fiona Britten	Masters 2014-current	Breastfeeding in mothers with type 2 diabetes mellitus	Prof. Emma Duncan <i>(secondary supervisor)</i>
Dr Kelly Carruthers	Masters 2016-2019	The Genetics of Familial Non-Medullary Thyroid Cancer	Prof. Emma Duncan <i>(first supervisor)</i>
Dr Andrea Fernandes	MPhil -current	The Endocrinology of Chronic Renal Disease	Prof. Emma Duncan <i>(first supervisor)</i>
Dr Sheila Cook	PhD -current	The effect of a low carbohydrate diet on clinical outcomes for patients with Type 1 Diabetes Mellitus	Prof. Emma Duncan <i>(first supervisor)</i>
Raied Alotaibi	MEpi 2019-completed	The relationship between naevi, melanoma and thyroid cancer in an Australian population-based study	Assoc. Prof. Don McLeod <i>(secondary supervisor)</i>
Sabbir Rahman	PhD 2017-current	Understanding the causes of rising incidence of thyroid cancer	Assoc. Prof. Don McLeod <i>(secondary supervisor)</i>

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Assoc. Prof. OMichael d'Emden	Director Endocrinology clinical trials, chronic disease, thyroid hormone action, testosterone transport				
Prof. Emma Duncan	Senior Staff Specialist genetics of endocrinology, clinical bone disease				QUT
Assoc. Prof. Don McLeod	Senior Staff Specialist; thyroid disease	Research FTE 0.4	NHMRC, Metro North HHS, Queensland Government	Thyroid disease	QIMR Berghofer
Dr Maree Mungomery	Visiting Medical Officer chronic disease, diabetes telehealth project				
Assoc. Prof. Kerry Richard	Senior Scientist thyroid hormone, iodine and placenta				
Dr Huika Li	Testosterone transport				
Helen Legg	Clinical Research Coordinator		Dr d'Emden Research Fund	Clinical Trials	
Liz Lahz	Clinical Research Coordinator		Dr d'Emden Research Fund	Clinical Trials	

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	Research Program	Affiliated University/ies
Melanie Young		Research Assistant thyroid hormone, iodine and placenta	
Assoc. Prof. Kerry Richard	Senior Scientist thyroid hormone, iodine and placenta, Dr Huika Li MB, testosterone transport		
Dr Huika Li	Testosterone transport		

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Assoc. Prof. Don McLeod	Ladenson P, Cooper D, Caturegli P, Veitor N, Whiteman D, Jordan S	Does stress cause Graves' disease?
Assoc. Prof. Don McLeod	Ladenson P, Cooper D, Caturegli P, Bedno S, Whiteman D, Jordan S	The association between thyroid autoimmunity and future thyroid cancer

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Rachel Neale <i>(QIMR Berghofer)</i>	Waterhouse M, English DR, Armstrong BK, Baxter C, Duarte Romero B, Ebeling P, Hartel G, Kimlin MG, McLeod DSA , O'Connell RL, Van Der Pols JC, Venn AJ, Webb PM, Whiteman DC	The D-Health trial
Susan Jordan <i>(UQ)</i>	Rahman ST, McLeod DSA , Pandeya N, Neale RE, Bain CJ, Baade P, Youl PH, Jordan	The Queensland Thyroid Cancer Study

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Assoc. Prof. Don McLeod	QIMR Berghofer, RBWH Endocrinology and Diabetes	Does stress cause Graves' disease?	NHMRC Project Grant	\$565,000		2017-2019
Assoc. Prof. Don McLeod	QIMR Berghofer RBWH Endocrinology and Diabetes	Queensland Advancing Clinical Research Fellowship. Optimising thyroid hormone treatment for Queenslanders	Queensland Government	\$300,000		November 2019-2022
Assoc. Prof. Don McLeod	QIMR Berghofer, RBWH Endocrinology and Diabetes	Metro North Clinician Research Fellowship. The causes, prognosis, and treatment of thyroid disease	Metro North HHS			2019-2022
Assoc. Prof Kerry Richard		The influence of maternal health and lifestyle on placental thyroid hormone transport and metabolism	Science and Education Research Committee. Kerry Richard and Kelly Landers	\$46 000	\$46,000	2019

2019 Research Publications

Journal Articles

PRE PRINTS

1. **McLeod DSA**. Staging and prognosis of differentiated thyroid cancer. Chapter 54. In: Braverman LE, Cooper DS, Kopp P (eds). Werner and Ingbar's The Thyroid: A Fundamental and Clinical Text, 11th Edition. Wolters Kluwer, Philadelphia. In press.

ACCEPTED PAPERS

1. Landers K, **d'Emden MC** and Richard K (2019) Scavenger receptor class B member 1 independent uptake of transthyretin by cultured hepatocytes is regulated by high density lipoprotein. Journal of Lipids. Article ID 7317639. doi.org/10.1155/2019/7317639
2. Aileen M. McInerney-Leo, Jennifer West, Lawrie Wheeler, Paul J Leo, Kim M Summers, Lisa Anderson, Matthew A Brown, Malcolm West, **Emma L Duncan**. "Compound heterozygous mutations in FBN1 in a large family with Marfan syndrome". Accepted, Molecular Genetics and Genomic Medicine, December 2019
3. Gregson CL, Bergen D, Leo P, Sessions RB, Wheeler L, Hartley A, Youtlen S, Croucher PI, McInerney-Leo AM, Fraser W, Tang JCY, Anderson L, Marshall M, Sergot L, Paternoster L, Davey-Smith G, Brown MA, Hammond C, Kemp JP, Tobias JH and **Duncan EL** (2019) "A rare mutation in SMAD9 associated with high bone mass identifies the SMAD-dependent BMP signalling pathway as a potential anabolic target for osteoporosis." J Bone Miner Res. ePub 16 Sept 2019
4. Cronin O, Forsyth L, Goodman K, Lewis SC, Keerie C, Walker A, Porteous M, Cetnarskyj R, Ranganath LR, Selby PL, Hampson G, Chandra R, Ho S, Tobias JH, Young-Min S, McKenna MJ, Crowley RK, Fraser WD, Gennari L, Nuti R, Brandi ML, Del Pino-Montes J, Devogelaer JP, Durmez A, Isaia G, Di Stefano M, Guanabens N, Blanch J, Seibel MJ, Walsh JP, Kotowicz MA, Nicholson GC, **Duncan EL**, Major G, Horne A, Gilchrist NL, Boers M, Murray GD, Charnock K, Wilkinson D, Russell RGG and Ralston SH (2019) "Zoledronate in the prevention of Paget's (ZiPP): protocol for a randomised trial of genetic testing and targeted zoledronic acid therapy to prevent SQSTM1-mediated Paget's disease of bone." BMJ Open 9(9): e030689
5. Johnson SR, Carter HE, Leo P, Hollingworth SA, Davis EA, Jones TW, Conwell LS, Harris M, Brown MA, Graves N and **Duncan EL** (2019) "Cost-effectiveness Analysis of Routine Screening Using Massively Parallel Sequencing for Maturity-Onset Diabetes of the Young in a Pediatric Diabetes Cohort: Reduced Health System Costs and Improved Patient Quality of Life." Diabetes Care 42(1): 69-76. – Awarded 2019 Overall Publication of the Year and the Carla Patterson award for Best Research by an Early Career Investigator, Institute of Health and Biomedical Sciences, Queensland University of Technology

Journal Articles

ACCEPTED PAPERS (CONT):

6. Johnson SR, Ellis JJ, Leo P, Anderson LK, Ganti U, Harris JE, Curran JA, McInerney-Leo A, Paramalingam N, Song X, Conwell LS, Harris M, Jones TW, Brown MA, Davis EA, **Duncan EL** (2019) "Comprehensive genetic screening: The prevalence of maturity-onset diabetes of the young gene variants in a population-based childhood diabetes cohort". *Pediatr Diabetes* 20(1):57-64
7. Wisniowski B, **McLeod DSA**, Harvey Y, Papadimos D, Adams R, Brown I, McGuire L, Armes J, Mollee P. The epidemiology of amyloidosis in Queensland, Australia. *The British Journal of Haematology*. 2019;186: 829-36 (PMID 31148162)
8. Nickel B, Tan T, Cvejic E, Baade P, **McLeod DSA**, Pandeya N, Youl P, McCaffery K, Jordan S. Health-related quality of life after diagnosis and treatment of differentiated thyroid cancer and association with type of surgical treatment. *JAMA Otolaryngology Head & Neck Surgery*. 2019; 145: 231–38 (PMID 30653212)
9. Waterhouse M, English DR, Armstrong BK, Baxter C, Duarte Romero B, Ebeling P, Hartel G, Kimlin MG, **McLeod DSA**, O'Connell RL, Van Der Pols JC, Venn AJ, Webb PM, Whiteman DC, Neale RE. A randomized placebo-controlled trial of vitamin D supplementation for reduction of mortality and cancer: statistical analysis plan for the D-Health Trial. *Contemporary Clinical Trials Communications*. 2019; 14: 100333 (PMID 30886934)
10. Rahman ST, **McLeod DSA**, Pandeya N, Neale RE, Bain CJ, Baade P, Youl PH, Jordan SJ. Understanding pathways to the diagnosis of thyroid cancer – are there ways we can reduce over-diagnosis? *Thyroid*. 2019; 29: 341-48 (PMID 30700206)
11. Nickel B, Semsarian C, Moynihan R, Barratt A, Jordan S, **McLeod D**, Brito JP, McCaffery K. Public perceptions of changing the terminology for low risk thyroid cancer: a qualitative focus group study. *BMJ Open*. 2019; 9: e025820 (PMID 30813118)
12. Bone and Metabolism v6. Therapeutic Guidelines. 2019. Therapeutic Guidelines Ltd. West Melbourne. Available online at: tg.org.au. **McLeod DSA** Expert group member
13. **McLeod DSA**, Zhang L, Durante C, Cooper DS. Contemporary debates in adult papillary thyroid cancer management. *Endocrine Reviews*. 2019; 40: 1481–99 (PMID 31322698)
14. Managing Cardiovascular Risk in Type 2 Diabetes: What Do the Cardiovascular Outcome Trials Mean for Australian Practice? Deed G, Atherton JJ, **d'Emden M**, Rasalam R, Sharma A, Sindone A. *Diabetes Ther*. 2019 Oct;10(5):1625-1643. doi: 10.1007/s13300-019-0663-x. Epub 2019 Jul 10. Review. PMID: 31292928
15. Hyponatremia in Heart Failure. Tee SL, Sindone A, Roger S, Atherton J, Amerena J, **D'Emden M**, Erlich J, De Pasquale C. *Intern Med J*. 2019 Aug 26. doi: 10.1111/imj.14624. [Epub ahead of print] Review. PMID: 31449715
16. Fernandes A, Jang C, **Duncan EL** (2019) "Is there a role for menopausal hormone therapy in the management of osteoporosis?" *Endocrinology Today* 8(3): 12-20
17. **Duncan EL** (2019) "Atypical femoral fracture: a fascinating story in evolution". *J Bone Miner Res* 33(12):2089-2090
18. Brown MA, **Duncan EL**, Evans DM (2019) Comment on "Vitamin D-Binding Protein Deficiency and Homozygous Deletion of the GC Gene", *New Engl J Med*, 380(26) 2583
19. Johnson SR and **Duncan EL** (2019) – Response to comment on Johnson et al. Cost-Effectiveness Analysis of Routine Screening Using Massively Parallel Sequencing for Maturity-Onset Diabetes of the Young in a Pediatric Diabetes Cohort: Reduced Health System Costs and Improved Patient Quality of Life"; *Diabetes Care* 42(5): e79-e80.

Book Chapters / Letters

1. Douglas Kiel, **Emma L Duncan**, Fernando Rivedeneira. "Human Genome-Wide Association Studies" Primer for the American Society for Bone and Mineral Research (ed. C. Rosen). In press.

CURRENTLY SUBMITTED

1. Ella M. A. Martin, Annabelle Enriquez, Duncan B. Sparrow, David Humphreys, Paul J. Leo, **Emma L. Duncan**, Kavitha R. Iyer, Joeline A. Greasby, Clémantine Dimartino, Jeanne Amiel, Yline Capri, Daphné Lehalle, Ali G. Gharavi, Grażyna G. Krzemień, Monika Miklaszewska, Robert D. Steiner, Cathy Raggio, Robert Blank, Hila M. Rasouly, Nara L. M. Sobreira, Rebekah Jobling, Christopher T. Gordon, Philip Giampietro, Sally L. Dunwoodie and Gavin Chapman. "Heterozygous loss of WBP11 function causes multiple congenital defects in humans and mice." Submitted, *Am J Hum Genet*, November 2019
2. Aideen McInerney-Leo, Jennifer West, Bettina Meiser, Malcolm West, Matthew A Brown, **Emma L Duncan** "Causal attributions in an Australian Aboriginal family with Marfan syndrome: A qualitative study." Submitted, *Social Science and Medicine*, October 2019
3. Owen Cronin, Deepak Subedi, Laura Forsyth, Kirsteen Goodman § Steff Lewis, Catriona Keerie, Allan Walker, Mary Porteous, Roseanne Cetnarskyj, Ranganath Lakshminarayan, Peter Selby, Geeta Hampson, Rama Chandra, Shu Ho, Jon Tobias, Steven Young Min, Malachi McKenna, Rachel Crowley, William D. Fraser, Jonathan Tang, Luigi Gennari, Rannuccio Nuti, Maria-Luisa Brandi, Javier del Pino-Montes, Jean-Pierre Devogelaer Anne Durnez, Giancarlo Isaia, Marco Di Stefano, Josep Blanch, Nuria Guanabens, Markus Seibel, John P Walsh, Mark Kotowicz, Geoffrey Charles Nicholson, **Emma L Duncan**, Gabor Major, Ann Horne, Nigel Gilchrist, Stuart H. Ralston "Evolution of early Paget's disease in SQSTM1 mutation carriers." Submitted, *BMJ Open*, minor revisions requested, resubmitted July 2019.

PRINCIPLE INVESTIGATOR IN PUBLISHED CLINICAL TRIALS

1. Dapagliflozin and Cardiovascular Outcomes in Type 2 Diabetes. Wiviott SD, Raz I, Bonaca MP, Mosenzon O, Kato ET, Cahn A, Silverman MG, Zelniker TA, Kuder JF, Murphy SA, Bhatt DL, Leiter LA, McGuire DK, Wilding JPH, Ruff CT, Gause-Nilsson IAM, Fredriksson M, Johansson PA, Langkilde AM, Sabatine MS; DECLARE-TIMI 58 Investigators. *N Engl J Med*. 2019 Jan 24;380(4):347-357. doi: 10.1056/NEJMoa1812389. Epub 2018 Nov 10. PMID: 30415602
2. Effect of lorcaserin on prevention and remission of type 2 diabetes in overweight and obese patients (CAMELLIA-TIMI 61): a randomised, placebo-controlled trial. Bohula EA, Scirica BM, Inzucchi SE, McGuire DK, Keech AC, Smith SR, Kanevsky E, Murphy SA, Leiter LA, Dwyer JP, Corbalan R, Hamm C, Kaplan L, Nicolau JC, Ophuis TO, Ray KK, Ruda M, Spinar J, Patel T, Miao W, Perdomo C, Francis B, Dhadda S, Bonaca MP, Ruff CT, Sabatine MS, Wiviott SD; CAMELLIA-TIMI 61 Steering Committee Investigators. *Lancet*. 2018 Nov 24;392(10161):2269-2279. doi: 10.1016/S0140-6736(18)32328-6. Epub 2018 Oct 4. PMID: 30293771
3. Cardiovascular Safety of Lorcaserin in Overweight or Obese Patients. Bohula EA, Wiviott SD, McGuire DK, Inzucchi SE, Kuder J, Im K, Fanola CL, Qamar A, Brown C, Budaj A, Garcia-Castillo A, Gupta M, Leiter LA, Weissman NJ, White HD, Patel T, Francis B, Miao W, Perdomo C, Dhadda S, Bonaca MP, Ruff CT, Keech AC, Smith SR, Sabatine MS, Scirica BM; CAMELLIA-TIMI 61 Steering Committee and Investigators. *N Engl J Med*. 2018 Sep 20;379(12):1107-1117. doi: 10.1056/NEJMoa1808721. Epub 2018 Aug 26. PMID: 30145941.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **McLeod DSA**. Endocrinology workshop: A morning with Mike Tuttle. 8th Multidisciplinary Update on Thyroid & Parathyroid Surgery. Nov 16, 2019, Noosa
2. **McLeod DSA**. Thyroid nodules everywhere: A clinical decision-making guide. Australian Sonographers Association National Conference. June 23, 2019, Brisbane
3. **McLeod DSA**. Thyroid cancer case presentation. Queensland thyroid cancer special interest group. June 19, 2019, Brisbane.

Poster Presentations

1. Richard K, Landers KA and **d'Emden MC** (2019) Hepatocyte uptake of transthyretin is regulated by high density lipoprotein and is independent of scavenger receptor class B member 1. The Annual Scientific Meetings of the Endocrine Society of Australia, the Society for Reproductive Biology and the Asia Oceania Thyroid Association, Sydney, Australia
2. Richard K, Landers KA and **d'Emden MC** (2019) Transthyretin uptake by hepatocytes is regulated by high density lipoprotein and is independent of scavenger receptor class B member 1. RBWH Healthcare Symposium, Herston, Qld, Australia
3. Li H, **d'Emden MC** and Richard K (2019) Placental tissue for use in research. RBWH Healthcare Symposium, Herston, Qld, Australia
4. **Li H**, **d'Emden MC** and Richard K (2019) Placental tissue for use in research. Annual Queensland Perinatal Consortium (QPACT) Meeting, Griffith University, Gold Coast, Australia.

Other communications and outputs:

1. McLeod DSA. Editorial Board. *Thyroid* (commenced 2016, ongoing)
2. McLeod DSA. Member, American Thyroid Association Public Health Committee (commenced 2018, ongoing)
3. McLeod DSA. Member, American Thyroid Association Survey Evaluation Task Force (commenced 2019, ongoing)
4. McLeod DSA. Member, Organizing Committee. Endocrine Society of Australia Annual Scientific Meeting 2019-2021
5. McLeod DSA. Member, Expert Group. Bone & Metabolism v6. Therapeutic Guidelines (commenced 2018, completed 2019)
6. Member, Local Organising Committee. Asia & Oceania Thyroid Association Conference 2019 (Sydney, Australia) – completed1.
McLeod DSA. Editorial Board. *Thyroid* (commenced 2016, ongoing).



DEPARTMENT OF GASTROENTEROLOGY & HEPATOLOGY

The Endoscopy Research Group is currently running number of clinical projects involving capsule endoscopy, colonoscopy (safety, quality and polypectomy), bariatric endoscopy, EUS, dysplastic Barrett's oesophagus and eosinophilic oesophagitis. This group runs and participates in several national, multicentre studies. The group has a large group of interventional endoscopists, many with national and international reputations. The focus last year was increasing the clinical research support, starting several trials and setting up clinical databases in preparation for the expanded diagnostic and therapeutic endoscopy coming with the opening of STARS.

The Gut Health Research group (QIMR Berghofer MRI) is an independently funded team of clinicians, scientists, and students working in close collaboration with the Department of Gastroenterology at RBWH, and with local (QIMR Berghofer, Mater Adult Hospital), national (the member units of the ANZ IBD consortium) and international (International IBD Genetics Consortium) colleagues. The group has focussed on developing and establishing novel diagnostic and management tools over the past 12 months. This includes our risk prediction tool for high-risk small bowel Crohn's disease, now published, and an assay for detecting key mutations in the gene NUDT15 which are associated with thiopurine-induced myelosuppression.

Barbara Leggett continues to collaborate with a basic scientist Vicki Whitehall from Pathology Queensland and the histopathologists Mark Bettington, Christophe Rosty and Cheng Liu from Envoi Specialist Pathologists. This longstanding and productive collaboration investigating colorectal tumourigenesis is centred at laboratory space in QIMR Berghofer. In 2019 the highlight has been understanding that sessile serrated lesions have much higher malignant potential when they occur in elderly subjects because the age of the host markedly influences the rate at which DNA methylation occurs. This year also marked a major milestone in translation of our work on serrated neoplasia into clinical practice with Barbara Leggett being the author of the first national guidelines on colonoscopic management of serrated polyps.

Richard Skoien has continued his translational work in miRNAs as potential biomarkers in HCC and cirrhosis and is now exploring candidates via collaborations with hepatologists in other Liver Centres interstate. Ms Anna Weis was awarded her PhD this year for her thesis on the role of miRNAs in liver disease under the supervision of Dr Skoien and Prof Grant Ramm (QIMR-Berghofer). The hepatology medical and nursing staff are active in clinical research with the HACC-FOL initiative (streamlined model of nurse-led HCC surveillance) and the HepatoCare clinic (a novel model of dedicated supportive and palliative care in advanced cirrhosis) as well as a number of clinical audits of the management of variceal bleeding, HCC and SBP are also being undertaken.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Jennifer Borowsky	PhD, UQ <i>(2017-2021)</i>	Multiplexed Immuno-profiling of the colorectal carcinoma microenvironment	Vicki Whitehall, Barbara Leggett
Lauren White	MPhil UQ/QIMRB <i>(2018-2020)</i>	Introduction of Intestinal Ultrasound to a tertiary Gastrointestinal department.	Graham Radford-Smith, Andrew Lee
Abigail Marsh	PhD UQ	The effects of an anti-inflammatory diet on disease activity, symptom severity and microbiota profile in patients with inflammatory bowel disease.	Graham Radford-Smith, Veronique Chachay, Merrilyn Banks
Caitlin Hall	PhD UQ/QIMRB	Understanding the relationship between the gut microbiome and the brain.	Lucca Cochi, Graham Radford-Smith , Anton Lord
Anthony Croft	MPhil UQ/QIMRB <i>(2017-2019, awarded)</i>	Risk assessment in acute ulcerative colitis	Graham Radford-Smith , Anton Lord
Yoon-Kyo An	MPhil UQ/TRI/QIMRB	AURORA (Australian Ustekinumab Real-World Observational Research)	Jake Begun, Graham Radford-Smith
Rina Kumar	PhD UQ/QIMRB	Analysis of the mucosa-associated gut microbiome in health and disease	Graham Radford-Smith , Lisa Simms, Anton Lord, Martha Zakrzewski

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Barbara Leggett	Professor	1.0	Academic title holder	School of Medicine	University of Queensland
Ben Devereaux	Professor	0.2	Academic title holder	School of Medicine	University of Queensland
Graham Radford-Smith	Associate Professor	0.7	Academic title holder	School of Medicine	University of Queensland
Richard Skoien	Senior lecturer	1.0	Academic title holder	School of Medicine	University of Queensland
Kimberley Ryan	Endoscopic Research Coordinator	0.8	Operational / MN Research Coordinator grant funded	Interventional Gastroenterology Research	Queensland Health
Christopher (Yin Hiew) Kia	Endoscopy <i>(Hepatobiliary Fellow)</i>	1.0	Operational	Gastrointestinal – Interventional	Queensland Health
Abdulnasser Lafta	Endoscopy <i>(Luminal Fellow)</i>	1.0	Operational	Gastrointestinal – Interventional	Queensland Health
Melita Andelovic	Hepatology – Fellow	1.0	Operational	Gastrointestinal – Hepatology	Queensland Health
Lauren White	Inflammatory Bowel Disease – Research Fellow	0.8	IBD Telehealth, RBWH Scholarship, MNHHS Future Fund	Gut Health	University of Queensland
Allison Brown	Clinical Research Nurse	1.0	Clinical trials, MRFF award	Gut Health	Queensland Health
Abigail Marsh	Dietician	0.6	Operational, Future Fund, RBWH Scholarship	Gut Health	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Barbara Leggett	Vicki Whitehall (<i>Pathology Queensland and QIMR Berghofer</i>), Mark Bettington (<i>Envoi Specialist Pathologists</i>), Christopher Rosty (<i>Envoi Specialist Pathologists</i>), Cheng Liu (<i>Envoi Specialist Pathologists</i>)	Serrated pathway of colorectal tumourigenesis
Mark Appleyard, Florian Grimpen	Nam Q Nguyen (<i>Royal Adelaide Hospital</i>), Gregor Brown (<i>Alfred Health</i>), Alan Moss (<i>Western Health</i>), Gary Lim (<i>Christchurch Hospital</i>)	Does bowel preparation alter diagnostic yield in capsule endoscopy?
Florian Grimpen, Joshua Satchwell, Mark Appleyard, Kimberley Ryan, Matthew Remedios		Barrett's Oesophagus and its progression to oesophageal adenocarcinoma – Impact of enhanced imaging techniques and endoscopic therapies on outcomes
Abdulnasser Lafta, Florian Grimpen, Matthew Remedios, Kimberley Ryan, Mark Appleyard	Jessica Kinneally (<i>Nutrition and Dietetics</i>)	Two food group elimination diet versus swallowed fluticasone for the management of adult eosinophilic esophagitis, a single-centred randomised prospective study
Kimberley Ryan, Florian Grimpen, Mark Appleyard	Anthony FT Brown (<i>Emergency and Trauma Centre</i>), Eva Malacova (<i>QIMR Berghofer</i>)	Examining time to endoscopic intervention in patients admitted to hospital with upper gastrointestinal bleeding
Patrick Walsh	Chun How Gan, Mark Appleyard, Jason Huang, George Hopkins	Argon Plasma Coagulation and endoscopic suturing in the management of weight regain after gastric bypass surgery
Anthony Croft, Tianghong Wu, Graham Radford-Smith	Jacob Lim	Endoscopic balloon dilatation in structuring Crohn's disease
Graham Radford-Smith	Mark Appleyard (<i>Dept of Gastroenterology, RBWH</i>), Lisa Simms and Anton Lord (<i>Gut Health, QIMRB</i>), Louisa Gordon and Patricia Valery (<i>Population Health, QIMRB</i>), Tony Rahman (<i>Dept of Gastroenterology, TPCH</i>), Nick Tutticci, (<i>Dept of Gastroenterology, QEII</i>)	Development of a risk assessment tool to improve clinical triage accuracy for colonoscopic investigations for earlier detection of colorectal cancer and precancerous lesions
Lauren White	Graham Radford-Smith; Andrew Lee; Anton Lord (<i>QIMRB</i>)	Introduction of Intestinal Ultrasound to a tertiary Gastrointestinal department
Abigail Marsh	Graham Radford-Smith; Merrilyn Banks; Veronique Chachay (<i>UQ</i>); Anton Lord (<i>QIMRB</i>)	The effects of an anti-inflammatory diet on disease activity, symptom severity and microbiota profile in patients with inflammatory bowel disease
Richard Skoien	Grant Ramm and Anna Weis (<i>Hepatic Fibrosis Laboratory, QIMR-B</i>)	Investigating the potential of circulating microRNAs as non-invasive biomarkers in cirrhosis and hepatocellular carcinoma
Richard Skoien	Alison Kearney (<i>Dept of Supportive and Palliative Care</i>), Olivia Cullen and Joanne Mina (<i>Dept of Gastroenterology and Hepatology</i>); Amy Legg (<i>Dept of Pharmacy</i>)	The <i>HepatoCare</i> project: A novel, multi-disciplinary model of palliative and supportive care in advanced cirrhosis
Richard Skoien	Victoria Grey, Lorne Dunlop (<i>IMS</i>); Kimberley Ryan, Mark Appleyard (<i>Dept of Gastroenterology</i>); Anthony Brown (<i>Emergency and Trauma Centre</i>)	A study of the management of decompensated cirrhotic patients at risk of spontaneous bacterial peritonitis admitted through the RBWH Emergency Department

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Vicki Whitehall <i>(Pathology Queensland and QIMR Berghofer)</i>	Barbara Leggett <i>(Gastroenterology and Hepatology)</i> ; Matthew Burge <i>(Medical Oncology)</i> ; Melissa Eastgate <i>(Medical Oncology)</i>	BRAF mutant colorectal cancer
Jan Tack <i>(University Hospital Gasthuisberg, Belgium)</i>	Vishal Kaushik <i>(Gastroenterology and Hepatology)</i>	IBIS-C Study group. Economic burden of moderate to severe irritable bowel syndrome with constipation in six European countries
Nicholas A Kennedy <i>(Royal Devon and Exeter Hospital National Health Service (NHS), UK)</i>	Vishal Kaushik <i>(Gastroenterology and Hepatology)</i>	Predictors of anti-TNF treatment failure in anti-TNF-naive patients with active luminal Crohn's disease: a prospective, multicentre, cohort study
Marie Ooi, Nam Q Nguyen <i>(Royal Adelaide Hospital)</i>	Mark Appleyard, Florian Grimpén, Abdunnasser Lafta	A randomised controlled study on the effectiveness of a transparent cap-assisted device in the endoscopic management of high-grade food bolus obstruction in the oesophagus
Mangira, D., Moss, A., Nalankilli, K & Cao, J. <i>(Western Hospital, Footscray)</i>	Florian Grimpén, Mark Appleyard, Matthew Remedios	Cold snare Polypectomy for non-pedunculated colonic polyps sized 10-19mm: A prospective observational study (CSP study)
Nguyen, N., Phan, A., Schoeman, M. <i>(Royal Adelaide Hospital)</i>	Mark Appleyard, Florian Grimpén, Kimberley Ryan, Anthony FT Brown Carly Silvester, Arrchanah Balanchandran	The utility of the Glasgow-Blatchford score in predicting clinical outcome and stratifying the needs for therapeutic intervention in hospitalised patients with Upper Gastrointestinal Bleeding
Yoon-Kyo An <i>(Mater/UQ)</i> , Jake Begun <i>(Mater/UQ/TRI)</i>	Graham Radford-Smith	AURORA (Australian Ustekinumab Real-World Observational Research) in Crohn's Disease
Nik Ding <i>(St Vincent's, Melbourne)</i> , Edouard Louis <i>(Hopital St Antoine, Liege, Belgium)</i> , GETAID IBD Group <i>(Europe)</i>	Graham Radford-Smith, Allison Brown	A prospective randomized controlled trial comparing infliximab-antimetabolites combination therapy to anti-metabolites monotherapy and infliximab monotherapy in Crohn's disease patients in sustained steroid-free remission on combination therapy
Peter De Cruz <i>(Austin Hospital, Melbourne)</i> , Ronan Burder <i>(Austin Hospital, Melbourne)</i>	Graham Radford-Smith, Allison Brown	PREDICT UC: Optimizing Infliximab Induction Therapy for Acute Severe Ulcerative Colitis
Ken Croitura, Mount Sinai Hospital, Toronto, Canada	Graham Radford-Smith, Katherine Hanigan (QIMRB); Lisa Simms (QIMRB)	GEMS (Genes, Environment, Microbiome)
Will Kemp <i>(The Alfred, Melbourne) on behalf of the ALA-CRN)</i>	Richard Skoien	Management, Outcomes and Survival of an Australian IgG4-sclerosing cholangitis Cohort: The MOSAIC study
Patricia Valery <i>(QIMR-B)</i> and Elizabeth Powell <i>(PAH)</i>	Richard Skoien	Cirrhosis Care (CirCare): Understanding patient and health system factors that impact on health outcomes for patients with cirrhosis

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Vicki Whitehall, Barbara Leggett , Mark Bettington	Gastroenterology and Hepatology	High risk sessile serrated adenomas of the colorectum	Cancer Council Queensland	\$200,000	\$100,000	2019-2020
Graham Radford-Smith , Lisa Simms, Anton Lord, Allison Brown , Tony Rahman, Patricia Valery, Nick Tutticci, Louisa Gordon, Mark Appleyard	Gut Health Research Group <i>(QIMRB)</i> , Gastroenterology Departments <i>(RBWH, TPCH, QEII)</i> , Population Health <i>(QIMRB)</i>	Development of a risk assessment tool to improve clinical triage accuracy for colonoscopic investigations for earlier detection of colorectal cancer and precancerous lesions	MRFF	\$242,500	Nil	2019-2020

2019 Research Publications

Journal Articles

1. Bettington M, Brown I, Rosty C, Walker N, Croese J, Rahman T, Pearson S-A, McKeone D, **Leggett B**, Whitehall V. Sessile serrated adenomas in young patients may have limited risk of malignant progression. *J Clin Gastroenterol* 2019; 53: e113-e116
2. Lannagan TRM, Lee YK, Wang T, Roper J, Bettington ML, Fennell L, Vrbancic L, Jonavicius L, Somashekar R, Gieniec K, Yang M, Ng JQ, Suzuki N, Ichinose M, Wright JA, Kobayashi H, Putoczki TL, Hayakawa Y, Leedham S, Abud HE, Yilmaz OH, Marker J, Klebe S, Wirapati P, Tejpar S, **Leggett B**, Whitehall VLJ, Worthley DL, Woods SL. Genetic editing of colonic organoids provides a molecularly distinct and orthotopic preclinical model of serrated carcinogenesis. *Gut*; 2019; 68:684-692
3. Valery PC, Baade PA, Stuart KA, **Leggett B**, Macdonald GA, Whiteman D, Crawford DH, Clark PJ. Five-year conditional survival for patients with hepatocellular carcinoma in Queensland, Australia. *GastroHep* 2019; 1:61-69
4. Bettington ML, Liu C, Gill A, Walker NI, **Leggett B**, Whitehall VLJ, Rosty C. BRAF V600E immunohistochemistry demonstrates that some sessile serrated lesions with adenomatous dysplasia may represent collision lesions. *Histopathology* 2019; 75:81-87
5. Fennell L, Dumenil T, Hartel G, Nones K, Bond C, McKeone D, Bowdler L, Montgomery G, Wockner L, Klein K, Hoffmann I, Patch A-M, Kazakoff S, Pearson J, Waddell N, Wirapati P, Lochhead P, Imamura Y, Ogino S, Shao R, Tejpar S, **Leggett B**, Whitehall V. Integrative genome-scale DNA methylation analysis of a large and unselected cohort reveals five distinct subtypes of colorectal adenocarcinomas. *Cellular and Molecular Gastroenterology and Hepatology* 2019; 8:269-290
6. Liu C, Fennell LJ, Bettington ML, Walker NI, Dwine J, **Leggett B**, Whitehall VLJ. DNA methylation changes that precede onset of dysplasia in advanced sessile serrated adenomas. *Clinical Epigenetics* 2019; 11:90 doi.org/10.1186/s13148-019-0691-4
7. **Gonsalkorala ES**, Cannon MD, Lim TY, Penna L, Williamson C, Heneghan MA. Non-invasive markers (ALBI and APRI) Predict pregnancy outcomes in women with chronic liver disease. *Am. J. Gastroenterology* 2019 Feb;114(2):267-275.
8. Carter H, Knowles D, Moroney T, Holtmann G, Rahman T, **Appleyard M**, Steele N, Zanco M, Graves N. The use of modelling studies to inform planning of health services: case study of rapidly increasing endoscopy services in Australia. *BMC Health Services Research* 2019, 19:608, doi:10.1186/s12913-019-4438-x
9. Cherian P, Blake C, **Appleyard M**, Clouston J, & Mott N. Outcomes of radiologically inserted gastrostomy versus percutaneous endoscopic gastrostomy. *Journal of Medical Imaging and Radiation Oncology* 2019, 63:610-616
10. Powell EE, **Skoien R**, Rahman T, Clark PJ, O'Beirne J, Hartel G, Stuart KA, McPhail SM, Gupta R, Boyd P, Valery PC. Increasing Hospitalization Rates for Cirrhosis: Overrepresentation of Disadvantaged Australians. *EClinicalMedicine*. 2019 Jun 13; 11:44-53
11. Nicoll AJ, Roberts SK, Lim R, Mitchell J, Weltman M, George J, Wigg A, Stuart K, Gow P, MacQuillan G, Tse E, Levy M, Sood S, Zekry A, Cheng W, Mitchell J, **Skoien R**, Sievert W, Strasser SI, McCaughan GW; ALA Clinical Research Network, Gastroenterological Society of Australia. Beneficial response to mycophenolate mofetil by patients with autoimmune hepatitis who have failed standard therapy, is predicted by older age and lower immunoglobulin G and INR levels. *Aliment Pharmacol Ther*. 2019 May;49(10):1314-1322
12. Weis A, Marquart L, Calvopina DA, Genz B, Ramm GA, **Skoien R**. Serum MicroRNAs as Biomarkers in Hepatitis C: Preliminary Evidence of a MicroRNA Panel for the Diagnosis of Hepatocellular Carcinoma. *Int J Mol Sci*. 2019 Feb 17;20(4)
13. **Devereaux BM**, Taylor ACF, Athan E, Wallis DJ, Brown RR, Grieg SM, Bailey FK, Vickery K, Wardle E, Jones DM. Simethicone use during gastrointestinal endoscopy: Position statement of the Gastroenterological Society of Australia. *J Gastroenterol Hepatol*, 2019 June 26
14. Choi K, Karunairajah A, Flynn DE, Kaurnairajah A, Hughes A, Bhasin A, **Devereaux B**, Chandrasegaram M. Management of infected pancreatic necrosis in the setting of concomitant rectal cancer: A case report and review of literature. *World J Gastrointest Surg*, 2019;11:237-246
15. Maydeo A, Rerknimitr R, Lau J, Aljebreen A, Niaz S, Itoi T, Ang TL, Reichenberger J, Seo DW, Ramchandani M, **Devereaux B**, Lee JK, Goenka M, Sud R, Nguyen N, Kochhar R, Peetermans J, Goswamy P, Rousseau M, Bhandari S, Angsuwatcharakon, Tang R, Teoh A, Almadi M, Lee YN, Moon JH. Cholangioscopy-guided lithotripsy demonstrated high success rate for difficult bile duct stone clearance in a single session of ERCP – results from a large multi-national registry. *Endoscopy* 2019 Jun 27
16. Greenland KB, **Devereaux B**. High flow nasal oxygen: Urgent need to standardize the terminology. *Anaesth Intensive Care* 2019; 47:307308
17. **Devereaux BM**, Athan E, Brown RR, Greig SM, Jones DM, Bailey FK, Wallis DJ, Singh R. Australian infection control in endoscopy consensus statements on Carbapenemase-producing Enterobacteriaceae. *J Gastroenterol Hepatol* 2019; 34:650-658
18. Wynne K, **Devereaux B**, Dornhorst A. Diabetes of the exocrine pancreas. *J Gastroenterol Hepatol* 2019; 34:346-354
19. Dube U, Ibanez L, Budde JP, Benitez BA, Davis AA, Harari O, Iles MM, Law MH, Brown KM; 23andMe Research Team; Melanoma-Meta-analysis Consortium, Cruchaga C. Overlapping genetic architecture between Parkinson disease and melanoma. *Acta Neuropathol*. 2019 Dec 16. doi: 10.1007/s00401-019-02110-z
20. Hall CV, Lord A, Betzel R, Zakrzewski M, Simms LA, Zalesky A, **Radford-Smith G**, Cocchi L. Co-existence of Network Architectures Supporting the Human Gut Microbiome. *iScience*. 2019 Dec 20; 22:380-391. doi: 10.1016/j.isci.2019.11.032. Epub 2019 Nov 21
21. Shen EX, Lord A, Doecke JD, Hanigan K, Irwin J, Cheng RKY, **Radford-Smith G**. A validated risk stratification tool for detecting high-risk small bowel Crohn's disease. *Aliment Pharmacol Ther*. 2020 Jan;51(2):281-290. doi: 10.1111/apt.15550. Epub 2019 Nov 26
22. Ramsey KA, Chen ACH, Radicioni G, Lourie R, Martin M, Broomfield A, Sheng YH, Hasnain SZ, **Radford-Smith G**, Simms LA, Burr L, Thornton DJ, Bowler SD, Livengood S, Ceppe A, Knowles MR, Donaldson SH, Hill DB, Ehre C, Button B, Alexis NE, Kesimer M, Boucher RC, McGuckin MA. Airway Mucus Hyperconcentration in Non-Cystic Fibrosis Bronchiectasis. *Am J Respir Crit Care Med*. 2019 Nov 25. doi: 10.1164/rccm.201906-1219OC
23. Patrick D, Doecke JD, Irwin J, Hanigan K, Simms LA, Howlett M, **Radford-Smith G**. Short term colectomy is avoided in over half of regional patients failing medical therapy for acute severe ulcerative colitis with co-ordinated transfer and tertiary care. *Intern Med J*. 2019 Oct 7. doi: 10.1111/imj.14649

Journal Articles (cont)

24. Wu Y, Ghaly S, Kerr S, Jackson B, Hanigan K, Martins D, Krishnaprasad K, Mountfield RE, Whiteman DC, Bampton PA, Geary RB, **Radford-Smith G**, Lawrance IC. Level of UV Exposure, Skin Type, and Age Are More Important than Thiopurine Use for Keratinocyte Carcinoma Development in IBD Patients. *Dig Dis Sci*. 2019 Sep 6. doi: 10.1007/s10620-019-05818-w. [Epub ahead of print]
25. Faleiro R, Liu J, Karunarathne D, Edmundson A, Winterford C, Nguyen TH, Simms LA, **Radford-Smith G**, Wykes M. Crohn's disease is facilitated by a disturbance of programmed death-1 ligand 2 on blood dendritic cells. *Clin Transl Immunology*. 2019 Jul 25;8(7): e01071. doi: 10.1002/cti2.1071. eCollection 2019
26. Romagnoni A, Jégou S, Van Steen K, Wainrib G, Hugot JP. Comparative performances of machine learning methods for classifying Crohn Disease patients using genome-wide genotyping data.; International Inflammatory Bowel Disease Genetics Consortium (IIBDGC). *Sci Rep*. 2019 Jul 17;9(1):10351. doi: 10.1038/s41598-019-46649-z
27. Julsgaard M, Hvas CL, Geary RB, Gibson PR, Fallingborg J, Sparrow MP, Bibby BM, Connell WR, Brown SJ, Kamm MA, Lawrance IC, Vestergaard T, Svenningsen L, Baekdal M, Kammerlander H, Walsh A, Boysen T, Bampton P, **Radford-Smith G**, Kjeldsen J, Andrews JM, Subramaniam K, Moore GT, Jensen NM, Connor SJ, Wildt S, Wilson B, Ellard K, Christensen LA, Bell SJ. Anti-TNF Therapy in Pregnant Women With Inflammatory Bowel Disease: Effects of Therapeutic Strategies on Disease Behavior and Birth Outcomes.. *Inflamm Bowel Dis*. 2019 May 29. pii: izz110. doi: 10.1093/ibd/izz110. [Epub ahead of print]
28. Duplicate with last publication Elliott TM, Lord A, Simms LA, **Radford-Smith G**, Valery PC, Gordon LG. Evaluating a risk assessment tool to improve triaging of patients to colonoscopies. *Intern Med J*. 2019 Feb 28. doi: 10.1111/imj.14267
29. Choy MC, Seah D, Faleck DM, Shah SC, Chao CY, An YK, **Radford-Smith G**, Bessissow T, Dubinsky MC, Ford AC, Churilov L, Yeomans ND, De Cruz PP. Systematic Review and Meta-analysis: Optimal Salvage Therapy in Acute Severe Ulcerative Colitis. *Inflamm Bowel Dis*. 2019 Jun 18;25(7):1169-1186. doi: 10.1093/ibd/izy383
30. de Boer NKH; Thiopurine Working Group. Thiopurine Therapy in Inflammatory Bowel Diseases: Making New Friends Should Not Mean Losing Old Ones. *Gastroenterology*. 2019 Jan;156(1):11-14
31. **Satchwell JB**, & Grover SC. Taenia solium in the Small Intestine. *Clinical Gastroenterology and Hepatology*. 2019. doi.org/10.1016/j.cgh.2019.04.075
32. Marsh, A., Kinneally, J., Robertson, T., Lord, A., Young, A., & **Radford-Smith, G.** (2019). Food avoidance in outpatients with Inflammatory Bowel Disease—Who, what and why. *Clinical Nutrition ESPEN*; 31: 10-16.

Book Chapters / Letters

1. **Leggett B.** Section author of 'Colonoscopic Surveillance after Polypectomy' in Cancer Council Australia Surveillance Colonoscopy Guidelines Working Party. Clinical practice guidelines for surveillance colonoscopy. Sydney: Cancer Council Australia. Version URL: <https://wiki.cancer.org.au/australiawiki/index.php?oldid=208067> 2019
2. **Appleyard M.** Section author of 'Quality of colonoscopy' in Cancer Council Australia Surveillance Colonoscopy Guidelines Working Party. Clinical practice guidelines for surveillance colonoscopy. Sydney: Cancer Council Australia. Version URL: <https://wiki.cancer.org.au/australiawiki/index.php?oldid=208067> 2019.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Leggett, B.** Hereditary Colon Cancer: recognition, surveillance and chemoprevention, Australian Gastroenterology Week, 2019
2. **Gonsalkorala, ES.** Colonoscopy National Standards, Provincial Surgeons of Australia Annual Scientific Conference, Ballarat VIC, 2019
3. **Grimpen, F.** Suspected SI Bleeding: What to do next and when, Australian Gastroenterology Week, 2019
4. **Walsh, P.** Endoscopy in the post metabolic therapy patient, Australian Gastroenterology Week, 2019
5. **Walsh, P.** Resection and Plication (RAP) technique, a novel endoscopic option for the post bariatric patient with severe GORD, Australia Gastroenterology week, 2019
6. **Walsh, P.** Resection and Plication (RAP) technique, a novel endoscopic option for the post bariatric patient with severe GORD, Australian & New Zealand Metabolic and Obesity surgery Society 2019, Brisbane
7. **Walsh, P.** Endo-reflux procedure post bariatric surgery – The RAP, Auckland Bariatric Symposium, 2019
8. **Devereaux, B.** Approach to the pancreatic mass: Tissue acquisition and staging, Australian Gastroenterology Week, 2019
9. **Devereaux, B.** Tools and skills necessary to begin a cholangiopancreatography practice, Digestive Diseases Week, San Diego USA, 2019
10. **Devereaux, B.** State of the art approach to pancreatic mass. EndoQE 6th International Endoscopy Workshop, Malaysia, 2019
11. **Devereaux, B.** Use of simethicone in endoscopy. Gastrointestinal Associates Workshop, Malaysia, 2019
12. **Devereaux, B.** Intra-ductal imaging: cholangioscopy and pancreatoscopy. Spyglass Symposium / Spyglass Roadshow, Singapore / Taiwan / China, 2019
13. **Radford-Smith, G.** Acute Severe Ulcerative Colitis – evolving paradigms, when to operate, Australian Gastroenterology Week, 2019
14. **Radford-Smith G.** Inflammatory Bowel Disease and Spondyloarthropathy, Asia Pacific League of Associations for Rheumatology, Brisbane, 2019
15. **Lim, MH.** The Role of Telehealth in IBD care, IBD Masterclass, Melbourne, 2019.

Oral Presentations

1. **Lafta, A.** Lumen occupying pedunculated polyp: overcoming old challenges to face new ones, Australia Gastroenterology Week, 2019
2. **White, L.** Introduction of Intestinal Ultrasound to a Tertiary Gastroenterology Department, Acceptability and a New Model of Care". St Vincent's Hospital National IBD Symposium, Research Fellows Meeting, March 2019
3. **Satchwell J.** Impact of a game-based learning intervention in simulation-based endoscopy training on colonoscopy performance in novice endoscopists- A randomised trial, Digestive Diseases Week 2019, San Diego, USA.

Poster Presentations

1. Macrae F, Boussioutas A, Flanders B, Lockett T, Spigelman A, **Appleyard M**, Cameron D, & Clarke J. Can Butyrate prevent colon cancer? The AusFAP study. InSiGHT conference 2019, New Zealand
2. Khan S, Chandran S, Chin J, Karim S, Mangira D, Ermerak G, Trinh A, **Kia CY**, Mules T, Zad M, Ang TL, Johns E, Tee D, Kaul A, Fisher L, Cameron R, Welch C, Lim G, Metz A, Moss A, Bassan MS, St John A, Hourigan L, Tagkalidis P, Weilert F, Vaughan R, & **Devereaux B.** Endoscopic ultrasound-guided drainage of pancreatic fluid collections using a novel lumen-apposing metal stent: A multi-center Australian, New Zealand and Asian experience. Digestive Diseases Week 2019, San Diego, USA
3. **O'Sullivan T, Hanigan K, & Appleyard M.** Sessile serrated adenoma detection rates in a high-volume tertiary centre. Australian Gastroenterology Week 2019, Adelaide
4. **Hanigan K, Dixon A, Grimpen F, Leggett B, & Appleyard M.** Nurse led validation of surveillance intervals leads to improved concurrence of surveillance recommendations with NHMRC guidelines. Australian Gastroenterology Week 2019, Adelaide
5. Ooi M, Wong S, Duong T, **Appleyard M**, Rayner CK, **Grimpen F**, & Nguyen N. Advantages of cap-assisted device in the endoscopic management of food bolus obstruction in the esophagus. A multicentre randomized, controlled trial. UEG Week 2019, Spain
6. **Wu T**, Vandeleur A, & **Rahman T.** Fatigue in Colonoscopy. UEG Week 2019, Spain
7. **Walsh P, Lafta A**, Skinner C, & Hopkins G. What's next when patients fail Overstitch revision of the Gastro-jejunal anastomosis? Australian & New Zealand Metabolic and Obesity Surgery Society 2019, Brisbane
8. **White L.** Gastrointestinal ultrasound in Acute severe Ulcerative Colitis. Australian Gastroenterology Week 2019, Adelaide
9. **White L.** Combined intestinal ultrasound and faecal calprotectin in the assessment of disease activity in Inflammatory Bowel Disease, Australian Gastroenterology Week 2019, Adelaide
10. Saperia, J., Genis, S., Scaffidi, M. A., **Satchwell, J. B.**, Gimpaya, N., Tham, D., & Grover, S. C. Impact of a virtual reality intervention on ergonomics in colonoscopy, Canadian Digestive Diseases Week, 2019
11. **Satchwell, J. B.**, et al. Impact of a game-based learning intervention in simulation-based endoscopy training on colonoscopy performance in novice endoscopists- A randomised controlled trial, Canadian Digestive Diseases Week, 2019
12. Saperia, J., Genis, S., Scaffidi, M. A., **Satchwell, J. B.**, Gimpaya, N., Tham, D., & Grover, S. C. Impact of a virtual reality intervention on ergonomics in colonoscopy, Digestive Diseases Week, 2019, San Diego, USA
13. Low, D. J., Gimpaya, N., **Satchwell, J. B.**, Elsolh, K., Genis, S., Lin, J., & Grover, S. C. Automated Computer Detection of Colonoscopy Completion Using Deep Convolutional Neural Networks, Digestive Diseases Week, 2019, San Diego, USA
14. Management, Outcomes and Survival of an Australian IgG4-sclerosing cholangitis Cohort: The MOSAIC study. Kemp W, Majeed A, Mitchell J, Majumdar A, Tse E, **Skoien R**, Croagh D, Dev A, Gao H, Weltman M, Craig P, Stuart K, Cheng W, Edmunds S, Lee E, Sood S, Metz A, Ravikulan A, Thompson A, Sinclair M, Beswick L, Nicoll A, Riordan S, Braund A, Muller K, Roberts SK. Australian Gastroenterology Week 2019, Adelaide.

Details of staff that completed their PhDs in 2019 within your department / research group

Name	Name of Project	Completed Date	Affiliated University/ies
Anna Weis	Investigating the potential of circulating microRNAs as non-invasive biomarkers in cirrhosis and hepatocellular carcinoma	May 2019	University of Queensland

DEPARTMENT OF INFECTIOUS DISEASES

Professor McCarthy and his group at (QIMR-B) continued to publish critically important research addressing drug therapy for malaria and other parasitic infections.

Bridget Barber promoted to position of Team Head at QIMR Berghofer and promoted to A/Prof (Principal Research Fellow) at Menzies School of Health Research.

Bridget Barber awarded an NHMRC project grant (\$333,081, 2019-2020) as CIA to complete a randomised controlled trial of paracetamol for the attenuation of acute kidney injury in knowlesi malaria.

Bridget Barber awarded an RACP Research Establishment Fellowship (\$50,000, funding year 2019) for the development of a *P. knowlesi* parasite bank for use in malaria volunteer infection studies.

Bridget Barber co-chaired a symposium session on Zoonotic malaria at American Society of Tropical Medicine and Hygiene, Washington, November 2019.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Paul Chapman	PhD, UQ (2016-2020)	Vaccination with an attenuated hookworm larvae	James McCarthy , Alex Loukas
Johannes Hoehensteiger	Honours Molecular Biosciences	Bacterial and host factors contributing to rapid death in <i>P. aeruginosa</i> sepsis	Tim Wells, Kate McCarthy , Graham Leggat
Stephen Woolley	MD, LSTMH (2019-2021)	Utilising volunteer infection studies for the characterisation of anaemia in early malaria	Bridget Barber , David Lalloo, James McCarthy
John Woodford	PhD, UQ (2016-2020)	Microcirculatory disturbance in malaria	James McCarthy , Nicholas Anstey, Bridget Barber
Daniel Cooper	PhD, (2018-2020)	<i>Plasmodium knowlesi</i> malaria: evaluating the burden of disease, and improving outcomes from acute kidney injury	Bridget Barber , Nicholas Anstey, Matthew Grigg
Angelica Tan	PhD, (2019-2021)	<i>Plasmodium knowlesi</i> and other zoonotic malaria species in Sabah, Malaysia: Molecular detection, red blood cell interactions, and exposure trends within a longitudinal cohort	Matthew Grigg, Bridget Barber , Nicholas Anstey
Anand Odedra	PhD University of Liverpool (2017-)	Transmission of Malaria	James McCarthy , David Lalloo

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
James McCarthy	NHMRC Practitioner Fellow	0.4	Externally Funded	QIMR Berghofer	QIMR Berghofer <i>(2002-current)</i>
David Paterson	Director	0.8	UQ		University of Queensland
Sumudu Britton	Research post-doctoral fellow	0.2	External	Malaria biomarkers for malaria elimination	University of Queensland, QIMR Berghofer Medical Research Institute
Simon Holz	Research Nurse	0.4	Externally Funded	ASAP Trial; GAMECHANGER Trial	University of Queensland
Margarette Sommerville	Research Nurse	0.2	Externally-funded	MOBILISE Trial	University of Queensland
Bridget Barber	Team Head, QIMR Berghofer	0.5	External	Malaria pathophysiology and clinical trials	University of Queensland
Bridget Barber	Principal Research Fellow, Menzies School of Health Research	0.1	External	Malaria pathophysiology	Charles Darwin University

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Stephen Woolley	Honorary Research Fellow	0.1		Queensland Institute of Medical Research – Berghofer; University of Liverpool

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Sumudu Britton	Paul Griffin, Clare Nourse	Management of HIV in pregnancy- retrospective analysis to optimise healthcare
Kate McCarthy	Richard Hanly (<i>Orthopaedics</i>), Nigel Pinto (<i>Vascular</i>), Manoj Bhatt (<i>Nuclear Medicine</i>), Peter Donovan (<i>General Medicine</i>), David Paterson	Utilisation of highly bioavailable oral antibiotic therapy treatment of diabetic foot osteomyelitis with stratification by imaging at 6 weeks at the coalface: a prospective cohort study at a tertiary institution (Coalface Study)
Kate McCarthy	Tiffany Harris-Brown (<i>UQ</i>), Esther Schmits (<i>UQ</i>), Amy Legg (<i>Pharmacy</i>), David Paterson	Utilisation of ambulatory pumps in the inpatient setting to administer long term antibiotic therapy: A risk reduction and rehabilitation strategy (MOBILISE)
Kate McCarthy	Adam Stewart , Melanie Halford , Amy Legg (<i>Pharmacy</i>)	Temperature variation of OPAT antibiotic bags over summer in a subtropical region of Australia
Kate McCarthy	Majed Almarzooqi (<i>UQ</i>), Anna Hicks (<i>UQ</i>), Angela White (<i>Psychology</i>)	Defining patient “needs” during a Hospital in the Home admission: An unconsidered key performance indicator
James McCarthy	Medicines for Malaria/multiple Pharma/Bill and Melinda Gates Foundation	Human Challenge Studies in malaria
James McCarthy	Paul Thomas (<i>Nuclear Medicine</i>)	In vivo imaging in malaria
James McCarthy	Robert Sauerwein (<i>Netherlands</i>)	Transmission studies in malaria

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
James McCarthy	Michael Good, Don McManus, Istvan Toth, Nicholas Anstey, Denise Doolan, Christian Engwerda, Alexander Loukas, Richard Price	Tropical diseases: Translating discoveries into better health
James McCarthy	Gonzalo Domingo (<i>PATH</i>)	Biomarkers for Malaria Elimination
James McCarthy	Merck; Wellcome Trust	Evaluation of MK5717
James McCarthy	CADILA HEALTHCARE LIMITED (<i>Zydus</i>)	Evaluation of ZY-19489

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Nina Hall	Andrew Redmond , Paul Memmott (<i>UQ</i>), Barb Shaw, Dean Gooda, Peppi Simpson, Trish Baker (<i>Anyinginyi Health Service</i>)	Hygiene, Housing and Infection
Kate McCarthy	Robert Commons (<i>RDH</i>), Edward Raby (<i>Fiona Stanley Hospital</i>), Peter Lazzarini (<i>QUT</i>)	Diabetic foot INfection LonGitudinal Outcome study (DINGO)
Kate McCarthy	Tim Wells (<i>UQ</i>), Johannes Hoehensteiger (<i>UQ</i>)	Novel serum-resistance mechanism for <i>Pseudomonas aeruginosa</i> in bacteremia
Clare Nourse, Mandy Wu, Mandy Seel, Judith Dean, Mattea Lazarou	Sumudu Britton	Management of Syphilis in pregnancy and newborns
James McCarthy , John Woodford	Paul Thomas	In vivo images in malaria
James McCarthy , Anand Odedra	Glenn Kennedy (<i>Haematology</i>)	Apheresis in malaria

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Andrew Redmond	Best research presentation	2019 RBWH Symposium

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Kate McCarthy, Richard Hanly, Nigel Pinto, Manoj Bhatt, Peter Donovan, David Paterson	Infectious Diseases, Orthopedics, Vascular, General Medicine	Utilisation of highly bioavailable oral antibiotic therapy treatment of diabetic foot osteomyelitis with stratification by imaging at 6 weeks at the coalface: a prospective cohort study at a tertiary institution (Coalface Study)	RBWH Scholarship	\$40,000	\$12,820	2018-2019
Bridget Barber (CIA), Matthew Grigg, Tim William, Arjen Dondorp, Tsin Yeo		Targeting acute kidney injury in knowlesi malaria	NHMRC	\$333,081	\$200,000	2019-2020
Nicholas Anstey, Bridget Barber , Matthew Grigg, Inke Lubis, Farah Courtier, Rintis Noviyanti		Establishing a network for surveillance of emerging zoonotic malaria in Indonesia (ZOOMAL)	Australian Centre for International Agricultural Research	\$250,000	\$100,00	2019-2020
Bridget Barber		The development of a P. knowlesi cryobank for use in controlled human malaria infection studies	RACP	\$50,000	\$50,000	2019
Timothy William, Nicholas Anstey, Jayaram Menon, Tsin Yeo, Bridget Barber		Incidence and clinical spectrum of Plasmodium knowlesi malaria in Sabah, Malaysia	National Institute of Health	\$903,688	\$100,000	2015-2020
James McCarthy	Infectious Diseases	Centre for Research Excellence in Malaria Elimination	NHMRC	\$2,470,291	\$500,315.30	2017–2022
James McCarthy	Infectious Diseases	T-follicular helper cell subsets that induce protective anti-Plasmodium falciparum antibodies	NHMRC	\$456,261	\$152,087.16	2017-2019
James McCarthy		NHMRC Practitioner Fellowship GNT1135955 Project: Translational Studies in Malaria	NHMRC	\$507,679	\$100,331.85	2018-2022
James McCarthy , Nicholas Anstey, Denise Doolan, Christian Engwerda, Michael Good, Alex Loukas, Don McManus, Richard Price, Istvan Toth		NHMRC Program Grant GNT1132975 Project: Tropical diseases: Translating discoveries into better health	NHMRC	\$20,321,882	\$4,016,182.25 <i>(Total)</i> \$446,245.21 <i>(McCarthy share)</i>	2018-2022

2019 Research Publications

Journal Articles

1. Bialasiewicz S, Duarte TPS, Nguyen SH, Sukumaran V, **Stewart A**, Appleton S, Pitt ME, Bainomugisa A, Jennison AV, Graham R, Coin LJM, **Hajkowicz K**. Rapid diagnosis of *Capnocytophaga canimorsus* septic shock in an immunocompetent individual using real-time Nanopore sequencing: a case report. BMC Infect Dis. 2019 Jul 24;19(1):660
2. Doyle J, Raggatt M, Slavin M, McLachlan SA, Strasser SI, Sasadeusz JJ, Howell J, **Hajkowicz K**, Nandurkar H, Johnston A, Bak N, Thompson AJ. Hepatitis B management during immunosuppression for haematological and solid organ malignancies: an Australian consensus statement. Med J Aust. 2019 Jun;210(10):462-468
3. **O'Callaghan K, Tapp S, Hajkowicz K, Legg A, McCarthy KL**. Outcomes of patients with a history of injecting drug use and receipt of outpatient antimicrobial therapy. Eur J Clin Microbiol Infect Dis. 2019 Mar;38(3):575-580
4. Babich T, Naucler P, Valik JK, Giske CG, Benito N, Cardona R, Rivera A, Pulcini C, Abdel Fattah M, Haquin J, Macgowan A, Grier S, Gibbs J, Chazan B, Yanovskaya A, Ben Ami R, Landes M, Neshler L, Zaidman-Shimshovitz A, **McCarthy K, Paterson DL**, et al. Ceftazidime, carbapenems, or piperacillin-tazobactam as single definitive therapy for Pseudomonas aeruginosa bloodstream infection - a multi-site retrospective study. Clin Infect Dis. 2019 Jul 17. pii: ciz668. doi: 10.1093/cid/ciz668
5. Bell S, Dean J, Lemoire J, Debattista J, Driver G, Gilks CG, **Redmond A**, Williams O. Integrated HIV self-testing (HIVST) service delivery in Queensland for policy and service development: study protocol. AIDS Care 2019;31(2):207-215; doi:10.1080/09540121.2018.1516859

Journal Articles (cont)

6. Babich T, Naucler P, Valik JK, Giske CG, Benito N, Cardona R, Rivera A, Pulcini C, Fattah MA, Haquin J, Macgowan A, Grier S, Chazan B, Yanovskay A, Ami RB, Landes M, Neshet L, Zaidman-Shimshovitz A, **McCarthy K, Paterson DL** et al. Risk factors for mortality among patients with *Pseudomonas aeruginosa* bacteremia - retrospective multicenter study. *Int J Antimicrob Agents*. 2019 Nov 23. pii: S0924-8579(19)30318-8. doi: 10.1016/j.ijantimicag.2019.11.004
7. **Stewart AG**, Harris PNA, Chatfield M, Evans SR, vanDuijn D, **Paterson DL**. Modern clinician-initiated trails to determine optimal therapy for multi-drug resistant Gram-negative infections. *Clin Infect Dis* 2019 Nov 18. pii: ciz1132. doi: 10.1093/cid/ciz1132
8. **Paterson DL**, Bonomo RA. Multidrug-Resistant Gram-Negative Pathogens: The Urgent Need for 'Old' Polymyxins *Adv Exp Med Biol*. 2019;1145:9-13. doi: 10.1007/978-3-030-16373-0_2
9. Choudhury MA, Sidjabat HE, Zowawi HM, Marsh PhD N, Larsen E, Runnegar PhD N, **Paterson DL**, McMillan DJ, Rickard CM. Skin colonization at peripheral intravenous catheter insertion sites increases the risk of catheter colonization and infection. *Am J Infect Control*. 2019 Dec;47(12):1484-1488. doi: 10.1016/j.ajic.2019.06.002
10. Mitchell BG, Hall L, White N, Barnett AG, Halton K, **Paterson DL**, Riley TV, Gardner A, Page K, Farrington A, Gericke CA, Graves N. An environmental cleaning bundle and health-care-associated infections in hospitals (REACH): a multicentre, randomised trial. *Lancet Infect Dis*. 2019 Apr;19(4):410-418. doi: 10.1016/S1473-3099(18)30714-X
11. Lin YW, Abdul Rahim N, Zhao J, Han ML, Yu HH, Wickremasinghe H, Chen K, Wang J, **Paterson DL**, Zhu Y, Rao GG, Zhou QT, Forrest A, Velkov T, Li J. Novel Polymyxin Combination with the Antiretroviral Zidovudine Exerts Synergistic Killing against NDM-Producing Multidrug-Resistant *Klebsiella pneumoniae*. *Antimicrob Agents Chemother*. 2019 Mar 27;63(4). pii: e02176-18. doi: 10.1128/AAC.02176-18
12. Evans SR, Follmann D, Liu Y, Holland T, Doernberg SB, Rouphael N, Hamasaki T, Jiang Y, Lok JJ, Tran TTT, Harris AD, Fowler VG, Boucher H, Kreiswirth BN, Bonomo RA, Van Duijn D, **Paterson DL**, Chambers H. Sequential, Multiple-Assignment, Randomized Trials for Comparing Personalized Antibiotic Strategies (SMART-COMPASS). *Clin Infect Dis*. 2019 May 17;68(11):1961-1967. doi: 10.1093/cid/ciy912
13. Williamson DA, Howden BP, **Paterson DL**. The risk of resistance: what are the major antimicrobial resistance threats facing Australia? *Med J Aust*. 2019 Aug;211(3):103-105.e1. doi: 10.5694/mja2.50249
14. **Lipman J**, Brett SJ, De Waele JJ, Cotta MO, Davis JS, Finfer S, Glass P, Knowles S, McGuinness S, Myburgh J, **Paterson DL**, Peake S, Rajbhandari D, Rhodes A, **Roberts JA**, Shirwadkar C, Starr T, Taylor C, Billot L, Dulhunty JM. A protocol for a phase 3 multicentre randomised controlled trial of continuous versus intermittent β -lactam antibiotic infusion in critically ill patients with sepsis: BLING III. *Crit Care Resusc*. 2019 Mar;21(1):63-68
15. Harris PNA, Tambyah P, **Paterson DL**. Antibiotics for Ceftriaxone Resistant Gram-Negative Bacterial Bloodstream Infections-Reply. *JAMA*. 2019 Feb 12;321(6):613. doi: 10.1001/jama.2018.19353
16. Cameron JK, Hall L, Tong SYC, **Paterson DL**, Halton K. Incidence of community onset MRSA in Australia: least reported where it is most prevalent. *Antimicrob Resist Infect Control*. 2019 Feb 12; 8:33. doi: 10.1186/s13756-019-0485-7
17. Peri AM, Doi Y, Potoski BA, Harris PNA, **Paterson DL**, Righi E. Antimicrobial treatment challenges in the era of carbapenem resistance. *Diagn Microbiol Infect Dis*. 2019 Aug;94(4):413-425. doi: 10.1016/j.diagmicrobio.2019.01.020
18. White NM, Barnett AG, Hall L, Mitchell BG, Farrington A, Halton K, **Paterson DL**, Riley TV, Gardner A, Page K, Gericke CA, Graves N. Cost-effectiveness of an environmental cleaning bundle for reducing healthcare associated infections. *Clin Infect Dis*. 2019 Jul 30. pii: ciz717. doi: 10.1093/cid/ciz717
19. Marimuthu K, Ng OT, Cherng BPZ, Fong RKC, Pada SK, De PP, Ooi ST, Smitasin N, Thoon KC, Krishnan PU, Ang MLT, Chan DSG, Kwa ALH, Deepak RN, Chan YK, Chan YFZ, Huan X, Zaw Linn K, Tee NWS, Tan TY, Koh TH, Lin RTP, Hsu LY, Sengupta S, **Paterson DL**, Perencevich E, Harbarth S, Teo J, Venkatchalam I; CaPES Study Group. Antecedent Carbapenem Exposure as a Risk Factor for Non-Carbapenemase-Producing Carbapenem-Resistant Enterobacteriaceae and Carbapenemase-Producing Enterobacteriaceae. *Antimicrob Agents Chemother*. 2019 Sep 23;63(10). pii: e00845-19. doi: 10.1128/AAC.00845-19
20. Burkett E, Carpenter CR, Arendts G, Hullick C, **Paterson DL**, Caterino JM. Diagnosis of urinary tract infection in older persons in the emergency department: To pee or not to pee, that is the question. *Emerg Med Australas*. 2019 Oct;31(5):856-862. doi: 10.1111/1742-6723.13376
21. Huber CA, Pflüger V, Reed S, Cottrell K, Sidjabat HE, Ranasinghe A, Zowawi HM, Harris P, **Paterson DL**. Bacterial identification using a SCIEX 5800 TOF/TOF MALDI research instrument and an external database. *J Microbiol Methods*. 2019 Sep; 164:105685. doi: 10.1016/j.mimet.2019.105685.
22. Yadav R, Bergen PJ, Rogers KE, Kirkpatrick CMJ, Wallis SC, Huang Y, Bulitta JB, **Paterson DL**, **Lipman J**, Nation RL, **Roberts JA**, Landersdorfer CB. Meropenem-Tobramycin Combination Regimens Combat Carbapenem-Resistant *Pseudomonas aeruginosa* in the Hollow-Fiber Infection Model Simulating Augmented Renal Clearance in Critically Ill Patients. *Antimicrob Agents Chemother*. 2019 Dec 20;64(1). pii: e01679-19. doi: 10.1128/AAC.01679-19
23. Marsh N, Larsen E, **Tapp S, Sommerville M**, Mihala G, Rickard C. Management of hospital in the home (HITH) peripherally inserted central catheters: A retrospective cohort study. *Home Health Care Management and Practice* 2019. Doi: 10.1177/1084822319873334
24. Loughland JR, Woodberry T, Boyle MJ, Tipping PE, Piera KA, Amante FH, Kenangalem E, Price RN, Engwerda CR, Anstey NM, **McCarthy JS**, Minigo G. *Plasmodium falciparum* Activates CD16+ Dendritic Cells to Produce Tumor Necrosis Factor and Interleukin-10 in Subpatent Malaria. *J Infect Dis*. 2019 Jan 29;219(4):660-671
25. Jang IK, Tyler A, Lyman C, Kahn M, Kalnoky M, Rek JC, Arinaitwe E, Adrama H, Murphy M, Imwong M, Ling CL, Proux S, Haohankunnatham W, Rist M, Seillie AM, Hanron A, Daza G, Chang M, Das S, Barney R, Rashid A, Landier J, Boyle DS, Murphy SC, **McCarthy JS**, Nosten F, Greenhouse B, Domingo GJ. Simultaneous Quantification of Plasmodium Antigens and Host Factor C-Reactive Protein in Asymptomatic Individuals with Confirmed Malaria by Use of a Novel Multiplex Immunoassay. *J Clin Microbiol*. 2019 Jan;57(1)
26. Vaz Nery S, Traub RJ, **McCarthy JS**, Clarke NE, Amaral S, Llewellyn S, Weking E, Richardson A, Campbell SJ, Gray DJ, Vallely AJ, Williams GM, Andrews RM, Clements ACA. WASH for WORMS: A Cluster-Randomized Controlled Trial of the Impact of a Community Integrated Water, Sanitation, and Hygiene and Deworming Intervention on Soil-Transmitted Helminth Infections. *Am J Trop Med Hyg*. 2019 Mar;100(3):750-761
27. Cooper MM, Loiseau C, **McCarthy JS**, Doolan DL. Human challenge models: tools to accelerate the development of malaria vaccines. *Expert Rev Vaccines*. 2019 Mar;18(3):241-251

Journal Articles (cont)

28. Vaz Nery S, Clarke NE, Richardson A, Traub R, **McCarthy JS**, Gray DJ, Valley AJ, Williams GM, Andrews RM, Campbell SJ, Clements ACA. Risk factors for infection with soil-transmitted helminths during an integrated community level water, sanitation, and hygiene and deworming intervention in Timor-Leste. *Int J Parasitol.* 2019 Apr;49(5):389-396
29. Woodford J, Collins KA, Odedra A, Wang C, Kyung JJ, Domingo GJ, Watts R, Marquart L, Berriman M, Otto TD, **McCarthy JS**. An experimental human blood stage model for studying *Plasmodium malariae* infection. *J Infect Dis.* 2019 Mar 10
30. Collins KA, Rückle T, Elliott S, Marquart L, Ballard E, Chalou S, Griffin P, Möhrle JJ, **McCarthy JS**. DSM265 at 400 Milligrams Clears Asexual Stage Parasites but Not Mature Gametocytes from the Blood of Healthy Subjects Experimentally Infected with *Plasmodium falciparum*. *Antimicrob Agents Chemother.* 2019 Apr;63(4)
31. Pasay CJ, Yakob L, Meredith HR, Stewart R, Mills PC, Dekkers MH, Ong O, Llewellyn S, Hugo RLE, **McCarthy JS**, Devine GJ. Treatment of pigs with endectocides as a complementary tool for combating malaria transmission by *Anopheles farauti* (s.s.) in Papua New Guinea. *Parasit Vectors.* 2019 Mar 19;12(1):124
32. Rivera-Hernandez T, Carnathan DG, Jones S, Cork AJ, Davies MR, Moyle PM, Toth I, Batzloff MR, **McCarthy JS**, Nizet V, Goldblatt D, Silvestri G, Walker MJ. An Experimental Group A Streptococcus Vaccine That Reduces Pharyngitis and Tonsillitis in a Nonhuman Primate Model. *MBio.* 2019 Apr 30;10(2)
33. Osowicki J, Azzopardi KI, Baker C, Waddington CS, Pandey M, Schuster T, Grobler A, Cheng AC, Pollard AJ, **McCarthy JS**, Good MF, Walker MJ, Dale JB, Batzloff MR, Carapetis JR, Smeesters PR, Steer AC. Controlled human infection for vaccination against *Streptococcus pyogenes* (CHIVAS): Establishing a group A Streptococcus pharyngitis human infection study. *Vaccine.* 2019 May 14
34. Engelman D, Cantey PT, Marks M, Solomon AW, Chang AY, Chosidow O, Enbiale W, Engels D, Hay RJ, Hendrickx D, Hotez PJ, Kaldor JM, Kama M, Mackenzie CD, **McCarthy JS**, Martin DL, Mengistu B, Maurer T, Negussu N, Romani L, Sokana O, Whitfield MJ, Fuller LC, Steer AC. The public health control of scabies: priorities for research and action. *Lancet.* 2019 Jul 6;394(10192):81-92
35. Ballard E, Wang CYT, Hien TT, Tong NT, Marquart L, Pava Z, Tarning J, O'Rourke P, **McCarthy JS**. A validation study of microscopy versus quantitative PCR for measuring *Plasmodium falciparum* parasitemia. *Trop Med Health.* 2019; 47:49
36. Oyong DA, Loughland JR, SheelaNair A, Andrew D, Rivera FDL, Pira KA, William T, Grigg MJ, Barber BE, Haque A, Engwerda CR, **McCarthy JS**, Anstey NM, Boyle MJ. Loss of complement regulatory proteins on red blood cells in mild malarial anaemia and in *Plasmodium falciparum* induced blood-stage infection. *Malar J.* 2019 Sep 18;18(1):312
37. Barber BE, Grigg MJ, Pira K, Amante FH, William T, Boyle MJ, Minigo G, Dondorp AM, **McCarthy JS**, Anstey NM. Antiphosphatidylserine Immunoglobulin M and Immunoglobulin G Antibodies Are Higher in Vivax Than Falciparum Malaria and Associated With Early Anemia in Both Species. *J Infect Dis.* 2019 Sep 26;220(9):1435-1443
38. Sinxadi P, Donini C, Johnstone H, Langdon G, Wiesner L, Allen E, Duparc S, Chalou S, **McCarthy JS**, Lorch U, Chibale K, Möhrle J, Barnes KI. Safety, tolerability, pharmacokinetics and antimalarial activity of the novel *Plasmodium* phosphatidylinositol 4-kinase inhibitor MMV390048 in healthy volunteers. *Antimicrob Agents Chemother.* 2020 Jan 13
39. **McCarthy JS**, Rückle T, Elliott SL, Ballard E, Collins KA, Marquart L, Griffin P, Chalou S, Möhrle JJ. A Single-Dose Combination Study with the Experimental Antimalarials Artefenomel and DSM265 To Determine Safety and Antimalarial Activity against Blood-Stage *Plasmodium falciparum* in Healthy Volunteers. *Antimicrob Agents Chemother.* 2019 Dec 20;64(1)
40. Wockner LF, Hoffmann I, Webb L, Mordmüller B, Murphy SC, Kublin JG, O'Rourke P, **McCarthy JS**, Marquart L. Growth Rate of *Plasmodium falciparum*: Analysis of Parasite Growth Data from Malaria Volunteer Infection Studies. *J Infect Dis.* 2019 Nov 4. pii: jiz557
41. Aw JYH, Clarke NE, **McCarthy JS**, Traub RJ, Amaral S, Huque MH, Andrews RM, Gray DJ, Clements ACA, Vaz Nery S. *Giardia duodenalis* infection in the context of a community-based deworming and water, sanitation and hygiene trial in Timor-Leste. *Parasit Vectors.* 2019 Oct 18;12(1):491
42. Odedra A, Lalloo DG, Kennedy G, Llewellyn S, **McCarthy JS**. Safety and effectiveness of apheresis in the treatment of infectious diseases: A systematic review. *J Infect.* 2019 Dec;79(6):513-520
43. Vaz Nery S, Traub RJ, **McCarthy JS**, Clarke NE, Amaral S, Llewellyn S, Weking E, Richardson A, Campbell SJ, Gray DJ, Valley AJ, Williams GM, Andrews RM, Clements ACA. WASH for WORMS: A Cluster-Randomized Controlled Trial of the Impact of a Community Integrated Water, Sanitation, and Hygiene and Deworming Intervention on Soil-Transmitted Helminth Infections. *Am J Trop Med Hyg.* 2019 Mar;100(3):750-761
44. **McCarthy JS**, Smith B, Reid M, Berman J, Marquart L, Dobbin C, West L, Read LT, Dow GS. Blood Schizonticidal Activity and Safety of Tafenoquine When Administered as Chemoprophylaxis to Healthy, Nonimmune Participants Followed by Blood Stage *Plasmodium falciparum* Challenge: A Randomized, Double-blind, Placebo-controlled Phase 1b Study. *Clin Infect Dis.* 2019 Jul 18;69(3):480-486.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Chapman P**. Should we expand faecal microbiota transplantation. National Antimicrobial Resistance Forum 2019
2. **James McCarthy** Learnings from experimental human malaria infection studies. Imperial College, Malaria Network Special Seminar. January 2019. London, UK
3. **James McCarthy** Use of human challenge models in clinical development of compounds. Wellcome Centre for Anti-Infectives Research (WCAIR). May 2019. Dundee, Scotland
4. **James McCarthy** P. vivax Blood Stage challenge studies in Australia. Malaria Infection Study in Thailand (MIST). May 2019. Bangkok, Thailand
5. **James McCarthy** Lessons for CHIVAS from malaria human infection studies, and prospects for Australian human infection studies. Controlled human infection for vaccination against *Streptococcus pyogenes* (CHIVAS) Monash University. August 2019. Melbourne, Victoria.



Oral Presentations

1. **Chapman P, McCarthy JS, Loukas A.** Vaccination with an attenuated hookworm larval vaccine: preliminary results from a phase Ib clinical trial. American Society for Tropical Medicine and Hygiene 2019
2. **Legg A, Halford M, McCarthy K.** Adequate unbound meropenem levels using continuous infusions community-based outpatient administration. Antimicrobial Society of Australia Conference. 2019
3. **O'Callaghan K, Tapp S, Hajkowicz K, Legg A, McCarthy KL.** Outcomes of patients with a history of injecting drug use and receipt of outpatient antimicrobial therapy. Hospital in the Home Conference. 2019
4. **James McCarthy** Learnings from experimental human malaria infection studies. Lorne Infection and Immunity Conference. February 2019. Lorne, Victoria, Australia
5. **James McCarthy** How are human challenge studies advancing translational research in malaria, Australian Academy of Health and Medical Sciences (AAHMS). October 2019. Perth, WA
6. **James McCarthy** A phase 1a/b, first-in-human, dose-escalation and volunteer infection study of M5717, a first-in-class inhibitor of Plasmodium falciparum eukaryotic translation elongation factor 2. American Society of Tropical Medicine and Hygiene (ASTMH). November 2019.

Poster Presentations

1. **Parsonson F, Legg A, Halford M, McCarthy K.** Contemporaneous Management of Ampicillin Infusions in the OPAT setting through the use of Therapeutic drug monitoring. Australian Society of Infectious Diseases Conference. 2019
2. **O'Callaghan K, Tapp S, Hajkowicz K, Legg A, McCarthy KL.** Outcomes of patients with a history of injecting drug use and receipt of outpatient antimicrobial therapy. Australian Society of Infectious Diseases Conference. 2019
3. **Britton S-** International conference for research in Plasmodium vivax, Paris, France June 2019
4. **Britton S-** American Society for Tropical Medicine and Hygiene, Washington DC, USA, November 2019
5. **Woodford J, Yeo TS, Piera KA, Weinberg JB, McCarthy JS, Anstey NM, Barber BE.** Endothelial activation in early Plasmodium falciparum and P. vivax infection. Australasian Society of Infectious Diseases, Darwin, May 2019
6. **Barber BE, Grigg MJ, Piera KA, Amante F, William T, Boyle MJ, Dondorp AM, McCarthy JS, Anstey NM.** Anti-phosphatidylserine antibodies are higher in vivax than falciparum malaria and are associated with early anaemia in both species. Australasian Society of Infectious Diseases, Darwin, May 2019
7. **Rebelo M, Khoury DS, Pawliw R, Gower J, Webb L, Pava Z, Webster R, Davenport MP and McCarthy JS.** Drug Testing in Volunteer Infection Studies: The Importance of Blood-Stage Parasite Viability in the Investigation of Antimalarial Drug Efficacy. Malaria Gordon Conference (GRC), Les Diablerets, Switzerland, June 30-July 5 2019
8. **Rebelo M, Khoury DS, Pawliw R, Gower J, Webb L, Pava Z, Webster R, Davenport MP and McCarthy JS.** Drug Testing in Volunteer Infection Studies: Evaluating parasite viability after administration of a novel antimalarial drug candidate in the induced blood stage malaria model. ASTMH 68th Annual Meeting, Maryland, USA, November 20-24 2019
9. **Zuleima Pava, Katharine Collins, Rebecca Watts, Fiona Amante, Maria Rebelo, Hayley Mitchell, Matthew Adams, Greg Robinson, Melanie Rampton, Claire Wang, Jörg J Möhrle, James McCarthy.** Investigating human to mosquito transmission of artemisinin resistant parasites using the induced blood stage malaria model. Malaria Gordon Conference (GRC), Les Diablerets, Switzerland, June 30-July 5 2019
10. **Anand Odedra, Zuleima Pava, Rebecca Watts, Rebecca Pawliw, Katharine Collins, Maria Rebelo, Glen Kennedy, Kari Mudie, David Lalloo, James McCarthy.** Safety and feasibility of apheresis as a method of harvesting and concentrating parasites from the blood of subjects with Plasmodium vivax infection. 7th International Conference on Plasmodium vivax Research June 26-28, 2019 Institut Pasteur, Paris, France.



INTERNAL MEDICINE RESEARCH UNIT

The Internal Medicine Research Unit supports investigator initiated collaborative research including clinical and health services studies intended to directly improve hospital and post-hospital patient outcomes. We have expertise in design and evaluation of complex interventions using multi-methods research, collaborating with a range of universities and health services. We provide support to trainees, research higher degree students and postdoctoral fellows from a range of health disciplines.

Principles areas of research focus are:

- Frailty
- Hospital-associated complications of older people, particularly delirium and functional decline
- Heart failure
- Safe prescribing
- Multidisciplinary collaborative care models
- Knowledge translation and implementation science.

Research highlights for 2019 include:

- Primary outcomes for the CHERISH cluster randomised controlled trial testing the Eat Walk Engage program in four Queensland hospitals were presented at:
 - ➔ American Geriatrics Society Annual Meeting in Portland, USA,
 - ➔ International Association of Geriatrics and Gerontology (European region) biannual meeting in Gothenburg, Sweden
 - ➔ Australian Association of Geriatrics and Gerontology annual meeting in Sydney.
- Awarded American Geriatrics Society Presidential Poster Award for best clinical trial (CHERISH trial)
- Implementing the successful Eat Walk Engage program in 12 new Queensland hospitals under Minister's Priority funding, providing rapid translation in practice
- Successful 2019-20 Medical Research Future Fund Rapid Translation Grant "Improving Delirium Care" in the rehabilitation unit of Redcliffe hospital
- Successful 2019-20 Flinders Medical Centre Hospital Foundation Grant "REDUCE" project, piloting Eat Walk Engage (A Mudge, P McRae co-investigators)
- Successful Irish Health Review Board grant piloting an 'Acute Frailty Bundle' modelled on Eat Walk Engage (A Mudge co-investigator)
- PhD awarded to Dr Julie Adsett
- PhD awarded to Dr Angela Byrnes
- Successful mid-candidature review for Ms Karen Lee-Steere
- Delivering a wide range of courses in Knowledge Translation through partnerships with MNHHS, QUT, Clinical Excellence Division, and others.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Julie Adsett	PhD, Griffith (2012-2019) <i>conferred July 2019</i>	Exercise rehabilitation for patients with stable heart failure	Norman Morris, Suzanne Kuys, Jennifer Paratz, Alison Mudge
Angela Byrnes	PhD, UQ (2015-2019) <i>conferred February 2019</i>	Investigating the nutritional status and care of older (≥65 years) patients on two general surgical wards: A multiphase, action research study	Judy Bauer, Adrienne Young, Alison Mudge, Merrilyn Banks
Karen Lee-Steere	M Phil UQ (2017-2020) <i>Mid-candidature review completed 2019</i>	Improving the care of the older patient with or at risk of delirium in the acute care setting: patient and carer perspectives	Sally Bennett, Jacki Liddle, Alison Mudge
Aisling Fleury	PhD UQ (2019-2024)	Frailty and outcomes in surgical patients	Alison Mudge , Ruth Hubbard
Brooke Myers	PhD, UQ (2014-current)	Role of the Pharmacist on the Medical Post-Take Ward Round	Ian Coombes , Charles Mitchell, Peter Donovan , Jennifer Whitty

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Alison Mudge	Professor Clinical Director	0.6	Fellowship and UQ funded	Hospital care of frail older people: implementing and evaluating systems to improve care and outcomes	University of Queensland
Charles Denaro	Associate Professor	0.1	In kind funded	Screening for Fabry Disease in Chronic Kidney Disease	University of Queensland
Prue McRae	Program manager	0.3	Grant funded	Eat Walk Engage and related projects	
Karen Lee-Steere	Program manager	0.3	Fellowship funded	Patient and family experience and involvement in delirium prevention	University of Queensland
Samantha Olenski	Research assistant	0.2	Grant funded	various	
Elise Treleaven	Research assistant	0.4	Grant and UQ funded	various	University of Queensland
Angela Byrnes	Data Manager	0.4	Grant funded	Eat Walk Engage state-wide	

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Adrienne Young	Angela Byrnes , Evonne Miller (<i>QUT</i>), Alison Mudge , Gary Power (<i>consumer</i>), Merrilyn Banks , Mark Brough (<i>QUT</i>), Amanda Dines , Prue McRae (<i>IMRU</i>), Chiara Santomauro (<i>CSDS</i>), Tara McCurdie (<i>QIPPS</i>)	Co-designing a positive meal environment for older people in hospital: a multi-phase experience-based co-design study
Alison Mudge	Elizabeth Beattie (<i>QUT</i>), Len Gray (<i>UQ</i>), Ruth Hubbard (<i>UQ</i>), Helen Edwards (<i>QUT</i>), Prue McRae , Cathy Yelland (<i>Redcliffe Hospital</i>), Amanda Fox (<i>QUT</i>), Sandra Jeavons (<i>QUT</i>)	Reducing harm in older inpatients: an integrated program to meet the Australian Delirium Clinical Care Standards in hospitals
Alison Mudge	Alison Mudge , Prue McRae , Samantha Olenski , Elise Treleaven , Margaret Cahill , Karen Lee-Steere	Delirium Day: a hospital wide quality audit

Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Alison Mudge	Merrilyn Banks , Adrian Barnett (<i>QUT</i>), Irene Blackberry (<i>Latrobe</i>), Ann Chang (<i>QUT</i>), Nick Graves (<i>QUT</i>), Ruth Hubbard (<i>UQ</i>), Sharon Inouye (<i>Harvard</i>), Sue Kurrle (<i>Uni of Sydney</i>), Kwan Lim (<i>Uni of Melbourne</i>), Prue McRae , Nancye Peel (<i>UQ</i>), Adrienne Young	CHERISH Collaborative for Hospitalised Elders: Reducing the Impact of Stays in Hospital
Julian de Looze	Julian de Looze , Joan Webster , Charles Denaro , Alison Mudge , John Gowardman , Robyn Fox , Catriona Booker , Peter Thomas , Samantha Olenski , Elise Treleaven , Melissa Eastgate , Tracy Glynn	Patients of Concern: A qualitative exploratory study within the Royal Brisbane and Women's Hospital
Alison Mudge	Julie Adsett , Alison Mudge , Norm Morris (<i>Griffith Uni</i>)	Frailty, exercise and outcomes in heart failure patients: substudy of EJECTION-HF
Alison Mudge	Margaret Shaw , Anita Pelecanos	Effect of pre-planned physician involvement in care of adult surgical patients on clinical and health service outcomes: a systematic review
Samantha Olenski	Alison Mudge , Adrienne Young , Prue McRae , Elise Treleaven , Kimberley Mallan (<i>ACU</i>), Zoe Walsh (<i>COH</i>), Jill Ross (<i>COH</i>), Alanna Geary (<i>Nursing and Midwifery</i>)	Developing and validating a novel survey to identify barriers and enablers to improving nutrition care in acute and subacute inpatient settings
Prue McRae	Alison Mudge , Jesse Spurr, Kaye Rolls, Elise Treleaven , Margaret Cahill , Karen Lee-Steere , Angela Byrnes	Getting Eat Walk Engage to talk-is a virtual community of practice acceptable?
Peter Donovan	Peter Donovan , Alison Mudge , Jenny Martin (<i>Uni Newcastle</i>), Michael Barras (<i>Princess Alexandra Hospital</i>), James Rowland	Interventions to improve safety and quality in the management of anticoagulants for therapeutic indications in hospital inpatients: systematic review
Peter Donovan	Michael Barras, (<i>Princess Alexandra Hospital</i>), Ian Coombes, Jason Roberts , Ms Carla Scuderi (<i>Pharmacy</i>), Charles Denaro (<i>Internal Medicine</i>), John Atherton, Ms Bonnie Tai (<i>Prince Charles Hospital</i>), Ms Anita Pelecanos (<i>QIMR Berghofer</i>)	Development of a therapeutic range for enoxaparin in patients with renal impairment
Peter Donovan	Nicola Harper , Dr Danielle Stowasser, Natasha Truloff (<i>Metro North IT</i>), Ian Coombes, (<i>Pharmacy</i>), Charles Denaro (<i>Internal Medicine</i>), Timothy Dunn (<i>Caboolture Hospital Pharmacy</i>), Anita Pelecanos (<i>QIMR Berghofer</i>)	Evaluation of the Implementation of Electronic Prescribing using Interrupted Time-Series Analysis at Two Hospitals in Queensland

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Alison Kitson (<i>Flinders University</i>)	Alison Mudge , Prue McRae , Sarah Hunter (<i>Flinders</i>), Rebecca Feo (<i>Flinders</i>), Tiffany Conroy (<i>Flinders</i>), Jo Nolan (<i>Flinders Medical Centre</i>), Michale Lawless (<i>Flinders</i>)	REDUCE (tRanslating knowLEDge for fUndamental CarE): Reducing Delirium with the 'Eat Walk Engage' Program
Laurie Grealish (<i>Griffith/GCUH</i>)	Alison Mudge , Margaret Cahill , Wendy Chaboyer (<i>Griffith</i>), Andrea Marshall (<i>Griffith</i>)	Using Normalisation Process Theory to engage nurses in delirium care
Helen Edwards (<i>QUT</i>)	Alison Mudge , Kerrie Coleman , Patricia Sinasac, Kathleen Finlayson, Fiona Coyer	Reducing the prevalence and severity of wounds through implementation of the Champions for Skin Integrity model: Protecting Skin Integrity
Natasha Roberts (<i>Cancer Care Services</i>)	Monica Janda (<i>QUT</i>), Alison Mudge , Kimberley Alexander , David Wyld	i-PROMOS: Implementing Patients Reported Outcome Measures in Oncology Outpatients
Dylan Flaws (<i>Mental Health</i>)	Alison Mudge , Gerard Byrne (<i>Mental Health</i>), Prue McRae , Megan Nitz (<i>Mental Health</i>), Conor O'Launaigh (<i>TPCH</i>), Trevor Hollingsworth (<i>Caboolture</i>), Adrienne Young , Elise Treleaven	Delirium in older psychiatry inpatients: protocol for an observational study
Dr Susan Jordan (<i>University of Queensland</i>), Prof Sallie-Anne Pearson (<i>University of New South Wales</i>), Dr Nirmala Pandeya (<i>University of Queensland</i>), Assoc Prof Michael Coory (<i>Murdoch Children's Research Institute</i>), Dr Katrina Spillsbury (<i>Curtin University of Technology</i>)	Peter Donovan	IMPROVE – Investigating Medication Re-Purposing to Reduce risk of Ovarian cancer and Extend survival

Collaborative Research Activity involving RBWH Research Group / Department *(cont)*

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Louise Cullen <i>(Emergency and Trauma Centre)</i>	Nathan Brown, Peter Donovan, Ian Coombes, Jaimi Greenslade, David Hughes, Elizabeth Doran	Prevalence and characteristics of medication-related presentations to the emergency department. Emergency and Trauma Centre, Royal Brisbane and Women's Hospital
Phillip Robinson <i>(Rheumatology)</i>	Peter Donovan , Nicola Dalbeth <i>(University of Auckland, Auckland Hospital)</i>	A Health Economic Analysis Colchicine Therapy for Gout Prophylaxis
Ian Coombes <i>(Pharmacy)</i>	Peter Donovan , Charles Mitchel <i>(UQ)</i> , Brooke Myers, Christy Noble, <i>(Gold Coast University Hospital, Griffith University)</i>	Improving Intern Medical Officer Prescribing through an Intervention of Self-Assessment and Feedback
Don McLeod <i>(Endocrinology)</i>	Peter Donovan, Roger Allison <i>(Cancer Care)</i> , Susan Thomas <i>(Cancer Care)</i> , Lee Tripcony <i>(Cancer Care)</i>	Validating a response to therapy risk stratification system for Medullary Thyroid Cancer
Champika Pattullo <i>(Clinical Pharmacology)</i>	Benita Suckling, Peter Donovan , Lisa Hall <i>(Queensland University of Technology)</i>	Development, implementation and outcomes of an adaptable OXYCODONE Quality Improvement STRATEGY: Steps towards opioid stewardship

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Alison Mudge	American Geriatrics Society Presidential Poster Award best clinical trial	AGS Annual Scientific Meeting Portland USA
Eat Walk Engage team	Finalist	Queensland Health Excellence Awards

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Samantha Olenski, Alison Mudge, Adrienne Young, Prue McRae , Kimberley Mallan	Internal Medicine Research Unit; RBWH Department of Nutrition and Dietetics	Developing and validating a nutrition care survey	RBWH Research Foundation	\$32,000	\$9,041	2018-2019
Prue McRae, Alison Mudge , Jesse Spurr, Kaye Rolls, Elise Treleaven, Angela Byrnes	Internal Medicine Research Unit	Getting Eat Walk Engage to talk-is a virtual community of practice acceptable?	RBWH Research Foundation	\$39,900	\$24,406	2018-2019
Helen Edwards, Kerrie Coleman , Patricia Sinasac, Kathleen Finlayson, Fiona Coyer , Jessica Schluter, Christina Parker, Alison Mudge	Internal Medicine Research Unit, Skin Integrity Service	Reducing the prevalence and severity of wounds through implementation of the Champions for Skin Integrity Model-Protecting Skin Integrity	Queensland Health Nursing and Midwifery Fellowships	\$119,385	\$39,795	2017-2019
Karen Lee-Steere , Sally Bennett., Jacki Liddle and Alison Mudge	Internal Medicine Research Unit; RBWH and UQ	Improving the care of the older patient with or at risk of delirium in the acute care setting: patient and carer perspectives	RBWH Research Foundation	\$110,000	\$36,863	2017-2019
Susan Jordan <i>(Queensland Institute of Medical Research Berghofer)</i> , Sallie-Anne Pearson <i>(University of New South Wales)</i> , Nirmala Pandeya <i>(University of Queensland)</i> , Michael Coory <i>(Murdoch Children's Research Institute)</i> , Katrina Spilsbury <i>(Curtin University of Technology)</i> , Peter Donovan	Clinical Pharmacology, Internal Medicine and Aged Care	IMPROVE – Investigating Medication Re-Purposing to Reduce risk of Ovarian cancer and Extend survival	National Health and Medical Research Council	\$438,313	\$95,104	2017-2021

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Wendy Hoy, Andrew Mallett , Helen Healy , Charles Denaro , Mark Thomas, Vincent Lee	CKD.QLD, Centre for Chronic Disease UQ; Internal Medicine Research Unit	aCQuiRE: Assessing the prevalence of Fabry disease in CKD	Sanofi-Genzyme	\$946,554	\$236,638	2016-2019
Penni Burfein	Speech Pathology /GARU	Return to work for stroke survivors with aphasia	RBWH Foundation Postgraduate Scholarships	\$38,082.52	\$38,082.52	2019
Adrienne Young , Angela Byrnes , Evonne Miller (<i>QUT</i>), Alison Mudge , Gary Power (<i>consumer</i>), Merrilyn Banks , Mark Brough (<i>QUT</i>), Amanda Dines , Prue McRae (<i>IMRU</i>), Chiara Santomauro (<i>CSDS</i>), Tara McCurdie (<i>QIPPS</i>)	Internal Medicine Research Unit; RBWH Department of Nutrition and Dietetics	Co-designing a positive meal environment for older people in hospital: a multi-phase experience-based co-design study	RBWH Research Foundation	\$35,459	\$35,459	2019

2019 Research Publications

Journal Articles

- Mudge A, McRae P, Donovan P, Reade M.** A multidisciplinary quality improvement program for older patients admitted to a vascular surgery ward. *Internal Medicine Journal* epub ahead of print 10 June 2019
- Flaws D, Byrne G, Mudge A.** Delirium risk in non-surgical ward patients: a systematic review of predictive tools. *Archives of Gerontology and Geriatrics* epub ahead of print May 5 2019
- Maru S, **Mudge A**, Suna J, Scuffham PA. One-year cost-effectiveness of supervised center-based exercise training in addition to a post-discharge disease management for patients recently hospitalized with acute heart failure: The EJECTION-HF study. *Heart & Lung: the Journal of Acute and Critical Care* 2019; 48(5):414-420
- Byrnes A, Clarke D, Mudge A.** Implementation science approaches to enhance uptake of complex interventions in surgical settings. *Australian Health Review* published online early 15 April 2019
- Roberts N, Mudge A**, Alexander K, **Wyld D**, Janda M. The iPROMOs study protocol: a stepped wedge study to implement routine patient reported outcomes in a medical oncology outpatient setting. *BMJ Open* 2019;9(2): e027046
- Adsett J**, Morris N, Kuys S, **Paratz S, Mudge A.** Motivators and barriers for participation in aquatic and land-based exercise training programmes for people with stable heart failure: A mixed methods approach. *Heart & Lung* 2019; 48(4):287-93
- Adsett J, Mudge A**, Morris N. Predictors of exercise training and physical activity guideline adherence in patients with heart failure: a brief report. *Journal of Cardiopulmonary Rehabilitation and Prevention* 2019; 39 (3): E12-16
- Adsett J**, Morris NM, **Mudge A.** Impact of exercise training program attendance and physical activity participation on six minute walk distance in patients with heart failure. *Physiotherapy theory & practice* epub before print Sept 25 2019
- Hubbard R, **Mudge A.** Management of frail older people with acute illness. *Intern Med J* 2019; 49: 28-33 (invited commentary)
- Mudge A, McRae P**, Hubbard R et al. Hospital-associated complications of older people: a proposed multi-component outcome for acute care research. *J Am Geriatr Soc* 2019; 67 :352-356
- Byrnes A, Young A, Mudge A, Banks M**, Bauer J. Exploring practice gaps to improve perioperative nutrition care (EXPERIENCE study): a qualitative analysis of barriers to implementation of evidence-based practice guidelines. *Eur J Clin Nutr* 73 (1); 94
- Mudge A.** Outcomes for frail very old patients in the ICU are remarkable good. *MJA* 2019; 211(7): 314-5 (invited editorial)
- Frazer A, Rowland J, Mudge A, Barras M, Martin J, Donovan P.** Systematic review of interventions to improve safety and quality of anticoagulant prescribing for therapeutic indications for hospital inpatients. *Eur J Clin Pharm* 2019 epub before print Sept 11 2019
- Grealish L, Chaboyer W, **Mudge A**, Simpson T, **Cahill M**, Todd J et al. Using a general theory of implementation to plan the introduction of delirium prevention for older people in hospital. *J Nurs Management* 2019 epub ahead of print 24 August 2019
- Brooke Bullock, Ian Coombes**, Charles Mitchell, **Peter Donovan**, Jenny Whitty, A Systematic review of the costs and cost-effectiveness of clinical pharmacists on hospital ward rounds. *Expert Review of Pharmacoeconomics & Outcomes Research*, July 2019
- Madeline E Duke, Fiona L Britten**, Carel Pretorius, **Peter J Donovan.** Maternal Metyrapone Use During Breastfeeding: Safe for the Breastfed Infant. *Journal of the Endocrine Society*, March 2019
- Brooke Bullock, Peter Donovan**, Charles Mitchell, Jenny Whitty, **Ian Coombes.** The impact of a pharmacist on post-take ward round prescribing and medication appropriateness. *International Journal of Clinical Pharmacy*, Jan 2019
- Peter J Donovan**, David Arroyo, **Champika Pattullo**, Anthony J Bell. Trends in opioid prescribing in Australia: a systematic review. *Australian health review.* Epub ahead of print. DOI: 10.1071/AH18245.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Mudge A, McRae P.** “Improving mobility levels of hospitalized people” invited multinational symposium (live streamed) World Congress of Physiotherapy Geneva May 2019
2. **Mudge A.** Re-engineering perioperative care pathways: a physician’s perspective. Invited speaker, Australia and New Zealand College of Anaesthetists (ANZCA) Perioperative Medicine Special Interest Group meeting Brisbane November 2019
3. **Mudge A.** Delirium: the brain and the older surgical patient. Invited speaker, Australia and New Zealand College of Anaesthetists (ANZCA) Perioperative Medicine Special Interest Group meeting Brisbane November 2019
4. **Mudge A.** Post-operative delirium. Invited speaker, Internal Medicine Society of Australia and New Zealand (IMSANZ) Annual Scientific Meeting Melbourne September 2019.

Oral Presentations

1. **Mudge A, McRae P,** Barnett A, Inouye S for the CHERISH investigators: Reducing hospital-associated complications in older people: results from the CHERISH cluster randomised controlled trial International Association of Gerontology and Geriatrics Gothenburg May 2019
2. **Mudge A, McRae P,** Barnett A, Inouye S for the CHERISH investigators: Reducing hospital-associated complications in older people: results from the CHERISH cluster randomised controlled trial International Association of Gerontology and Geriatrics Gothenburg May 2019 American Geriatrics Society meeting Portland USA May 2019 (Lightning Science)
3. **Mudge A McRae P** Eat Walk Engage: an integrated program to improve mobility and outcomes in older inpatients. Selected speaker, Global Online Mobility Summit July 2019
4. **Mudge A, McRae P** Moving forward: patient and staff perspectives on limited mobility in a rehabilitation setting. Selected speaker, Global Online Mobility Summit July 2019
5. **Treleaven E, Olsenski S, Mudge A,** Hewitt M, Wheeler M, **McRae P, Young A.** Capturing the Patient Perspective: Barriers to Nutritional Intake in the Acute Setting. Dietitians Association Australia National Conference Gold Coast, August 2019
6. **Cahill M, Treleaven E, Mudge A, McRae P, Lee-Steere K,** Finnigan S. The Prevalence of Cognitive Impairment and its impact on care at the bedside. Australian College of Nursing Forum Hobart, August 2019
7. **Lee-steere K, Mudge A,** Bennett, S, Liddle, J. Understanding Older Patients’ Experiences and Perceptions of Non-Pharmacological Delirium Prevention Strategies in the Acute Care Environment. Occupational Therapy Australia Aged Care Symposium, Brisbane Convention and Exhibition Centre, South Bank, Brisbane, Queensland, February 2019
8. **Lee-steere K, Mudge A,** Bennett, S, Liddle, J. Understanding Older Patients’ Experiences and Perceptions of Non-Pharmacological Delirium Prevention Strategies in the Acute Care Environment. Occupational Therapy Australia National Conference, Sydney, NSW, July 2019
9. **McRae P, Mudge A, Banks M,** for the CHERISH investigators, reducing hospital associated complications in older people: Results from the CHERISH cluster randomised controlled study, 13th National Allied Health Conference Brisbane August 2019
10. **McRae P, Mudge A, Treleaven E, Lee-Steere K,** Cognitive Impairment in a tertiary hospital; prevalence and the carer experience; 13th National Allied Health Conference Brisbane August 2019
11. Nolan J, Hunter S, Kitson A, Feo R, Conroy T, **Mudge A, McRae P** REDUCE (tRanslating knowLEDge for fUndamental Care): Reducing Delirium with the 'Eat Walk Engage' Program, SA Gerontology Conference, Adelaide June 2019.

Poster Presentations

1. **Mudge A, Young A, McRae P** et al “Older people aren’t my real patients”: a qualitative study of barriers and enablers to older person friendly hospitals. International Association of Gerontology and Geriatrics Gothenburg May 2019
2. **Cahill M, Treleaven E, Mudge A, McRae P, Lee-Steere K,** Finnigan S. Cognitive Impairment in a tertiary hospital; prevalence and carer experience. Australian College of Nursing Forum Hobart, August 2019.

Details of staff that completed their PhDs in 2019 within your department / research group

Name	Name of Project	Completed Date	Affiliated University/ies
Angela Byrnes	Investigating the nutritional status and care of older (≥65 years) patients on two general surgical wards: A multiphase, action research study	Conferred February 2019	University of Queensland
Julie Adsett	Exercise rehabilitation for patients with stable heart failure	Conferred July 2019	Griffith University



Other communications and outputs:

Alison Mudge and **Prue McRae** were selected speakers for Global Online Mobility Summit:” Eat Walk Engage: an integrated program to improve mobility and outcomes in older inpatients” July 2019

Alison Mudge and **Prue McRae** were selected speakers for Global Online Mobility Summit:” Moving forward: patient and staff perspectives on limited mobility in a rehabilitation setting” July 2019

Alison Mudge and **Prue McRae** were invited members of an expert meeting on improving inpatient mobility at Utrecht UMC in the Netherlands as invited international experts May 2019

Alison Mudge co-authored the COPERATE report on assessing geriatric risks in older surgical patients, in a project funded by Statewide Network for Anaesthetics and Perioperative Medicine and Statewide Older Persons Health Clinical Network available at <https://clinicalexcellence.qld.gov.au/sites/default/files/2018-08/cooperate-project-final-report.pdf>

Alison Mudge was invited speaker at MNHHS Frailty Workshop: Frailty and its impact on hospitalized older people February 2019

Alison Mudge, Prue McRae, Adrienne Young led a full day workshop in implementation science training for QUT/MNHHS Graduate Certificate in Health Sciences (Health Services Innovation)

Alison Mudge, Prue McRae, Adrienne Young led two three day workshops in implementation science in collaboration with national partners MNHHS/AusHSI/Uni of Adelaide/Flinders University and Health Consumers Queensland (May 2019, November 2019)

Alison Mudge, Prue McRae, Adrienne Young have assisted with planning and delivery of a new online AH-TRIP (Allied Health Translating Research into Practice) course including development of webinar material accessible to clinicians throughout the state <https://www.health.qld.gov.au/clinical-practice/database-tools/translating-research-into-practice>

Prue McRae participated as an implementation expert on their Implementation Support Panel to support allied health clinicians to implement evidence into practice. Monthly videoconferences supported clinicians throughout the state for 6 months

Alison Mudge was an invited guest lecturer on implementation for the QUT Masters of Healthcare Management and the UQ Health and Biomedical Sciences Student Research Day

Alison Mudge was invited speaker at a statewide videoconference lecture for the state-wide Patient Safety and Quality Improvement Service:” Eat Walk Engage and the Comprehensive Care Standards” April 2019

Alison Mudge was invited speaker at the combined Statewide Older Person’s Health Clinical Network/ Statewide General Medicine Network annual forum: “Caring for the frail older person in hospital: lessons form the CHERISH project” June 2019

Alison Mudge was invited speaker for the Directors of Clinical Governance Forum “reducing the confusion: what does good care for cognitive impairment look like?”

Alison Mudge was invited speaker for the Brisbane Diamantina Health Partners Ageing Theme Consumer Forum: “Older Person Friendly Hospitals” August 2019

World Delirium Awareness Day: The Eat Walk Engage team supported wards to demonstrate their delirium prevention and management strategies through displays, and led a staff and public information booth

everyBODYmoves Day 13th July: Prue Mcrae and Alison Mudge led EveryBODY moves day at RBWH to raise awareness of the importance of mobility (as part of Global Mobility Online Summit campaign)

Margaret Cahill and Karen Lee-Steere. Cognitive impairment in a tertiary hospital: prevalence and the carer experience. Oral presentation MNHHS Comprehensive Care Forum at Brighton Health Campus, 5th April 2019

Karen Lee-Steere. Delirium prevention in the acute hospital setting. Occupational Therapy Australia OTs working with older people special interest group presentation. April 30, 2019.

KIDNEY HEALTH SERVICE

Highlights of the Kidney Health Service research year are the tremendous energy from our young researchers, in total 27 research higher degree students, driving the impressive list of publications and presentations reported here.

Our early career researchers are successfully navigating to independent research careers, attracting awards and prestigious funding. Associate Professor Andrew Mallett was awarded an inaugural early career MNHHS Clinical Research Fellowship and the University of Queensland Young Alumni of the year in 2019. Dr Andrew Kassianos is the driving force in the Conjoint Kidney Research Group which has successfully attracted continuous NHMRC grant funding since 2016, and Dr Martin Wolley is part of an international collaboration that has been awarded a prestigious Transatlantic Network Grant by the European Leducq Foundation.

Our international profile is also growing through collaborations like the latter and with researchers across the world, including the UK, Europe, India and Korea. The Visiting Academic program, with the 2019 Academics listed in this report, continues to be important opportunities to develop mutually productive research initiatives.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Aihua Wu	PhD, UQ (2018-2021)	Regulation of sodium chloride cotransporter (NCC) in health and disease of salt homeostasis	Michael Stowasser, Martin Wolley
Amanda Mckie	MPhil, QUT (2018-2022)	Understanding nurses' perception of sexual dysfunction in people with end stage kidney disease requiring haemodialysis	Ann Bonner, Theresa Green
Arti Raghubar	PhD, UQ (Apr 2020-Dec 2022)	Gene expression mapping in the kidney	Andrew Mallett, Helen Healy, Andrew Kassianos, Quan Nguyen
Becker M.P. Law (Meng-Po LAW)	PhD, QUT (2015-2019) <i>conferred 2019</i>	Functional characterisation of lymphocyte subsets in human kidney disease	Andrew Kassianos, Helen Healy, Kenneth Beagley, Ray Wilkinson
Bryan Gregory	PhD, QUT (2016-2022)	The effects of continuous renal replacement therapy and sustained low-efficiency dialysis on immune-suppressive drug levels in critically ill patients with acute kidney injury	Ann Bonner, Fiona Coyer
Carla Scuderi	PhD, UQ (Oct 2017-Dec 2023)	Improving patient centred outcomes in kidney transplant recipients	Christine Staatz, Helen Healy, Andrew Mallett
David McIntyre	PhD, QUT (2016-2022)	The development and validation of haemodialysis nurse sensitive indicators	Ann Bonner, Fiona Coyer
Dominique McConnochie	PhD, UQ (2018-2022)	Phenotype-genotype correlations in cystic kidney disease	Jenny Stow, Andrew Mallett, Adam Wall
Evan Owens	PhD, UQ (2017 Dec 2020)	Clinical Biobanking and the distinguishing risk of progressive Chronic Kidney Disease study	Glenda Gobe, Wendy Hoy, David Vesey, Helen Healy
Harith Yapa	PhD, QUT (2017-2020)	Contributing factors to health-related quality of life in people with chronic kidney disease in Sri Lanka	Ann Bonner, Louise Purtell, Shirley Connell
Haunnah Rheault	DHlthSc, QUT (2016-2022)	Health literacy and chronic disease self-management in Indigenous Australians	Ann Bonner, Fiona Coyer
Jennifer Mathias-Shah	PhD, QUT (2019-2022)	Health literacy and chronic kidney disease	Ann Bonner, Joanne Ramsbotham
Kurt Giuliani	PhD, UQ (Apr 2019-Dec 2021)	The role of inflammasome signalling in human kidney fibrosis and chronic kidney disease	Helen Healy, Andrew Kassianos, Josephine Forbes, Jacobus Ungerer
Kushani Jayasinghe	PhD, Monash (2018-2022)	Clinical utility of targeted whole exome sequencing within a multidisciplinary renal genetics' clinic	Peter Kerr, Cathy Quinlan, Zornitza Stark, Andrew Mallett
Kylie Barr	PhD, UWS (Sydney) (Oct 2015-Nov 2019) <i>Submitted Nov 2019</i>	Intradialytic Yoga as a complex intervention for patients with end stage kidney disease receiving haemodialysis treatment: A mixed methods approach	Caroline Smith, Birinder Cheema, Freya MacMillan, Helen Healy

Supervised Post-Graduate Research Students *(cont)*

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Lan Van Hoang	PhD, QUT (2016-2020)	Relationship between health care supports, social supports and patient outcomes among haemodialysis population in Vietnam	Ann Bonner, Theresa Green
Marina Cousins	PhD, CQU (2018-2024)	Interpersonal relationships with people receiving haemodialysis	Julie Bradshaw, Ann Bonner
Marina Wainstein	PhD, UQ (Apr 2019-Dec 2021)	Extending the national CKD surveillance model	Wendy Hoy, Sally Shrapnel, Ivor Kratz, Helen Healy
Molly Milazi	DHlthSc, QUT (2014-2020)	Nurse-led teach back intervention to improve people with End Stage Kidney Disease adherence with phosphate control	Ann Bonner, Clint Douglas
Muhammad Ali Khan	PhD, UQ (2017 Dec 2021)	Treating Chronic Kidney Disease using plant extracts of bush pumpkin	Glenda Gobe, Andrew Kassianos, Wendy Hoy, Helen Healy
Nyakuoy Yak	MPhil, UQ (2019-2020)	Cell surface interactions within microenvironments	Jenny Stow, Andrew Mallett
Pauline Nicholas	Masters, QUT (2016-2019)	Measuring the prevalence of MCI in ESKD	Ann Bonner , Louise Purtell, Theresa Green
Senanayake Sameera	PhD, QUT (2018-2020)	Prediction of graft survival and cost effectiveness of kidney transplantation according to donor quality levels in Australia	Sanjeewa Kularatna, Nicholas Graves, Helen Healy, Keshwar Baboolal
Sita Sharma	PhD, QUT (2019-2022)	Symptom intervention to improve HRQoL in people receiving haemodialysis	Ann Bonner, Theresa Green
Sri Krishna Venuthurupalli	PhD, UQ (2010-2019) <i>conferred 2019</i>	CKD.QLD: profile of chronic kidney disease (CKD) from Darling Downs Health and Hospital Service (DDHHS)	Wendy Hoy, Helen Healy , Robert Fassett
Tain Lloyd	MAppSc, QUT (2017-2020)	Investigation of chronic kidney disease and stroke	Ann Bonner, Theresa Green, Louise Purtell
Zaw Thet	Masters, Griffith School of Medicine (2019-2020)	Cancer Risks along the disease trajectory in ANCA Vasculitis	Alfred K Lam, Dwarakanathan Ranganathan , Soe Yu Aung, Tien K Khoo,
Zeng Guo	PhD, UQ 2017-2020	Histopathological, biochemical and genetic characterization of different types of primary aldosteronism, including validation of a new angiotensin assay	Michael Stowasser, Martin Wolley

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Andrew Mallett	MNHHS Clinical Research Fellow	0.4	Metro North Hospital and Health Service (MNHHS)	Genetic Kidney Disease	University of Queensland
Martin Wolley	Senior Research Fellow	0.2	Leducq Foundation Transatlantic Network Grant	Potassium in Hypertension	University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Arti Raghubar	Honorary Researcher	1.0	Investigating underlying molecular processes in IgA nephropathy cases using SWATH-MS	University of Queensland/Pathology Queensland
Kurt Giuliani	Honorary Researcher	1.0	Targeting mitochondrial-driven inflammasome activation in human chronic kidney disease (CKD)	University of Queensland/Pathology Queensland
Seokchan Hong	Honorary Research Fellow	1.0	Proximal tubular epithelial cell-immune cell interactions in lupus nephritis	Asan Medical Centre, Korea

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
aCQuiRE Collaborative, Helen Healy, Andrew Mallett	Charles Denaro , Wendy Hoy (UQ), Samantha Stark, Vincent Lee (<i>Westmead Hospital</i>) Mark Thomas (<i>Sir Charles Gardner Hospital</i>)	aCQuiRE a CKD Queensland FabRy disease Epidemiological point prevalence study in people managed in specialist nephrology practices
Andrew Mallett	Australian Genomics and KidGen Collaboration >50 collaborators; full list at www.kidgen.org.au	KidGen Renal Genetics Flagship
Andrew Mallett	Australian Genomics and KidGen Collaboration >50 collaborators; full list at www.kidgen.org.au	KidGen HIDDEN Flagship
CKD.Qld Collaborative, Helen Healy	Wendy Hoy (UQ), Ann Bonner (QUT), J Zhang (UQ), Z Wang (UQ), Vishal Diwan (UQ)	collaborative of clinicians in the public kidney practices in Queensland and academics poses of studying the natural history of chronic kidney disease, practice patterns across the state and biobanking of biosamples with linked phenotypes
Conjoint Kidney Research Group – Helen Healy	Andrew Kassianos (QPath), George John , Andrew Mallett , Pedro Gois , Katrina Kildey , Xiangju Wang (QPath), Kurt Giuliani (QPath), Becker Law (QUT), Arti Raghobar (QPath), Muhammad Ali Khan (UQ), Suceena Alexandra (<i>Christian Medical College, Vellore India</i>), Santosh Varughese (<i>Christian Medical College, Vellore India</i>)	Mechanisms of Progression of Chronic Kidney Disease. Identifying biologically relevant control and switch points driving progression of kidney disease
Conjoint Kidney Research Group – Helen Healy	Andrew Kassianos , Katrina Kildey , George John , Ross Francis (PAH), Sebastian Hultin (PAH), Santosh Varughese (<i>Christian Medical College, Vellore India</i>), Suceena Alexandra (<i>Christian Medical College, Vellore India</i>)	Mechanisms of Rejection of Kidney Allografts
Health Services Implementation Group, Helen Healy	Pedro Gois , Gary Chang , Alexandra Cation ; Ann Bonner (QUT), Louise Purtell (QUT), Adrian Kark	Keeping Kidneys in the Community
Kidney Transplantation Research Group, Helen Healy , Andrew Mallett	Carla Scuderi , George John , Christine Staatz (UQ)	Patient-centred outcomes in kidney transplantation
Peritoneal Dialysis Research Group, Lesley Williams , Nicola Williams	Pauline Nicholas , Deborah Smith , Martin Wolley , Dwarakanathan Ranganathan , Michelle Rice	Efficacy and feasibility study comparing topical use of acetic acid at the exit site versus Mupirocin to prevent exit site infections in PD patients (ACES)
Machine Learning Group	Helen Healy , Marina Wainstein , Wendy Hoy (UQ), Sally Shrapnel (UQ), Ivor Kratz (<i>St George Hospital</i>), Robert Webb	What the big datasets tell us about the natural history of CKD
Martin Wolley		Incremental start-up of Haemodialysis
Queensland Renal Biopsy Registry, Dwarakanathan Ranganathan	Wendy Hoy, Leo Francis, Andrew Mallett , George John	
OMICS in kidney disease, Helen Healy , Andrew Mallett	Andrew Kassianos , Monica Ng , Arti Raghobar, Quan Nguyen, Leo Francis, Anne Stewart	Finger printing kidney disease

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
A/Prof Alberta Hoi (<i>Monash University</i>)	Dwarakanathan Ranganathan	SPOCS and Auslupus Registry
A/Prof Alberta Hoi (<i>Monash University</i>)	Dwarakanathan Ranganathan	aHUS registry
A/Prof Caroline Smith (<i>University of Western Sydney</i>)	Helen Healy , Birinder Cheema (UWS), Freya MacMillan (<i>Flinders University</i>), Kylie Barr (UWS)	Utility of complementary interventions in ESKD patients on haemodialysis
A/Prof Glenda Gobe (UQ)	Helen Healy , Andrew Kassianos , Wendy Hoy (UQ), David Vesey (UQ), Muhammed Ali Kha (UQ)	Treating chronic kidney disease with plant extracts with anti-oxidant properties (plant extracts of elephant foot yam)
Sanjeeva Kularatna (QUT)	Helen Healy , Keshwar Baboolol , Senanayake Sameera (QUT), Nicholas Graves (<i>Singapore University</i>)	Applying Machine Learning to kidney organ allocation

Collaborative Research Activity involving RBWH Research Group / Department *(cont)*

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Santosh Varughese <i>(Christian Medical College, Vellore, India)</i>	Helen Healy, George John, Andrew Kassianos	Molecular profiling in renal allograft recipients with acute rejection and chronic allograft dysfunction
Smyth B, Kotwal S, Gallagher M, Gray NA, Polkinghorne K	Sharad Ratanjee, David McIntyre	REDUCCION Partnership Program
Suceena Alexander <i>(Christian Medical College, Vellore, India)</i>	Helen Healy, George John, Andrew Kassianos	Pathogenic molecular/cellular responses leading to chronic kidney disease in primary Focal and Segmental Glomerulosclerosis (FSGS) in Indians
Wendy Hoy <i>(UQ)</i>	Helen Healy, Ann Bonner <i>(QUT)</i> , Luke Connelly <i>(UQ)</i> , Zoltan Endre <i>(UNSW)</i> , Jeff Coombes <i>(UQ)</i> , Glenda Gobe <i>(UQ)</i>	NHMRC Chronic Kidney Disease Centre of Research Excellence

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Andrew Mallett	Rising Star Award	2019 Metro North Hospital and Health Service Research Excellence Awards
Andrew Mallett	Distinguished Young Alumnus Award	2019 UQ Alumni Awards
Arti Raghubar	Australian Government Research Training Program (RTP) Scholarship	PhD studies – commenced 2019
Kurt Giuliani	Australian Government Research Training Program (RTP) Scholarship	PhD studies – commenced 2019
Molly Milazi	2019 RBWH Postgraduate Scholarship – renewal	DHlthSc studies continuing full-time

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Andrew Kassianos, Helen Healy, Kenneth Beagley	Conjoint Kidney Research Group, Kidney Health Service	Developing therapeutic approaches targeting human unconventional T lymphocytes for the treatment of chronic kidney disease	National Health and Medical Research Council (NHMRC)	\$557,127	\$185,709	2019-2021
Andrew Kassianos, Helen Healy, Ray Wilkinson, Leo Francis, Ross Francis	Conjoint Kidney Research Group, Kidney Health Service	Pathogenic dendritic cells in human kidney disease	National Health and Medical Research Council (NHMRC)	\$370,983	\$125,000	2016-2019
Andrew Mallett	KidGen	The HIDDEN (wHole genome Investigation to iDentify undetected Nephropathies) Project	AGHA Rare Disease Flagship	\$240,000	\$120,000	2018-2020
Andrew Mallett	KidGen	Evaluation of clinical genomics and a MDT clinic model in inherited kidney disease	AGHA Rare Disease Flagship	\$204,223.50	\$408,447	2016-2019
Andrew Mallett, Helen Healy, Charles Denaro, Wendy Hoy, Mark Thomas	CKD.Qld	aCQuiRE: Epidemiology of Fabry's disease in Queensland CKD patients stage 1-5D	Sanofi-Genzyme International	\$315,518	\$946,554	2016-2019
Ann Bonner, Louise Purtell	Kidney Health Service	An evaluation of the General Practitioner with Special Interest (GPwSI) in specialist outpatient clinics	Metro North Hospital and Health Service	\$99,997	\$99,997	2019

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Arti Raghubar, Andrew Mallett , Helen Healy , Andrew Kassianos , Quan Nguyen, Leo Francis, Anne Stewart	-OMICS in kidney disease	Optimisation of novel spatial transcriptomics in clinical kidney tissue to identify the transcriptome signature during kidney injury	Pathology Queensland – Study, Education and Research Committee	\$50,000	\$5,000	2019-2021
Arti Raghubar, Andrew Mallett , Helen Healy , Andrew Kassianos , Quan Nguyen, Leo Francis, Anne Stewart	Conjoint Kidney Research Group, Kidney Health Service	Optimisation of novel spatial transcriptomics in clinical kidney tissue to identify the transcriptome signature during kidney injury	Pathology Queensland – Study, Education and Research Committee	\$50,000	\$50,000	2019
Dwarakanathan Ranganathan , Sudha Ekambaram, Peter Trnka	International Society of Nephrology	The International Society of Nephrology (ISN) Sister Centres Program nurtures a partnership between centres from low income countries and organisations from higher income countries to enhance practice of nephrology at the EC	ISN Asia Pacific Society of Nephrology	\$24,000 USD	\$12,000 USD – \$A16,405.35	2018–2019
Helen Healy , Alexandra Cation , Adrian Kark , Gary Chang , Vinood Lal , Carla Scuderi , J Hairs, Amanda Queen, Peter Boffey, Ann Bonner , Louise Purtell	Health Services Implementation Group	KICK CKD: Keeping Kidneys Integrated Care for Chronic Kidney Disease	Metro North Hospital and Health Service-LINK	\$359,000	\$180,000	2019-2020
Louise Purtell, Ann Bonner, Helen Healy , Carol Douglas , Ilse Berquier , Wendy Hoy	Health Services Implementation Group, Kidney Health Service	The REPOSE study (Randomised Evaluation of the Provision of a Sleep intervention in End-stage kidney disease)	Kidney Health Australia	\$50,000	\$50,000	2019-2020
Melissa Little, Ian Smyth, Cas Simons, Andrew Mallett , Steven Alexander, Ernst Wovetang, wA Oshlack, Chirag Patel, Helen Healy , Bruce Bennetts, Michel Tchan, Cathy Quinlan, Amanda Walker, S White, Z Stark.	KidGen	Applying functional genomics to Kidney Disease	National Health and Medical Research Council (NHMRC) APP1098654	\$409,772	\$1,229,316	2016-2019
Molly Milazi , Clint Douglas , Ann Bonner	Kidney Health Service	A novel bundled intervention (4Ds) to improve adherence with phosphate control in people receiving haemodialysis for end stage kidney disease	Royal Brisbane and Women's Hospital Scholarship	\$38,082	\$38,082	2019
Pedro Gois , Dwaraka Ranganathan , Sharad Ratanjee , Helen Healy	Investigator initiated	Haemodialysis without systemic anticoagulation: a prospective randomized trial to evaluate five strategies in patients at high risk of bleeding Royal Brisbane and Women's Hospital and RBWH Foundation	Royal Brisbane and Women's Hospital and Royal Brisbane and Women's Hospital Foundation	\$40,000	\$40,000	2019
Wendy Hoy, Helen Healy , Luke Connolly, Geoff Mitchell, Katie Panaretto, Zoltan Endre, Jeff Coombes, Glenda Gobe, Ann Bonner , Rob Fassett	Kidney Health Service	Chronic Kidney Disease Centre of Research Excellence	National Health and Medical Research Council (NHMRC)	\$2,496,981	\$500,000	2014-2019

2019 Research Publications

Journal Articles

1. Bhagat Singh AK, Jeyaruban AS, Wilson GJ, **Ranganathan D**. Adalimumab-induced IgA nephropathy. *BMJ Case Rep*. 2019 Mar 31;12(3). pii: e226442. doi: 10.1136/bcr-2018-226442
2. **Bonner A**, Havas K, Tam V, Stone C, Abel J, Barnes M & **Douglas C**. An integrated chronic disease nurse practitioner clinic: Service model description and patient profile. *Collegian*. (2019). 26, 227-234. DOI: 10.1016/j.colegn.2018.07.009
3. **Bonner A**, Havas K, Stone C, Abel J, Barnes M, Mills K, Tam V & **Douglas C**. An integrated chronic comorbid disease clinic: Outcomes of nurse practitioner lead service model. *Collegian*. (2019, in press)
4. Brown L, Gardner G., **Bonner A**. A randomized controlled trial testing a decision support intervention for older patients with advanced kidney disease. *Journal of Advanced Nursing*. (2019 early online). 75, 3032-3044. DOI: 10.1111/jan.14112
5. Chan S, Marshall MR, Ellis RJ, **Ranganathan D**, Hawley CM, Johnson DW, **Wolley MJ**. Haemodialysis withdrawal in Australia and New Zealand: a binational registry study. *Nephrol Dial Transplant*. 2019 Aug 9. pii: gfz160. doi: 10.1093/ndt/gfz160. [Epub ahead of print] PubMed PMID: 3139748
6. Chan S, Patel C, **Mallett AJ**. A pilot clinical and validation study of the PROPKD score in clinical practice amongst patients with Autosomal Dominant Polycystic Kidney Disease. *Nephrology*, 2019 (published online 22 Aug 2019)
7. Chan S, Spraggon ES, Francis L, **Wolley MJ**. Bile Cast Nephropathy in a Patient With Obstructive Jaundice. *Kidney Int Rep*. 2018 Sep 18;4(2):338-340. doi: 10.1016/j.ekir.2018.09.008. eCollection 2019 Feb. PubMed PMID: 30775631
8. Davis J, Tjipto A, Hegerty K, **Mallett A**. An audit of electron microscopy in the diagnosis of focal segmental glomerulosclerosis – are current pathological techniques missing important abnormalities in the glomerular basement membrane? *F1000 Research*, Jul 2019, 8:1204
9. De Rechter S, Bockenauer D, Guay-Woodford LM, Liu I, **Mallett AJ**, Soliman NA, Sylvestre LC, Schaefer F, Liebau MC, Mekhali D, ADPedKD: A Global Online Platform on the management of Children with Autosomal Dominant Polycystic Kidney Disease for the ADPedKD Consortium. *Kidney Int Reports*. 2019, 4:1271-1284
10. Dinh TTH, **Bonner A**, Ramsbotham J., Clark R. A cluster randomized controlled trial testing effectiveness of a self-management intervention using the teach-back method for people with heart failure in Vietnam. *Nursing and Health Sciences*. (2019 early online). DOI: 10.1111/nhs.12616
11. El-Damanawi R, Viecelli AK, Pascoe EM, Craig JC, Johnson DW, **Mallett AJ**, Hawley CM, Hiemstra TF. Metformin for preventing the progression of chronic kidney disease (Protocol) *Cochrane Database of Systematic Reviews*, 2019, 9:CD013414
12. Ferreira D, de Bragança AC, Volpini RA, Shimizu MHM, **Gois PHF**, Girardi ACC, Seguro AC, Canale D. Vitamin D deficiency is a potential risk factor for lipid Amphotericin B nephrotoxicity. *PLoS Negl Trop Dis*. 2019 Jul 11;13(7): e0007567
13. Giuliani KTK, **Kassianos AJ**, Healy H, **Gois PHF**. Pigment Nephropathy: Novel Insights into Inflammasome-Mediated Pathogenesis. *International Journal of Molecular Sciences* 2019 Apr 23;20(8). E1997
14. **Green T**, **Bonner A**, Teleni L, Bradford N, **Purtell L**, **Douglas C**, Yates P, MacAndrew M, Dao HY & Chan RJ. Use and reporting of experience-based co-design studies in the healthcare setting: A systematic review. *BMJ Quality & Safety*. (2019). Epub ahead of print. 1-13. DOI: 10.1136/bmjqs-2019-009570
15. Haas M, Boughtwood T, Quinn M, AGHA Flagships Leads. The ethics approval process for multisite research studies in Australia: changes sought by the Australian Genomics initiative. *MJA*, 2019, 211(10:440-446
16. Hoang VL, **Green T**, **Bonner A**. Informal caregivers of people undergoing haemodialysis: Associations between activities and burden. *Journal of Renal Care*. (2019). 45(3), 151-158. DOI:10.1111/jorc.12280
17. Hudson R, Patel C, Hawley C, O'Shea S, Snelling P, Ho G, Holman K, Bennetts B, Crawford J, Francis L, Simons C, **Mallett A**. Adult-diagnosed non-syndromic nephronophthisis in Australian families causes by biallelic NPHP4 variants. *AJKD* (accepted 31 August 2019)
18. Jayasinghe K, White SM, Kerr PG, MacGregor D, Stark Z, Wilkins E, Simons C, **Mallett A***, Quinlan C. Isolated proteinuria due to CUBN homozygous mutation – challenging the investigative paradigm. *BMC Nephrology*, 2019, 20:330
19. Jayasinghe K, Stark Z, Patel C, Mallawaarachchi A, McCarthy H, Faul R, Chakera A, Sundaram M, Jose M, Kerr P, Wu Y, Wardrop L, Goranitis I, Best S, Martyn M, Quinlan C, **Mallett A**. A study protocol for comprehensive evaluation of clinical genomic testing in patients with suspected genetic kidney disease. *BMJ Open*, 2019, 9: e029541
20. Kilday K, Francis R, Hultin S, Harfield M, Giuliani K, Law B, Wang X, See E, **John G**, Ungerer J, Wilkinson R, Kassianos A, Healy H. Specialised roles of human natural killer cell subsets in human kidney transplant rejection. *Frontiers in Immunology*. (2019). 10: 1877
21. Kumuthini J, Van Woerden C, **Mallett A**, Zass L, Chaouch M, Thompson M, Johnston K, Mbiyavanga M, Baichoo S, Mungloo-Dilmohamud Z, Patel C, Mulder N. Proposed minimum information guideline for kidney disease: research and clinical data reporting – A Cross Sectional Study. *BMJ Open*, 2019, 9: e029539
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24. Law B, Wilkinson R, Wang X, **Kilday K**, Giuliani K, Beagley K, Ungerer J, **Healy H**, **Kassianos A**. Human tissue-resident mucosal-associated invariant T (MAIT) cells in renal fibrosis and chronic kidney disease. (2019). *Journal of the American Society of Nephrology*. 30(7): 1322-1335
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Journal Articles (cont)

52. Zhang J, **Healy HG**, Venthurupalli SK, Tan K-S, Wang Z, **Cameron A**, Hoy WE. Blood pressure management in hypertensive patients with non-dialysis chronic kidney disease in Queensland, Australia. *BMC Nephrology* 2019; 20:348
53. Zhang W, Mei C, Chen N, Ding X, Ni Z, Hao C, Zhang J, Zhang J, Wang N, Jiang G, Guo Z, Yu C, Deng Y, Li H, Yao Q, Marshall MR, **Wolley MJ**, Qian J. Outcomes and practice patterns with hemodiafiltration in Shanghai: a longitudinal cohort study. *BMC Nephrol.* 2019 Feb 1;20(1):34. doi: 10.1186/s12882-019-1219-z. PubMed PMID: 30709342.

Book Chapters / Letters

1. **Bonner A.** & Ramanathan V. (2019). Adaptation of nursing management: Male reproductive problems. In D. Brown, H. Edwards, L. Seaton, & T. Buckley (Eds), *Lewis's Medical-Surgical Nursing* (5th ed.), (pp XX-YY). Sydney: Elsevier. ISBN: 9780729543095
2. **Bonner A.** (2019). Adaptation of nursing assessment: Urinary system. In D. Brown, H. Edwards, L. Seaton, & T. Buckley (Eds), *Lewis's Medical-Surgical Nursing* (5th ed.), (pp XX-YY). Sydney: Elsevier. ISBN: 9780729543095
3. **Bonner A.** (2019). Adaptation of nursing management: Acute kidney injury and chronic kidney disease. In D. Brown, H. Edwards, L. Seaton, & T. Buckley (Eds), *Lewis's Medical-Surgical Nursing* (5th ed.), (pp XX-YY). Sydney: Elsevier. ISBN: 9780729543095
4. **Bonner A.** (2019). Adaptation of nursing management: Renal and urologic problems. In D. Brown, H. Edwards, L. Seaton, & T. Buckley (Eds), *Lewis's Medical-Surgical Nursing* (5th ed.), (pp XX-YY). Sydney: Elsevier. ISBN: 9780729543095
5. **Bonner A.** (2019). Renal and genitourinary trauma. In K. Curtis, C. Ramsden, R. Z. Shaban, M. Fry, & M. Considine (Eds), *Emergency and Trauma Care for Nurses and Paramedics* (3rd ed.), (pp. 669-693). Sydney: Elsevier. ISBN: 9780729587198.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Bonner A.** Chronic kidney disease research program: From primary care to supportive care. Invited presentation at the Nanjing Medical University Research Symposium, 2019, Nanjing, China
2. **Kassianos A.** Molecular interrogation of the allograft: bench to bedside. CMC Vellore Renal Winter Symposium, 2019. Vellore, India
3. **Kassianos A.** Proximal tubular epithelial cell immuno-biology. CMC Vellore Renal Winter Symposium, 2019. Vellore, India
4. **Mallett A.** Autosomal Dominant Tubulointerstitial Kidney Disease, World Congress of Nephrology, 2019
5. **Mallett A.** Doing Better, TEDx talk, Macquarie University, 2019, New South Wales, Australia
6. **Mallett A.** Genetics Kidney Disease, an unmet need, UQ EoM Research Symposium, University of Queensland, 2019, Brisbane, Australia
7. **Mallett A.** Kidney Clinical Genomics in Queensland. A Model in Australia, Logan Research Symposium, 2019, Logan Hospital, Queensland, Australia
8. **Mallett A.** Mobilising Nation-Wide Multidisciplinary Renal genetics clinics, IMB research day, 2019, University of Queensland, Queensland, Australia
9. **Mallett A.** Mobilising Nation-Wide Multidisciplinary Renal genetics clinics, Australian Genomics Conference, 2019, Melbourne, Australia
10. **Mallett A.** Transforming Kidney Health: Challenges, progress, opportunities, Australia and New Zealand Transplant Nurses Association Conference, 2019
11. **Ranganathan D:** Nephkids 2019. July 2019, Chennai, India
12. **Wolley M,** Aldosterone, Potassium and NCC. Asia Pacific Congress of Hypertension, November 2019, Brisbane, Australia
13. **Wolley M,** Approach to the patient with an incidentaloma. 9th Emirates Diabetes and Endocrine Congress, March 2019. Dubai, UAE
14. **Wolley M,** Drug resistant hypertension, 9th Emirates Diabetes and Endocrine Congress, March 2019, Dubai, UAE
15. **Wolley M,** Hyperaldosteronism: Challenges in diagnosis and Treatment. 9th Emirates Diabetes and Endocrine Congress, March 2019, Dubai, UAE
16. **Wolley M,** Incremental haemodialysis trial. BEAT-CKD, August 2019, Sydney, Australia
17. **Wolley M,** Potassium and blood pressure. Pressure-wise community event, November 2019, Brisbane, Australia.

Oral Presentations

1. **Bonner A, Berquier I, Healy H,** Purtell L. Kidney supportive care: Evaluation of treatment decision-making and advance care plans. In: Abstract Book page 109. Oral presented at: 48th EDTNA/ERCA International Conference, 2019 Sept 14-17, Prague, Czech Republic (O 87)
2. **Bonner A, Kirby J,** Purtell L, **Berquier I, Healy H.** Younger people are also accessing kidney supportive care. In: Abstract Book page 64. Oral presented at: 48th EDTNA/ERCA International Conference, 2019 Sept 14-17, Prague, Czech Republic (O 43)
3. **Bonner A,** Purtell L, **Berquier I, Healy H.** In: Abstract Book page 29. Oral presented at: 48th EDTNA/ERCA International Conference, 2019 Sept 14-17, Prague, Czech Republic (SO 10)
4. **Bonner, A.,** Purtell, L., **Berquier, I., Healy, H.** Evaluating patient and carer perspectives of a kidney supportive care program. EDTNA/ERCA International Conference, 2019. Czech Republic

Oral Presentations (cont)

5. **Chang G, Bonner A, Healy HG.** Keeping Kidneys General Practitioner with Special Interest (GPwSI) Project: a new model of care for community kidney health. Oral presentation at: Royal Australian College of General Practitioners Annual Conference (GP19); 2019 Oct 24-26, Adelaide, Australia
6. Eranga Yapa H, Chambers S, **Purtell L, Bonner A.** Comparing symptom burden across different stages of chronic kidney disease. Renal Society of Australasia, 2019. New Zealand
7. Eranga Yapa, H, Chambers, S, **Purtell, L, Bonner, A.** Comparing health-related quality of life across different stages of chronic kidney disease. Renal Society of Australasia, 2019. New Zealand
8. Guo Z, Cowley D, Poglitsch M, McWhinney BC, Ungerer JPJ, **Wolley M,** Stowasser M. The effect of ramipril on the aldosterone/renin ratio and aldosterone/angiotensin II ratio in patients with primary aldosteronism: A pilot study. The 29th European Meeting on Hypertension and Cardiovascular Protection. 21-24 June 2019, Milan, Italy. (Parallel Oral Session 3B, Endocrine Hypertension, ESH19-ABS-3840-258-94807)
9. **Hale J, Jahan, S, Coleman S, Kark A, Mallett A.** Does the kidney failure risk equation (KFRE) accurately predict progression from chronic to end stage kidney disease in an Australian metropolitan population – a retrospective clinical audit. Renal Society of Australasia, 2019. Auckland, New Zealand
10. **Hart L, Garry L, Coleman S, Beaumont N, O'Donohue R, Mason B, Millhouse S, Hale J, Kark A.** 'Welcome group': A multidisciplinary interactive group session designed to introduce patient to chronic kidney disease (CKD) management. Renal Society of Australasia, 2019. New Zealand
11. **Hart L.** "Welcome Group": A multidisciplinary interactive group session designed to introduce patients to Chronic Kidney Disease (CKD) management. Renal Society of Australasia Conference 2019. Auckland
12. Hoang V, **Bonner A, Green T.** Are informal carers of family members who receive haemodialysis burdened by their caring activities? Renal Society of Australasia, 2019. New Zealand
13. Hoang, V, **Bonner A, Green T.** Living with haemodialysis: Patients' social support and quality of life and their family carers' level of burden. Renal Society of Australasia, 2019. New Zealand
14. **Holman S, Terry M, Healy HG.** Fluid assessment is hard in the obese – a challenge case of 31L of fluid ultrafiltration on haemodialysis (HD) over two days. In: Abstract Book page 90. 47th Renal Society of Australasia Annual Conference, 2019 Jun 27-29, Auckland, New Zealand
15. **Kirby J, Bonner A,** Purtell L, **Berquier I, Austin L, Healy H.** Psychosocial factors and the value of the social worker in a kidney supportive care multidisciplinary team. In: Abstract Book page 58. Oral presentation at: 47th Renal Society of Australasia Annual Conference, 2019 Jun 27-29, Auckland, New Zealand
16. **Mallett, A.** National Scale Diagnostic genomics for genetic kidney disease, ASN Kidney Week, 2019, Washington DC, United States of America
17. **Milazi M, Bonner A, Douglas C.** Closing the loop in serum phosphate control: Improving self-efficacy in patients receiving haemodialysis. Renal Society of Australasia Conference, 2019. New Zealand
18. **Milazi, M, Bonner A, Douglas C.** The missing piece: A bundled self-management intervention (4Ds) to improve patient's knowledge of phosphate control. Renal Society of Australasia Conference, 2019. New Zealand
19. **Rice M, Scuderi C, Berquier I, Purtell L, Douglas C, Bonner A, Healy H.** The role of the pharmacist in Kidney Supportive Care – A Case Example. ISN Melbourne 2019
20. **Rice M, Scuderi C, Healy H.** Pexip Pilot Pharmacy Review – Videohealth Consults Pushing Pharmacists into Patient's Homes Using Smart Technology. ISN Melbourne 2019
21. **Scuderi C, Dawson C, Rice M,** Ironside D. Supporting Medication Adherence in Patients Attending Chronic Kidney Disease (CKD) Pharmacist Outpatient Clinics. ISN Melbourne 2019
22. **Scuderi C, Leutsch K.** Whose Turf Anyway? Pharmacist's perceptions of medical dominance – Effects on Roles and Behaviour. Society of Hospital Pharmacists of Australia – Medicines Management Conference 2019
23. Yates P, Nowlan S, **Bonner A, Douglas C,** Chan, R. Developing the evidence base to strengthen nursing services: The benefits of academic-health service-policy partnerships." Australian College of Nursing National Nursing Forum, 2019. Australia
24. **Zvirawa P, Mendiola M.** An efficacy and feasibility study comparing topical use of acetic acid at the exit site versus mupirocin to prevent exit site infections (ESI) in peritoneal dialysis (PD) patients (ACES study). Renal Society of Australasia, 2019. New Zealand.

Poster Presentations

1. Wu, **M. J. Wolley,** D. Cowley, R. D. Gordon, R. A. Fenton, M. Stowasser. Effects of acute sodium loading on NCC abundance and phosphorylation in hypertensives with raised aldosterone to renin ratio (ARR) in human urinary exosomes. 29th European Meeting on Hypertension and Cardiovascular Protection. 21-24 June 2019, Milan, Italy
2. Wu, **M. J. Wolley,** Q. Wu, R. D. Gordon, R. A. Fenton, M. Stowasser. Administration of exogenous mineralocorticoids and potassium is associated with a reduction in pendrin abundance in urinary exosomes from patients with primary aldosteronism. 29th European Meeting on Hypertension and Cardiovascular Protection. 21-24 June 2019, Milan, Italy
3. Cousins M, Bradshaw J & **Bonner, A.** Renal clinicians experience in establishing and maintaining a professional relationship with patients: A systematic review. Renal Society of Australasia, 2019. New Zealand
4. **Dawson C, Scuderi C.** Utilising an advanced scope pharmacy assistant to assess medication adherence: MAQ a difference. Renal Society of Australasia, 2019. New Zealand
5. Eranga Yapa H, Chambers S, **Purtell L & Bonner A.** Chronic kidney disease in Sri Lanka: Demographic and clinical profile. Renal Society of Australasia, 2019. New Zealand

Poster Presentations (cont)

6. Giuliani K, Rist M, Wang X, Law B, Wilkinson R, Ungerer J, Forbes J, **Healy H**, Kassianos A. Human hypoxic proximal tubule epithelial cells (PTEC) trigger NLRP3 inflammasome activation in CD1+c dendritic cells (DC). In: *Kidney International Reports* 2019;4(7): S220. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (SUN-149)
7. **Gois P**, Purtell L, **Bonner A**, **Chang GK**, **Lal V**, **Cation A**, **Kark AL**, **Healy HG**. The Keeping Kidneys Program: Baseline results form a new model of Care for Community Kidney Health. In: *Journal of the American Society of Nephrology Abstract Supplement* 2019;30:1180. Poster presented at Kidney Week American Society of Nephrology; 2019 Nov 5-10; Washington DC, US. (SA-PO0851)
8. Guo Z, **McWhinney BC**, **Ungerer JPJ**, **Wolley M**, Gordon RD, Stowasser M. Biochemical, histopathological and genetic differences between posture responsive and unresponsive aldosterone-producing adenomas. The 15th Asian-Pacific Congress of Hypertension (APCH) 2019. 24-27 November 2019, Brisbane, QLD, Australia. Poster Presentation – Abstract 43. (also presented at the 2019 Princess Alexandra Hospital Health Symposium and the 2019 Translational Research Symposium)
9. Guo Z, Cowley D, Poglitsch M, **McWhinney BC**, **Ungerer JPJ**, **Wolley M**, Stowasser M. The effect of ramipril on the aldosterone/renin ratio and aldosterone/angiotensin II ratio in patients with primary aldosteronism: A pilot study. The 15th APCH 2019. 24-27 November 2019, Brisbane, QLD, Australia. Moderated Poster Presentation – Abstract 19. (selected as a finalist of ISH students for the poster award and awarded with the Best Student Post Presentation Award at the 15th APCH 2019)
10. **Healy HG**, Giuliani KT, Wang X, Forbes JM, Kassianos AJ. Human Hypoxic Proximal Tubule Epithelial Cells (PTECs) Trigger NLRP3 Inflammasome Activation in CD1c+ Dendritic Cells (DC). In: *Journal of the American Society of Nephrology Abstract Supplement* 2019;30:921. Poster presented at: Kidney Week American Society of Nephrology; 2019 Nov 5-10; Washington DC, US. (SA-PO0620)
11. **Hepburn K**, **Pastore G**, Jegatheesan D, **Ranganathan D**. Proximity of residence to silica mines as a risk factor for anti-neutrophil cytoplasmic antibody-associated (ANCA) vasculitis
12. Hoy W, Zhang J, Wang Z, **Healy H**, Venuthurupalli SK, Fassett R, Tan KS, Cherian R and others. The end of the CKD journey – renal replacement therapy (RRT) or death without RRT: the CKD.Qld experience. In: *Kidney International Reports* 2019;4(7): S108. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (SAT-242)
13. Hoy W, Zhang J, Wang Z, **Healy H**, Venuthurupalli SK, Fassett R, Tan KS, Cherian R and others. The CKD.Qld Registry: characteristics and course of chronic kidney disease (CKD) patients in public nephrology care in Queensland, Australia. In: *Kidney International Reports* 2019;4(7): S109. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (SAT-243)
14. **Jahan S**, **Healy H**, **Summers K**, Giugni R, **Nicholas P**, **Ranganathan D** : Kidney Health Service, Metro North Hospitals and Health Services, Brisbane, QLD The transition care programme: Our experience in the last 10 years, Sept, 2019, Webinar
15. **Jahan S**, Purtell L, **Bonner A**, **Healy HG**, **Rawlings C**. Reasons for Referral to Kidney Supportive Care Clinic and Outcomes in Haemodialysis Population. In: *Journal of the American Society of Nephrology Abstract Supplement* 2019;30:185. Poster presented at: Kidney Week American Society of Nephrology; 2019 Nov 5-10; Washington DC, US. (TH-PO0276)
16. **Jahan S**, Purtell L, **Bonner A**, **Healy HG**, **Rawlings C**. Location and Preference for Place of Death in Those Supported by a Kidney Supportive Care Clinic. In: *Journal of the American Society of Nephrology Abstract Supplement* 2019;30:519. Poster presented at: Kidney Week American Society of Nephrology; 2019 Nov 5-10; Washington DC, US. (FR-PO0321)
17. **Jahan S**, **Rice ML**, **Scuderi CE**, **Purtell L**, **Rawlings C**, **Bonner A** & **Healy HG**. Conservatively managed patients with advanced CKD. What medications can be deprescribed? American Society of Nephrology 2019. Washington DC, USA
18. Khan MA, Giuliani K, Wang X, Hoy W, **Healy H**, Gobe G, **Kassianos A**. Model to test plant-derived chronic kidney disease therapies. In: *Kidney International Reports* 2019;4(7): S90. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (SAT-197)
19. Khan MA, Wang X, Giuliani K, Hoy W, **Healy H**, Gobe G, **Kassianos A**. Establishing a human kidney culture model to test plant-derived chronic kidney disease therapies. ISN World Congress of Nephrology, 2019. Melbourne, Australia
20. Khan MA, Wang X, Giuliani K, Hoy W, **Healy H**, Gobe G, **Kassianos A**. Functional response of human primary proximal tubular epithelial cells to oxidative stress is dependent upon underlying histopathology. RBWH Health Care Symposium, 2019. Brisbane, Australia.
21. **Kilday K**, **Kassianos AJ**, **Hultin S**, B Law, Wang X, Giuliani K, **John G**, Wilkinson R, Francis R, **Harfield M**, See E, Ungerer J, **Healy H**. Functional specialisation of natural killer cell subsets in human kidney transplant rejection. In: *Kidney International Reports* 2019;4(7): S32. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (SAT-069)
22. **Kirby J**, Purtell L, **Bonner A**, **Berquier I**, **Austin L**, **Douglas C**, **Healy H**. Are we wasting your time? Improving time efficiency for patients and families attending a kidney supportive care program. In: Abstract Book page 56. Poster presentation: at the 47th Renal Society of Australasia Annual Conference, 2019 Jun 27-29, Auckland, New Zealand
23. **Kirby J**, **Purtell L** & **Bonner A**. Kidney Supportive Care for Aboriginal and Torres Strait Islander people. National Allied Health conference, 2019. Australia
24. **Kirby J**, **Purtell L** & **Bonner A**. No time to waste. Tailoring the model of care of a Kidney Supportive Care program to prioritise the needs of patients and families attending. National Allied Health conference, 2019. Australia
25. Mckie A, **Bonner A** & **Green T**. Understanding nurse's perceptions of sexual dysfunction in people with end stage kidney disease requiring haemodialysis. Renal Society of Australasia, 2019. New Zealand
26. **Mon SY**, Do Campo J. Ramsay Hunt Syndrome and similar entity: Management dilemma. Royal Australian College of Physicians Congress, May 2019, Auckland, New Zealand
27. **Mon SY**, Yates D, Oh Y, **Kubler P**, **Ranganathan D**. A Multi-centre Retrospective Cohort Study Assessing the Incidence of Serious Infections in Lupus Nephritis Patients, Compared to Non-renal Systemic Lupus Erythematosus _world Congress of Nephrology, March 2019
28. Owens E, **Healy H**, Tan KS, Venuthurupalli SK, Ellis R, **Cameron A**, Gobe G, Hoy W. Geographical districtuoin of “uncertain” renal disease diagnosis in renal specialty practices of South-East Queensland and Darling Downs. In: *Kidney International Reports* 2019;4(7): S257. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (SUN-236)

Poster Presentations (cont)

29. **Pedro G, Purtell L, Bonner A, Chang G, Lal V, Cation A, Kark A & Healy H.** The Keeping Kidneys program: Baseline results from a new model of care of community kidney health. American Society of Nephrology 2019. Washington DC, USA
30. **Purtell L, Bonner A, Berquier I, Douglas C, Healy H.** Longitudinal evaluation of patients with advanced stages of chronic kidney disease attending a multidisciplinary kidney supportive care clinic. In: *Kidney International Reports* 2019;4(7): S198. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (SUN-101)
31. **Purtell L, Bonner A, Berquier I, Douglas C, Healy H.** Supportive care for Aboriginal and Torres Strait Islander people with advanced CKD in an urban setting. In: *Kidney International Reports* 2019;4(7): S369. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (MON-162)
32. **Ranganathan D, Williams L, Williams N, Wolley M.** ACRER study in PD patients; World Congress of Nephrology, March 2019
33. **Rice M, Scuderi C, Berquier I, Purtell L, Douglas C, Bonner A, Healy H.** The role of the pharmacist in Kidney Supportive Care – a case example. In: *Kidney International Reports* 2019;4(7): S369. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (MON-163)
34. **Rice M, Scuderi C, Healy H.** Pexip pilot pharmacy review: Videohealth consults pushing pharmacists into patients' homes using smart technology. In: *Kidney International Reports* 2019;4(7): S352. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (MON-118)
35. **Rice M, Scuderi C, Purtell L, Bonner A & Healy H.** Kidney Supportive Care (KSC) deprescribing. Society of Hospital Pharmacists of Australia 2019. Australia
36. **Scuderi C, Rice M, Henty A, Purtell L, Bonner A & Healy H.** Role of pharmacists in a GP with Special Interest chronic disease clinic – Keeping Kidneys. Society of Hospital Pharmacists of Australia 2019. Australia
37. **Scuderi C, Millhouse S, Rice M, Ironside D, Dawson C, Zipf J.** Use of a self-reported measure of medication adherence in a chronic kidney disease clinic. Society of Hospital Pharmacists of Australia – Medicines Management Conference 2019
38. **Sowa M, Purtell L, Hoy W, Healy H, Bonner A, Connelly L.** Kidney Supportive Care: Health service utilization outcomes from a program implementation in Brisbane, Australia. In: *Kidney International Reports* 2019;4(7): S174. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (SUN-049)
39. **Talbot B, Gois PF, Healy H, Gallagher A, Sen S, Chadban S, Gallagher M, Knight J and others.** Variations in environmentally sustainable practice within Australian Dialysis Units: time for a nationwide approach. In: *Kidney International Reports* 2019;4(7): S178. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia. (SUN-058)
40. **Wang X, Kassianos AJ, Kildey K, Wilkinson R, Healy H.** Molecular profiling of apical versus basolateral exosomes derived from human proximal tubule epithelial cells (PREC) under normal and disease conditions. In: *Kidney International Reports* 2019;4(7): S32. Poster presented at: International Society of Nephrology World Congress of Nephrology, 2019 Apr 12-15, Melbourne, Australia.

Details of staff that completed their PhDs in 2019 within your department / research group

Name	Name of Project	Completed Date	Affiliated University/ies
Becker Law	Functional characterisation of innate lymphocyte subsets in human kidney disease	24 Sept 2019	QUT

Other communications and outputs

KIDNEY HEALTH SERVICE INTERNATIONAL VISITING ACADEMICS

Visiting Academic	Hosted By	Event	Visiting Academic's Institute
Associate Professor Suceena Alexander, MD,	Kassianos, A. Queensland Institute of Medical Research (QIMR), John G. Kidney Health Service, Healy H. Kidney Health Service	Queensland Institute of Medical Research Conjoint Kidney Laboratory Visit and Presentation – April 2019	Department of Nephrology, Christian Medical College, Vellore, India
Dr Seokchan Hong, MD, PhD.	Kassianos, A. Queensland Institute of Medical Research (QIMR), Healy H. Kidney Health Service	Queensland Institute of Medical Research Conjoint Kidney Laboratory Visit and Presentation – April 2019	Division of Rheumatology, Department of Internal Medicine, University of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea
Professor Sara Davison	Healy H. Kidney Health Service, Austin, L. Kidney Supportive Care, Berquier I. Kidney Supportive Care, Bonner A. Professorial Nursing Unit	Key Note Speaker: Kidney Supportive Care Symposium – April 2019	Nephrologist and Bioethicist, Department of Medicine, University of Alberta. Co-chair of Kidney Disease Improving Global Outcomes (KDIGO) and Lead for Kidney Care, Canada

Other communications and outputs (cont)

KIDNEY HEALTH INNOVATIONS

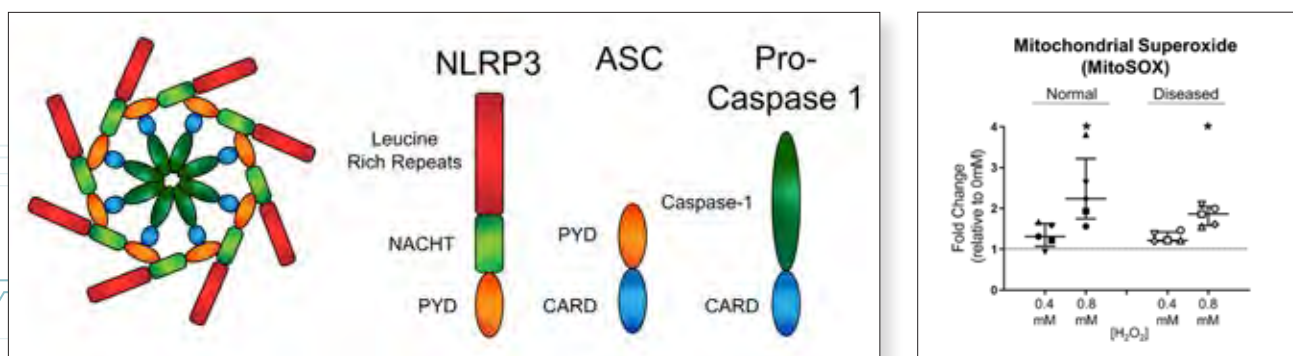
The Keeping Kidneys project was awarded \$359,000 in Metro North Hospital and Health Service (MNHHS) Leading Innovation through Networking and Knowledge – Sharing (LINK) innovation funding for the expansion and scientific evaluation of the model from 1 May 2019 to 30 April 2020. This includes a component of funding to research partner QUT for data analysis and evaluation of the project.

INTERNATIONAL SISTER SITES

International Society of Nephrology Level B sponsorship – Dr Sudha Ekambaram (EC), Mehta Multispecialty Hospital, Chennai, India and **Dwarakanathan Ranganathan** (SC), Dr Peter Trnka(SC) – US\$ 12000 pa for years 2018 and 2019.



NLRP3 INFLAMMASOME



DEPARTMENT OF NEUROLOGY-EPILEPSY TEAM

Commencement of the integrating Genomics into Clinical Care research project and recruitment of a research assistant and genetic counsellor based in neurology for this project

UQCCR Publication of the Month July 2019 “Deciphering the role of epigenetics in self-limited epilepsy with centrotemporal spikes”.

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Kimberley Irwin	Clinical Trial Coordinator	0.66	Epilepsy Clinical Trials	University of Queensland
Yvonne Gautam	Clinical Trial Officer	0.6	Epilepsy Clinical Trials	University of Queensland
Carmen Bennett	Research Assistant	0.6	Integrating Genomics into Clinical Care	University of Queensland
Melanie Tom	Genetic Counsellor	0.6	Integrating Genomics into Clinical Care	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Professor David Reutens		STAR -2 Open Label Extension Study to ZYN2-CL-03 to Assess the Long-Term Safety and Efficacy of ZYN002 Administered as a Transdermal Gel to Patients with Partial Onset Seizures
Professor David Reutens		GWEP1521 A double-blind, randomized, placebo-controlled study to investigate the efficacy and safety of cannabidiol (GWP42003-P, CBD) as add-on therapy in patients with tuberous sclerosis complex who experience inadequately-controlled seizures
Professor David Reutens		E2007-G000-338 A Multicenter, Double-Blind, Randomized, Placebo-Controlled Trial With an Open-Label Extension Phase of Perampanel as Adjunctive Treatment in Subjects at Least 2 Years of Age With Inadequately Controlled Seizures Associated With Lennox Gastaut Syndrome
Professor David Reutens		EP0091 A randomised, double-blind, placebo-controlled, dose finding study to evaluate the efficacy and safety of padsevonil as adjunctive treatment of focal-onset seizures in adult subjects with drug-resistant epilepsy
Professor David Reutens		EP0092 A multicenter, randomized, double-blind, placebo-controlled, parallel-group study to evaluate the efficacy and safety of padsevonil as adjunctive treatment of focal-onset seizures in adult subjects with drug-resistant epilepsy
Professor David Reutens		EP0093 A open label, multicentre, extension study to evaluate the safety and efficacy of padsevonil as adjunctive treatment of focal-onset seizures in adult subjects with drug resistant epilepsy
Professor David Reutens		YKP3089C021 An Open Label, Multicentre, Safety and Pharmacokinetic Study of YKP3089 as Adjunctive Therapy in Subjects with Partial Onset Seizures
Professor David Reutens		OPTALERT Seizure detection from eyelid movement using a wearable device in epilepsy

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Lata Vadlamudi	Dr Lata Vadlamudi	Integrating Genomics into Care Centre for Clinical Research (CCR), UQ
Dr Lata Vadlamudi	Dr Lata Vadlamudi	Functional Genomics with Australian Institute of Bioengineering and Nanotechnology (AIBN), UQ

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Professor David Reutens	Fellow of the Australian Academy of Health and Medical Science	

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Lata Vadlamudi	Epilepsy Service Neurology Department RBWH	A functional genomics approach to personalise refractory epilepsy management	RBWH Research Foundation	\$40,000	\$40,000	2019
DC Reutens and 23 other applicants	Epilepsy Service Neurology Department RBWH	ARC Training Centre for Innovation in Biomedical Imaging Technology	ARC Industrial Transformation Training Centres	\$4,744,000		2017-2021
DC Reutens , T Woodruff, M Ruitenber, M Chen, G McLachlan	Epilepsy Service Neurology Department RBWH	Targeting Complement in post-traumatic epileptogenesis	United States Department of Defence	\$696,000		2017-2019

2019 Research Publications

Journal Articles

- Du J, Vegh V, **Reutens D**. Small changes in synaptic gain lead to seizure-like activity in neuronal network at criticality. *Sci Rep* 2019 Jan 31;9(1):1097. doi: 10.1038/s41598-018-37646-9
- Vogel M, Pellicer Guridi R, Su J, Vegh V, **Reutens D**. 3D-Spatial encoding with permanent magnets for ultra-low field magnetic resonance imaging. *Sci Rep* 2019 Feb 6;9(1):1522. doi: 10.1038/s41598-018-37953-1
- Venkatachalam TK, Bernhardt PV, Pierens GK, Stimson DHR, Bhalla R, **Reutens DC**. Synthesis and characterization of indium (III) bis-thiosemicarbazone complexes: 18F incorporation for PET imaging. *Aust J Chem* 2019; 72(5):383-391
- Bonyadi MR, **Reutens DC**. Optimal-margin evolutionary classifier. *IEEE Trans Evol Comput* 2019; 23(5):885-898
- Kausar ASMZ, **Reutens DC**, Weber E, Vegh V. Monopole antenna array design for 3T and 7 T magnetic resonance imaging. *PLoS One* 2019 Apr 1;14(4): e0214637
- Ziaei M, Persson J, Bonyadi MR, **Reutens DC**, Ebner NC. Amygdala functional network during recognition of own-age vs. other-age faces in younger and older adults. *Neuropsychologia*. 2019; 129:10-20
- Venkatachalam TK, Stimson DHR, Bhalla R, Mardon K, Bernhardt PV, **Reutens DC**. Synthesis of 18F-radiolabeled diphenyl gallium dithiosemicarbazone using a novel halogen exchange method and in vivo biodistribution. *J Labelled Comp Radiopharm*. 2019 62(7):321-331
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Journal Articles (cont)

10. Stimson DHR, Qiao Z, **Reutens DC**, Venkatachalam TK. Investigation on the impact of three different quaternary methyl ammonium cartridges on the radiosynthetic yields of [18 F] fluoromethyl tosylate. *J Labelled Comp Radiopharm*. 2019; 62(9):588-595
11. Migotto M, Mardon K, Orian J, Weckbecker G, Kneuer R, Bhalla R*, **Reutens D***. Efficient distribution of a Novel Zirconium-89 Labeled Anti-CD20 Antibody Following Subcutaneous and Intravenous Administration in Control and Experimental Autoimmune Encephalomyelitis-Variant Mice. *Front Immunol*. 2019 Oct 18; 10:2437. doi: 10.3389/fimmu.2019.02437. eCollection 2019
12. Caradonna P, **Reutens D**, Takahashi T, Takeda S, Vegh V. Probing entanglement in Compton interactions. *J. Phys. Commun* 2019 3 105005
13. Qiao Z, Mardon K, Stimson DHR, Migotto MA, **Reutens DC**, Bhalla R. Synthesis and evaluation of 6-[18F] fluoro-3-(pyridin-3-yl)-1H-indole as potential PET tracer for targeting tryptophan 2, 3-dioxygenase (TDO). *Nucl Med Biol*. 2019 Dec 20;84-85:1-10. doi: 10.1016/j.nucmedbio.2019.12.007
14. Lawrence S, Sturgess D, **Reutens D**. The lumbar ligamentum flavum does not have two layers and is confluent with the interspinous ligament. *Clin Anat*. 2019 Nov 20. doi: 10.1002/ca.23518
15. Du J, Vegh V, **Reutens D**. Persistent sodium current blockers can suppress seizures caused by loss of low-threshold D-type potassium currents: predictions from an in silico study of Kv1 channel disorders. *Epilepsia Open* <https://doi.org/10.1002/epi4.12379>
16. Mohandas N., Loke Y.J., MacKenzie L., Bennett C., Berkovic S.F., Craig J.M., **Vadlamudi L**. Deciphering the role of epigenetics in self-limited epilepsy with centrotemporal spikes. *Epilepsy Res* 2019;156: 106163. doi: 10.1016/j.epilepsyres.2019.106163
17. Mohandas N., Loke Y.J., Hopkins S., MacKenzie L., Bennett C., Berkovic S.F., **Vadlamudi L.**, Craig J.M. Evidence for type-specific DNA methylation patterns in epilepsy: a discordant monozygotic twin approach. *Epigenomics*. 2019 Jun;11(8):951-968. doi: 10.2217/epi-2018-0136. Epub 2019 Jun 5
18. Vajda FJE, O'Brien TJ, Graham JE, Hitchcock AA, **Lander CM, Eadie MJ**. Preexisting illness, fetal malformation, and seizure control rates in pregnant women with epilepsy. *Epilepsy Behav*. 2019 Nov 8:106481. doi: 10.1016/j.yebeh.2019.106481. [Epub ahead of print]
19. Vajda FJE, Graham JE, Hitchcock AA, **Lander CM**, O'Brien TJ, **Eadie MJ**. Antiepileptic drugs and foetal malformation: analysis of 20 years of data in a pregnancy register. *Seizure*. 2019 Feb; 65:6-11. doi: 10.1016/j.seizure.2018.12.006. Epub 2018 Dec 19
20. Vajda FJE, O'Brien TJ, Graham JE, Hitchcock AA, **Lander CM, Eadie MJ**. Valproate-associated foetal malformations-Rates of occurrence, risks in attempted avoidance. *Acta Neurol Scand*. 2019 Jan;139(1):42-48. doi: 10.1111/ane.13005. Epub 2018 Aug 14
21. Somerville E, Black A, **Lander C**, Jones D, Beran R, Gordon J, Burrow J, Archer J, Dunne J, Cook M, Berkovic S, Harvey AS. A decision tree to determine fitness to drive in epilepsy: Results of a pilot in two Australian states. *Epilepsia*. 2019 Jul;60(7):1445-1452. doi: 10.1111/epi.16020. Epub 2019 May 21.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Oral Presentations

1. **Dr Lata Vadlamudi** State-of-the-Art Symposium, Royal Brisbane and Women's Hospital 11 September 2019 Improving patient outcomes in neurological disorders: Piloting a neurogenetics service for refractory epilepsy patients
2. **Dr Cecillie Lander** Update on Pregnancy and Epilepsy, for Epilepsy Queensland Annual Conference, November 2019. Management of Women with Epilepsy, Conference of Hospital Pharmacists, Gold Coast November 2019.



DEPARTMENT OF NEUROLOGY- MOTOR NEURONE DISEASE RESEARCH

Participated in multi-site Phase 2 and Phase 3 clinical trials with both pharmaceutical and collaborative research groups. Participated in investigator-led research in collaboration with the RBWH Oncology Dept and the University of New South Wales.

Securing of \$249,931 funding from FightMND to further validate “Point of care assessment of venous acid-base balance and creatinine as markers for disease progression in patients with Motor Neuron Disease (MND)”:

- Investigators: F Steyn, S Ngo, R Henderson, L van den Berg, R van Eij
- Project duration: January 2020-December 2021
- Pilot data for this grant was generated through funding support from a 2018 RBWH Foundation Research Grant “Use of Point of Care (PoC) testing to improve respiratory management and monitoring of disease progression in ALS: A Pilot Study”.

Securing of \$718,125 funding from FightMND to conduct an investigator-initiated, multi-centre Phase 1 trial “Targeting metabolic flexibility in amyotrophic lateral sclerosis (ALS) (MetFlex); Safety and tolerability of Trimetazidine for the treatment of ALS”:

- Investigators: S Ngo, R Henderson, L van den Berg, A Al-Chalabi, F Steyn, R van Eijk, JP Loeffler
- Project duration: January 2020-December 2021
- The application for funding was built off data and publications arising from a current RBWH study “Metabolic Exploration in Motor Neurone Disease (MEND-MND).

Securing of \$39,964 funding from the RBWH and RBWH Foundation Research Grants scheme to conduct a novel project “Investigating the immunometabolic nature of MND: a study linking metabolism, inflammation, and clinical outcomes in MND patients”:

- Investigators: S Ngo, R Henderson, F Steyn, P McCombe, R Gordon
- Project duration: January 2020-December 2020
- The application for funding was based on data, obtained in part, through a current RBWH study “Metabolic Exploration in Motor Neurone Disease (MEND-MND).

Securing of a \$696,210 Ideas Grant from the National Health and Medical Research Council to conduct pre-clinical research into the modulation of metabolism as a therapeutic approach in MND:

- Investigators: S Ngo, F Steyn, P Noakes
- Project duration: January 2020-December 2022
- The application for funding included pre-clinical mouse data that was generated due to knowledge gained through a current RBWH study “Metabolic Exploration in Motor Neurone Disease (MEND-MND).

Securing of \$249,720 funding from the Motor Neurone Disease Research Institute of Australia to conduct pre-clinical research into understanding how interactions between mitochondria and protein aggregates might cause neuronal death in MND:

- Investigators: S Ngo, X Wang, F Steyn, A Walker
- Project duration: April 2020-April 2022
- The application for funding included pre-clinical data obtained from human induced pluripotent stem cell derived neurons that were generated from skin samples donated by participants who enrolled in a current RBWH study “Metabolic Exploration in Motor Neurone Disease (MEND-MND).

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Gaurav Singh	Visiting Neurologist	0.1	MND Research Fund – RBWH Foundation	Clinical Phase 2 and Phase 3 studies, Investigator-led studies	Gold Coast University Hospital
Matthew Katz	Research Fellow	0.5	MND Research Fund – RBWH Foundation	Clinical Phase 2 and Phase 3 studies, Investigator-led studies	
Susan Heggie	Research Coordinator	0.9	MND Research Fund – RBWH Foundation	Clinical Phase 2 and Phase 3 studies, Investigator-led studies	
Kathryn Thorpe	Research Coordinator	0.9	MND Research Fund – RBWH Foundation	Clinical Phase 2 and Phase 3 studies, Investigator-led studies	
Robyn Tuffley	Research Nurse	0.4	MND Research Fund – RBWH Foundation	Clinical Phase 2 and Phase 3 studies, Investigator-led studies	

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Frederik Steyn	Honorary Researcher	Visiting	Endocrine and Appetite Targets and Therapies for Motor Neuron Disease; A prospective observational Study; Investigating the role of energy metabolism, lipid storage and appetite in MND	University of Queensland (2008-)
Amelia Ceslis	Honorary Neuropsychologist	Visiting	Assessment of cognition and behaviour in Motor Neurone Disease in a clinical setting and the impact of education sessions on care giver well-being	University of Queensland (2016-)
Shyuan Ngo	Honorary Researcher	Visiting	Investigating the role of energy metabolism and lipid storage in MND; Studying responses of patient neurones and muscle derived from patient skin and muscle biopsies	University of Queensland (2009-)
Fleur Garton	Honorary Researcher	Visiting	Understanding Rare Disease Mechanisms; Clinical Presentation and Prediction	University of Queensland (2016-)
Gail Robinson	Honorary Neuropsychologist	Visiting	Longitudinal assessment of behaviour and cognition in ALS through brief Online Carer's behavioural Questionnaire (OCQ)	University of Queensland (2010-)

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Robert Henderson	Collaborative Medicinal Development Pty Ltd	A Multi-centre Randomised, Double-Blind, Placebo-Controlled Phase 2 Study of Cu(II) ATSM in Patients with Amyotrophic Lateral Sclerosis/Motor Neurone Disease
Robert Henderson	Orion Pharma / PRA Health Sciences	Effects of oral Levosimendan (ODM-109) on respiratory function in patients with ALS
Robert Henderson	Steve Vucic, Matthew Kiernan, Westmead Hospital / IQVia	Phase 2 Randomised Placebo-controlled Double-blind Study to assess the Efficacy and Safety of Tecfidera in Patients with Amyotrophic Lateral Sclerosis – TEALS study
Robert Henderson	Cytokinetics Inc./ Parexel International Pty Ltd	A Phase 2, Multi-centre, Double-Blind, Randomised, Dose-ranging, placebo-controlled study to evaluate the efficacy, Safety, and tolerability of CK-2127107 in patients with Amyotrophic Lateral Sclerosis (ALS)

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Shyuan Ngo (UQ)	Pam McCombe (Neurology), Robert Henderson (Neurology)	Energy metabolism and lipid storage in motor neurone disease (MND)
Frederik Steyn (UQ)	Pam McCombe (Neurology), Robert Henderson (Neurology)	Endocrine and Appetite Targets and Therapies for Motor Neuron Disease; A prospective observational Study
Frederik Steyn (UQ)	Robert Henderson (Neurology)	Use of Point of Care (PoC) testing to improve respiratory management and monitoring of disease progression in ALS: A Pilot Study
Amelia Ceslis	Robert Henderson (Neurology)	Assessment of cognition and behaviour in Motor Neurone Disease in a clinical setting and the impact of education sessions on care giver well-being
Gail Robinson (UQ)	Robert Henderson (Neurology), Pam McCombe (Neurology)	Longitudinal assessment of behaviour and cognition in ALS through brief Online Carer's behavioural Questionnaire (OCQ)
Fleur Garton (UQ)	Robert Henderson (Neurology)	Understanding Rare Disease Mechanisms; Clinical Presentation and Prediction
David Wyld (Oncology)	Robert Henderson (Neurology)	Peripheral Neuropathy in Chemotherapy-treated Patients: Predictors, Assessment strategies and Functional Outcomes- INFOCUS Study

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Gail Robinson	Neurology	Longitudinal assessment of behaviour and cognition in ALS through brief Online Carer's behavioural Questionnaire (OCQ)	MNDRIA	\$3000	\$3000	2018-2019

2019 Research Publications

Journal Articles

1. Trabjerg B, **Henderson RD** et al. ALS in Danish Registries: heritability and links to psychiatric and cardiovascular disorders accepted in Neurology:Genetics December 2019
2. Vucic S, **Henderson RD** et al. Phase 2 Randomised Placebo Controlled Double Blind Study to Assess the Efficacy and Safety of Tecfidera in Patients with Amyotrophic Lateral Sclerosis (TEALS Study) accepted in Medicine December 2019
3. Al-Chalabi A, **Henderson RD** et al. A Proposal for New Diagnostic Criteria for ALS accepted in Clinical Neurophysiology December 2019
4. **Henderson RD**, Eisen E. ALS Split Phenotypes – to what extent do they exist. Accepted in Clinical Neurophysiology December 2019
5. Wray N, **Henderson RD**, **McCombe PA** et al. Significant out-of-sample classification from methylation profile scoring for amyotrophic lateral sclerosis. Accepted in Genomic Medicine December 2019
6. Lee A, Arachchige BJ, Reed S, **Henderson RD**, Aylward J, **McCombe PA**. Plasma from some patients with Amyotrophic Lateral Sclerosis exhibits elevated formaldehyde levels. Accepted in Journal of the Neurological Sciences November 2019
7. McCrary JM, Goldstein D, Wyld D, **Henderson RD**, Lewis CR, Park SB. Mobility in survivors with chemotherapy-induced peripheral neuropathy and utility of the 6-min walk test. J Cancer Surviv. 2019 Jun 6. doi: 10.1007/s11764-019-00769-7
8. Cousyn L, Law-Ye B, Pyatigorskaya N, Debs R, Froissart R, Piraud M, Federico A, Salvatore S, Cerase A, Macário MC, Durães J, Kim SH, Adachi H, Audoin B, Aygnac X, Da Y, **Henderson RD**, La Piana R, Laule C, Nakamagoe K, Raininko R, Schols L, Sirrs SM, Viader F, Jastrzębski K, Leclercq D, Nadjar Y. Brain MRI features and scoring of leukodystrophy in adult-onset Krabbe disease. Neurology. 2019 Jul 23. doi: 10.1212/WNL.00000000000007943
9. **McCombe PA**, **Henderson RD**, Lee A, Woodruff T, Lee J, Restuadi R, McRae A, Wray NR, Ngo ST and Steyn FJ Gut microbiota in ALS: possible role in pathogenesis? 2019. Expert Review of Neurotherapeutics. 19 (9): 785-805
10. Ngo ST*, van Eijk RPA*, Chachay V, van den Berg LH, **McCombe PA**, **Henderson RD** and Steyn FJ. Loss of appetite is associated with a loss of weight and fat mass in patients with amyotrophic lateral sclerosis. 2019. Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration. 20(7-8):497-505. *Equal contribution
11. Kirk SE, Tracey TJ, Steyn FJ and Ngo ST. Biomarkers of metabolism in ALS. 2019. Frontiers in Neurology. 10: 191
12. **McCombe PA**, Ngo ST, Guo CC, Fazlollahi A, Bollmann S, Wang L, Hu X, Barth M, Salvado O, Davis M, Ceslis A, Robinson GA, Henderson RD, and Steyn FJ. An ALS patient with a novel TBK1 mutation, widespread brain involvement, behaviour changes, and metabolic dysfunction. 2019. Journal of Neurology, Neurosurgery, and Psychiatry. 90 (8): 952-954
13. Beecroft SJ, Olive M, Quereda LG, Gallano MP, Ojanguren I, McLean C, **McCombe PA**, Laing NG, Ravenscroft G. Cylindrical spirals in two families: Clinical and genetic investigations. Neuromuscul Disord. 2019 Dec 25. pii: S0960-8966(19)31233-7. doi: 10.1016/j.nmd.2019.12.006. [Epub ahead of print].
14. Kunchok A, Malpas C, Nytrova P, Havrdova EK, Alroughani R, Terzi M, Yamout B, Hor JY, Karabudak R, Boz C, Ozakbas S, Olascoaga J, Simo M, Granello F, Patti F, **McCombe PA**, Csepány T, Singhal B, Bergamaschi R, Frago Y, Al-Harbi T, Turkoglu R, Lechner-Scott J, Laureys G, Oreja-Guevara C, Pucci E, Sola P, Ferraro D, Altintas A, Soysal A, Vucic S, Grand'Maison F, Izquierdo G, Eichau S, Lugaresi A, Onofrij M, Trojano M, Marriott M, Butzkueven H, Kister I, Kalincik T. Clinical and therapeutic predictors of disease outcomes in AQP4-IgG+ neuromyelitis optica spectrum disorder. Mult Scler Relat Disord. 2019 Nov 25; 38:101868. doi: 10.1016/j.msard.2019.101868. [Epub ahead of print]

Journal Articles (cont)

15. Tea F, Lopez JA, Ramanathan S, Merheb V, Lee FXZ, Zou A, Pilli D, Patrick E, van der Walt A, Monif M, Tantsis EM, Yiu EM, Vucic S, Henderson APD, Fok A, Fraser CL, Lechner-Scott J, Reddel SW, Broadley S, Barnett MH, Brown DA, Lunemann JD, Dale RC, Brilot F; **Australasian and New Zealand MOG Study Group**. Characterization of the human myelin oligodendrocyte glycoprotein antibody response in demyelination. *Acta Neuropathol Commun*. 2019 Sep 3;7(1):145. doi: 10.1186/s40478-019-0786-3
16. Fambiatos A, Jokubaitis V, Horakova D, Kubala Havrdova E, Trojano M, Prat A, Girard M, Duquette P, Lugaresi A, Izquierdo G, Grand'Maison F, Grammond P, Sola P, Ferraro D, Alroughani R, Terzi M, Hupperts R, Boz C, Lechner-Scott J, Pucci E, Bergamaschi R, Van Pesch V, Ozakbas S, Granella F, Turkoglu R, Iuliano G, Spitaleri D, **McCombe PA**, Solaro C, Slee M, Ampapa R, Soysal A, Petersen T, Sanchez-Menoyo JL, Verheul F, Prevost J, Sidhom Y, Van Wijmeersch B, Vucic S, Cristiano E, Saladino ML, Deri N, Barnett M, Olascoaga J, Moore F, Skibina O, Gray O, Fragoso Y, Yamout B, Shaw C, Singhal B, Shuey N, Hodgkinson S, Altintas A, Al-Harbi T, Csepany T, Taylor B, Hughes J, Jun JK, van der Walt A, Spelman T, Butzkueven H, Kalincik T. Risk of secondary progressive multiple sclerosis: A longitudinal study. *Mult Scler*. 2020 Jan;26(1):79-90. doi: 10.1177/1352458519868990. Epub 2019 Aug 9
17. **McCombe PA**. Women who contributed to past research in multiple sclerosis. *Mult Scler*. 2019 Oct;25(11):1440-1443. doi: 10.1177/1352458519846101. Epub 2019 May 28
18. Kerage D, Sloan EK, Mattarollo SR, **McCombe PA**. Interaction of neurotransmitters and neurochemicals with lymphocytes. *J Neuroimmunol*. 2019 Jul 15; 332:99-111. doi: 10.1016/j.jneuroim.2019.04.006. Epub 2019 Apr 11. Review
19. Alruwaili AR, Pannek K, **Henderson RD**, Gray M, Kurniawan ND, **McCombe PA**. Tract integrity in amyotrophic lateral sclerosis: 6-month evaluation using MR diffusion tensor imaging. *BMC Med Imaging*. 2019 Feb 22;19(1):19. doi: 10.1186/s12880-019-0319-3
20. Brown JW, Coles A, Horakova D, Havrdova E, Izquierdo G, Prat A, Girard M, Duquette P, Trojano M, Lugaresi A, Bergamaschi R, Grammond P, Alroughani R, Hupperts R, **McCombe PA**, Van Pesch V, Sola P, Ferraro D, Grand'Maison F, Terzi M, Lechner-Scott J, Flechter S, Slee M, Shaygannejad V, Pucci E, Granella F, Jokubaitis V, Willis M, Rice C, Scolding N, Wilkins A, Pearson OR, Ziemssen T, Hutchinson M, Harding K, Jones J, McGuigan C, Butzkueven H, Kalincik T, Robertson N; MSBase Study Group. Association of Initial Disease-Modifying Therapy With Later Conversion to Secondary Progressive Multiple Sclerosis. *JAMA*. 2019 Jan 15;321(2):175-187. doi: 10.1001/jama.2018.20588
21. Kalincik T, Kubala Havrdova E, Horakova D, Izquierdo G, Prat A, Girard M, Duquette P, Grammond P, Onofrij M, Lugaresi A, Ozakbas S, Kappos L, Kuhle J, Terzi M, Lechner-Scott J, Boz C, Grand'Maison F, Prevost J, Sola P, Ferraro D, Granella F, Trojano M, Bergamaschi R, Pucci E, Turkoglu R, **McCombe PA**, Pesch V, Van Wijmeersch B, Solaro C, Ramo-Tello C, Slee M, Alroughani R, Yamout B, Shaygannejad V, Spitaleri D, Sánchez-Menoyo JL, Ampapa R, Hodgkinson S, Karabudak R, Butler E, Vucic S, Jokubaitis V, Spelman T, Butzkueven H. Comparison of fingolimod, dimethyl fumarate and teriflunomide for multiple sclerosis. *J Neurol Neurosurg Psychiatry*. 2019 Apr;90(4):458-468. doi: 10.1136/jnnp-2018-319831. Epub 2019 Jan 13
22. *J Neurol Neurosurg Psychiatry*. 2019 Aug;90(8):955-956. doi: 10.1136/jnnp-2018-319410. Epub 2018 Nov 19. No abstract available
23. Nguyen AL, Havrdova EK, Horakova D, Izquierdo G, Kalincik T, van der Walt A, Terzi M, Alroughani R, Duquette P, Girard M, Prat A, Boz C, Sola P, Ferraro D, Lugaresi A, Lechner-Scott J, Barnett M, Grand'Maison F, Grammond P, Ramo-Tello C, Turkoglu R, **McCombe PA**, Pucci E, Trojano M, Granella F, Spitaleri D, Van Pesch V, Soysal A, Oreja-Guevara C, Verheul F, Vucic S, Hodgkinson S, Slee M, Ampapa R, Prevost J, Menoyo JLS, Skibina O, Solaro C, Olascoaga J, Shaw C, Madsen KG, Naidoo K, Hyde R, Butzkueven H, Jokubaitis V; MSBase Study Group. Incidence of pregnancy and disease-modifying therapy exposure trends in women with multiple sclerosis: A contemporary cohort study. *Mult Scler Relat Disord*. 2019 Feb; 28:235-243. doi: 10.1016/j.msard.2019.01.003. Epub 2019 Jan 3
24. Mehta D, Wani S, Wallace L, Henders AK, Wray NR, **McCombe PA**. Cumulative influence of parity-related genomic changes in multiple sclerosis. *J Neuroimmunol*. 2019 Mar 15; 328:38-49. doi: 10.1016/j.jneuroim.2018.12.004. Epub 2018 Dec 17.

Book Chapters / Letters

1. **Henderson RD**, Spies J. Autonomic Neuropathy in *Textbook of Neurology*. Hankey G (ed). 2019.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Ngo ST**. Insights into metabolic imbalance in motor neuron disease. Australasian Neuroscience Society Meeting, Adelaide, 2019.

Oral Presentations

1. Ngo ST, Chachay V, McLaren-Hedwards T, Lucia D, **Henderson RD**, **McCombe PA**, Steyn, F.J. Increased dietary intake could offset increased resting energy expenditure in hypermetabolic patients with MND. 30th International ALS/MND Symposium, Perth, Australia
2. Ngo ST, van Eijk RPA, Chachay V, van den Berg LH, **McCombe PA**, **Henderson RD**, Steyn, F.J. Loss of appetite is associated with a loss of weight and fat mass in patients with amyotrophic lateral sclerosis. 30th International ALS/MND Symposium, Perth, Australia
3. Kirk SE, Tefera TW, Kelk D, Tracey TJ, Wimberger E, **McCombe PA**, **Henderson RD**, Steyn FJ, Ngo, ST. Altered skeletal muscle glucose-fatty acid flux in amyotrophic lateral sclerosis. 30th International ALS/MND Symposium, Perth, Australia

Poster Presentations

1. Ngo S, Holdom C, **McCombe PA**, **Henderson RD**, Steyn FJ. On-the-spot assessment of venous creatinine as a marker for change in fat free mass and disease progression in patients with MND. 30th International ALS/MND Symposium, Perth, Australia
2. Tracey TJ, Steyn FJ, **McCombe PA**, **Henderson RD**, Wolvetang EJ, Ngo ST. Optimisation of a method for the direct reprogramming of patient fibroblasts into lower motor neurons. 30th International ALS/MND Symposium, Perth, Australia
3. Ceslis A, Henders A, Gallagher LA, Wray N, **Henderson RD**, **McCombe PA** & Robinson, G. A. Development of the Online Carer's Questionnaires (OCQ) behaviour screen for MND. 30th International Symposium on ALS/MND 2019. Perth, Australia.

DEPARTMENT OF NEUROLOGY- STROKE

RBWH continues to contribute to acute stroke trials in Australia, an area where Australia is highly competitive internationally. In recognition of this contribution, landmark publications in the *Lancet* and the *New England Journal of Medicine* in 2019 included stroke specialists from RBWH. These articles have changed practice and led to many more patients receiving thrombolytic therapy, with the potential for better outcomes and less stroke-related disability.

We also farewelled our long-servicing Clinical Trial coordinator Genevieve Skinner but have plans to restart clinical trial activity later in 2020. We were joined by Dr Michael Roizman as stroke fellow for the year, who contributed significantly to both the clinical and research activities of the department.

Another successful Master Stroke Business Lunch was held with Jeff Thomson as guest speaker, and many cricketing anecdotes from the 70s and 80s were shared whilst raising funds for further stroke research.

The team is looking forward to another productive year of research in 2020, contributing to, disseminating and implementing the latest in stroke research at RBWH and broader Queensland.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Wayne Loudon	PhD, QUT (2018-2024)	An Investigation of the Pre-Hospital Diagnosis and Triage of Ischaemic Hyper-Acute Stroke to Recommended Reperfusion therapies	Vivienne Tippett, Andrew Wong , Simon Finnigan

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Michael O'Sullivan	Director	0.3	Operationally Funded	Herston Imaging Research Facility	University of Queensland
Michael O'Sullivan	Theme lead	0.5	Externally Funded	Clinical Neuroscience UQCCR	University of Queensland
Andrew Wong	Associate Professor	Academic title holder			University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Andrew Wong	Simon Finnigan (<i>UQ</i>), Vivienne Tippett (<i>QUT</i>)	SPIDER (Stroke Prehospital Informed Decision-making using EEG Recordings)
Michael O'Sullivan/ Andrew Wong		Apathy after Stroke

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Stephen Davis	Andrew Wong, Claire Muller, Michael Roizman	THALES
Bruce Campbell (<i>Melbourne</i>)	Andrew Wong, Claire Muller, Michael Roizman	REMEDY
Bruce Campbell (<i>Melbourne</i>)	Andrew Wong, Claire Muller, Michael Roizman	EXTEND-IA tNK part 2
Geoff Donnan (<i>Melbourne</i>)	Andrew Wong, Claire Muller	RESTORE-BRAIN
Carlos Garcia Esperon (<i>Newcastle</i>)	Andrew Wong, Claire Muller, Michael Roizman	TASTE
Andrew Lee (<i>Adelaide</i>)	Andrew Wong, Claire Muller, Michael Roizman	ATTUNE
Bernard Yan (<i>Melbourne</i>)	Andrew Wong, Claire Muller, Michael Roizman	DIRECT-SAFE
Christopher Bladin (<i>Melbourne</i>)	Claire Muller, Michael Roizman, Andrew Wong	TEXAIS
Craig Anderson (<i>George Institute for Global Health</i>)	Michael O'Sullivan	TRIDENT
Sharon Naismith (<i>Sydney</i>)	Michael O'Sullivan	TRIDENT-Cog (<i>trial substudy</i>)
Hugh Markus (<i>Cambridge UK</i>)	Michael O'Sullivan	Apathy in Stroke International Consortium
Julie Bernhardt (<i>Melbourne</i>)	Michael O'Sullivan	ISRRA (<i>International Stroke Recovery and Rehabilitation Alliance</i>)
Christopher Levi (<i>Sydney/Newcastle</i>)	Michael O'Sullivan	MIDAS

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Andrew Wong	Stroke	SPIDER (<i>Stroke Prehospital Informed Decision-making using EEG Recordings</i>)	RBWH and RBWH Foundation Research Advisory Committee	\$39,946	\$39,946	2019
Michael O'Sullivan	Stroke	TRIDENT Cognitive Substudy	NHMRC	\$1.4M		2019-2022

2019 Research Publications

Journal Articles

1. Campbell, B. C., Ma, H., Ringleb, P. A., Parsons, M. W., Churilov, L., Bendzus, M., . . . **Wong, A., Muller, C., . . .** Fatar, M. (2019). Extending thrombolysis to 4- 5–9 h and wake-up stroke using perfusion imaging: a systematic review and meta-analysis of individual patient data. *The Lancet*
2. Loudon, W., **Wong, A.**, Disney, M., & Tippett, V. (2019). Validated pre-hospital stroke scales to predict large vessel occlusion: a systematic review. *Australasian Journal of Paramedicine*, 16
3. Loudon, W., **Wong, A.**, Finnigan, S., & Tippett, V. (2019). Stroke Prehospital Informed Decision-Making Using EEG Recordings (SPIDER). *Prehospital Disaster Medicine*, 34(s1), s87-s88
4. Ma, H., Campbell, B. C., Parsons, M. W., Churilov, L., Levi, C. R., Hsu, C., . . . **Wong, A., . . .** Dewey, H. M. (2019). Thrombolysis guided by perfusion imaging up to 9 hours after onset of stroke. *New England Journal of Medicine* 380(19), 1795-1803.
5. **Muller, C., Roizman, M., & Wong, A.** (2019). Secondary prevention of ischaemic stroke. *Internal Medicine Journal*, 49(10), 1221-1228.
6. Roxbury, T., McMahon, K., **Wong, A.**, Farrell, A., Burfein, P., Taubert, S., . . . Copland, D. (2019). Brain activity during spoken word recognition in subacute aphasia. *Brain language*, 195, 104630.
7. McDonald MW, Black SE, Copland DA, Corbett D, Dijkhuizen RM, Farr TD, Jeffers MS, Kalaria RN, Karayanidis F, Leff AP, Nithianantharajah J, Pendlebury S, Quinn TJ, Clarkson AN, **O'Sullivan MJ**. Cognition in Stroke Rehabilitation and Recovery Research: Consensus-based Core Recommendations from the Second Stroke Recovery and Rehabilitation Roundtable. *Neurorehabilitation and Neural Repair* 2019; 33: 943-950
8. McDonald MW, Black SE, Copland DA, Corbett D, Dijkhuizen RM, Farr TD, Jeffers MS, Kalaria RN, Karayanidis F, Leff AP, Nithianantharajah J, Pendlebury S, Quinn TJ, Clarkson AN, **O'Sullivan MJ**. Cognition in Stroke Rehabilitation and Recovery Research: Consensus-based Core Recommendations from the Second Stroke Recovery and Rehabilitation Roundtable. *Int J Stroke* 2019; 14: 774-782
9. **O'Sullivan MJ**, Brownsett S, Copland DA. Language and language disorders: neuroscience to clinical practice. *Practical Neurology* 2019; 19: 380-388
10. Bernhardt J, Borschmann KN, Kwakkel G, Burridge JH, Eng JJ, Walker MF, Bird M-L, Cramer SC, Hayward KS, **O'Sullivan MJ**, Clarkson AN, Corbett D. Setting the scene for the second Stroke Recovery and Rehabilitation Roundtable *Int J Stroke* 2019; 14: 450-456
11. Hartopp N, Wright P, Ray N, Evans TE, Metzler-Baddeley C, Aggleton JP, **O'Sullivan MJ**. A key role for fornix-subiculum connectivity in recollection. *Front Syst Neurosci* 2019; 12:70
12. (Campbell, Ma, et al., 2019; Campbell, Majoie, et al., 2019; Loudon, Wong, Disney, & Tippett, 2019; Muller, Roizman, & Wong, 2019) (Loudon, Wong, Finnigan, & Tippett, 2019; Ma et al., 2019; Roxbury et al., 2019).

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **A Wong**, 1. *NOACs in Clinical Practice* and 2. *Secondary Prevention of Stroke*, Malaysia Stroke Council Stroke Masterclass, Putrajaya, Malaysia
2. **A Wong**, *Balancing Stroke Risk and Bleeding Risk and the Contraindication-to-OAC dilemma*, Abbott Asia Pacific Heart Brain Summit, Bangkok, Thailand
3. **A Wong**, *Non-stroke cerebrovascular disease*, Australasian Stroke Academy seminar, Brisbane, Australia
4. **M O'Sullivan**, *Cognition in stroke recovery trials: Why is it hard and what can we do?* Stroke Society of Australasia, Canberra, 2019
5. **M O'Sullivan**, *What, if anything, have animal models taught us about cognitive deficits after brain injury?* Australasian Neuroscience Society, Adelaide, 2019
6. **C Muller**, *Cerebral Amyloid Angiopathy*, Stroke Society of Australasia, Canberra, 2019
7. **C Muller**, *Secondary Stroke Prevention*, Australasian Stroke Academy seminar, Brisbane, Australia
8. **C Muller**, *Atrial Fibrillation*, Australasian Stroke Academy seminar, Brisbane, Australia.

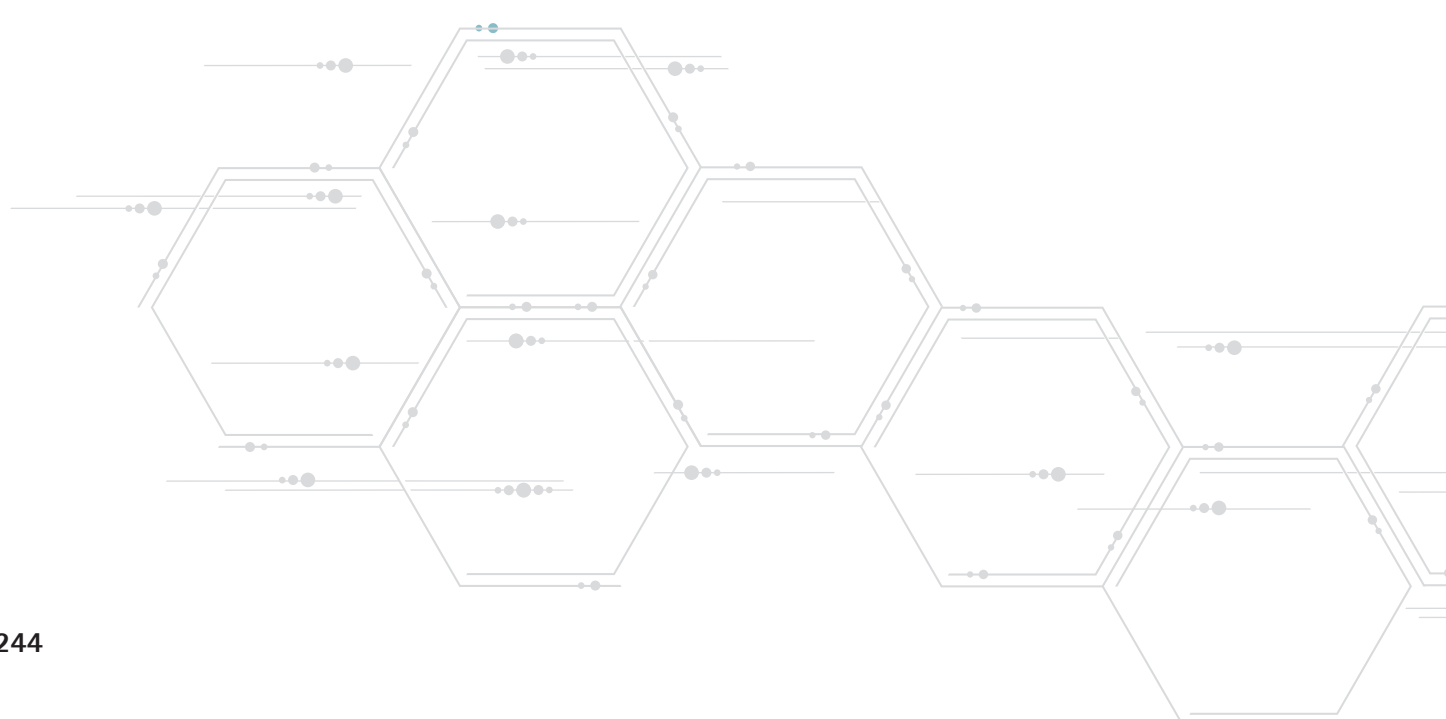
NUCLEAR MEDICINE DEPARTMENT

The Department of Nuclear Medicine at the Royal Brisbane and Women's Hospital (RBWH) is one of the largest in Australia. It provides a referral, diagnostic and therapeutic nuclear medicine service with four SPECT/CT gamma cameras, one solid state cardiac camera, BMD dual energy X-ray absorptiometry (DEXA) and a pQCT scanner. Research interests in nuclear medicine include image reconstruction methodologies, application of gating and bone mineral densitometry in various disease states.

The department hosts the state-wide Specialised PET Services Queensland, which operates two state-of-the-art PET/CT scanners and Q-TRaCE, a TGA accredited radiopharmaceutical laboratory operating a cyclotron. It offers research facilities to a wide variety of investigators. In addition to conventional tracers such as fluorodeoxyglucose (^{18}F FDG), the Service also conducts research using ^{18}F FDOPA, ^{18}F FMISO, ^{18}F FPSMA-1007, ^{18}F GE180, ^{18}F FEOBV, ^{68}Ga Ga-DOTATATE, ^{68}Ga Ga-PSMA-11, ^{68}Ga Ga-Pentixafor and ^{89}Zr Ptz. There is also ongoing research interest in image reconstruction algorithms, respiratory gating and image analysis techniques.

The department also provides a radionuclide therapy service for patients with inoperable neuroendocrine tumours and has continued treatment for prostate cancer through the TheraP trial. Whilst predominantly focussed upon clinical service delivery, retrospective analysis of patients previously treated in our statewide NET service aims to more effectively tailor our treatment to patients most likely to benefit and minimise the risk of side effects.

- TheraP Lu-PSMA multicentre RCT: recruited ahead of schedule, RBWH was 3rd highest recruitment of 11 national sites
- CONTROL-NETS LuTate multicentre RCT: recruitment completed, RBWH provided 3rd highest recruitment, abstract accepted at ASCO GI Cancer Symposium 2020
- Brittany Robinson won Technologist Best Abstract Award at the Society of Nuclear Medicine and Molecular Imaging Annual Scientific Meeting (Anaheim 2019)
- David Pattison was Co-Investigator on two large successful grants:
 - ↳ \$4 million Movember / Cancer Australia grant "Up-Front PSMA" Alliance: Using Theranostics Early to Eradicate Prostate Cancer and Developing Novel Strategies for PSMA-negative disease – 2019 ongoing
 - ↳ \$1.8 million Medical Research Future Fund (MRFF) grant for the TarGeted Therapy and Avelumab in Merkel Cell Carcinoma (GoTHAM) Trial – 2018 ongoing.
- Ongoing support for Herston Imaging Research Facility projects.





Supervised Post-Graduate Research Students

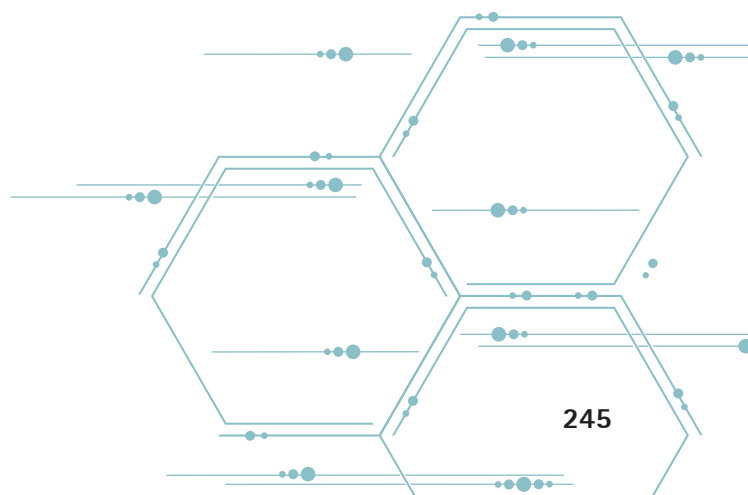
Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dominique Scott	MPhil UQ (PT 2017-)	New radiopharmaceutical methodology for PET imaging	Melissa Latter , Kristofer Thurecht
Brenda Tai	MPhil UQ (PT 2018-)	PET radiopharmaceuticals as molecular imaging tools for improved clinical outcome	Melissa Latter , Kristofer Thurecht
Rahul Ladwa	MPhil UQ (PT 2017-)	Predictors of dosimetry and response to peptide receptor radionuclide therapy in metastatic neuroendocrine tumour	David Wyld , David Pattison , Stephen Rose
Simon Ryder	MPhil UQ (PT 2019-)	State-of-the-art imaging and genetic testing for pheochromocytomas and paragangliomas: The Royal Brisbane experience	David Pattison , Emma Duncan

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Dr Jye Smith	Adjunct lecturer	1.0	In-Kind Funded	Faculty of Medicine	UQ (2009-current)
Dr Marissa Bartlett	Adjunct lecturer	1.0	In-Kind Funded	Faculty of Medicine	UQ (2010-current)
Dr Melissa Latter	Honorary Research Fellow	1.0	In-Kind Funded	Faculty of Medicine	UQ (2014-current)
A/Prof David Pattison	Associate Professor	1.0	In-Kind Funded	Faculty of Medicine	UQ (2018-current)
A/Prof Paul Thomas	Associate Professor	1.0	In-Kind Funded	Faculty of Medicine	UQ (2014-current)
A/Prof Stuart Ramsay	Associate Professor	1.0	In-Kind Funded	Medicine	JCU (2013-current)
Dr Melissa Latter	Partner Investigator	0.2	In-Kind Funded	ARC Centre for Innovation in Biomedical Imaging Technology	UQ (2018-current)

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
David Pattison	Paul Thomas , Stuart Ramsay , Brook Gulhane, Maciej Debowski	[¹⁸ F] FPSMA-1007 vs [⁶⁸ Ga] Ga-PSMA-11 trial
Manoj Bhatt	David Pattison , David Wyld , Kevin Lee , Matthew Burge	[⁶⁸ Ga] Ga-DOTA=TATE PET/MRI
Jye Smith	Matthew Griffiths , Paul Thomas	PSMA Salivary Gland Vasoconstriction



Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Rahul Ladwa	David Pattison, David Wyld, Matthew Burge , Nicholas Dowson, Stephen Rose, Jye Smith, Stephen Goodman , Steven Williams	Predictors of dosimetry and response to peptide receptor radionuclide therapy
Ashleigh Scott	Glen Kennedy , Siok Tey, David Pattison, Paul Thomas	Pilot study of ¹⁸ FGE-180-PET to assess acute gastrointestinal graft versus host disease
Jeffrey Goh, David Pattison	Stuart Ramsay, Kevin Lee, Paul Thomas, Patrina Campbell, Melissa Latter	TheraP trial. LuPSMA study (RBWH pilot study and ANZUP trial)
David Wyld	David Pattison, Kevin Lee, Manoj Bhatt, Stuart Ramsay	CONTROLNETS

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Brittany Robinson	Technologist Best Abstract Award	Society of Nuclear Medicine and Molecular Imaging (SNMMI)

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Sandhu S, Scolyer R, Atkinson V, Poulsen M, Emmett L, Tothill R, Neeson P, Pattison DA , Guminski A	Dept of Nuclear Med Specialised PET Services, RBWH	TarGeted Therapy and Avelumab in Merkel Cell Carcinoma (GoTHAM) Trial	MRFF – Low Survival Cancers and Diseases	\$1,800,000	\$360,000	2018-2022
Hooper J, Thomas P , Snell C, Rose S, Cuda T	2019 Brisbane Colorectal Theranostics Collaboration	Development of Theranostics for Metastatic Colorectal Cancer Using High Affinity Engineered Antibody Fragments	Brisbane Diamantina Health Partners Cancer Theme Grant	\$17,500	\$17,500	2019
Azad A, Hofman M, Murphy D, Vela I, Risbridger G, Taylor R, Trapani J, Sandhu S, Williams S, Violet J, Lawrentschuk N, Pattison DA , Francis R	Dept of Nuclear Med Specialised PET Services, RBWH	“Up-Front PSMA” Alliance: Using Theranostics Early to Eradicate Prostate Cancer and Developing Novel Strategies for PSMA-negative disease	Prostate Cancer Research Alliance Grant (Movember/ Cancer Australia)	\$4,000,000	\$1,000,000	2019-2022

2019 Research Publications

Journal Articles

1. **Pattison DA**, MacFarlane LL, Callahan J, Kane EL, Akhurst T, Hicks RJ. Personalised insulin calculator enables safe and effective correction of hyperglycaemia prior to FDG PET/CT. *EJNMMI Res* 2019; 9: 15. doi: 10.1186/s13550-019-0480-2
2. Shaw TB, **Jeffree RL**, **Thomas P**, **Goodman S**, **Debowski M**, **Lwin Z**, **Chua B**. Diagnostic performance of 18F-fluorodeoxyglucose positron emission tomography in the evaluation of glioma. *J Med Imaging Radiat Oncol.* 2019; 63:650-656. doi: 10.1111/1754-9485.12929. PMID: 31368665
3. Violet J, Sandhu S, Iravani A, Ferdinandus J, Thang SP, Kong G, Ravi Kumar A, Akhurst T, **Pattison DA**, Beulieu Am Mooi J, Guo C, Kalff V, Murphy DG, Eu P, Scalzo M, Williams S, Hicks RJ, Hofman MS. Long term follow-up and outcomes of re-treatment in an expanded 50 patient single-center phase II prospective trial of Lutetium-177 (¹⁷⁷Lu) PSMA-617 theranostics in metastatic castrate-resistant prostate cancer. *Journal of Nuclear Medicine* 2019; [Epub ahead of print]
4. Iravani A, Solomon B, **Pattison DA**, Jackson P, Ravi Kumar A, Kong G, Hofman MS, Akhurst T, Hicks RJ. Mitogen-Activated Protein Kinase Pathway Inhibition for Redifferentiation of Radioiodine Refractory Differentiated Thyroid Cancer: An Evolving Protocol. *Thyroid* 2019; 29: 1634-1645
5. Weber N, Thirunavukarasu CE, **Kyle S**, **Gray S**, **Morris K**, Scott A, **Butler JP**, Tey S, **Curley C**, **Kennedy G**, **Thomas P**. CXCR4 positron emission tomography for the detection of bone disease in newly diagnosed myeloma. *International Myeloma Workshop, Boston.* 2019
6. **Paxton-Hall F**, You K, **Pattison DA**, **Burge M**, **Wyld D**. Outcome and toxicity of salvage therapy with ¹⁷⁷Lu-DOTATATE in patients with metastatic neuroendocrine tumours. *AGITG Annual Scientific Meeting* 2019
7. Ladwa R, **Pattison DA**, **Smith J**, **Goodman S**, **Burge M**, Rose S, Dowson N, **Wyld D**. The impact of tumour absorbed dosimetry with survival outcomes after peptide receptor radionuclide therapy in metastatic neuroendocrine tumours. *European Society for Medical Oncology Congress* 2019
8. **Debowski M**, Gulhane B, **Ramsay SC**, **Thomas PA**, **Garcia P**, **Latter M**, **Tapper S**, **Pattison DA**. A prospective intra-individual blinded comparison of ¹⁸F-PSMA-1007 and ⁶⁸Ga-PSMA-11 PET imaging in patients with confirmed prostate cancer. *Australian & New Zealand Society of Nuclear Medicine Annual Scientific Meeting* 2019.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Pattison DA**. Iodine PET scans. 8th Multidisciplinary Update on Thyroid & Parathyroid Surgery (Noosa) 2019
2. **Pattison DA**. FDOPA for Medullary Thyroid Carcinoma. 8th Multidisciplinary Update on Thyroid & Parathyroid Surgery (Noosa) 2019
3. **Pattison DA**. Theranostics for castrate resistant prostate cancer. *Urological Society of Australia and New Zealand Annual Scientific Meeting (Brisbane)* 2019
4. **Pattison DA**. How do we interpret / use PSMA PET in the monitoring of advanced prostate cancer? *Urological Society of Australia and New Zealand Annual Scientific Meeting (Brisbane)* 2019
5. **Pattison DA**. Functional imaging and therapy for endocrine tumours. *Endocrine Society of Australia Seminar Weekend (Perth)* 2019
6. **Pattison DA**. Molecular imaging for endocrine tumours. *Endocrine Society of Australia Annual Scientific Meeting (Sydney)* 2019
7. **Pattison DA**. PSMA PET tracers: Who's who in the zoo? *Australia & New Zealand Society of Nuclear Medicine Scientific Meeting (Adelaide)* 2019
8. **Pattison DA**. Emerging role of I-124 PET for thyroid cancer theranostics. *Australia & New Zealand Society of Nuclear Medicine Scientific Meeting (Adelaide)* 2019.

Oral Presentations

1. **Scott, D**. ⁶⁸Ga-Exendin-4 labelling: validation and QC for clinical use. *Radiopharmaceutical Science Symposium* 2019. Brisbane
2. **Lummis S**, **Latter, M.J**. Theranostic PMSA Radiopharmaceuticals – clinical radiopharmaceutical experience at Q-TRaCE. *Radiopharmaceutical Science Symposium* 2019. Brisbane
3. **Scott D**, **Latter M.J.**, Kristofer Thurecht, K. Clinical Production and Quality Control Testing of [⁶⁸Ga] Gallium-Exendin-4 for the Localisation and Detection of Insulinomas at the Royal Brisbane and Women's Hospital. *27th Royal Australian Chemical Institute R&D Topics Symposium* 2019. Adelaide
4. **Lummis S**, **Latter M.J**, **Scott D**, **Tapper S**. Comparison of [¹⁸F]-PSMA-1007 and [⁶⁸Ga]-PSMA-11 Radiopharmaceutical Production at Q-TRaCE. *1Q-TRaCE, Royal Brisbane and Women's Hospital*
5. **Tai, CH**. Optimisation of High Activity Automated Manufacture of [⁶⁸Ga] Ga-DOTA-TATE. *Annual Scientific Meeting of the Australian and New Zealand Society of Nuclear Medicine.* Adelaide, Australia April 2019.

Other communications and outputs:

Pattison DA. Play for a Cure Research fundraiser presentation (Brisbane)

Pattison DA. 'Theranostics: A new weapon in the fight against prostate cancer' – Prostate Cancer Foundation of Australia Fundraiser (Brisbane).

PALLIATIVE & SUPPORTIVE CARE

Research highlights for 2019 for the department include presentation of the initial collaborative work with hepatology. The Metro North Kidney Supportive Care service continues to thrive with publication by the team pharmacist this year. Dr Bill Lukin was successful in publishing his work comparing methadone conversion techniques and has presented these findings at many local forums.

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Carol Douglas		The Care of the Dying Evaluation (CODE) Project: A survey of bereaved persons in an Australian acute care setting
Prof Janet Hardy	Dr Alison Kearney	Oral Medicinal Cannabinoids to Relieve Symptom Burden in the palliative care of patients with advanced cancer; a double blinded, placebo controlled RCT of efficacy and safety
Pharmacy/Oncology/Palliative Care	Mika Varitimos, Neil Cottrell, Alison Kearney, Melissa Eastgate, Catherine Bettington	Ref HREC/18/QRBW/180: Investigating patient perceptions towards medicine burden in palliative oncology patients

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof David Curirow, Palliative Care Clinical Studies Collaborative	Alison Kearney, Carol Douglas	Rapid Pharmacovigilance in Palliative Care

2019 Research Publications

Journal Articles

- Scuderi C, Berquier I, Purtell L, Bonner A, Douglas C, Healy H.** Complex prescribing in chronic kidney disease: role of the renal pharmacist in kidney supportive care in uncovering hydralazine-related lupus, *Journal of Pharmacy Practise and Research* (2019) 49, 364-367
- Lukin W, Greenslade J, Kearney A, Douglas C, Howell T, Barras M, Good P.** Conversion of other opioids to methadone a retrospective comparison of two methods *BMJ Supportive & Palliative Care* Published Online First: 16 February 2019. doi: 10.1136/bmjspcare-2018-001645.

Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

- Kearney A.** CPCRE research conference, RBWH – "Hepatocare, a novel model of care for advanced liver disease" 24th July
- Douglas C.** ICU Palliative Care interface – IAPCON Kochi 9/2
- Douglas C.** Giving Voice to the Bereaved – evaluation of 'CODE' Care at EOL workshop 22/3
- Douglas C.** Supportive Care in ESRD – Aust.Nephrology trainees meeting 6/7
- Kearney A.** PCOC Using Evidence on patient outcomes to improve the future of palliative care, 20th Nov Sydney "Hepatocare: a novel model of care".

PHARMACY

Practice based, translational research is now a core component of the outputs of the pharmacy department and we have continued to undertake high quality research throughout 2019. We continue our strong links with academia including The University of Queensland, School of Pharmacy and Faculty of Medicine; Queensland University of Technology School of Pharmacy.

Seventy journal articles, nine oral and 41 poster presentations were associated with nine HDR pharmacy staff undertaking HDRs and 24 other medical, pharmacy and nursing students supervised by and collaborating with RBWH senior researchers.

Areas of research include pharmacist led therapeutic drug monitoring service, effective management of mucositis in bone marrow transplants, impact of a pharmacist in high risk discharge patients

We continue to attract HDR students enrolled in PhDs and MPhils collaborating across nursing, medicine and allied health.

Pharmacy staff continue to present their research locally, nationally and internationally at pharmacy, nursing, medical and multi-professional meetings.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Elizabeth Doran	PhD (2018-2022)	The Role of the Emergency Department Pharmacist (EDP) in the Management of Drug Toxicities	Karen Whitfield, Ian Coombes
Karen Bettenay	PhD QUT (2018-)	An evaluation of allied health prescribing in Queensland and development of non-medical prescribing implementation and evaluation frameworks	Andrew Hale
Jason Waddell	PhD QUT (2018-)	An investigation into the personality characteristics of Australian Pharmacists	Andrew Hale
Monika Ogilvie	MPhil QUT (2018-)	Pharmacist prescribing in the Emergency Department	Lisa Nissen, Greg Kyle, Andrew Hale
Penelope Richards	MPhil QUT (2018-)	An Assessment of Pharmacist prescribing in an Elective Surgery Pre Admission Clinic	Lisa Nissen, Greg Kyle, Andrew Hale
Lisa Allard	Diploma in Clinical Pharmacy, UTAS		Dr Mohammed Salahudeen
Kathryn Hurree	MPhil (2017-2019)	Investigation of Impact of a pharmacist in palliative Care Clinics	Karen Whitfield
Karen Davies	PhD, UQ (2018-2020)	Medication administration evaluation and feedback tool	Karen Whitfield, Ian Coombes, Samantha Keogh
Yasakalum Bagyanantha	MPhil	Evaluation of the role of clinical pharmacy in quality of care for acute coronary syndrome	Ian Coombes, Mohamed Fahim, I Garamana
Caitlin Lock	MPhil QUT	Evaluation of Emergency Medicine Pharmacist review and its impact on hospital length of stay of older medical patients	Ian Coombes, Sonya Osborne
Angela North	MPhil, UQ (2015-2019)	Investigation of Therapeutic Heparin in the peri partum period	Karen Whitfield, Karin Lust, Helen Barrett
E Tanvir	PhD, UQ (2018-2021)	To investigate trace element levels in blood in the neonatal population	Karen Whitfield, Nick Shaw
Midori Nagakai	PhD, UQ (2018-2022)	To investigate management of oral mucositis prevention in patients undergoing haematopoietic stem cell transplantation (HSCT)	Karen Whitfield, Glen Kennedy, Alexandra Clavarino

Supervised Post-Graduate Research Students *(cont)*

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Paul Firman	PHD, UQ <i>(2017-)</i>	Pharmacist Led Therapeutic Drug Monitoring	Karen Whitfield , Ken Tan, Alexandra Clavarino
Kim Ta	PhD, QUT <i>(2019-)</i>	Evaluation of Pharmacist administered Influenza Vaccination in high-risk Hospital Outpatients	Lisa Nissen, Andrew Hale , Esther Lau
Dr Alexis Tabah	PhD, UQ <i>(2018-)</i>	The value of antibiotic de-escalation strategies in critically ill patients	Jason Roberts <i>(Co-supervisor)</i>
Dr Sazlyna Lim	PhD, UQ <i>(2018-)</i>	Optimising antibiotic treatment for infections caused by multi-drug resistant <i>Acinetobacter baumannii</i>	Jason Roberts <i>(Primary supervisor)</i>
Kamrul Islam	PhD, UQ <i>2018-(confirmed)</i>	Optimising antibiotic treatment for infections caused by extended spectrum beta-lactamase producing <i>Escherichia coli</i>	Jason Roberts <i>(Primary supervisor)</i>
Aun Raza	PhD, UQ <i>(2018-)</i>	Nanoformulation to improve bioavailability of key drugs	Jason Roberts <i>(Co-supervisor)</i>
Saiyuri Naicker	PhD, UQ <i>(2017-)</i>	The effects of antibiotic de-escalation of emergence on antibiotic resistance	Jason Roberts <i>(Co-supervisor)</i>
Eko Setiawin	PhD, UQ <i>(2017-)</i>	Optimising antibiotic dosing for hospitalised patients in Indonesia	Jason Roberts <i>(Primary supervisor)</i>
Dr Helmi Sulaiman	PhD, The University of Malaya <i>(2017-)</i>	Optimising antibiotic dosing for treatment of severe lung infections	Jason Roberts <i>(Associate supervisor)</i>
Dr Chris Anstey	PhD, UQ <i>2017-(confirmed)</i>	The kinetics of citrate during continuous renal replacement therapy in critically ill patients	Jason Roberts <i>(Associate supervisor)</i>
Dr Andrew Burke	PhD, UQ <i>2017-(confirmed)</i>	Optimising dosing of antibiotics for treatment of mycobacterial infections	Jason Roberts <i>(Primary supervisor)</i>
Paul Williams	PhD, UQ <i>2017-(confirmed)</i>	Establishing an evidence-base for practical dosing of antibiotics in critically ill patients	Jason Roberts <i>(Primary supervisor)</i>
Chandra Sumi	PhD, UQ <i>2017-(confirmed)</i>	Quantifying differences between continuous versus extended versus intermittent infusion of beta-lactam antibiotics versus <i>Klebsiella pneumoniae</i> and <i>Escherichia coli</i>	Jason Roberts <i>(Primary supervisor)</i>
Vesa Cheng	PhD, UQ <i>2017-(confirmed)</i>	Developing optimised antibiotic dosing for critically ill patients receiving extracorporeal membrane oxygenation	Jason Roberts <i>(Primary supervisor)</i>
Dr Rochelle Ryan	PhD, UQ <i>2017-(confirmed)</i>	Developing optimised dosing of antibiotics to be used for peri-operative prophylaxis of infection	Jason Roberts <i>(Primary supervisor)</i>
Aaron Heffernan	PhD, Griffith University <i>2017-(confirmed)</i>	Characterisation of the effect of nebulised amikacin versus intravenous dosing for treatment of ventilator associated pneumonia	Jason Roberts <i>(Co-supervisor)</i>
Paul Jarrett	PhD, QUT <i>2016-(confirmed)</i>	Optimising nursing practices for administration of antibiotics to critically ill patients	Jason Roberts <i>(External Supervisor)</i>
Yarmarly Guerra Valero	PhD, UQ <i>2016-(confirmed)</i>	Development of novel sampling and bioanalysis methods for study pharmacokinetics in infants and children	Jason Roberts <i>(Co-supervisor)</i>
Dr Tavey Dorofaeff	PhD, UQ <i>2016-(confirmed)</i>	Optimisation of antibiotic dosing in critically ill infants and children	Jason Roberts <i>(Co-supervisor)</i>
Caleb Economou	MPhil, UQ <i>2011-(confirmed)</i>	Antibiotic dosing during renal replacement therapy in critically ill patients	Jason Roberts <i>(Primary supervisor)</i>
Dr Gloria Wong	MPhil, UQ <i>2011-2019</i>	Therapeutic drug monitoring of beta-lactam antibiotics in critically ill patients	Jason Roberts <i>(Primary supervisor)</i>
Dr Angela Tognolini	MPhil, UQ <i>2018-</i>	Optimising dosing of lignocaine in obese and non-obese patients	Jason Roberts <i>(Primary supervisor)</i>
William Franks	MPhil, UQ <i>2017-</i>	Optimising antifungal dosing in transplant recipients	Jason Roberts <i>(Primary supervisor)</i>
Bryan Gregory	MPhil, QUT <i>2016-(confirmed)</i>	Optimised dosing of immunosuppressant drugs in critically ill patients receiving renal replacement therapy	Jason Roberts <i>(Co-supervisor)</i>



RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Ian Coombes	Adjunct Associate Professor				University of Queensland
Andrew Hale	Adjunct Associate Professor		Nil		Queensland University of Technology
Jason Roberts	NHMRC Practitioner	0.7	NHMRC	Optimising antibiotic dosing to improve patient outcomes and suppress emergence of resistant superbugs	University of Queensland
Andrew Hale	Adjunct Senior Lecturer		Nil		Queensland University of Technology
Karen Whitfield	Adjunct Associate Professor	0.2	UQ School of Pharmacy		University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
John Smith	Honorary Research Fellow	0.6	Development and evaluation of a tailored fatigue self-management behavioural intervention for patients with advanced cancer	Queensland University of Technology
Christopher Collins	Honorary Research Fellow	0.8	Improving quality of Food Services	Senior Lecturer, Queensland University of Technology

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Nathan Brown	Elizabeth Doran (ETC), Jaimi Greenslade (ETC), Bill Lukin (ETC), Neil Cottrell (UQ), Fabian Jaramillo, Ian Coombes (Pharmacy), Peter Donovan (Clinical Pharmacology), Louise Cullen (ETC)	The prevalence and characteristics of emergency department presentations due to medication-related events
Karen Whitfield		Teaching on the run for Pharmacy Technicians
Nicholas Ah Yui	Lily Hatt, William Franks	Compliance to Vancomycin Procedures at the Royal
Andrew Hale, Kim Ta	Lisa Nissen, Esther Lau, Krispin Hajkowicz, Ian Coombes, Liza-Jane McBride	Evaluation of Pharmacist administered Influenza Vaccination in high-risk Hospital Outpatients

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Shaw UQ	Karen Whitfield	Milk Bank Nutrition

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Kim Ta, Krispin Hajkowicz, Andrew Redmond, Peter Groom, Jenna Turkington, Emily Hallas	Best consumer focus award	2019 QuARRIE Awards
Kim Ta, Krispin Hajkowicz, Andrew Redmond, Peter Groom, Jenna Turkington, Emily Hallas	Overall Superior Quality Achiever	2019 QuARRIE Awards
Kim Ta	Best Oral presentation	2019 SHPA Research Symposium

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dhanani J, Roberts JA , Wallis SC, Bell S , Reade M, Eley V	University of Queensland	"Establishing UQ Centre for Clinical Research as the centre for Aerosol therapy in critical care by optimising particle size of aerosols for effective drug delivery"	Major Equipment and Infrastructure and NHMRC Equipment Grant	\$138,660	\$138,660	2019
Roberts JA		Continuous infusion versus intermittent dosing: does the mode of beta-lactam antibiotic administration or drug exposure define patient outcomes?	Australian Infectious Diseases Research Excellence Award	\$50,000	\$50,000	2019
Ankravs M, Deane A, Bellomo R, Udy A, Roberts JA		National Translational Research Collaborative Research Proposal	Society of Hospital Pharmacists of Australia	\$30,000	\$30,000	2019
Davies M, Irwin A, Parker S, Roberts JA		Optimising the treatment of invasive infection in critically ill neonates, through application of an innovative microsampling approach	Royal Brisbane and Women's Hospital Research Foundation	\$38,081	\$19,040	2018-2019
Karamujic N, Roberts JA		Pharmacokinetic and statistical analysis of data from Screening Anti-Fungal Exposure in Intensive Care Units (SAFE-ICU) study	Royal Brisbane and Women's Hospital Research Foundation	\$40,000	\$20,000	2018-2019
Woods M, Harris P, Whiley D, Roberts JA, Lipman J, Hajkowicz K, Redmond A		Rapid detection of resistance genes from gram negative bacteria isolated from blood in ICU-admitted patients to enable timely and effective treatment	Royal Brisbane and Women's Hospital Research Foundation	\$40,000	\$20,000	2018-2019
Wainwright C, Bell SC, Wason J, Thomson R, Roberts JA , Coin L, Byrnes J, Tiddens H, Grimwood K, Ahern S		A platform clinical trial approach to the management of Mycobacterium abscessus complex	Medical Research Futures Fund Lifting Clinical Trials and Registries Capacity (LCTRC) grant	\$2,091,178	\$418,236	2018-2022
Roberts JA , Ivanovski S, Sime FS, Lee R	The University of Queensland	Maximising the outcomes of antibiotic therapy in the management of gum disease caused by a community of multi-species bacteria	2019 Faculty of Health and Behavioural Sciences Research Collaboration Seeding Grant	\$39,156	\$39,156	2019
Roberts JA , Luque S, Zeitlinger M, Sime F		Screening anti-fungal exposure in intensive care unit: The SAFE-ICU study	European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Study Group Research Grants	\$47,200	\$47,200	2019
Roberts JA, Lipman J , Paterson DL, Harris P, Kruger P, Dorofaeff T, Schlapbach L, Beatson S, Schembri M		Reducing time to appropriate antibiotics and optimal doses to treat sepsis using rapid whole genome sequencing combined with dosing software	MRFF Rapid Applied Research Translation Program Grant	\$250,829	\$125,415	2019-2020

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Nakagaki, M, Glen Kennedy, Jenni Leutenegger, Cameron Curley, Michael Smith, Therese Hays, Annette Barnes, Angela McLean, Caroline Stewart, Teresa Brown, Rebecca Fichero Leonie Naumann Angela O'Malia, Ian Coombes, Karen Whitfield		Implementation and Evaluation of a Nurse- Allied Health Multidisciplinary Post-Bone Marrow Transplant Clinic	SEED	\$81,150	\$81,150	2019
Roberts JA, Lipman J, De Waele J, Kourenti D		Novel dosing regimens to maximise antibiotic effectiveness for treatment of pneumonia in the intensive care unit	NHMRC Project Grant (APP1162281)	\$203,850	\$815,403	2019-2022
Midori Nakagaki	Pharmacy	Oral Mucositis Management in BMT patients	RBWH Foundation Scholarship	\$38,082	\$38,082	2019
Karen Davies	Pharmacy	Medication administration evaluation and feedback tool	RBWH Foundation Scholarship	\$38,082	\$38,082	2019
Tognolini A, Jackson D, Roberts JA, Eley V		Intraoperative lignocaine infusions: Development of an optimised infusion dosing regimen for obese patients	Australian and New Zealand College of Anaesthetists Project Grant	\$22,500	\$22,500	2019
Roberts JA, Lipman J, Cotta MO, Kruger P, Schlapbach L, Irwin A, Shekar K, Comans T, Paterson DL, Harris P, Ungerer J, McWhinney B		Personalising Antibiotic Therapy to Improve Outcomes in Patients with Severe Infections	MRFF Rapid Applied Research Translation Program Grant	\$332,868	\$166,434	2019-2020

2019 Research Publications

Journal Articles

- Wan W, Guerra Valero Y, Choi GYS, Ordóñez Mejia J, Wallis SC, Joynt GM, **Lipman J**, Gomersall CD, **Roberts JA**. In-vitro absorption and sieving coefficient of ticarcillin-clavulanate during continuous haemofiltration. *Int J Antimicrob Agents* 2019; 54(2):261-264
- Dhanani JA**, Diab S, Chaudhary J, Cohen J, Parker SL, Wallis SC, Boidin C, Barnett A, Chew M, **Roberts JA**, Fraser JF. Lung pharmacokinetics of tobramycin by intravenous and nebulized dosing in a mechanically ventilated healthy ovine model. *Anesthesiology* 2019; 131(2):344-355
- Guerra Valero Y, **Roberts JA, Lipman J**, Fourie C, Starr T, Wallis SC, Parker SL. Analysis of capillary microsamples obtained from a skin-prick to measure vancomycin concentrations as a valid alternative to conventional sampling: a bridging study. *J Pharmaceut Biomed Anal* 2019; 169: 288-92
- Zhang P, Curley C, Mudie K, **Nakagaki M**, Hill G, **Roberts JA**, Tey SK. Effect of plasmapheresis on ATG (Thymoglobulin) clearance prior to adoptive T cell transfer. *Bone Marrow Transplantation* 2019; 54(12):2110-2116
- Cheng V, Matthew DM Rawlins M, Chang T, Fox E, Dyer J, Allen C, Litton E, Page M, Hoad K, **Roberts JA**. Pharmacokinetics of benzylpenicillin (penicillin G) during prolonged intermittent renal replacement therapy. *Chemotherapy* 2019; 64(1):17-21
- Weber N, Jackson K, McWhinney B, Ungerer J, Kennedy G, **Lipman J, Roberts JA**. Evaluation of pharmacokinetic/pharmacodynamic and clinical outcomes with 6-hourly empiric piperacillin-tazobactam dosing in hematological malignancy patients with febrile neutropenia. *J Infect Chemother* 2019; 25(7):503-508
- Schetz M, De Jong A, Deane AM, Druml W, Hemelaar P, Pelosi P, Pikkers P, Reitham Blaser A, **Roberts JA**, Sakr Y, Jaber S. Obesity in the critically ill: a narrative review. *Intensive Care Med* 2019; in press (date accepted 4th March 2019; ICME-D-19-00072R1)
- Sazly Lim SM, Sime FB, **Roberts JA**. Multidrug-resistant *Acinetobacter baumannii* infections: current evidence on treatment options and role of PK/PD in dose optimization. *Int J Antimicrob Agents* 2019; 53(6):726-745
- Dimopoulos G, Kourenti D, Parker SL, **Roberts JA**, Poulakou G. Intravenous fosfomycin for the treatment of multidrug resistant pathogens: what is the evidence on dosing regimens? *Exp Rev Anti-infect Ther* 2019; 17(3):201-210
- Raza A, Sime FB, Cabot PJ, **Roberts JA**, Falconer JR. Solid nanoparticles for oral delivery of antimicrobials: A review. *Drug Discovery Today* 2019; 24(3):858-866
- Lipman J**, Brett SJ, DeWaele JJ, Cotta MO, David JS, Finfer S, Glass P, Knowles S, McGuinness S, Myburgh J, Paterson DL, Peake SL, Rajbhandari D, Rhodes A, **Roberts JA**, Shirwadkar C, Starr T, Taylor C, Billot L, Dulhunty JM. A protocol for a Phase 3 multicentre randomised controlled trial of continuous versus intermittent beta-lactam antibiotic infusion in critically ill patients with sepsis: the BLING III trial. *Crit Care Resus* 2019; 21(1):63-68

Journal Articles (cont)

12. **Roberts JA**, Roger C, De Waele J. Personalized antibiotic dosing for the critically ill. *Intensive Care Med* 2019; 45(5): 715-8
13. **Davies KM, Coombes ID**, Keogh S, **Whitfield KM**. Medication administration evaluation tool design: An expert panel review. *Collegian* <https://doi.org/10.1016/j.colegn.2018.05.001>
14. Bullock B, Whitty, JA, **Mitchell C, Donovan P, Coombes I**. The impact of a pharmacist on post-take ward round prescribing and medication appropriateness. In *J Clinical Pharmacy* <https://doi.org/10.1007/s11096-018-0775-9>
15. Welch S, Currey E, **Doran E**, Harding A, Roman C, Taylor S, Thomas A, Munro C Standard of practice in emergency medicine for pharmacy services. *Journal of Pharmacy Practice & Research*
16. **Doran E**. Carbamazepine toxicity & refractory seizures. *Toxicology Communications* 2019, 3:1, 47-53, DOI: 10.1080/ 24734306.2019.1625179
17. **North A, Barrett H, Lust K, Whitfield K**. Therapeutic anticoagulation during the postnatal peripartum period: a survey of clinical practice. *Journal of Pharmacy Practice and Research (JPPR)* 09/07/2019
18. **Risetto T, Trenerry H, Madan A**. Medicinal Mishap: The perils of antiepileptic toxicity. *Australian Prescriber* article
19. **Davies KM, Coombes I**, Keogh S, Hay K, **Whitfield KM**. (2019). Medication Administration Evaluation and Feedback Tool: Inter-rater Reliability in the Clinical Setting. *Submitted to Journal of Clinical Nursing*, 23 May 2019
20. **Davies KM, Coombes I**, Keogh S, Hay K, Hurst C, **Whitfield KM**. (2019) Medication administration evaluation and feedback tool: Simulation reliability testing. *Clinical Simulation in Nursing*, 32 1-7. doi:10.1016/j.ecns.2019.03.010
21. Raby E, Naicker S, Sime FB, Manning L, Wallis SC, Pandey S, **Roberts JA**. An *in vitro* stability study of ceftolozane-tazobactam in an elastomeric infusion device for ambulatory care. *Eur J Hosp Pharm* 2019; in press (date accepted 4th December 2019; ejhpharm-2019-002093.R1)
22. Breilh D, Honore PM, De Bels D, **Roberts JA**, Gordien JB, Fleureau C, Dewitte A, Coquin J, Rozé H, Perez P, Attou R, Redant S, Kugener L, Saux MC, Spapen HD, Ouattara A, Joannes-Boyau O. on behalf of the IVOIRE study group. Pharmacokinetics and pharmacodynamics of anti-infective agents during continuous veno-venous hemofiltration in critically ill patients: Lessons learned from an ancillary study of the IVOIRE trial. *J Translational Med* 2019; 7(4): in press
23. Lonsdale D, Lipman J, Livermore A, Ungerer JP, McWhinney BC, **Roberts JA**. Amoxicillin-clavulanate dosing in the ICU: the additive effect of renal replacement therapy in a patient with normal kidney function. *Chemotherapy* 2019; in press (date accepted 27th November 2019; CHE-2019-7-6/R1)
24. Abbott I, van Gorp E, Wijma R, Meletiadiis J, **Roberts JA**, Mouton JW, Peleg A. Oral fosfomycin efficacy with variable urinary exposures following single and multiple doses against *Enterobacteriales*: the importance of heteroresistance on growth outcome. *Antimicrob Agents Chemother* 2019; in press (date accepted 25th November 2019; AAC01982-19R1)
25. Tabah A, Bassetti M, Kollef MH, Zahar JR, Paiva JA, Timsit JF, **Roberts JA**, Schouten J, Giamarellou H, Rello J, De Waele J, Shorr AF, Leone M, Poulakou G, Depudyt P, Garnarcho-Montero J. Antimicrobial de-escalation in critically ill patients: a position statement from a task force of the European Society of Intensive Care Medicine (ESICM) and European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Critically Ill Patients Study Group (ESGCIIP). *Intensive Care Med* 2019; in press (date accepted 12th November 2019; ICME-D-19-01275R1)
26. Williams P, Beall G, Cotta MO, **Roberts JA**. Antimicrobial dosing in Critical Care: a pragmatic adult dosing nomogram. *Int J Antimicrob Agents* 2019; in press (date accepted 31st October 2019; IJAA-D-19-00194R2)
27. Heffernan A. Sime FB, Sun J, Lipman J, Kumar A, Andrews K, Ellwood D, Grimwood K, **Roberts JA**. Beta-lactam antibiotic versus combined beta-lactam antibiotic and single-daily dosing regimens of aminoglycosides for the treatment of serious infections: a meta-analysis. *Int J Antimicrob Agents* 2019; in press (date accepted 30th October 2019; IJAA-D-19-00592R1)
28. Donnellan S, Wright DFB, **Roberts JA**, Duffull SB, Schollum JBW, Putt TL, Wallis SC, Walker RJ. The pharmacokinetics of meropenem and piperacillin-tazobactam during sustained low efficiency haemodiafiltration (SLED-HDF). *Eur J Clin Pharmacol* 2019; (date accepted 29th October 2019; EJCL-D-19-00459R1)
29. Lai T, Alffenaar JW, Kesson A, Bandodkar S, **Roberts JA**. Evaluation of target attainment of oral posaconazole suspension in immunocompromised children. *J Antimicrob Chemother* 2019; in press (date accepted 22nd October 2019; JAC-2019-1340.R1)
30. Sime FS, Lassig-Smith M, Starr T, Stuart J, Pandey S, Parker SL, Wallis SC, Lipman J, **Roberts JA**. A population pharmacokinetic model-guided evaluation of ceftolozane/tazobactam dosing in critically ill patients undergoing continuous venovenous hemodiafiltration. *Antimicrob Agents Chemother* 2019; 64(1). pii: e01655-19
31. Fox E, Cheng V, Rawlins M, Dyer J, De Keulenaer B, Page MM, Hoard K, **Roberts JA**. Pharmacokinetics of flucloxacillin during prolonged intermittent renal replacement therapy in a 76-year old man. *J Chemother* 2019; 31(7-8):419-423
32. Yadav R, Bergen P, Rogers K, Kirkpatrick C, Wallis SC, Huang Y, Bulitta J, Paterson DL, Lipman J, Nation R, **Roberts JA**, Landersdorfer CB. Meropenem-tobramycin combination regimens combat carbapenem-resistant *Pseudomonas aeruginosa* in the hollow-fiber infection model simulating augmented renal clearance in critically ill patients. *Antimicrob Agents Chemother* 2019; 64(1) pii: e01679-19
33. Pandey S, Dhanani J, Lipman J, **Roberts JA**, Wallis SC, Parker SL. Development and validation of LC-MS/MS methods to measure tobramycin and lincomycin in plasma, microdialysis fluid and urine: application to a pilot pharmacokinetic research study. *Clin Chem Lab Med* 2019; 58(2):274-284
34. Parker SL, Pandey S, Sime FB, Lipman J, **Roberts JA**, Wallis SC. A validated LC-MS/MS method for the simultaneous quantification of meropenem and vaborbactam in human plasma and renal replacement therapy effluent and its application to a pharmacokinetic study. *Anal Bioanal Chem* 2019; 411(29):7831-7840
35. Mohd Sazlly-Lim SM, Zainal Abidin A, Liew SM, **Roberts JA**, Sime FB. The global prevalence of multidrug-resistance among *Acinetobacter baumannii* causing hospital-acquired and ventilator-associated pneumonia and its associated mortality: A systematic review and meta-analysis. *J Infect* 2019; 79(6):593-600

Journal Articles (cont)

36. Wong G, Taccone FS, Villosio P, Scheetz M, Rhodes N, Briscoe S, McWhinney B, Núñez-Núñez M, Ungerer J, Lipman J, **Roberts JA**. Beta-lactam pharmacodynamics in gram negative bloodstream infections in the critically ill. *J Antimicrob Chemother* 2019; in press (date accepted 25th September 2019; JAC-2019-0839.R1)
37. Boidin C, Bourguignon L, Cohen C, Roger C, Lefrant JY, **Roberts JA**, Allaouchiche B, Lepape A, Friggeri A, Goutelle S. Amikacin initial dose in critically ill patients: a nonparametric approach to optimize PK/PD target attainments in individual patients. *Antimicrob Agents Chemother* 2019; 63(11) pii: e00993-19
38. Dhaese S, Colin P, Willems H, Heffernan A, Gadeyne B, Van Vooren S, Depuydt P, Hoste E, Stove V, Verstraete AG, Lipman J, **Roberts JA**, De Waele JJ. Saturable elimination of piperacillin in critically ill patients: implications for continuous infusion. *Int J Antimicrob Agents* 2019 in press; (dte accepted 27th August 2019; IJAA-D-19-00481R1)
39. Kanji S, **Roberts JA**, Xie J, Zelenitsky S, Hiremath S, Zhang G, Watpool I, Porteous R, Patel R. Vancomycin population pharmacokinetics in critically ill adults during sustained low efficiency dialysis. *Clin Pharmacokinet* 2019; in press (date accepted August 21st, 2019; CPKA-D-19-00074R1)
40. Richter DC, Frey O, Röhr A, **Roberts JA**, Köberer A, Fuchs T, Papadimas N, Heinzel-Gutenbrunner M, Brenner T, Lichtenstern C, Weigand MA, Brinkmann A. Therapeutic drug monitoring-guided continuous infusion of Piperacillin/ Tazobactam significantly improves pharmacokinetic target-attainment in critically ill patients: a retrospective analysis of four years of clinical experience. *Infection* 2019; 47(6):1001-1011
41. **Dhanani J**, **Lipman J**, **Pincus J**, Townsend S, Livermore A, Wallis SC, Abdul-Aziz MH, **Roberts JA**. Pharmacokinetics of total and unbound cefazolin during veno-arterial extracorporeal membrane oxygenation: a case report. *Chemother* 2019; 64(3):115-118
42. Economou C, Xie J, Comadira C, Richards B, Tallott M, Wallis SC, Ordoñez J, **Lipman J**, **Roberts JA**. Population pharmacokinetics of ticarcillin in critically ill patients receiving extended daily diafiltration. *Int J Antimicrob Agents* 2019; 54(3):351-355
43. Sime FB, Byrne CJ, Parker S, Stuart J, Butler J, Starr T, Pandey S, Wallis SC, **Lipman J**, **Roberts JA**. Population pharmacokinetics of total and unbound concentrations of intravenous posaconazole in adult critically ill patients. *Crit Care* 2019; 23(1):205
44. Heffernan AJ, Germano A, Sime FB, **Roberts JA**, Kimura E. Vancomycin population pharmacokinetics for adult patients with sepsis or septic shock. Are current dosing regimens sufficient? *Eur J Clin Pharmacol* 2019; 75(9):1219-1226
45. **Dhanani J**, **Roberts JA**, Reade M. Nebulized tranexamic acid for hemoptysis associated with submassive pulmonary embolism. *J Aerosol Med Pulm Drug Del* 2019; in press (date accepted 4th May 2019; JAMP-2019-1534.R1)
46. Ranganathan D, Abdul-Aziz MH, John GT, McWhinney BC, Fassett RG, Healy H, **Kubler P**, Lim A, **Lipman J**, Purvey M, Roberts M, Reyaldean R, Ungerer J, **Roberts JA**. Pharmacokinetics of Enteric Coated Mycophenolate Sodium in Lupus Nephritis (POEMSLUN). *Ther Drug Monit* 2019; 41(6):703-713
47. Dhaese SAM, Thooft ADJ, Farkas A, **Lipman J**, Verstraete AG, Stove V, **Roberts JA**, De Waele JJ. Early target attainment of continuous infusion piperacillin/tazobactam and meropenem in critically ill patients: A prospective observational study. *J Crit Care*. 2019; 52: 75-79
48. Luque S, Muñoz R, Echeverría-Esnal D, Sorli L, Campillo N, Martínez-Casanova J, González-Colominas E, Álvarez-Lerma F, Horcajada JP, Grau S, **Roberts JA**. Linezolid dosing in patients with liver cirrhosis: standard dosing risks toxicity. *Ther Drug Monit* 2019; 41(6):732-739
49. Wan W, Guerra Valero Y, Choi GYS, Ordóñez Mejia J, Wallis SC, Joynt GM, Lipman J, Gomersall CD, **Roberts JA**. In-vitro adsorption and sieving coefficient of ticarcillin-clavulanate during continuous haemofiltration. *Int J Antimicrob Agents* 2019; 54(2):261-264
50. **Roberts JA**, Alobaid AS, Wallis SC, Perner A, Lipman J, Sjövall F. Defining optimal dosing of ciprofloxacin in patients with septic shock. *J Antimicrob Chemother* 2019; 74(6):1662-1669
51. Tenorio-Cañamás T, Grau S, Luque S, Fortún J, Liaño F, **Roberts JA**. Pharmacokinetics of micafungin in critically-ill patients receiving continuous veno-venous hemodialysis with high cut-off membranes. *Ther Drug Monit* 2019; 41(3): 376-82
52. Gurunathan U, Parker SL, Maguire R, Ramdath D, Bijoor M, Wallis SC, **Roberts JA**. Population pharmacokinetics of periarticular ketorolac in adult patients undergoing total hip or total knee arthroplasty. *Anesth Analg* 2019; 129(3):701-708
53. Colin PJ, Allegaert K, Thomson AH, Touw DJ, Dolton M, de Hoog M, **Roberts JA**, Adane ED, Yamamoto Y, García MJ, Simon N, Taccone FS, Lo Y-L, Barcia E, Eleveld DJ. Vancomycin pharmacokinetics throughout life: results from a pooled population analysis and evaluation of current dosing recommendations. *Clin Pharmacokinet* 2018; 58(6):767-780
54. Dhanani JA, Parker SL, Lipman J, Wallis SC, Cohen J, Fraser J, Barnett A, Chew M, **Roberts JA**. Recovery rates of combination antibiotic therapy using in vitro microdialysis simulating in vivo conditions. *J Pharmaceut Anal* 2019; 8(6):407-412
55. Abraham J, Sinnollareddy M, Roberts MS, Williams P, Peake SL, Lipman J, **Roberts JA**. Plasma and interstitial fluid population pharmacokinetics of vancomycin in critically patients with sepsis. *Int J Antimicrob Agents* 2019; 53(2):137-142
56. Dhaese S, Farkas A, Colin P, Lipman J, Stove V, Verstraete A, **Roberts JA**, De Waele JJ. Population pharmacokinetics and evaluation of the predictive performance of pharmacokinetic models in critically ill patients receiving continuous infusion meropenem: a comparison of eight pharmacokinetic models. *J Antimicrob Chemother* 2019; 74(2):432-441
57. Abdul-Aziz MH, **Roberts JA**. Antibiotic dosing during extracorporeal membrane oxygenation – does the system matter? *Curr Opin Anesthesiol* 2019; 33(1):71-82
58. Leone M, **Roberts JA**, Bassetti M, Bougle A, Lavigne JP, Legrand M, Neely M, Paiva JA, Payen D, Rello J, Roger C, Sjövall F, Jung B. Update on antibiotic therapy in the intensive care unit: Report from the 2019 Nimes international symposium. *Anaesth Crit Care Pain Med* 2019; 38(6):647-656
59. Douville SE, Callaway LK, Amoako A, **Roberts JA**, Eley VA. Reducing post-caesarean delivery surgical site infections: a narrative review. *Int J Obstet Anesth* 2019; in press (date accepted 28th August 2019; IJOA_2019_265R2)
60. Williams P, Cotta MO, **Roberts JA**. PK/PD of Beta-lactams and Therapeutic Drug Monitoring: From Theory to Practical Issues in the ICU. *Semin Resp Crit Care Med* 2019; 40(4):476-487
61. Sumi CD, Heffernan AJ, Lipman J, **Roberts JA**, Sime FB. What antibiotic exposures are required to suppress the emergence of resistance for Gram-negative bacteria? A systematic review. *Clin Pharmacokinet* 2019; 58(11):1407-1443

Journal Articles (cont)

62. Jager NGL, van Hest RM, Lipman J, **Roberts JA**, Cotta MO. Antibiotic exposure at the site of infection: principles and assessment of tissue penetration. *Exp Rev Clin Pharmacol* 2019; 12(7): 623-34
63. Schetz M, De Jong A, Deane AM, Druml W, Hemelaar P, Pelosi P, Pikkers P, Reitham Blaser A, **Roberts JA**, Sakr Y, Jaber S. Obesity in the critically ill: a narrative review. *Intensive Care Med* 2019; 45(6): 757-69
64. Cheng V, Abdul-Aziz MH, **Roberts JA**, Shekar K. Overcoming barriers to optimal drug dosing during ECMO in critically ill adult patients. *Exp Opin Drug Metab Toxicol* 2019; 15(2):103-112
65. Hagel S, Fiedler S, Andreas H, Brinkmann A, Frey O, Hoyer H, Schlattmann P, Kiehntopf M, **Roberts JA**, Pletz MW, TARGET Study Group Trials. Therapeutic drug monitoring-based dose optimisation of piperacillin/tazobactam to improve outcome in patients with sepsis (TARGET): a prospective, multicenter, randomized controlled trial. *Trials* 2019; 20(1):330
66. Paul SK, **Roberts JA**, Lipman J, Deans R, Samanta M. A Robust Statistical Approach to Analyse Population Pharmacokinetic Data in Critically Ill Patients with Renal Impairment. *Clin Pharmacokinet* 2019; 58(2):263-270
67. Crass RL, Williams P, **Roberts JA**. The Challenge of Quantifying and Managing Pharmacokinetic Variability of Beta-lactams in the Critically Ill. *Anaesth Crit Care Pain Med* 2019; in press (date accepted 27th December 2019; ACCPM_603)
68. Baptista JP, **Roberts JA**, Sousa E, Freitas R, Deveza N, Pimentel J. Attainment of therapeutic vancomycin level within the first 24 h: Author's response. *Crit Care* 2019; 23(1):354
69. Abdul-Aziz MH, Shekar K, **Roberts JA**. Antimicrobial therapy during ECMO – customised dosing with therapeutic drug monitoring: the way to go? *Anaesth Crit Care Pain Med* 2019; 38(5):451-453
70. Baptista JP, **Roberts JA**, Udy AA. Augmented Renal Clearance: A real phenomenon with an uncertain cause. *Anaesth Crit Care Pain Med* 2019; 38(4): 335-6.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Presentation Information

1. **Roberts JA**, “Should we be using prolonged infusions of beta-lactams now?” World Congress of Intensive Care 2019, Melbourne, Australia, October 2019
2. **Roberts JA**, “Personalised antibiotic dosing in critically ill patients” Chinese Critical Care Congress 2019, September 2019, Wuhan, China
3. **Roberts JA**, “Challenging breakpoints with supranormal dosing” Chinese Critical Care Congress 2019, September 2019, Wuhan, China
4. **Roberts JA**, “Antibiotic dosing during ECMO” Chinese Critical Care Congress 2019, September 2019, Wuhan, China
5. **Roberts JA**. “Therapeutic Drug Monitoring of Antibiotics – Standard of Care?” Sepsis Update 2019, 9th Annual Congress Sepsis and Multiorgan Dysfunction Syndrome, September 2019, Weimar, Germany
6. **Roberts JA**. “Why is Therapeutic Drug Monitoring required for Antibiotics in Sepsis?” Sepsis Update 2019, 9th Annual Congress Sepsis and Multiorgan Dysfunction Syndrome, September 2019, Weimar, Germany
7. **Roberts JA**. “Personalised Antibiotic Dosing in the Critically Ill”. Technical Solutions to Support Infection Management and Address AMR. Imperial College London, July 2019, London, UK
8. **Roberts JA**. “Critically Ill patients at risk of suboptimal antibiotic concentrations”. Antimicrobial Optimisation Seminar, NHMRC Centre for Research Excellence REDUCE, Nimes University Hospital, July 2019, Nimes, France
9. **Roberts JA**. “Symposium Pro/con: optimised dosing according to PK/PD principles in patients – does it improve the efficacy of antibiotics?”. European Conference on Clinical Microbiology and Infectious Diseases. Amsterdam, The Netherlands, April 2019
10. **Roberts JA**. “How to optimise antibiotic administration in critically ill patients – from PK/PD to TDM”. European Conference on Clinical Microbiology and Infectious Diseases. Amsterdam, The Netherlands, April 2019
11. **Roberts JA**. “A world with precision dosing and TDM”. ESCMID Educational Course: Optimised dosing of antibiotics – understanding PK/PD, clinical breakpoints and therapeutic drug monitoring. Rotterdam, The Netherlands, April 2019
12. **Roberts JA**. “Optimal dosing and continuous or prolonged infusion of beta-lactams and vancomycin – what is the evidence?”. ESCMID Educational Course: Optimised dosing of antibiotics – understanding PK/PD, clinical breakpoints and therapeutic drug monitoring. Rotterdam, The Netherlands, April 2019
13. **Roberts JA**, “Antimicrobial therapy and PK/PD in the critically ill”. Australasian Society of Infectious Diseases (ASID) Trainees Weekend, Brisbane, Australia, November 2019
14. **Roberts JA**, “Antimicrobial dosing in critically ill patients”. South Australia-Northern Territory Infectious Diseases Symposium, Society of Hospital Pharmacists of Australia, Adelaide, Australia, September 2019
15. **Roberts JA**, “TDM of beta-lactams in our ICU – State of the art”. Short Course in Critical Infection, The University of Sydney, Brisbane, Australia, September 2019
16. **Roberts JA**, “Beta lactam infusion – applications and pitfalls”. Antimicrobial Masterclass (AiM) for Acute Care Clinicians. Brisbane, Australia, June 2019
17. **Roberts JA**, “Antibiotic dosing in obesity and in patients on extracorporeal organ support”. Antimicrobial Masterclass (AiM) for Acute Care Clinicians. Brisbane, Australia, June 2019
18. **Roberts JA**, “Converting research into publications”. Queensland Hospital Pharmacy Research Collaborative and Society of Hospital Pharmacists of Australia (Queensland Branch) Research Symposium, Pharmacy Australia Centre of Excellence, Brisbane, October 2019
19. **Roberts JA**, “Pharmacological aspects of infective endocarditis”. Infective Endocarditis Symposium, The Prince Charles Hospital, Brisbane, October 2019



Presentation Information *(cont)*

20. **Roberts JA**, "Therapeutic Drug Monitoring of Antibiotics". Royal Melbourne Hospital, Melbourne, Australia, October 2019
21. **Roberts JA**, "Antimicrobial Dosing in Critically Ill Patients". The Austin Hospital, Melbourne, Australia, October 2019
22. **Roberts JA**, "How to write a research protocol". Royal Brisbane and Women's Hospital Annual Research Symposium, Brisbane, September 2019
23. **Roberts JA**, "Updates to the electronic Therapeutic Guidelines (eTG) version 16". Queensland Statewide Antimicrobial Stewardship Program Education Session, Brisbane, June 2019.

Invited Speakers

1. **Whitfield K**. Building Resilience in Students Monash Pharmacy Education Symposium 2019, Prato, Italy, 7-10 July 2019 (Workshop)
2. **Whitfield K**. Building Personal and Team Resilience Tasmania SHPA Conference 2019 (Keynote Speaker)
3. **Whitfield K**. PRINT Conference (Premedical Intern Conference), Brisbane 2019 (Interactive Workshop)
4. **Roberts JA**. National Antimicrobial Forum 2019, The University of Queensland and Queensland Health Communicable Diseases Branch, Royal Brisbane and Women's Hospital Education Centre, Brisbane, November 2019 (Convenor)
5. **Roberts JA**. Queensland Hospital Pharmacy Research Collaborative and Society of Hospital Pharmacists of Australia (Queensland Branch) Research Symposium, Pharmacy Australia Centre of Excellence, Brisbane, October 2019 (Convenor)
6. **Roberts JA**. Antimicrobial Optimisation Seminar, NHMRC Centre for Research Excellence REDUCE, Nimes University Hospital, Nimes, France, July 2019 (Convenor)
7. **Roberts JA**. Antimicrobial Population PK/PD Modelling and Dose Optimisation workshop, NHMRC Centre for Research Excellence REDUCE, Nimes University Hospital, Nimes, France, July 2019 (Convenor)
8. **Roberts JA**. Outpatient Parenteral Antibiotic Therapy/Hospital In The Home (OPAT/HITH) Workshop, NHMRC Centre for Research Excellence REDUCE, St Vincent's Hospital, February 2019, Sydney (Convenor).

Oral Presentations

1. **Ta K, Turkington J, Young A, Groom P, Redmond A**. Penicillin Allergy need not be forever. 2019 RBWH QuaRRIES Quality Awards
2. **Ta K, Hale A, Nissen L, Hajkowicz K, Coombes I, Lau E, McBride LJ**. Evaluation of Pharmacist administered Influenza Vaccination in High risk hospital Outpatients (EPIVHO). 2019 SHPA Research Symposium.
3. **Doran E**. Leading a team of ED pharmacists. SHPA Emergency Medicine Extension Seminar Sydney August 2019
4. **Doran E**. The poisoned patient who produces the poison: fatal sodium azide ingestion. SHPA MM19 Gold Coast November 2019
5. **Doran E, Lock C, Coombes I**. The role of emergency medicine pharmacists: what do other emergency clinicians value most? SHPA MM19 Gold Coast November 2019
6. **Doran E**. Acute trauma management– the emerging role for pharmacists. Herston Healthcare Symposium 2019
7. **Tripcony L**. Pharmacists Providing Personalised Medicine Using Pharmacogenomic Testing. SHPA MM19 Gold Coast November 2019
8. **Carmichael S**. Fooling with the flow; Flozins and Fournier's. SHPA MM19 Gold Coast November 2019
9. Vienet M, Galbraith K, McInerney B, **Whitfield KM**. Leadership 101 for Intern Pharmacists. Proceedings of the 2019 45th SHPA National Conference, 14-16 November 2019 Gold Coast.

Poster Presentations

1. **Yu A, Dekkar K, Nasseh N**. Mapping the phone lines: Assessing the need for pharmacist-led telephone interviews in the pre-admission clinic. SHPA MM19 Gold Coast November 2019
2. **Yu A, Dekkar K**. Establishing a pharmacy telephone review service in Pre-Admission Clinic. SHPA MM19 Gold Coast November 2019
3. **Yu A, Nawabi L**. Infections, readmissions and increased length of stay – all too common for the peri-procedural diabetic patient. Herston Healthcare Symposium 2019
4. **Dawson C**. Utilising an advanced scope pharmacy assistant to assess medication adherence: MAQ a difference. Renal Society of Australasia Conference, Auckland 27/06/2019
5. **Scuderi C, Rice M, Berquier I, Douglas C, Purtell L, Bonner A, Healy H**. The Role of the pharmacist in Kidney Supportive Care: A patient example. Herston Healthcare Symposium 2019
6. **Scuderi C, Rice M**. Video health consults pushing pharmacists into patients' homes using smart technology. International Society of Nephrology World Congress of Nephrology April 2019
7. **Scuderi C, Rice M, Jahan S, Purtell L, Rawlings C, Bonner A, Helen Healy H**. Less is More: Deprescribing in renal patients on a conservative management pathway. SHPA MM19 Gold Coast November 2019
8. **Scuderi C, Rice M, Hendy A, Burrows J, Purtell L, Bonner A, Healy H**. Role of pharmacists in Keeping Kidneys – a General Practitioner with Special Interest chronic disease clinic. SHPA MM19 Gold Coast November 2019
9. **O'Halloran G**. Improving physical health in mental health: a pharmacist's impact. Qld Research Symposium 26/10/2019
10. **Butler-Mader R, Craven AM, Fassbind I**. Transdermal Granisteron in the treatment of Hyperemesis Gravidarum. SOMANZ 2019
11. **Walker J**. The appropriateness of anticoagulant prescribing post-ischaemic stroke in patients with atrial fibrillation. Queensland Pharmacy Research Symposium



Poster Presentations (cont)

12. **Black K.** From Palliation to Recuperation: Phytoin and Pharmacist to the Rescue. SHPA MM19 Gold Coast November 2019
13. **Black K.** A Plan to Beat the Pain: The implementation of personalised post-operative pain management plans. SHPA MM19 Gold Coast November 2019
14. **Doran E.** Carbamazepine toxicity & refractory seizures. Toxicology and Poisons Network Australasia (TAPNA) Scientific meeting Gold Coast May 2019
15. **Swan B, Hughes D, Doran E.** Anticoagulation Prescribing and Documentation in a Tertiary Emergency and Trauma Centre – The clot thickens. SHPA MM19 Gold Coast November 2019
16. **Doran E, Lock C, Coombes I.** The role of emergency medicine pharmacists: what do other emergency clinicians value most? SHPA MM19 Gold Coast November 2019
17. **Jensen M.** Drug Interactions, Haematopoietic Stem Cell Transplantation, Mycobacterium Tuberculosis – Pharmaceutical Challenges. SHPA Qld Branch Research Symposium
18. **Nasseh, N.** Rocking the Boat? Consumer Engagement in a Written Counselling Tool. SHPA Qld Branch Research Symposium
19. **Millhouse S.** Use of a Self-reported Measure of Medication Adherence in a Chronic Kidney Clinic. SHPA QLD Branch Pharmacy Symposium 2019
20. **Hoy S.** Evaluation of Neonatal Medication Safety Initiatives Across the Continuum of Care. SHPA MM19 Gold Coast November 2019
21. **Hossein Zadeh Z, Park M.** Avoiding valproate exposure in pregnancy using a decision-making tool. 2019 SHPA Research Symposium
22. **Legg A, Young A, Hallas E, Hajkowicz K, Redmond A, Turkington J.** Getting rid of penicillin allergy labels. Australasian Society for Infectious Diseases Annual Scientific Meeting
23. **Scuderi C, Rice M, Berquier I, Douglas C, Purtell L, Bonner A, Healy H.** The Role of the pharmacist in Kidney Supportive Care: A patient example. International Society of Nephrology World Congress of Nephrology April 2019
24. **O'Halloran G.** Improving physical health in mental health: a pharmacist's impact. SHPA MM19 Gold Coast November 2019
25. **Walker J.** The appropriateness of anticoagulant prescribing post-ischaemic stroke in patients with atrial fibrillation. SHPA MM19 Gold Coast November 2019
26. **Butler-Mader R, Craven AM, Fassbind I.** Transdermal Granisteron in the treatment of Hyperemesis Gravidarum. SHPA MM19 Gold Coast November 2019
27. **Millhouse S.** Use of a Self-reported Measure of Medication Adherence in a Chronic Kidney Clinic. SHPA MM19 Gold Coast November 2019
28. **Hossein Zadeh Z, Park M.** Avoiding valproate exposure in pregnancy using a decision-making tool. SHPA MM19 Gold Coast November 2019
29. **Nawabi L, North A.** Denosumab documentation and continuity of care in the geriatric evaluation and management (GEM) ward at the RBWH. RBWH Symposium Brisbane, September 2019
30. **Trenerry H, Risetto T.** The impact of a medicines information (MI) service on recognition and management of antiepileptic drug toxicity. SHPA MM19 Gold Coast November 2019
31. **Trenerry, H.** The management of carbamazepine-induced hyponatraemia and prevention of valproate toxicity by medicines information (MI) service. SHPA MM19 Gold Coast November 2019
32. **Risetto T, Trenerry H, Madan A.** Status Epilepticus and Encephalopathy or Valproate and Phenytoin toxicity? Toxicology and Poisons Network Australasia (TAPNA) May 2019
33. **Busuttin L, Middleton R, Smith C, Coombes I.** Forget the Fax – Implementation of Direct from Ward Dispensing. SHPA MM19 Gold Coast November 2019
34. **Davies K, Coombes I, Keogh S, Hay K, Whitfield K.** Medication administration evaluation and feedback tool design and validation. MAEFT Symposium 2019
35. **Vienet M, Galbraith K, McInerney B, Whitfield KM.** Leadership 101 for Intern Pharmacists. Monash Pharmacy Education Symposium 2019, Prato, Italy, 7-10 July
36. **Firman P, Whitfield K, Hayes T.** Oncology Pharmacists: Expanding Outpatient Service Models to Increase Patient Impact and Safety. SHPA Medication management 2019. Gold Coast Australia 14-16th November 2019
37. **Keegan L, Whitfield KM.** Preconception Counselling – The Role of the Clinical Pharmacist. Proceedings of the 2019 44th SHPA National Conference, 14-16th November 2019 Gold Coast
38. **North AM, Lust KM, Barrett H, Whitfield KM.** Therapeutic anticoagulation during the postnatal peripartum period: a survey of clinical practice. Proceedings of the 2019 21st Annual RBWH Health Care Symposium September 2019
39. **Davies K, Coombes I, Keogh S, Hay K, Whitfield KM.** Medication administration evaluation and feedback design and validation. Proceedings of the 2019 21st Annual RBWH Health Care Symposium September 2019
40. **Vienet M, Galbraith K, McInerney B, Whitfield KM.** Leadership 101 for Intern Pharmacists. Proceedings of the 2019 44th SHPA National Conference, 14-16th November 2019 Gold Coast
41. **Trenerry H, Risetto T.** The impact of a medicines information (MI) service on recognition and management of antiepileptic drug toxicity. QLD Branch Research Symposium October 2019.



DEPARTMENT OF RHEUMATOLOGY

The rheumatology department has collaborated with New Zealand colleagues to produce clinical research on improving the understanding and clinical outcomes of patients living with gout. Other areas of research interest include assessment and management of autoimmune inflammatory arthritis, axial spondyloarthritis, eye conditions related to systemic arthritis, Systemic Lupus Erythematosus (SLE) and systemic vasculitis. Specifically, the department has a research interest in applying therapeutic drug monitoring to clinical practice with the aim of providing individualised medicine management. The department liaises with national networks including other medical specialties to optimise patient outcomes in patients with SLE, systemic vasculitis and scleroderma.

2019 Research Publications

Journal Articles

1. Bursill David... **Philip Robinson** ...Dalbeth Nicola. Gout, Hyperuricemia and Crystal-Associated Disease Network (G-CAN) consensus statement regarding labels and definitions of disease states of gout. *Annals of the Rheumatic Diseases e-published* 9th September 2019 (IF 12.81)
2. Mathuja Bavan and **Philip Robinson**. Management of patients with gout and achievement of target serum urate levels at a tertiary rheumatology service in Australia. *Internal Medicine Journal* 2019 *e-published* (IF 1.78)
3. **Philip Robinson**, Raj Sengupta and Stefan Siebert. Non-radiographic axial spondyloarthritis (nr-axSpA) – Advances in classification, imaging and therapy. *Rheumatology & Therapy* 2019;6(2):165-77
4. David Bursill... **Philip Robinson**... Nicola Dalbeth. Gout, Hyperuricemia and Crystal-Associated Disease Network (G-CAN) consensus statement regarding labels and definitions for disease elements in gout. *Arthritis Care & Research* 2019; 71:427-434 (IF 3.32)
5. **Hennessey A**^{1,2}, Lukawska J³, Cambridge G⁴, Isenberg D^{5,6}, Leandro M Adverse infusion reactions to rituximab in systemic lupus erythematosus: a retrospective analysis. *BMC Rheumatol.* 2019 Aug 29;3:32. doi: 10.1186/s41927-019-0082-7. eCollection 2019.

SEXUAL HEALTH & HIV SERVICES

- Human Papilloma Virus saliva screening test study, a collaborative research partnership initiative with Sexual Health and HIV Services Metro North (SHHS), Queensland University of Technology (QUT) and Metro South Hospital and Health Service (MSHHS).
- Ethics approval and recruitment at SHHS for this study commenced in the last quarter of 2019 and continues to recruit healthy volunteers in 2020 to detect salivary biomarkers associated with HPV-related head and neck SCC cancers.
- The Australian HIV observational database (AHOD); an observational cohort study which commenced twenty years ago to monitor treatment uptake and outcomes and provides surveillance data for HIV care planning.
- Strategic Timing of Antiretroviral Treatment, of which its current data collection will determine whether HIV positive people will have chronic long term sequelae if they had delayed ARV treatment compared to cases whom received immediate ARV at time of diagnosis and continues until at least 2021.
- The Control and Elimination within Australia of Hepatitis C from people living with HIV (CEASE-D) study is the third observational cross-sectional study which tracks HIV-HCV co-infected people, their HCV and HIV treatments and their viraemia.
- Pending ethics approval, SHHS is Lead Australian site for an international pharmaceutical clinical trial using a novel anti-retroviral treatment regime in 2020. Other research studies are also in the pre-approval stages.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Sasee Chameera, Ekanayake Weeramange	PhD, Queensland University of Technology	Head and Neck Cancer detection is a spitting distance away. Saliva Screening test study	Associate Professor Chamindie Punyadeera, Dr Julian Langton-Lockton

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Emma Knowland	Clinical Nurse <i>(Research portfolio)</i>	0.2 (commenced August 2019)	Operational	n/a	n/a
Fiona Taylor	Clinical Nurse <i>(Research portfolio)</i>	0.2 (to Aug 2019)	Operational	n/a	n/a

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Associate Professor Chamindie Punyadeera (<i>QUT</i>)	Dr Julian Langton-Lockton, Emma Knowland , Sasee Chameera Ekanayake Weeramange (<i>QUT</i>), Kai Tang (<i>QUT</i>)	Head and Neck Cancer detection is a spitting distance away. Saliva Screening test study
Dr Caroline Thng (<i>Gold Coast Sexual Health, GCHHS</i>)	Dr Julian Langton-Lockton, Dr Peter Simos, Adam Spinks , Metro North Sexual Health and HIV Service, Dr Emma Sweeney, Associate Professor David Whiley, <i>University of Queensland, UQCCR</i>	<i>Mycoplasma genitalium</i> Antibiotic Resistance testing: Correlating Resistance testing to Clinical outcomes
Ms Jackie Hanson (<i>Executive Director, Operations, MNHHS</i>)	Dr Julian Langton-Lockton, Wade McClelland (<i>Metro North Sexual Health and HIV Service</i>) Joseph Debattista (<i>Metro North Public Health Unit</i>), Queensland Positive People (<i>non-government organisation</i>)	Project: From test to treatment – Completing the Circle (LINK innovation funding)
Karen Biggs (<i>Gold Coast Sexual Health</i>)	Jacqueline McElland, Adam Spinks, Julian Langton-Lockton (<i>Metro North HHS</i>), Dr Maree O'Sullivan, Dr Caroline Thng (<i>Gold Coast Sexual Health, GCHHS</i>) (<i>Metro South HHS</i>)	PEP in the era of PrEP
Professor Matthew Law (<i>The Kirby Institute, UNSW, Sydney</i>)	Dr Diane Rowling, Dr Julian Langton-Lockton Metro North Sexual Health and HIV Service and Others	The Australian HIV Observational Database (AHOD)
Professor Gregory Dore and Dr Gail Matthews (<i>The Kirby Institute, UNSW, Sydney</i>)	Dr Diane Rowling Metro North Sexual Health and HIV Service and Others	Control and Elimination within Australia of Hepatitis C from people living with HIV (CEASE)
The INSIGHT START Study Group. Australian Lead Researchers: (<i>The Kirby Institute, UNSW, Sydney</i>)	Dr Diane Rowling Metro North Sexual Health and HIV Service and Others	Strategic Timing of Antiretroviral Treatment (START)

2019 Research Publications

Journal Articles

1. E.L. Sweeney, a E. Trembizki, a C. Bletchly, b C.S. Bradshaw, c A. Menon, d 3 F. Francis, **e J. Langton-Lockton, f G.R. Nimmo, b and D.M. Whiley a,b 4** Title: Levels of *Mycoplasma genitalium* antimicrobial resistance differ by both region and gender in the state of Queensland, Australia: implications for treatment guidelines. *J. Clin. Microbiol.* doi:10.1128/JCM.01555-18, American Society for Microbiology
2. Holland DJ, **Simos PA**, Yoon J, Sivabalan P, Ramnarain J & Runnegar NJ. Infective Endocarditis: A Contemporary Study of Microbiology, Echocardiography and Associated Clinical Outcomes at a Major Tertiary Referral Centre. *Heart, Lung & Circulation* (2019) Issue 2. <https://www.ncbi.nlm.nih.gov/pubmed/31402124>.

2019 Conference Presentations – Invited Speaker, Oral and Poster

- Presentation information Australasian Chapter of Sexual Health Medicine – Annual Scientific Meeting (ASM), March 2019, Brisbane
- ASM 2019 Chair and Convenor **Dr Julian Langton-Lockton**.

Poster Presentations

1. **Taylor, F., Nunn, J & Nicholas, J.** (2019) Clinical Audit at Sexual Health & HIV Service to determine rates of vaccination in HIV positive cohort Herston State of the Art Healthcare Symposium, MNHHS. Brisbane, Australia.

QUEENSLAND STATE-WIDE ANTIMICROBIAL STEWARDSHIP PROGRAM

The research highlights for the Queensland Statewide Antimicrobial Stewardship Program were the collaboration of the Hot North Project which is quantifying and assessing appropriateness of antimicrobial prescribing practice in remote Aboriginal primary health care clinics across northern Australia and an innovative Antimicrobial Stewardship Program for children in remote and regional areas: optimising antibiotic use through early intravenous-to-oral conversion in collaboration with Children's Health Queensland Hospital and Health Services, AusHSI and The University of Queensland

The National Antimicrobial Resistance Forum was held in Brisbane, November 2019. The forum was a joint collaboration of the Queensland Statewide Antimicrobial Stewardship Program, Communicable Diseases Branch, Queensland Department of Health, the University of Queensland including the Centre of Research Excellence in Redefining Antimicrobial Use to Reduce Resistance, Queensland University of Technology and the National Centre for Antimicrobial Stewardship. This purpose of the forum was to provide a platform to share knowledge, experience and evidence for implementation of the response to antimicrobial resistance in the Australian context. It consisted of a clinical and scientific program with representatives from the academic, public, private and community sectors representing hospital, community and animal health, translational science and policy. Over two hundred delegates attended with over 50 sites registered to attend via video conference. The registrants included representatives from both national and international healthcare settings and from the following disciplines: medical, veterinary, allied health, scientists, government plus students. Video conference: 50 sites registered to attend via video conference.

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Minyon Avent	Advanced Pharmacist	0.4	Operationally Funded	Optimising antibiotic use through early intravenous-to-oral conversion	The University of Queensland

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Minyon Avent	QLD Antimicrobial Stewardship Program	An innovative Antimicrobial Stewardship Program for children in remote and regional areas: optimising antibiotic use through early intravenous-to-oral conversion	Children's Hospital Foundation Queensland: General Health Services Research	\$95,000	\$65,000	2018-2019

2019 Research Publications

Journal Articles

1. **Avent Minyon L**, Rogers Benjamin. A Optimising antimicrobial therapy through the use of Bayesian dosing programs. International Journal of Clinical Pharmacy, <https://doi.org/10.1007/s11096-019-00886-4>
2. Asha C Bowen, **Kathryn Daveson**, Lorraine Anderson, Steven YC Tong. An urgent need for antimicrobial stewardship in Indigenous rural and remote primary health care. MJA 2019:211 doi: 10.5694/mja2.50216.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Oral Presentations

1. **Avent, ML, Daveson K**, Graham N, Clark JE. Prevalence survey of the use and appropriateness of antimicrobial prescribing for children in regional and remote areas. February 2019, Antimicrobials 2019 scientific meeting, Sydney Australia.

THORACIC MEDICINE

KEY PUBLICATIONS

1. **Fielding D, Farzad Bashirzadeh, Mahendra Singh, Lakshmy Nandakumar**, Amy E McCart Reed, Debra Black, Andrew J Dalley, Stephen Kazakoff, Katia Nones, John Pearson, Nic Waddell, Sunil R Lakhani, Peter T Simpson. Diff-Quik cytology smears from Endobronchial Ultrasound Transbronchial Needle Aspirate Lymph Node Specimens as a source of DNA for Next Generation Sequencing instead of cell blocks. *Respiration* 2019; 97; 525-539
2. **David I. K. Fielding, Farzad Bashirzadeh, Jung Hwa Son, Maryann Todman, Adrian Chin, Lionel Tan, Karin Steinke, Morgan N. Windsor**, Arthur Wai Sung. First human use of a new robotic-assisted fiber optic sensing navigation system for small peripheral pulmonary nodules. *Respiration* in press 2019
3. Secombe P, Stewart P, Singh S, Campbell L, Stephens D, Tran K, White H, Sheehy R, Gibson J, Cooke R, Townsend S, Apte Y, Winearls J, Ferry OR, Pradhan R, Ziegenfuss M, Fong KM, Yang IA, McGinnity P, Meyer J, Walsham J, **Boots R**, Clement P, Bandeshe H, Gracie C, Jarret P, Collins S, Coulston C, Ng M, Howells V, Chatterjee I, Visser A, Smith J, Trout M; Clinical management practices of life-threatening asthma: an audit of practices in intensive care. *Crit Care Resusc.* 2019 Mar;21(1):53-62
4. **Holt MR**, et al. Similar characteristics of nontuberculous mycobacterial pulmonary disease in men and women. *Eur Respir J* 2019; 54:1900252.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies University <i>(e.g. PhD, Masters etc.)</i> <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
David Fielding	PhD		Peter Simpson, Sunil Lakhani

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Elizabeth Nixon	Research Co Ordinator	1.0	Operationally Funded	Pet First Study	
Jung Hwa Son	Research Coordinator	0.2	Externally Funded	Debutant Study, COPD Value Registry	
Zuzana Donelly	Research Coordinator	0.2	Externally Funded	Interstitial Lung Disease Database	

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
David Fielding	F Bashirzadeh, UQ CCR, QIMR BERGHOFER, GCUH, SCUH	Streamlining lung cancer diagnosis through genomic testing of cytology smears
David Fielding	F Bashirzadeh, E Nixon, HIRF, Dept Nuclear Medicine, Dept Thoracic Surgery	PET First in diagnosis of lung nodules

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
S Herath <i>(Westmead Sydney)</i>	D Fielding , F Bashirzadeh, J Son	Gencut biopsy of pulmonary nodules
D Steinfort <i>(Royal Melbourne)</i>	D Fielding , F Bashirzadeh, J Son, Radiation Oncology	SEISMIC study of pre radiation therapy EBUS TBNA Staging
International collaborators	C Zappala	Pulmonary Hypertension medication studies

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups /Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Lakhani et al	RBWH Thoracic Medicine, UQCCR, QIMR B	Integrating next-generation genomic platforms into routine clinical practice	QGHA	\$480,000	\$100,000	2017-present

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups /Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
D Fielding , Simpson, Nones, Steinfort, Nguyen, Williamson	RBWH Thoracic Medicine, UQCCR, QIMR B	Streamlining lung cancer diagnosis through genomic testing of cytology smears	CCQ, CA and Aus Genomics	\$957,000	\$100,000	2018 - 2012
D Fielding , P Simpson, S Lakhani, A Dalley, K Nones, N Waddell	RBWH, UQCCR, QIMR Berghofer	Streamlining lung cancer diagnosis through genomic testing of cytology smears	RBWH Foundation	\$ 40,000	\$40,000	2018- 2019
C Zappala	RBWH Thoracic Medicine	Medication studies of Pulmonary Hypertension	External		\$10,000	2018- present

2019 Research Publications

Journal Articles

- Fielding D**. Twenty-five years of Respiriology: Advances in interventional pulmonology. *Respirology* 2020; 25:23-25
- Fielding D**, Oki T. Technologies for targeting the pulmonary nodule (including robotics). *Respirology* 2019 In Press
- Fielding D** Farzad Bashirzadeh, Mahendra Singh, Lakshmy Nandakumar, Amy E McCart Reed, Debra Black, Andrew J Dalley, Stephen Kazakoff, Katia Nones, John Pearson, Nic Waddell, Sunil R Lakhani, Peter T Simpson. Diff-Quik cytology smears from Endobronchial Ultrasound Transbronchial Needle Aspire Lymph Node Specimens as a source of DNA for Next Generation Sequencing instead of cell blocks. *Respiration* 2019; 97; 525-539
- David I. K. Fielding, Farzad Bashirzadeh, Jung Hwa Son, Maryann Todman, Adrian Chin, Lionel Tan, Karin Steinke, Morgan N. Windsor, Arthur Wai Sung. First human use of a new robotic-assisted fiber optic sensing navigation system for small peripheral pulmonary nodules. *Respiration* in press 2019
- Langton D; Ing A; **Fielding D**; Wang W; Plummer V; Thien F, Bronchodilator responsiveness as a predictor of success for bronchial thermoplasty. *Respirology* 2019 ; 24:63-67
- Chronic Pulmonary Melioidosis Masquerading as lung malignancy diagnosed by EBUS guided sheath technique. *Zaw KK; Wasgewatta SL; Kwong KK; Fielding D; Heraganahally SS; Currie BJ. Respir Med Case Rep* 2019; 28: 100894
- Langton D**; Wang W; Sha J; Ing A; **Fielding D**; Hersch N; Plummer V; Thien F, Predicting the Response to Bronchial Thermoplasty. *J Allergy Clin Immunol Pract.* 2019 Nov 08
- Safety and Effectiveness of Bronchial Thermoplasty When FEV1 Is Less Than 50. *Langton D; Ing A; Fielding D; Hersch N; Sha J; Plummer V; Thien F, Chest* 2019 Sep 13
- Secombe P, Stewart P, Singh S, Campbell L, Stephens D, Tran K, White H, Sheehy R, Gibson J, Cooke R, Townsend S, Apte Y, Winearls J, Ferry OR, Pradhan R, Ziegenfuss M, Fong KM, Yang IA, McGinnity P, Meyer J, Walsham J, Boots R, Clement P, Bandeshe H, Gracie C, Jarret P, Collins S, Coulston C, Ng M, Howells V, Chatterjee I, Visser A, Smith J, Trout M; Critical Care Asthma Investigators . Clinical management practices of life-threatening asthma: an audit of practices in intensive care. *Crit Care Resusc.* 2019 Mar;21(1):53-62
- Holt MR, et al. Exploring immunomodulation by endocrine changes in Lady Windermere Syndrome. *Clin Exp Immunol* 2019; 196:28-38 (literature review for MPhil/PhD)
- Holt MR, et al. Similar characteristics of nontuberculous mycobacterial pulmonary disease in men and women. *Eur Respir J* 2019; 54:1900252 (project with UC Denver/NJH).

Books

- Kurimoto N, **Fielding D**, Musani A (Eds). *Endobronchial Ultrasonography 2nd Edition*. Wiley Blackwell. 2019 In press.

Book Chapters / Letters

D FIELDING. 5 CHAPTERS IN ENDOBRONCHIAL ULTRASONOGRAPHY

Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration: Tips and Tricks
 Endobronchial Ultrasonography with a Guide Sheath: Up to Date
 Endobronchial Ultrasonography for Ground-Glass Opacity Lesions
 Endobronchial Ultrasonography of Airway Integrity and Tumor Involvement
 Future Directions for Endobronchial Ultrasonography.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

D FIELDING

- World Lung Cancer Congress 2019. Robotic Bronchoscopy
- Menarini European Congress on Procedural Training Venice – Procedural training in Australia
- Brisbane Lung Cancer Conference: Specimen preparation in EBUS TBNA
- R Boots. RACP Lecture Series: Respiration Failure Acute and Chronic.

Poster Presentations

- Holt MR, et al. A comparison of microbiologic and molecular measures of bacterial burden in adults with nontuberculous mycobacterial lung disease. *Am J Respir Crit Care Med* 2019;199: A2535 (poster-discussion, ATS 2019, project with UC Denver/NJH)
- Fanning M, Leong M, Samarantunga D. Encouraging nasal /nasal pillow masks during initial titration – real world outcomes. (Sleep Australia 2019).

Other communications and outputs

D Fielding was Congress President of the ASIA PACIFIC CONGRESS OF BRONCHOLOGY, GOLD COAST MARCH 2019.



MEDICAL IMAGING CLINICAL SUPPORT SERVICES

DEPARTMENT OF MEDICAL IMAGING



Gillian Nasato
Executive Director
Clinical Support Services

The Department of Medical Imaging (DMI) provides a full range of diagnostic and interventional imaging services. DMI actively undertakes clinical research in departmental, interdepartmental and multi-site collaborative research projects. Under the directorship of Professor Alan Coulthard, the DMI Research Office supports many departmental research projects and clinical trials while further supporting external, service-based research studies established by other RBWH departments or external research groups. Our consultants, registrars, radiographers and nurses all provide expertise on imaging protocols, clinical diagnosis and interventional procedures to best support these projects.

DMI has established strong research collaborations with local research institutes such as the Herston Biofabrication Institute, Queensland Brain Institute, the Centre for Advanced Imaging, QIMR Berghofer, HIRF, UQCCR and CSIRO. Over the coming years we hope to extend these research collaborations with international hospitals such as Mount Sinai Hospital in New York, as well as, collaborating with global industry partners.



Assoc. Prof. Karin Steinke
Acting Medical Director
Medical Imaging

Highlights of our research from 2019 include:

CONSULT Study: The aim of this project is to clinically validate custom-made tractography software. Images created by the software will assist radiologists and neurosurgeons in their pre-surgical planning of patients about to receive brain surgery. This project has been conducted in two stages. Stage One was completed in 2018 and Stage Two is reaching completion in 2019. The project has been a joint venture between DMI, Dept. Neurosurgery and CSIRO.

EPPICS Study: This year we completed a three-year clinical trial designed to identify the optimal means of keeping patients anti-coagulated during intercranial aneurysm procedures.

PICC Study: This radiographer-driven study is designed to determine the optimal vein size-to-catheter ratio to reduce the occurrence of thromboembolic events in patients with PICC lines.

Formalising the Interventional Oncology Unit: There has been a steady rise in the demand for interventional radiologists to treat cancer patients. The Interventional Oncology Unit was developed to help meet that demand and exists as an on-going collaboration between Medical Imaging and Cancer Care Services. This Unit has been formalised by the addition of a research nurse, who is supported by the by Cancer Care Services, but embedded within Medical Imaging. This additional research support has fast-tracked protocol development and data collection which will immediately contribute to a number of research initiatives currently under development.

Centre of Excellence for Interventional Neuroradiology – Progress is on-going to establish a process for First in Human Clinical Trials for medical devices used in interventional neuroradiology procedures such as treating unruptured aneurysms and clot retrieval.



Prof. Alan Coulthard
Director of Research
 Medical Imaging

The Medical Imaging Department has been fortunate to secure the opportunity to install four Spectral CT Scanners across the Herston Precinct. Once installed, the Herston Precinct will be the only site globally to contain this number of Spectral CT Scanners thereby providing endless opportunities to perform cutting edge imaging research. Collaborations with various universities and research institutes currently investing in artificial intelligence and deep-machine learning algorithms that integrate with imaging platforms are already being developed. In turn, this will give our imaging staff exposure to leading technology in diagnostic imaging.

2019 has been a dynamic time for research within the Medical Imaging Department. Our research has provided valuable insights into the standards of practice within the department by exploring new diagnostic and interventional avenues. The diverse range of clinical trials currently being conducted within DMI will lead to changes of practice which will directly affect patient treatment and care across all imaging modalities.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Rachael Anstey	MPhil, UQ (2018-2020)	The Use of MRI and Ultrasound in Foetal Ventriculomegaly	Gail Durbridge
Muhammed Latif	MSc, Anglia Ruskin University, UK (2019-2020)	Magnetic Resonance Imaging	Catherine Westbrook
Kate Smith	MPhil, QUT (2019-2021)	The Impact of Patient Arm Position for Multi-trauma Patients with Upper Extremity Injuries	Karen Dobeli
Rebekah Onsley	MPhil, University of Sydney (2019-2021)	Image Interpretation (Specialty in CT imaging)	Karen Dobeli
Yi Jiun Yong	Graduate Certificate, University of South Australia (2019)	N/A	N/A
Jerry Casey	Graduate Diploma, UQ (2019-2020)	Magnetic Resonance Imaging	N/A
Cathy Chiem	MPhil, University of Adelaide	Image Interpretation (Specialty in Ultrasound and sonography)	N/A

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Alan Coulthard	Director of Research	0.1	In-kind	Directing research development for Medical Imaging – medical staff	UQ, School of Medicine
Marita Prior	Research Development Officer	0.5	Operational	Research development for Medical Imaging – medical staff, radiographers, nurses	N/A
Maria Sathi	Senior House Officer – Research	1.0	Operational	Research development for Medical Imaging – medical staff	UQ, School of Medicine
Janice den Elzen	Research Project Manager	0.8	Operational	Research development for Medical Imaging – medical staff, radiographers, nurses	N/A
Karen Dobeli	Senior Radiographer	0.05	Operational	Research development for Medical Imaging – radiographers	University of Sydney
Helen-Louise Morris	Research Nurse	0.4	External <i>(Cancer Care Services)</i>	Interventional Oncology Unit	N/A

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	Research Program	Affiliated University/ies
Daniel Zumsteg	Honorary Research Fellow	Factors Affecting Skeletal Muscle Cross-sectional Area in a Normal Population and Subsequent Outcomes After Traumatic Injury with Special Reference to the Elderly	UQ, School of Medicine
Everett Chu	Honorary Research Fellow	Factors Affecting Skeletal Muscle Cross-sectional Area in a Normal Population and Subsequent Outcomes After Traumatic Injury with Special Reference to the Elderly	UQ, School of Medicine
James O'Leary	Honorary Research Fellow	Factors Affecting Skeletal Muscle Cross-sectional Area in a Normal Population and Subsequent Outcomes After Traumatic Injury with Special Reference to the Elderly	UQ, School of Medicine
Phoebe Lam	Honorary Research Fellow	Factors Affecting Skeletal Muscle Cross-sectional Area in a Normal Population and Subsequent Outcomes After Traumatic Injury with Special Reference to the Elderly	UQ, School of Medicine
Rohit Rajendran	Honorary Research Fellow	Factors Affecting Skeletal Muscle Cross-sectional Area in a Normal Population and Subsequent Outcomes After Traumatic Injury with Special Reference to the Elderly	UQ, School of Medicine
Samuel Tan	Honorary Research Fellow	Factors Affecting Skeletal Muscle Cross-sectional Area in a Normal Population and Subsequent Outcomes After Traumatic Injury with Special Reference to the Elderly	UQ, School of Medicine
Amelia Bernard	Honorary Research Fellow	1. Splenic Embolisation Study; 2. Breast MR Coil Study; 3. Case Report in Microwave Ablation in Lung Cancer	UQ, School of Medicine
Camille Dunn	Honorary Research Fellow	1. Pancreatic Cysts; 2. Breast MR Coil; 3. CT Guided Lung Biopsy Study	UQ, School of Medicine
Dallas Platt	Honorary Research Fellow	Interventional Neuroradiology Database	UQ, School of Medicine

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group /Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Sathi M, M Fielder, J Hocking, N Waters, M Prior, A Coulthard	Dept. Medical Imaging	Bright Spots Study – Prospective study of clinically silent ischaemic events post elective endovascular treatment of intracranial aneurysms
M Fielder, J Hocking, M Prior, A Coulthard	R Jeffree (<i>Neurosurgery</i>), T Robertson (<i>Anatomical Pathology</i>), D Reutens (<i>Centre for Advanced Imaging</i>)	High field magnetic resonance imaging of hippocampal sclerosis
J Hocking, M Fielder, M Prior, A Coulthard	Dept. Medical Imaging	Enoxaparin for postoperative prophylaxis in intracranial coiling and stents (EPPICS).
J Hocking, M Prior, A Coulthard	Dept. Medical Imaging	Silent intracranial lesions in endovascular treatments (SILEnT).
M Fielder, N Waters, M Prior, A Coulthard	Dept. Medical Imaging	Verify Now Study – Effect of collection technique on platelet inhibition results.
H Thalagala, M Fielder, M Prior, A Coulthard	Dept. Medical Imaging	The effect of Grey Blanket Protocol on clot retrieval times
A Bernard, M Fielder, R Bains	Dept. Medical Imaging	The role of interventional radiology in splenic trauma
M Fielder, J Sommerville	R Sommerville (<i>ENT</i>), HIRF Centre for Advanced Imaging (<i>CAI</i>)	Perineural Spread of Head and Neck Cancers
J Sommerville, M Fielder	R Sommerville (<i>ENT</i>)	Utility of Black Blood MRI Sequence in Evaluating Perineural Spread in Head and Neck Cancers
M Fielder, A Coulthard	N Surendran (<i>Neurosurgery</i>)	Common Vertebral Artery Variants and their Clinical Implications
M Prior, A Coulthard, T Rajah	R Jeffree (<i>Neurosurgery</i>), L Reid, (<i>CSIRO</i>)	CONSULT – Predicting Surgery-induced Neurological Deficits using CONSULT
M Lu, P Jenvey, M Prior	J van de Pol, J Kinyanjui, L Daniel , (<i>Orthopaedics</i>), HIRF	Prospective assessment of graft incorporation and ligamentisation after anterior cruciate ligament (ACL) reconstruction using two different hamstring tendon fixation techniques.
T Mason, N Newman, M Prior	Dept. Medical Imaging	PICC Study – What is the optimal vein size-to-catheter ratio to reduce the occurrence of thromboembolic events in patients with PICC lines?
A Rao, S Gustafson, M Lu, F Sitheeque, M Prior	Dept. Medical Imaging	MR Enterography – Impact on image quality using split dose Buscopan

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Brooke-Mai Wheelan (UQ)	Alan Coulthard, Marita Prior	Be Clear Online Study
Gail Robinson (UQ)	Alan Coulthard, Marita Prior	Stroke Study
Mark Midwinter (UQ)	Marita Prior	CT KUB and Trauma
Patrick Brennan (University of Sydney)	Karen Dobeli, Marita Prior	Advancing lung cancer detection in developed and developing countries
Mark Allenby (QUT/Herston Biofabrication Institute)	John Clouston, Marita Prior	An Intelligent Risk Stratification Software to Predict Intracranial Aneurysm Rupture
Reade deLeacy (Mount Sinai Hospital)	Ken Mitchell, John Clouston, Alan Coulthard, Kate Mahady, Marita Prior	PADUANO registry
Amanda Ullman (Griffith University)	Alan Coulthard	PICNIC Trial
Joanne George (UQ)	Jane Bursle	PREB)-6 Trial

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Donna Napier	Sonographer and Educator of the Year	2019 ASA Annual International Conference. Australia

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Jennifer Sommerville, Ryan Sommerville, Matthew Fielder, Maria Sathi	Dept. Medical Imaging, Dept. of E.N.T	Perineural Spread of Head and Neck Cancers	RBWH Diamond Care	\$31,200.00	\$18,260.00	2018-2019
Lee Reid, Marita Prior, Rosalind Jeffree, Alan Coulthard, Thulasi Rajah	Dept. Neurosurgery, Dept. Medical Imaging, CSIRO	CONSULT – Predicting Surgery-induced Neurological Deficits using CONSULT	RBWH Diamond Care	\$15,500.00	\$4,920.00	2018-2019
Amanda Ullman, Patrick Harris, Andrew Bulmer, Rachael Walker, Naomi Runnegar, Tricia Kleidon, Paul Lee-Archer, Benjamin Pearch, Alan Coulthard (AI)	Griffith University, PAH, LCCH, Dept. Medical Imaging RBWH	PICNIC Trial	NHMRC	\$706,580.00	N/A	2018-2020
Joanne George, Alex Pagnozzi, Samudragupta Bora, Jane Bursle (AI)	University QLD, CSIRO, Dept. of Medical Imaging RBWH.	Prebo-6 Trial – Prediction of Childhood Brain Outcomes in Infants born Preterm using Neonatal MRI and concurrent clinical biomarkers	NHMRC	\$832,000.00	N/A	2018-2020
Craig Winter, Mark Allenby, John Clouston, Marita Prior	Dept. of Neurosurgery, Herston Biofabrication Institute, Medical Imaging RBWH	A Biofabricated Surgical Referral Suite to Predict Intracranial Aneurysm Rupture	RBWH and RBWH Foundation Research Project Grant	\$39,876.34	\$9,660.00	2019-2020

2019 Research Publications

Journal Articles

1. Roxbury T, McMahon K, **Wong A., Coulthard A, et al.** Brain activity during spoken word recognition in subacute aphasia. *Brain and Language*. (2019). DOI: 10.1016/j.bandl.2019.04.004
2. Wenderoth J, McAuliffe W, **Coulthard A, et al.** The Role of Interventional Radiologists in Acute Stroke Interventions: A Joint Statement from the Australia and New Zealand Society of Neuroradiology (ANZSNR), the Society of Neurointerventional Surgery (SNIS), the United Kingdom Neurointerventional Group (UKNG), the British Society of Neuroradiology (BSNR), and the European Society for Minimally Invasive, Neurological Therapy (ESMINT). *Journal of Vascular and Interventional Radiology*. (2019). DOI: 10.1016/j.jvir.2019.05.008
3. Black L, Baker K, Ponsonby A-L., **Coulthard A, et al.** A higher Mediterranean Diet score, including unprocessed red meat, is associated with reduced risk of central nervous system demyelination in a case-control study of Australian adults. *The Journal of Nutrition*. (2019). Vol149(8): 1385-1392
4. Pierot L, Jayaraman M, Szikora I., **Coulthard A, et al.** Standards of practice in acute ischemic stroke intervention: International recommendations. *Interventional Neuroradiology*. (2019). Vol 25(1): 31-37
5. Mander GTW, **Dobeli K,** Steffensen C, Munn Z. Diagnostic accuracy of computed tomography coronary angiography utilizing recent advances in technology in patients with high heart rates: a systematic review protocol. *JBI Database System Rev Implement Rep*. (2019) Vol 17(7):1312-1318
6. **Harvey J,** Windsor MN, **Steinke K.** Delayed complications following microwave ablation of lung tumours. *J Med Imaging Radiat Oncol*. 2019 Dec;63(6):770-778
7. Lee A, Ellul D, **Sommerville J, et al.** Bony orbital changes in allergic fungal sinusitis are reversible after treatment. *Orbit*. (2019). DOI.org/10.1080/01676830.2019.1576740
8. **Fielding DIK,** Bashirzadeh F, Son JH, Todman M, Chin A, Tan L, **Steinke K,** Windsor MN, Sung AW. First Human Use of a New Robotic-Assisted Fiber Optic Sensing Navigation System for Small Peripheral Pulmonary Nodules. *Respiration*. 2019;98(2):142-150. doi: 10.1159/000498951
9. Sharpless M, **Mahady K,** Sullivan T. Conservative management of spontaneous intraorbital arteriovenous fistulas. *Clinical and Experimental Ophthalmology*. (2019). doi: 10.1111/ceo.13640
10. Cherian P, Blake C, Appleyard M, **Clouston J, Mott N.** Outcomes of radiologically inserted gastrostomy versus percutaneous endoscopic gastrostomy. *Journal of Medical Imaging and Radiation Oncology*. (2019) Vol 63: 610-616
11. **Napier D.** Ultrasound in the diagnosis of rib fracture following blunt chest trauma: a case study. *Sonography* (2019) Vol 6(2)
12. **Napier D.** Splenic artery aneurysm rupture in the pregnant patient - the importance of utilising ultrasound in differentiating the acute abdomen from obstetric causes of abdominal pain. *Sonography* (2019) Vol 6(3).

Books

1. **Scally P.** iBook Disease Profiler: The links from Pathology to Treatment. <https://itunes.apple.com/au/book/disease-profiler>.

Book Chapters / Letters

1. **Hacking C.** Aortic dissection in iBook Disease Profiler: The links from Pathology to Treatment
2. **Hacking C.** Hyperpituitarism in iBook Disease Profiler: The links from Pathology to Treatment
3. **Hacking C.** Pheochromocytoma in iBook Disease Profiler: The links from Pathology to Treatment
4. **Hacking C.** Seronegative arthropathies in iBook Disease Profiler: The links from Pathology to Treatment
5. **Steinke K.** Complications in Non-Vascular Interventional Therapy and Interventional Oncology, Thieme, 2019, ISBN: 9783132412873.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Clouston J.** Value-based Healthcare. IRSA ASM. Australia. 2019
2. **Coulthard A.** Queensland Experience with the new Derivo Flow Diverter. ANZ Stroke Solutions PEER Meeting. 2019
3. **Coulthard A.** Australian Experience with the ATLAS endovascular stent. NeuroSummit APAC Emerging Leaders' Segment. 2019
4. **Dobeli K.** CTCAE – CT chest acronyms explained. RADaim. Australia. 2019
5. **Dobeli K.** A close look at medications used for patient preparation in cardiac CT. RADaim. Australia. 2019
6. **Hacking C.** Emergency imaging of stroke. Everlight EverLearning Webinar series. Australia. 2019
7. **Hacking C.** Emergency imaging of stroke. Northern Ireland Registrar education night. Northern Ireland. 2019
8. **Hacking C.** Contrast injection techniques for trauma imaging. Australasian Trauma Society Trauma Conference. Australia. 2019
9. **Hacking C.** Trauma imaging Kahoot quiz. Australasian Trauma Society Trauma Conference. Australia. 2019
10. **Hacking C.** Trauma Radiology Workshop. Australasian Trauma Society Trauma Conference. Australia. 2019
11. **Hacking C.** CT brain and spine workshop. Social media and critical care (SMACC) conference. Australia. 2019
12. **Hacking C.** CT chest and abdomen workshop. Social media and critical care (SMACC) conference. Australia. 2019

Invited Speakers *(cont)*

13. **Hacking C.** Emergency Radiology: CXR. Pre-Internship (PRINT) Medical Conference. Australia. 2019
14. **Hacking C.** Emergency Imaging in Stroke. Herston State of the Art Healthcare Symposium. Australia. 2019
15. **Hacking C.** Radiology in Trauma: Tips and traps. TraumaTRAPS course. Australia. 2019
16. **Hacking C.** Paediatric emergency radiology. Australasian College of Emergency Medicine Autumn Symposium. Australia. 2019
17. **Hacking C.** TREW: Trauma, Radiology and Emergency Management Workshop. Queensland Trauma Symposium. Australia. 2019
18. **Napier D.** The role of ultrasound in the diagnosis of penile fracture. ASA Annual International Conference. Australia. 2019
19. **Napier D.** Splenic artery aneurysm rupture in the pregnant patient. Queensland Diagnostic Imaging Education Day. Australia 2019
20. **Newman N.** Radiology EDucation: Implementation of a Clinical Education Program. Medical Imaging Nurses Assoc Qld. Australia 2019
21. **Sommerville J.** Horse or Zebra? Case based review of common mimics in the head and neck - Sinonasal polyps. RSNA. 2019
22. **Sommerville J.** Neck nodes: What's new? ANZSNR. 2019
23. **Sommerville J.** Anatomy of the central skull base. ANZSNR. 2019
24. **Sommerville J.** Post-operative skull base. ANZSNR. 2019
25. **Steinke K.** MASERATI trial Combined SBRT and Microwave ablation for node-negative NSCLC. TROG ASM. Australia. 2019
26. **Steinke K.** Lung MTA Ablation - Planning and Troubleshooting. Advanced Ablation Workshop. Australia. 2019
27. **Steinke K.** Of dense breasts and more. Invited Lecture Annual I-MED QLD Radiology Imaging Conference. Australia. 2019.

Oral Presentations

1. Van den Heuvel, **Sommerville J.** Friend, Foe or Fake? Lymph node mimics in the head and neck. RANZCR ASM. 2019. New Zealand
2. **Gustafson S.** Exenteration audit review of R1 cases. RANZCR ASM. 2019. New Zealand
3. Benard A, Sathi M, **Steinke K.** "Microwave ablation for primary lung cancer – How many are too many?" RANZCR ASM 2019 New Zealand
4. Dunn C, **Sathi M**, Benard A, **Steinke K.** The evaluation of iatrogenic anatomic distortion of breast tissue landmarks on follow-up MRI due to a change in breast coil. RANZCR ASM. 2019. New Zealand
5. Dunn C, **Sathi M**, Mellam Y, Rich J, **Steinke K.** Clinical outcomes of CT-guided lung biopsy and diagnostic agreement with bronchoscopic tissue biopsy in suspicious lung lesions. RANZCR ASM. 2019. New Zealand
6. Dunn C, **Sathi M**, Mellam Y, Rich J, **Steinke K.** Clinical outcomes of CT-guided lung biopsy and diagnostic agreement with bronchoscopic tissue biopsy in suspicious lung lesions. RANZCR ASM. 2019. New Zealand
7. Thalagala H, **Sathi M**, **Steinke K.** "Understanding bubble-like subsolid pulmonary lesions on CT – a case series" . RANZCR ASM. 2019. New Zealand
8. **Prior M**, **Reid L**, **Coulthard A.** Validating tractography software called CONSULT. RANZCR ASM. 2019.

Poster Presentations

1. **Tusek X.** An Introduction into the use of intraoperative Computed Tomography in complex spinal procedures. ASMIRT. 2019
2. Devine M, **Gillespie J**, Kaniyur S, Gandhi M. Large nerve perineural spread involving the peripheral facial nerve divisions. ASHNR. 2019
3. **Cossens M**, Dunn C, **Gillespie J.** Improved quality of thyroid ultrasound reports following the implementation of the ACR Thyroid Imaging Reporting and Data System Nodule Lexicon. RANZCR ASM. 2019
4. MacManus D, **Gillespie J.** A pictorial review of 4D CT for localising parathyroid adenomas. RANZCR ASM. 2019
5. **Gillespie J**, MacManus D, **Lovell S.** Investigating Cauda Equina Syndrome: A Review of a Tertiary Trauma Centre's Experience. RANZCR ASM. 2019
6. **Gustafson S.** Upper renal tract imaging. USANZ. 2019
7. **Gustafson S.** Career experiences. RANZCR Qld Branch Meeting. 2019
8. Thalagala H, **Sathi M**, **Felder M**, **Hacking C**, **Coulthard A.** tA review of the effectiveness of a 'grey blanket' protocol for workflow improvement in acute ischemic stroke with large vessel occlusion. RANZCR ASM. 2019
9. **Hapugoda S**, Bekhit P, **Hacking C.** Liver trauma injury grading 2018 update: review of CT imaging features. RANZCR ASM. 2019
10. **Hapugoda S**, Bekhit P, **Hacking C.** Spleen trauma injury grading 2018 update: review of CT imaging features. RANZCR ASM. 2019
11. **Hapugoda S**, Bekhit P, **Hacking C.** Kidney trauma injury grading 2018 update: review of CT imaging features. RANZCR ASM. 2019
12. **Sommerville J.** Van den Heuvel J. Pitfalls in post-operative imaging in the head and neck. ANZSNR. 2019
13. Rich J, **Sathi M**, **Steinke K.** CT-guided microwave ablation for the treatment of primary lung lesions – efficacy based on lesion size and location. RANZCR ASM. New Zealand. 2019.

MEDICAL SERVICES



MEDICAL SERVICES



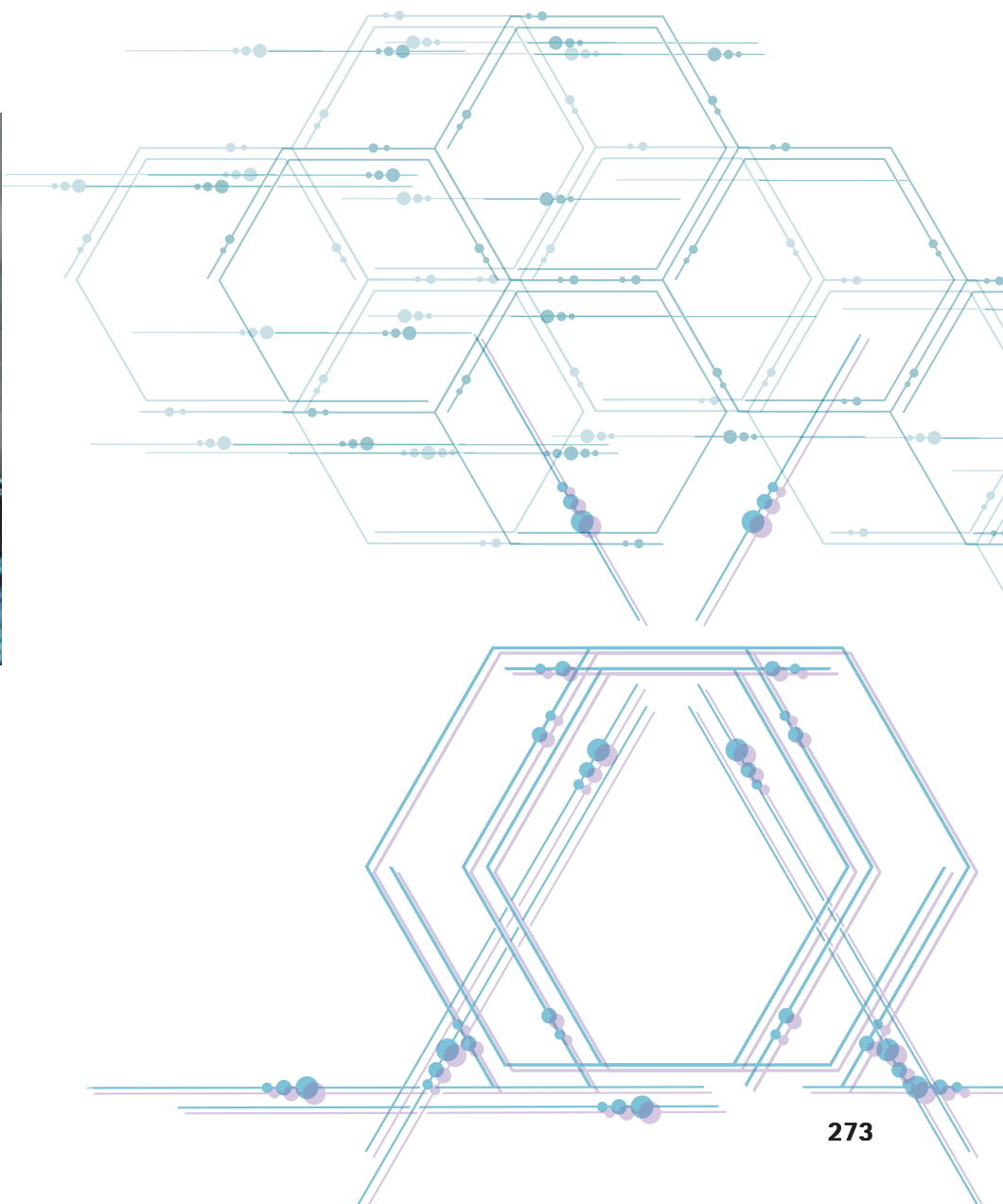
Judy Graves
Executive Director
Medical Services

Medical Services provides support to all areas of the Royal Brisbane and Women's Hospital in all aspects of medical administration and encompasses several departments that contribute to invaluable research activities for the organisation.

The role of the Quality, Innovation, Patient Safety and Support Services, which is part of Medical Services, is to lead the patient safety, quality and clinical improvement agendas for the Royal Brisbane and Women's Hospital. This is achieved through an integrated approach in meeting the organisation's clinical governance agenda. This service provides expertise and support to the Service Lines through safety partnerships to ensure the delivery of safe, high quality services. Ensuring the engagement of patients, families, carers and all consumers in the design, effective delivery and evaluation of our services is a role of the service, as is the drive for continuous improvement and organisational learning.



Danielle Heffernan
Nursing Director
Quality, Innovation and
Patient Safety Service



QUALITY INNOVATION & PATIENT SAFETY SERVICES (QIPSS)

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Tara McCurdie	Honorary Research Fellow		The University of Queensland

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups /Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Adrienne Young, Angela Byrnes, Alison Mudge, Prue McRae, Mark Brough, Gary Power, Amanda Dines, Merrilyn Banks, Tara McCurdie	Nutrition and Dietetics, Internal Medicine Research Unit, RBWH Consumer Advisory Group, Quality Innovation and Patient Safety Service	Co-designing a positive meal environment for older people in hospital: a multi-phase experience-based co-design study	RBWH Project Grant	\$35,459	\$35,459	2019

2019 Research Publications

Journal Articles

- Sanderson P, **McCurdie T**, Grundgeiger T. Interruptions in health care: Assessing their connection with error and patient harm. *Human Factors*. 2019 Aug 30;61(7):1025-1036
- Santomauro C, **McCurdie T**, Pollard C, Shuker M. Exploring the feasibility of wearable technologies to provide interactive telepresence sub-specialist support to remote clinicians treating patients with traumatic injuries. *Prehospital and Disaster Medicine*. 2019;34(s1) s85.

Other communications and outputs:

- Santomauro, C., **McCurdie, T.**, Pollard, C., & Shuker, M. Exploring the feasibility of wearable technologies to provide interactive telepresence sub-specialist support to remote clinicians treating patients with traumatic injuries. WADEM (World Association for Disaster and Emergency Medicine) Congress on Disaster and Emergency Medicine. May 2019
- Santomauro, C., Shuker, M., **McCurdie, T.**, Pollard, C., & Host, D. Using Simulation to Explore the Feasibility of Wearable Interactive Telepresence Technology to Support Remote Clinicians Treating Patients with Traumatic Injuries. Australasian Simulation Congress. September 2019
- Ryan, C.**, Daelman, T., Daly, N. RBWH SPIRIT Program presented at the Health Round Table Developing a Health Culture Group. Melbourne; October 2019. Awarded Certificate of Achievement for presenting an outstanding Innovation
- Tyler, J., Coates, H., **Babao, E.** Wrong Blood in tube: A Women's and Newborn Trial presented at the Health Round Table Patient Safety Improvement Group. Melbourne; October 2019.



MENTAL HEALTH SERVICES

METRONORTH MENTAL HEALTH SERVICES



Professor Brett Emmerson AM
Executive Director
Mental Health

As Executive Director of one of the largest mental health services in Australia, I oversee interconnected inpatient, community and rehabilitation services providing assessment and treatment to Metro North's diverse population of around 1000 000 residents. Metro North Mental Health (MNMH) is also home to a range of specialist services including The Perinatal Mental Health Service, Queensland Eating Disorders Service, The Queensland Forensic Mental Health Service and The Queensland Victim Support Service.

MNMH has a budget of around \$200 million and employs 1200 staff who work across multiple facilities providing care to people of all ages experiencing problems associated with mental illness. MNMH works closely with a range of community services and government agencies to promote access to a spectrum of care, which may be needed by individuals at any time. As a service we are committed to continually improving the process, experience and outcomes of care and the health and wellbeing of our staff. To this end we recognise research as an essential component of the health system and are actively engaged in development and application of robust research evidence in all elements of the service.

Metro North Mental Health has robust partnerships with a range of academic and research institutions, supports conjoint academic appointments, employs dedicated researchers, supports clinicians to engage in post-graduate study and promotes access to a range of educational and training opportunities. The work presented in this report demonstrates the breadth and depth of the research undertaken by MNMH researchers and clinicians. Research using diverse methodologies as appropriate to the study, ranges from basic science, through studies of clinical interventions and health service delivery to global studies of the prevalence and burden of disease. Some studies are funded by prestigious grants, others conducted with limited project grants and many are conducted by dedicated clinicians who go the extra mile to integrate research in practice with in-kind support of the service. The work is united in seeking to generate the evidence needed to promote mental health, prevent mental illness support early diagnosis and intervention and improve mental health across the lifespan, within such a context highlights are difficult to identify but I take this opportunity to acknowledge the extraordinary efforts of clinicians and researchers undertaking world leading work.

Highlights include:

- Impressive representation of the service by clinicians from across disciplines at National and International Conferences
- Award of prestigious NHMRC grants including \$810, 745 to James Scott and team for 'Identifying and treating patients with psychosis who are positive to anti-neuronal antibodies'
- Publication of the findings from NHMRC-funded clinical trials examining nutraceuticals in treatment of major depressive disorder and kava in treatment of generalised anxiety disorder in older people
- Publication of an international cross-validation of the Geriatric Anxiety Inventory (GAI); developed 12 years ago the GAI is now available in 20 languages and in use globally
- Award of a collaborative research grant of ~50K to a MNMH/QIMR team led by Nurse Practitioner of the Perinatal Mental Health Service, Ms Tracey Mackle to develop and test a screening tool for post-traumatic stress disorder in women during pregnancy and after birth
- Collaboration of Warren Ward and QuEDS in an extensive program of research designed to improve outcomes of people affected by eating disorders. The program is funded by a grant of \$3,670,400 by the Medical Research Future Fund
- Appointment of MNMH Research Director, Professor James Scott as Head of Mental Health at QIMR Berghofer Medical Research Institute. A key aim of the conjoint appointment is to grow the mutual research interests of the two organisations providing staff at Metro North Mental Health with access to world leading research staff and facilities
- Establishment of a nurse-led project to design and implement a model of Trauma Informed Care and Practice (TICP).

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Alex Ryan	PhD, The University of Queensland, 2017-2019	Investigating the aetiopathogenic role of autoantibodies against the M1 muscarinic acetylcholine receptor in patients with first episode of schizophrenia (Associate Advisor)	James Scott
Berihun Dachew	PhD, The University of Queensland, 2017-2019	Hypertension Disorders of Pregnancy and Offspring Mental and Behavioural Disorders (Associate Advisor)	James Scott
Bjorn Burgher	PhD, The University of Queensland, 2015-2020	Microglial activation in early onset psychotic disorders (Associate Advisor)	James Scott
Dana Pourzinal	PhD, The University of Queensland <i>(ongoing)</i>	Virtual reality assisted psychotherapy for anxiety in dementia	Nadeeka Dissanayaka, Gerard Byrne
Elizabeth Ness McVie	PhD, The University of Queensland <i>(ongoing)</i>	An analysis of the decisions of the Queensland Mental Health Court	Gerard Byrne
Elnike Brand	PhD, The University of Queensland <i>(ongoing)</i>	Comprehending the sexual health and sexuality in men with chronic mental illness: An epidemiological study	Ed Heffernan and Angela Rasch
Emily Hielscher	PhD, The University of Queensland, 2016-2019	Non-accidental self-injury and suicidality in adolescents and young adults with psychotic experiences (Principal Advisor)	James Scott
Ji Hyun (Julia) Yang	PhD, The University of Queensland <i>(submitted 2019)</i>	Markers and mechanisms of mild cognitive impairment (MCI) in Parkinson's disease (PD)	Nadeeka Dissanayaka, Gerard Byrne , Katie McMahon, David Copland
John Reilly	PhD, The University of Queensland <i>(ongoing)</i>	Implementation of Substance Use Assessments in Queensland Mental Health Services	Ed Heffernan and Carla Meurk
Jordan Laurie	PhD, Queensland University of Technology, 2017-2020	Non-contact vital signs assessment using robotic vision	Jonathan Roberts <i>(QUT)</i> , Thierry Peynot <i>(QUT)</i> , Niall Higgins
Kate Gossip	PhD, The University of Queensland, 2018-2024	Mental health services for young people with severe mental illness (Principal Advisor)	James Scott
Laura White	Masters, Griffith University	Delirium management in hip fracture surgery	Andrew Teodorczuk , Laurie Grealish, Elizabeth Coyne
Lauren Rodgers	Psychology Honours, Queensland University of Technology	Impact of a single-session group psychosocial intervention in withdrawal management treatment in a tertiary alcohol and drug treatment service: an exploration of factors contributing to treatment outcome	Hollie Wilson , John Kelly
Lisa Wright	PhD <i>(part time)</i> , The University of Queensland <i>(commenced 2017)</i>	What factors influence implementation of sensory modulation approaches in mental health care?	Sally Bennett <i>(UQ)</i> , Pamela Meredith <i>(CQU)</i>
Phoebe St John Mosse	Psychology Honours, Queensland University of Technology	Exploring the Profile of Young People Calling an Alcohol and Drug Telephone Support Service	Hollie Wilson , John Kelly
Rachel Brimelow	PhD, The University of Queensland <i>(ongoing)</i>	Management of affective and anxiety disorders in aged care: identification, diagnosis and the impact on wellbeing through an e-health initiative for personal carers	Nadeeka Dissanayaka, Gerard Byrne , Elizabeth Beattie
Samantha Finnis	Masters, Clinical Psychology, Queensland University of Technology	The Impact of Referral Type on Treatment Outcomes: Research Applied in a Telephone-based Alcohol and Drug Support Service	Hollie Wilson , Annaketurah Ralph , Adrian Kelly <i>(QUT)</i>
Shuichi Suetani	PhD, The University of Queensland, 2015-2019	Physical activity and people with psychosis	James Scott
Tim Lowry	PhD, The University of Queensland <i>(ongoing)</i>	Threats, harassment and other problematic behaviours towards public office holders: The contribution of mental disorder	Gerard Byrne

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/ in-kind)</i>	Research Program	Affiliated University/ies
Andrew Teodorczuk	Professor	1.0	External	Delirium education	Griffith University
Anika Short	Research Assistant	0.2	NHMRC	Clinical trials	The University of Queensland
Anna Jenkins	Senior Lecturer			School of Medicine	The University of Queensland
Anthony Bligh	Industry Fellow	N/a	In-kind	School of Psychology and Counselling	Queensland University of Technology
Brad Partridge	Senior Research Fellow	0.3	External	Mental Health	University of Queensland
Brett Emmerson	Professor	1.0	Operationally Funded	School of Medicine	The University of Queensland
Bruce Hamilton	Guest Lecturer			Forensic Psychology	Australian Catholic University
Carla Meurk	Honorary Senior Fellow			School of Public Health	The University of Queensland
Carla Meurk	Principal Researcher			Forensic Mental Health Group	Queensland Centre for Mental Health Research
Carrick Anderson	Senior Lecturer			School of Medicine	The University of Queensland
Edward Heffernan	Associate Professor			School of Medicine	The University of Queensland
Edward Heffernan	Stream Head			Forensic Mental Health Group	Queensland Centre for Mental Health Research
Elissa Waterson	Principal Researcher	1.0	Operationally Funded	Forensic Mental Health Group	Queensland Centre for Mental Health Research
Elke Perdacher	Lecturer			School of Criminology and Criminal Justice	Griffith University
Fiona Davidson	Research and Evaluation Manager	1.0	Operationally Funded	Forensic Mental Health	Queensland Forensic Mental Health Service, Metro North Mental Health
Gerard Byrne	Professor	1.0	Operationally Funded	School of Medicine	The University of Queensland
Hollie Wilson	Research Coordinator				
James Scott	Professor			UQ Centre for Clinical Research	University of Queensland
James Scott	Director of Research	0.5	Operationally Funded	Mental Health	Metro North Mental Health
James Scott	Head of Mental Health Programme			Mental Health Programme	QIMR Berghofer Medical Research Institute
James Scott	Group Leader			Child and Youth Mental Health	Queensland Centre for Mental Health
Jane Phillips	Senior Lecturer			School of Medicine	The University of Queensland
Lisa Fawcett	Clinical Associate Professor	1.0	Operationally Funded	School of Nursing	Australian Catholic University
Nathan Dart	Clinical Research Fellow	1.0	Operationally Funded	School of Nursing	Australian Catholic University
Niall Higgins	Associate Professor	1.0	Operationally Funded	School of Nursing	University of Southern Queensland
Niall Higgins	Senior Research Fellow	1.0	Conjointly Funded	Mental Health	Metro North Mental Health/ Queensland University of Technology
Sue Patterson	Principal Research Fellow	1.0	Operationally Funded	Mental Health	Metro North Mental Health
Sue Patterson	Associate Professor	n/a		School of Dentistry	The University of Queensland
William Brennan	Program Lead			Master of Mental Health Nursing, Faculty of Health and Behavioural Sciences	The University of Queensland
Zara Samaraweera	Associate Lecturer-Registrar			School of Medicine	The University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Andrew Teodorczuk	Anne Wand, Amy Montgomery, Peter Smedley	Evaluation of the Delirium Evaluation and Monitoring System (DEMS)
Andrew Teodorczuk	Emily Gallagher, Laurie Grealish, Eva Schmidt	Realist review of Carer education in delirium
Andrew Teodorczuk		ECT in schizophrenia a review.
Andrew Teodorczuk	Anne Wand, Koen Milisan, Song, James Fisher, Ann Marie Hosie, Meera Agar	A systematic review of delirium education
Anthony Bligh, Kylie Garrick	Ross Young, Will Parsonage, Gino Medoro	CBTp Training Evaluation: An observational evaluation of implementation, experience of participation and perceived impact
Brett Emmerson, Gail Robinson, Andrew Teodorczuk	Jamie Wallis, Elizabeth Cardell, Georgina Sanger, Gary Rogers	Evaluation of a student well being bundle
Carla Meurk	Kym Walford, Fiona Black, Dominic Beer	What really matters? An exploratory study into insight in a forensic psychiatric inpatient population
Carla Meurk, Megan Steele		Young Offenders Mental and Sexual health
Carrick Anderson		Frequent callers to emergency services
Conor O'Luanaigh, Niall Higgins		Prevalence of loneliness in community dwelling older adults with co-morbid mental health problems
Darren Neillie, Bob Green, Fiona Davidson		Treatment pathways of persons found not criminally responsible due to mental disorder
Darren Neillie, Tim Lowry, Carla Meurk	Terri-Ann Goodwin	Delusional Disorders
Eamonn Eeles, Andrew Teodorczuk		Understanding complexity in delirium
Ed Heffernan	Julia Crilly <i>(GC)</i> , Stuart Kinner <i>(GU)</i> , Et al.	Improving outcomes for people with acute mental illness in emergency departments
Ed Heffernan	Bobbie Clugston	ITO Benchmarking
Ed Heffernan, Carla Meurk, Bob Green, Jane Phillips, Zara Samaraweera, Carolina Ceron	Adam Griffin, Bobbie Clugston, Cameron Gardner <i>(QPS)</i>	Fitness for interview and Fitness for Trial
Ed Heffernan, Carla Meurk, Elissa Waterson		Partners in prevention. Data linkage
Ed Heffernan, Carla Meurk, Megan Steele, Laura Ferris		PIP: Mental Health, Ambulance and Police models – QLD mapping
Ed Heffernan, Fiona Davidson	Kimina Anderson, Stuart Kinner	Family Business – Improving and understanding the treatment of PTSD among incarcerated Aboriginal and Torres Strait Islander Women
Ed Heffernan, Fiona Davidson, Michelle Perrin	Stuart Kinner <i>(Griffith)</i> , Bobbie Clugston	National PMHS benchmarking project
Ed Heffernan, Laura Ferris, Carla Meurk, Fiona Davidson		PIP Responding to suicide crises: First responders' knowledge, skills, attitudes and confidence
Ed Heffernan, Tim Lowry, Elissa Waterson, Jane Phillips	Bobbie Clugston	Siege Project
Ed Heffernan	David Street <i>(NZ)</i> , Graham Neilsen, Elnike Brand, Daniel Barns <i>(Maryb.)</i> , Felicity Moore <i>(Maryb.)</i>	Let's talk about sex
Elke Perdacher, Carla Meurk	Lisa Wittenhagen, Megan Steele, Andrew Aboud, Tamara Smith, Darryn Collins, David Kavanagh <i>(QUT)</i> , Ian Garton (e-wellbeing services)	e-Inside Project
Elke Perdacher, Ed Heffernan, Penny Dale	David Kavanagh <i>(QUT)</i> , Jenny Sheffield <i>(UQ)</i>	Stay Strong Custody Project
Evelyn Ma, Susan Patterson, Vikas Moudgil		Attending to the physical health of morbidly obese adults with severe mental illness being treated by public mental health service
Fiona Davidson, Ed Heffernan	Tony Butler <i>(UNSW)</i> , David Greenberg <i>(UNSW)</i> , Phillip Burgess <i>(UQ)</i>	National Court Liaison Benchmarking Project

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group/Department Lea Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Fiona Davidson, Ed Heffernan, Jane Phillips	Tony Butler <i>(UNSW)</i> , David Greenberg <i>(NSW)</i> , Philip Burgess <i>(UQ)</i>	Queensland Court Liaison Service – Pathways of Mental Health Service
Gail Robinson, Niall Higgins	Andrew Burke, Deanne Curtin, George Tay	OSA prevalence in SMI Screening for sleep disordered breathing in an in-patient mental health population
James Scott	Stefan Blum, Belinda Lennox, Brian O'Donoghue, Michael Benros, Dan Siskind, Shuichi Suetani	Anti Neuronal Antibodies in patients with psychosis
James Scott	Alex Ryan, Judith Greer	Muscarinic antibodies in first episode psychosis
John Reilly, Ed Heffernan, Carla Meurk		Detecting and intervening in substance disorders in MHS
Katherine Moss, Ed Heffernan, Carla Meurk, Megan Steele		Physical activity in a High Secure Inpatient Service
Lisa Wright	Sally Bennett <i>(UQ)</i> , Pamela Meredith <i>(CQU)</i>	Sensory Modulation in Mental Health Care: Phase One: Investigating the factors affecting implementation of sensory modulation in inpatient mental health units
Matilda Mackay-Sim, James Scott	James Kesby, Alex Ryan	Goal-Directed Action in those with Early Psychosis
Melanie Mitchell		Mentally ill threateners
Niall Higgins	Jordan Laurie <i>(QUT)</i> , Jonathan Roberts <i>(QUT)</i> , Thierry Peynot <i>(QUT)</i>	Non-contact vital signs assessment using robotic vision
Niall Higgins	Judy Munday <i>(QUT)</i> , Samantha Keogh <i>(QUT)</i>	A comparison of zero-heat-flux thermometry with core temperature measurements for perioperative temperature monitoring: a pilot study
Niall Higgins, Fiona Coyer, Brett Emmerson, Lisa Fawcett	Jonathan Roberts <i>(QUT)</i>	Remote patient monitoring via non-invasive digital technology: a preliminary evaluation of a system for respiratory observations
Niall Higgins, Hollie Wilson, Gail Robinson, Vikas Moudgil	Rajib Rana <i>(USQ)</i> , Kazi Shezan <i>(USQ)</i> , Sonja March <i>(USQ)</i>	Automated Computation of Mood Using Artificial Intelligence
Penny Dale, Megan Steele, Ed Heffernan, Elke Perdacher, Fiona Davidson and IMHIP team		IMHIP evaluation
Queensland Forensic Mental Health Service	Fiona Black, Dominic Beer, Robert King <i>(QUT)</i>	Barriers to engagement in physical activity in a Forensic Mental Health Inpatient Setting
Samantha Bicker, Susan Patterson, Sally Mercier, Danielle Manolis		It makes sense: therapeutically: creating sensory spaces in inpatient units
Sue Patterson, Danielle Alchin, Kelly Price	Gail Robinson, Brett Emmerson, Wilsen Brincat, Michael Luck, Karen Petty	Acceptability, feasibility and impact of contingency management (CM) as an adjunct to smoking cessation programs in Metro North Hospital and Health Service (MNMH): A mixed-methods observational evaluation
Tim Lowry		Harassment, proximity seeking and problematic approaches to public office holders: The role of mental disorder
Tim Lowry, Annette Vassey	Bruce Watt, Bruce Hamilton	High risk psychotic phenomena
Tim Lowry, Darren Neillie, Fiona Davidson		CFOS reports: Referrer feedback survey
Tim Lowry, Darren Neillie, Fiona Davidson		CFOS consumer snapshot

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Alessandro Morandi	Andrew Teodorczuk	interdisciplinary statement if scientific societies for the advancement of delirium care across Europe
Ann Marie Hosie	Andrew Teodorczuk	Measures of delirium-related emotional distress
Christy Noble	Andrew Teodorczuk	Enriching Medical trainees Learning through Practice Toowoomba
Christy Noble	Andrew Teodorczuk	Enriching Medical trainees Learning through Practice Gold Coast
Gideon Caplan	Andrew Teodorczuk	The economic impact of delirium in Australia

Collaborative Research Activity involving RBWH Research Group / Department *(cont)*

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Laurie Grealish	Andrew Teodorczuk	SIMPLE: hospital discharge for patients with dementia
Prudence Milliar	Anthony Bligh	Psychologists and their use of technology
Rosie Watson	Andrew Teodorczuk	Review of Lewy Body Dementia in Australia
Thomas Fisher	Andrew Teodorczuk	Agitation in Delirium
Tim McDonald	Andrew Teodorczuk , Gary Grant	Microdose Antagonist Combination for Depression (MAC-D) Trial

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Andrew Teodorczuk	Principal Fellow of the Higher Education Academy	Higher Education Academy
Andrew Teodorczuk	Prince Charles Best of Grand Rounds 2019 Peoples Award	The Prince Charles Hospital
Ed Heffernan	Recognising outstanding contributions to Indigenous mental health in either Australia or New Zealand	Royal Australian and New Zealand College of Psychiatrists Mark Sheldon Prize 2019
James Scott	Excellence in Teaching and Supervision Award	Royal Australian and New Zealand College of Psychiatrists (Qld Branch)
Katherine Moss	Award for best practice in consumer and carer inclusion	Royal Australian and New Zealand College of Psychiatrists Private Mental Health Consumer Carer Network Award 2019
Zara Samaraweera and Carolina Ceron	Medlicott Award 2019. Interviewing persons with mental illness charged with murder or attempted murder: a retrospective review of police interviews	Royal Australian and New Zealand College of Psychiatrists

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
James Scott , Stefan Blum, Belinda Lennox, Judith Greer, Brian O' Donoghue, Michael Benros, Dan Siskind and Shuichi Suetani	Metro North Mental Health	Identifying and treating patients with psychosis who are positive to anti-neuronal antibodies	National Health and Medical Research Council	\$810,745	\$100,000	2019-2021
Rosana Pacella, Michael Dunne, James Scott , David Finkelhor, Ben Mathews, Francesca Meinck, Darryl Higgins, Holly Erskine and Hannah Thomas	Early Psychosis	The first national study of child maltreatment in Australia: prevalence, health outcomes, and burden of disease	National Health and Medical Research Council	\$2,311,217	\$400,000	2019-2023
Harvey Whiteford, Holly Erskine, James Scott and Meghan Enright	Early Psychosis	Nationally-representative population surveys of adolescent mental disorder in Kenya, Indonesia, and Vietnam (NAMHS)	Pivotal Ventures gift	\$2,942,531 USD	\$1,000,000 USD	2018-2020
Holly Erskine, James Scott and Harvey Whiteford	Early Psychosis	Adolescent Extended Treatment Facility Evaluation Framework	Queensland Health	\$328,458	\$328,458	2018-2019
Ian Hickie, Nick Martin, James Scott , Nathan Gillespie and Daniel Hermens	Early Psychosis	Clinical and neurobiological predictors of onset of major mental disorders (mania, psychosis, severe depression), and associated functional impairment, in adolescent and young adult twins: A prospective longitudinal study"	National Health and Medical Research Council	\$1,291,586	\$200,000	2014-2019
Ed Heffernan and Elissa Waterson	QFMHS	Developing guidelines for MH Police Co-responder Models	MHAODB	\$50,000	\$50,000	2019

Research Grants *(cont)*

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Ed Heffernan	QFMHS	Mental Health and the Criminal Justice System: Developing the evidence-base to improve mental health and criminal justice outcomes for people with mental illness	National Health and Medical Research Council ECF	\$193,596	\$48,399	2018-2021
Julia Crilly, Stuart Kinner, Gerry Fitzgerald, Ed Heffernan and Marianne Wallis	QFMHS	Improving Outcomes for people with acute mental illness in the emergency department: a data linkage study	National Health and Medical Research Council	\$251,470	\$83,823	2017/18, 2018/19, 2019/20
Chris Doran, Jacinta Hawgood, Lisa Wittenhagen, Ed Heffernan and Carla Meurk	QFMHS	CQU Mates Data analysis	CQU Mates	\$10,000	\$10,000	2019
Ed Heffernan and Elissa Waterson	QFMHS	Metro North Hospital and Health Service Research Coordinator Grant	Metro North Hospital and Health Service	\$310,832	\$103,610	2019/20, 2020/21
Sarah Maguire, Warren Ward , Stephen Touyz, Natasha Nassar, Michelle Cunich, Ian Hickie, Janice Russell, Sloan Madden, Danielle Maloney and Claire Diffy	QuEDS	MAINSTREAM Centre for Health System Research and Translation in Eating Disorders: detection and intervention system-focused knowledge to drive better outcomes in mainstream care for eating disorders	The Commonwealth of Australia Medical Research Future Fund Million Minds	\$3,670,400	\$750,270	2019-2023
Lisa Wright	Occupational Therapy	Sensory Modulation Therapy Equipment	TPCH Hospital Foundation, through The Common Good	\$7,041.91	\$7,041.91	2019
Patrick Ho Ek Seng , James Scott and A Martin <i>(UQ)</i>	Early Psychosis	Stimulating social cognition in early psychosis (SSCEP): Effects of anodal High-Definition transcranial Direct Current Stimulation (HD-tDCS) to the right temporo-parietal junction (rTPJ) in young adults with early psychosis	RANZCP New Investigator Grants 2019	\$6,000	\$0	2019-2020
Lisa Wright , Sally Bennett and Pamela Meredith	Occupational Therapy	Sensory Modulation in Mental Health Care: Phase two: Translating sensory modulation approaches into mental health practice: Outcomes of implementing a behaviour change intervention	TPCH Hospital Foundation, through The Common Good	\$7,041.91	\$7,041.91	2019
Lisa Fawcett, Nathan Dart and Niall Higgins	Nursing	Trauma Informed Care and Practice model of nursing care	Queensland Health Nurses and Midwives Innovation Fund	\$369,781	\$300,064	2019-2021
Niall Higgins , Xiaohui Tao <i>(USQ)</i> and Raj Gururajan <i>(USQ)</i>	Nursing	Remote patient monitoring via non-invasive digital technology: a preliminary evaluation of a system for respiratory observations	Metro North Mental Health	\$8,566	\$8,566	2019-2020
Michael Breakspear, Nick Martin, Gerard Byrne , Stephen Rose, Olivier Salvado, Osvaldo Almeida, Gail Robinson , Michael Weiner and Nancy Pachana	Older Persons Mental Health	Prospective imaging study of ageing: genes, brain and behaviour (PISA)	National Health and Medical Research Council	\$6,465,047.40	\$1,293,009.48	2015-2020
Jerome Sarris, Chee Ng, Gerard Byrne , David Castle and David Camfield	Older Persons Mental Health	N-Acetyl Cysteine in the adjunctive treatment of obsessive-compulsive disorder: A 16-week, double-blind, randomised, placebo-controlled study	National Health and Medical Research Council	\$850,448	\$212,612	2016-2020
Lisa Wright	Allied Health	AH-TRIP Knowledge Translation Bursary	Metro North Allied Health, AH-TRIP	\$1,900	\$1,900	2019
Tracey Mackle , Sue Patterson , Lucia Colodro Conde and Sarah Medland	Perinatal	Pregnancy, Birth and Trauma; designing a screening tool for post-traumatic stress disorder (PTSD) in the perinatal setting, Metro	Metro North Hospital and Health Service	\$49,486	\$24,743	2019-2020

2019 Research Publications

Journal Articles

1. Ashton MM, Dean OM, Walker A, Bortolasci C, Ng C...**Scott JG**, et al. The Therapeutic Potential of Mangosteen Pericarp as an Adjunctive Therapy for Bipolar Disorder and Schizophrenia. *Front Psychiatry*. 2019 Mar 13; 10:115. doi:10.3389/fpsy.2019.00115
2. Carr P, Rippey J, Cooke M, **Higgins N**, Trevenen M, Foale A, Keijzers G, Rickard C. Derivation of a tool to improve clinical decision making for the insertion of clinically indicated peripheral intravenous catheters and promote vessel health preservation. An observational study. *PLoS One*. 2019 Mar 22;14(3). doi: 10.1371/journal.pone.0213923
3. Carr P, Rippey J, Cooke M, **Higgins N**, Trevenen M, Foale A, Rickard C. Factors associated with first-time insertion success for peripheral intravenous cannulation in the Emergency Department. A multi-centre prospective cohort analysis of patient, clinician, and product characteristics. *BMJ Open*. 2019 Apr 2;9(4). doi:10.1136/bmjopen-2018-022278
4. Chapman J, Childs S, Pratt G, Tillston S, Lau G, Petrucci J, **Patterson S**. Building Healthy Communities through Multidisciplinary Community-Based Lifestyle Interventions. TheMHS Conference Proceedings, Brisbane Australia, 27th-30th August 2019. doi:10.13140/RG.2.2.26558.23366
5. Chapman J, Lau G, Wyder M...**Patterson S**, **Avery N**, **Bligh A**, et al. Staff attitudes and opinions on addressing physical health within mental health and addiction services. TheMHS Conference Proceedings, Brisbane Australia, 27th-30th August 2019. doi:10.13140/RG.2.2.31306.72644
6. Chin K, **Teodorczuk A**, Watson R. Dementia with Lewy bodies: challenges in the diagnosis and management. *Aust N Z J Psychiatry*. 2019 Apr;53(4):291-303. doi:10.1177/0004867419835029
7. Cobham V, Hickling A, Kimball H, Thomas HE, **Scott JG**, Middeldorp C. Systematic Review: Anxiety in children and adolescents with chronic medical conditions. *J Am Acad Child Adolesc Psychiatry* (2019). doi: 10.1016/j.jaac.2019.10.010
8. **Connell M**, **Scott JG**, McGrath JJ, et al. A comparison of hallucinatory experiences and their appraisals in those with and without mental illness. *Psychiatry Res*. 2019 Apr; 274:294-300. doi: 10.1016/j.psychres.2019.01.079
9. Crilly J, Johnston A, Wallis M, Polong-Brown J, **Heffernan E**, Fitzgerald G, Young JT, Kinner S. Clinical characteristics and outcomes of patient presentations to the emergency department via police: A scoping review. *Emerg Med Australas*. 2019 Aug;31(4):506-515. doi:10.1111/1742-6723.13300
10. Dachew B, **Scott JG**, Mamun A, Alati R. Hypertensive disorders of pregnancy and emotional and behavioural problems in children: A longitudinal population-based study. *Eur Child Adolesc Psychiatry*. 2019 Nov. doi:10.1007/s00787-019-01443-0
11. Dachew BA, **Scott JG**, Betts K, Mamun A, Alati R. Hypertensive disorders of pregnancy and the risk of offspring depression in childhood: Findings from the Avon Longitudinal Study of Parents and Children. *Dev. Psychopathol*. 2019 Dec;31(5). Cambridge University Press. 2019 Jul 26. doi:10.1017/S0954579419000944
12. Dachew BA, **Scott JG**, Mamun A, & Alati R. Pre-eclampsia and the risk of attention-deficit/hyperactivity disorder in offspring: Findings from the ALSPAC birth cohort study. *Psychiatry Res*. 2019 Feb; 272:392-397. doi: 10.1016/j.psychres.2018.12.123
13. Dachew BA, **Scott JG**, Mamun A, Alati R. Hypertensive disorders of pregnancy and the risk of anxiety disorders in adolescence: Findings from the Avon Longitudinal Study of Parents and Children. *J Psychiatr Res*. 2019 Mar; 110:159-165. doi: 10.1016/j.jpsychires.2019.01.001
14. **Davidson F**, Clugston B, **Perrin M**, Williams M, **Heffernan E**, Kinner SA. Mapping the prison mental health service workforce in Australia. *Australas Psychiatry*. 2019 Dec 23. doi:10.1177/1039856219891525
15. **Davidson F**, **Heffernan E**, **Hamilton B**, Greenberg D, Butler T, Burgess P. Benchmarking Australian mental health court liaison services – results from the first national study. *J Forens Psychiatry Psychol*. 2019; 30:5:729-743. doi:10.1080/14789949.2019.1646788
16. Dissanayaka N,...**O'Sullivan J**, **Byrne GJ**, **Silburn P**, **Marsh R**, et al. Depression symptomatology correlates with event-related potentials in Parkinson's disease, an affective priming study. *J Affect Disord*. 2019 Feb 15;245:897-904. doi: 10.1016/j.jad.2018.11.094
17. Eeles E, Pinsker D, Armstrong A, Pandy S, **Teodorczuk A**. Delirium management: Anything's possible. *Can J Aging*. 2019 May 20. doi:10.1017/S0714980819000230
18. **Fairbrother F**, Petzl N, **Scott JG**, Kisely S. Lithium therapy can cause hyperthyroidism as well as hypothyroidism: a systematic review of an under-recognised association. *Aust N Z J Psychiatry*. 2019 May;53(5):384-402. doi:10.1177/0004867419833171
19. Fetene DM, Betts KS, **Scott JG**, Alati R. Maternal prenatal thyroid function and trajectories of offspring emotional and behavioural problems: findings from the ALSPAC cohort. *Eur Child Adolesc Psychiatry*. 2019. doi:10.1007/s00787-019-01404-7
20. **Flaws D**, **Byrne G**, Mudge AM. Delirium risk in non-surgical patients: systematic review of predictive tools. *Arch Gerontol Geriatr*. 2019 Jul - Aug; 83:292-302. doi: 10/1016/j.archger.2019.05.013
21. GBD 2017 Child and Adolescent Health Collaborators: Reiner RC Jr, Olsen HE...**Scott JG**, et al. Diseases, Injuries, and Risk Factors in Child and Adolescent Health, 1990 to 2017: Findings From the Global Burden of Diseases, Injuries, and Risk Factors 2017 Study. *JAMA Pediatr*. 2019 Jun 1;173(6): e190337. doi:10.1001/jamapediatrics.2019.0337.
22. Grealish L, Chaboyer W, Mudge A, Simpson T, Cahill M, **Teodorczuk A**, et al. Using a general theory of implementation to plan the introduction of delirium prevention for older people in hospital. *J Nurs Manag*. 2019 Nov;27(8):1631-1639. doi:10.1111/jonm.12849
23. Grealish L, Todd JA, Krug M, **Teodorczuk A**. Education for Delirium Prevention. Knowing, meaning doing. *Nurse Educ Pract*. 2019 Sep 3; 40:102622. doi: 10.1016/j.nepr.2019.102622
24. **Green B**, Hayllar J, **Anderson C**. Speeding: a review of self-reported effects of amphetamine type stimulants. *Addiction Research and Theory*. 2019 Jun 08. doi:10.1080/16066359.2019.1622000
25. Henry JD, Moore P, Terrett G, Rendell PG, **Scott JG**. A comparison of different types of prospective memory reminders in schizophrenia. *Schizophr Res*. 2019 Aug; 210:89-93. doi: 10.1016/j.schres.2019.06.002
26. Hielscher E, **Connell M**, Lawrence D, Zubrick SR, Hafekost J, **Scott JG**. Association between psychotic experiences and non-accidental self-injury: Results from a nationally representative survey of adolescents. *Soc Psychiatry Psychiatr Epidemiol*. 2019 Mar;54(3):321-330. doi:10.1007/s00127-018-1629-4.

Journal Articles (cont)

27. Hielscher E, Whitford TJ, **Scott JG**, Zopf R. When the body is the target - Representations of one's own body and bodily sensations in self-harm: A systematic review. *Neurosci Biobehav Rev*. 2019 Jun; 101:85-112. doi: 10.1016/j.neubiorev.2019.03.007
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44. O'Callaghan F, O'Callaghan M, **Scott JG**, Najman J, Al Mamun A. Effect of maternal smoking in pregnancy and childhood on child and adolescent sleep outcomes to 21 years: a birth cohort study. *BMC Pediatr*. 2019 Mar 6;19(1):70. doi:10.1186/s12887-019-1439-1
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67. Wole A, Voisey J, **Lawford B**. NLRP3 is associated with coronary artery disease in Vietnam veterans. *Gene.* 2019. doi: 10.1016/j.gene.2019.144163
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Book Chapters / Letters

1. **Clark S, et al (2019)**. 'Substance use and dependency'. Lewis's Medical–Surgical Nursing ANZ 5th edition. Elsevier, Marrickville, NSW
2. **Johnson JCS, Byrne GJA**. QT-prolonging agents with risk of torsades de pointes. *Australas Psychiatry.* 2019 Feb;27(1):92. doi: 10.1177/1039856218794875.

Other Publications

1. Capra C, Gardner M, **Scott J**. Ed-LinQ Evaluation Framework. Prepared for Children's Health Queensland
2. Capra C, Garner M, **Scott J**. Evaluation Framework for the Adolescent Extended Treatment Centre (AETC): Final Summary Report for the Mental Health Alcohol and Other Drugs Branch (MHAODB)
3. Gardner M, Capra C, Erskine E, Whiteford H, **Scott J**. Youth Residential Rehabilitation Units Service Evaluation Report. Prepared for the Mental Health Alcohol and Other Drugs Branch
4. **Mercier S, Manolis D, Patterson S & Bicker S**. Evaluation report: development of sensory spaces on adult inpatient mental health units. Report submitted to the Mental Health, Alcohol and Other Drugs Branch, Queensland Health, State of Queensland, Brisbane.

Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Andrew Teodorczuk**. Blackall CA, Delirium: the cognitive superbug. Hobart, Australia. July 2019
2. **Andrew Teodorczuk**. Delirium Update, Older Peoples Statewide symposium. Brisbane. August 2019
3. **Andrew Teodorczuk**. European Delirium Association: Delirium Education: where are we now? Edinburgh. September 2019
4. **Andrew Teodorczuk**. European Delirium Association: How to make delirium education effective. Edinburgh. September 2019
5. **Andrew Teodorczuk**. European Delirium Association: The Wicked Problem of Delirium Education. Edinburgh. September 2019

Invited Speakers (cont)

6. **Andrew Teodorczuk.** RACMA, Resilience and wellbeing: lessons from across the education continuum. Brisbane. November 2019
7. **Andrew Teodorczuk.** Recent advances in management and assessment of delirium. Statewide Older Peoples Mental Health Symposium. August 2019
8. **Andrew Teodorczuk.** Delirium: Past Present and Future. The Prince of Wales Hospital. May 2019
9. **Ed Heffernan, Fiona Davidson, Carla Meurk.** Mental health of police. RANZCP Congress. Cairns. 13 May 2019
10. **Ed Heffernan, Penny Dale, Yasmin Muller, Fiona Davidson, Megan Steele, Elissa Waterson.** From custody to community, the Indigenous Mental Health Intervention Program. RANZCP Congress. Cairns. 13 May 2019
11. **Gerard Byrne.** Are self-ratings or informant-ratings of anxiety better in the presence of dementia? International Geriatrics and Gerontology Association – European Regional Conference. Gothenburg, Sweden. May 2019
12. **Gerard Byrne.** Can suicide be prevented in older people? Centre for Health Services Research Geriatric Seminar. Translational Research Institute, University of Queensland. Princess Alexandra Hospital. Brisbane. November 2019
13. **Gerard Byrne.** Risk in Older People: Assessment and Mitigation. Psychiatric Masterclass. Perth, Western Australia. March 2019
14. **Gerard Byrne.** Trick question: Can suicide be prevented? Risk assessment and mitigation in older people. Australian Psychological Society – Psychology & Ageing Interest Group. Auckland University of Technology, Auckland, New Zealand. June 2019
15. **James Scott.** Bullying: Definition, Prevalence and Longitudinal Outcomes at “The Causes and Consequences of Childhood Bullying. An Australian and Danish Workshop”. Aarhus University Denmark. 30th October 2019
16. **James Scott.** Psychosocial interventions in schizophrenia: Back to the Future Vision 2020. Sydney. 30 March 2019
17. **James Scott.** The mistaken identity of autoimmune encephalitis. Psyacademy. Melbourne. 21 September 2019.

Oral Presentations

1. **Amanda Davis.** Innovative methods enhance confidence and competence of Dietitians to deliver dietetic interventions for eating disorders. Dietitians Association of Australia Conference. 13 August 2019
2. **Amanda Davis.** Solving the supervision dilemma for Dietitians working in Eating Disorders - Innovative programmes from a state-wide advisory service. Australian New Zealand Academy for Eating Disorders 17th Annual Conference 2019. 23 August 2019
3. **Amanda Davis.** Solving the supervision dilemma for Dietitians working in Eating Disorders - Innovative programmes from a state-wide advisory service. Dietitians Association of Australia 36th Annual Conference. 13 August 2019
4. **Bozica Stumfol.** Application of EMDR therapy for an elderly man with a lifelong anxiety disorder: a case study. Older Person's Mental Health Statewide Symposium, RBWH, Brisbane. 9 August 2019
5. **Carla Meurk, Megan Steele, Jackyln Schess, Lorraine Yap, Jocelyn Jones, Scott Harden, Tony Butler, Ed Heffernan.** Prevalence of mental disorder among justice involved youth: A cross-sectional survey. Justice Health Conference, Public Health Association of Australia, Sydney. 10 April 2019
6. **Catherine Doyle, Amy Hannigan and Jacqueline Byrne.** Carer Peer Mentor Pilot Program: Feasibility and Qualitative evaluation. Australian New Zealand Academy for Eating Disorders 17th Annual Conference. 24 August 2019
7. Justin Chapman, Stephen Tillston, Sarah Childs, Greg Pratt, Shuichi Suetani, Dan Siskind, and **Sue Patterson.** Building healthy communities through multidisciplinary community-based lifestyle interventions. Brisbane North Allied Health Conference, Chermide, Brisbane. 21 May 2019
8. **Darren Neillie.** RANZCP Family Violence in Psychiatry Network: improving capacity of mental health services to respond to family violence. RANZCP Congress, Cairns. 14 May 2019
9. **Dylan Flaws.** Clinician scientist perspective/career. Faculty of Medicine's annual MD Student Research Welcome and Expo for incoming medical students in 2020. 9 April 2019
10. **Dylan Flaws.** Enabling clinical research through Partnership. The MNHHS Interactive Research Workshop. 13 August 2019
11. **Dylan Flaws.** The role of research in ongoing medical training. Australian Medical Student Journal Research Symposium. 19 July 2019
12. **Ed Heffernan, Carla Meurk, Megan Steele, Elissa Waterson.** Partnering with police to improve outcomes in mental health crisis situations. RANZCP Congress. Cairns. 14 May 2019
13. **Ed Heffernan, Carla Meurk.** Partners in Prevention: Understanding and Enhancing First Responses to Suicide Crisis Situations. TheMHS Conference 2019. Brisbane. 28 August 2019
14. **Ed Heffernan, Penny Dale, Yasmin Muller, Fiona Davidson, Megan Steele, Elissa Waterson.** From custody to community, the Indigenous Mental Health Intervention Program. TheMHS Conference 2019. Brisbane. 29 August 2019
15. **Ed Heffernan.** Innovations in community services (symposium). The MHS Conference 2019, Brisbane. 28 August 2019
16. **Fiona Davidson.** Diversion down under: how well do Australian mental health court liaison services perform? Justice Health Conference, Public Health Association of Australia, Sydney. 10 April 2019
17. **Gerard Byrne.** Assessment of anxiety in the presence of dementia. Annual Congress of the Royal Australian & New Zealand College of Psychiatrists. Cairns, Queensland. May 2019
18. **James Scott, Frances Dark, Julianne Fraser, Faith Ng, Stephen Parker, Katherine Moss, Eesharnan Mahendran and Brendon Eyre.** Welcome to the breakfast club: fostering culture, diversity and mutual learning among registrars and early career psychiatrists through research. RANZCP Congress. Cairns. 13 May 2019
19. **James Scott.** The aggressive child. Royal Australian and New Zealand College of Psychiatrist Congress. Cairns. 14 May 2019
20. John Reilly, Calogero Longhitano, **Darren Neillie.** Violence risk assessment and management framework: mental health services. RANZCP Congress. Cairns. 14 May 2019

Oral Presentation (cont)

21. **Julie Ewing**. A physical health audit's impact on care design. Australian College of mental Health Nursing conference. Sydney. 8-10 October 2019
22. **Katherine Moss, Ed Heffernan, Carla Meurk**, Megan Steele. Physical health and mental illness: can implementation science assist in addressing the needs of forensic patients in secure facilities? RANZCP Congress. Cairns. 14 May 2019
23. **Lisa Wright**, Pamela Meredith, Sally Bennett. "Why didn't you just give them PRN": Investigating the factors influencing the implementation in inpatient mental health units. Occupational Therapy 28th National Conference and Exhibition 2019. Sydney. 10-12 July 2019
24. Megan Steele, **Carla Meurk, Jackyln Schess**, Lorraine Yap, Jocelyn Jones, Scott Harden, Tony Butler, **Ed Heffernan**. Substance use patterns of justice involved youth. Justice Health Conference. Public Health Association of Australia, Sydney. 10 April 2019
25. **Melissa Connell**. Trauma Informed Care and Practice in MNMH-ADS. Queensland Health Mental Health Alcohol and Other Drugs Senior Leaders Group (SLG) forum. Victoria Park, Brisbane. 13 August 2019
26. **Melissa Connell, Kim Sander, Annaketurah Ralph, John Kelly, Nicole Brigg**. Becoming Trauma Informed: MNMH-ADS journey of developing and implementing a model of Trauma Informed Care and Practice. Australian Winter School 2019. 25-26 July 2019
27. Oystein Tronstad, **Dylan Flaws, Sue Patterson**, John Fraser. ICU of the Future - how redesigning the ICU environment can improve patient outcomes. 29th TheMHS Conference 2019. 28 August 2019
28. Oystein Tronstad, **Dylan Flaws, Sue Patterson**, John Fraser. What are the short and long-term impacts of an ICU admission on the patient? 29th TheMHS Conference 2019. 28 August 2019
29. Oystein Tronstad, **Dylan Flaws, Sue Patterson**, John Fraser. How does the ICU environment impact staff experience and patient care: implications for environmental development. World Congress of Intensive Care. Melbourne. 14-18 October 2019
30. **Sally Mercier, Danielle Manolis, Sue Patterson, Samantha Bicker**. It makes sense, therapeutically: Creating sensory spaces in mental health inpatient units. 29th TheMHS Conference 2019, 28 August 2019 & Statewide Leaders' Forum, 13 August 2019.

Poster Presentations

1. **Bridget Johnson, George Bruxner, Sue Patterson**. Optimising Psychiatric After-Hours Duty: The Implementation and Impact of a Short Cycle After-Hours Roster. RANZCP Congress in Cairns. 12-16 May 2019
2. **Bruce Collyer, Diane Burrows and Imani Gunasekara**. 'Onboarding, to recovery'. Presented to: ACMHN 45th International Mental Health Nursing Conference. Sheraton Grand Sydney Hyde Park. 8-10 October 2019
3. **Lisa Wright, Margherita Chiavone**. Psychiatric Intensive Care Units: Developing a Role for Occupational Therapists. Presented by L.Wright at Occupational Therapy 28th National Conference and Exhibition 2019. Sydney. 10-12 July 2019
4. Oystein Tronstad, **Dylan Flaws, Sue Patterson**, John Fraser. What can ICU patients tell us about their experience and the impact of the environment on their recovery? World Congress of Intensive Care. 14-18 October 2019
5. Oystein Tronstad, **Dylan Flaws, Sue Patterson**, John Fraser. When a flower doesn't bloom, you fix the environment where it grows, not the flower – Designing the ideal ICU. World Congress of Intensive Care. 14-18 October 2019
6. **Scott Haworth, Robin Counsel and Imani Gunasekara**. 'To debrief or not to debrief: Adding a collaborative approach to decreasing repeated restrictive practices'. Presented to: ACMHN 45th International Mental Health Nursing Conference; Sheraton Grand Sydney Hyde Park. 8 -10 October 2019.

Other communications and outputs:

1. Hielscher E, **Scott JG**. "Researchers identify risk factors for teens attempting suicide". Brisbane Times (9 Dec). <https://www.brisbanetimes.com.au/national/queensland/researchers-identify-risk-factors-for-teens-attempting-suicide-20191208-p5310i.html>
2. Hielscher E, **Scott JG**, Diminic S. (2019). "For people with a mental illness, loved ones who care are as important as formal supports". The Conversation (17 October). <https://theconversation.com/for-people-with-a-mental-illness-loved-ones-who-care-are-as-important-as-formal-supports-120344>
3. **Scott JG**. (2019). "Mum discovers heartbreaking note years after Victorian teen Cassidy Trevan's death". Channel 9 News (4 April). <https://www.9news.com.au/national/victoria-news-mum-discovers-heartbreaking-note-years-after-teen-cassidy-trevans-death/34b1a51b-d0e0-44c3-b5eb-447ea1fa0540>
4. **Scott JG**. (2019). "Researchers count the ways children are abused in bid to uncover economic cost". ABC News (11 Mar). <https://www.abc.net.au/news/2019-03-11/child-abuse-study-financial-cost/10883284>.

NURSING & MIDWIFERY SERVICES



NURSING & MIDWIFERY SERVICES



Kerri McLeod
Director
Nursing and Midwifery Services
MNHHS

Nursing and Midwifery Services continues to deliver exceptional research outputs, contributing to the expansion and improvement of evidence-based and internationally recognised quality clinical care. Our success over the last 12 months is evident in our high number of peer-reviewed publications, successful grant funding, and international representation at Nursing and Midwifery and other health-care conferences.

Our ongoing and successful collaborations with our university and industry partners have led to a number of successful research projects including a 2019 National Health and Medical Research Council Partnership Grant (\$1,497,197.00), exploring the implementation of ultrasound guided procedures for patients with difficult peripheral intravenous access. This large project was built on the foundations of clinical research conducted here at the RBWH, under the leadership of Professor Joan Webster and Dr Nicole Marsh.

This year has seen several changes including the appointment of the new Nursing and Midwifery Director of Research, Dr Nicole Marsh. Nicole's program of research centres on improving patients' outcomes associated with Vascular Access devices. Nicole has been a significant contributor to high quality research outcomes at the RBWH over the last decade and we are pleased to welcome her into this position. 2019 has also seen the

departure of (RBWH/QUT joint appointment) Professor Theresa Green, who will be taking up a key role in the new STARS facility, from 2020. We would like to extend our thanks for her impact on nursing and midwifery research since 2016 and look forward to collaborating with her in the future. We continue to work with our university partners to establish more co-joint and professorial appointments. With *Sustainability* and embedded *Research Culture* as the focus of our research endeavours, we are continually creating opportunities for nurses and midwives to participate in research activities. This includes our Evidence Based Practice Program, research staffing opportunities, and support to actively share their research results locally at the RBWH Symposium and Nursing and Midwifery Research Ground rounds, as well as internationally at health forums. These activities have, in turn, resulted in the integration of RBWH-based research results into international guidelines and clinical practice; an excellent achievement from our nurses and midwives.

Our researchers should be very proud of their efforts for 2019. 2020 – Year of the Nurse and Midwife will certainly give Nursing and Midwifery a great platform to build on our successes. I look forward to what 2020 holds for the expansion and translation into practice of our Nursing and Midwifery Research.



Back row (L-R): Natasha Perry (Clinical Nurse, Cancer Care Services), Emily Larsen (Research Fellow, Vascular Access, Griffith University), Dr Nicole Gavin (Nurse Researcher, Cancer Care Services), Deanne August (Clinical Trial Coordinator), Prof Theresa Green (Professor of Nursing, Neurology), Sharon Ireland (Administration Officer)
Front row (L-R): (Professor of Nursing, Critical Care Services), Veronica Percival (RN, Oncology Day Therapy Unit)

NURSING & MIDWIFERY RESEARCH CENTRE

Over the last 12 months the Nursing and Midwifery Research Centre has continued to focus on conducting high quality research to improve clinical practice and ensure evidence-based practice. We have achieved this through departmental and collaborative research projects, extending across a wide range of clinical units from Intensive Care and Neurosciences, to Neonatology and Cancer Care. We currently have 40 active research studies, four funded by NHMRC grants [the PISCES Trial, evaluating various central line dressings and devices to prevent catheter failure; the PICNIC Trial, comparing two novel peripherally inserted central catheter technologies with standard care (older generation polyurethane catheters); the DRESSING trial, evaluating the effectiveness of negative pressure wound therapy on clean surgical wounds to prevent surgical site infection] and the DIVA trial looking at sustainable implementation of ultrasound guided procedures for patients with difficult peripheral intravenous access; and a NSW Health, Translational Research Project Grant for the implementation of best available evidence into practice for incontinence-associated dermatitis.

2019 was another successful year for the centre, with 31 peer reviewed publications, \$3,152,067 in competitive grant funding awarded and 15 invited conference presentations. Our team was recognised for high-quality research outcomes by our peers with awards such as *Health Service* and *Implementation Research Award* for our Nursing and Midwifery Vascular Access Research Team lead by Dr Nicole Marsh and the *Chief Executive Award* presented to Professor Joan Webster at the Metro North 2019 Research Excellence Awards. Professor Theresa Green was recognised for her important stroke research at the *2018 World Stroke Congress* in Montreal; and Professor Fiona Coyer was an invited expert to an international consensus panel on medical device-related pressure injuries and an invited member of a small working group in the development of the Pressure Ulcer/ Injury Prevent and Treatment: Clinical Practice Guidelines, culminating in the 2019 Intervention Prevention and Treatment of Pressure Ulcers/Injuries conference in Los Angeles.

Our continued focus on developing research skills amongst nurses and midwives is evident in our ongoing successful Evidence-Based Practice Program, Mentorship Program, Nursing and Midwifery Research Grand Rounds and 21 higher degree students supported through supervision.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Sonia Hines	PhD, Qld University of Technology	An educational intervention to improve nurses' research literacy	Prof Joanne Ramsbotham, Prof Fiona Coyer
Lizanne Dagleish	PhD, Qld University of Technology <i>(2018-2020)</i>	The role of microcirculatory dysfunction and skin breakdown in the critically ill	Prof Fiona Coyer, Dr Jill Campbell, Dr Kathy Finlayson, Prof Andre VanZundert
Adrianna Hada	PhD, Qld University of Technology <i>(2017-2021)</i>	Transforming patient outcomes through improved and effective nursing clinical handover	Prof Fiona Coyer, Dr Leanne Jack
Paul Jarrett	PhD, Qld University of Technology <i>(2017-2021)</i>	Administration of antibiotics in the intensive care unit	Prof Fiona Coyer, Prof Sam Keogh, Prof Jason Roberts
Anthony Batterbury	PhD, Qld University of Technology <i>(2018-2021)</i>	How sick is too sick and how heavy too heavy? A mixed method study to understand clinical acuity and dependence to define thresholds for escalation or resource mobilisation	Prof Fiona Coyer, Assoc. Prof Clint Douglas
Hannah Rheault	Doctor Health Science, Qld University of Technology <i>(2014-2020)</i>	Examining the health literacy and chronic disease self-management of remote Aboriginal Australians: A mixed method study	Prof Ann Bonner, Prof Fiona Coyer

Supervised Post-Graduate Research Students (cont)

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Leanne Stone	Doctor Health Science, Qld University of Technology (2014-2020)	Comparing “Magnet” attributes in nursing between Australia and the United States	Prof Fiona Coyer, Prof Ray Chan, Prof Alexandra McCarthy
Bryan Gregory	PhD, Qld University of Technology (2018-2022)	The effects of continuous renal replacement therapy and sustained low-efficiency dialysis on immunosuppressive drug levels in critically ill patients with acute kidney injury	Prof Fiona Coyer, Prof Jason Roberts, Prof Ann Bonner
Jessica Ingleman	PhD, Qld University of Technology (2019-2022)	Exploring tissue reperfusion in two body positions and varied load periods in critically ill patients (EXTREME 2 pressure study)	Prof Fiona Coyer, Dr Christina Parker
David McIntyre	PhD, Qld University of Technology (2016-2021)	Developing and validating haemodialysis nurse-sensitive indicators	Prof Ann Bonner, Prof Fiona Coyer
Tain Lloyd	Masters of Applied Science (Research), Qld University of Technology	Investigation of Chronic Kidney Disease and Stroke Development	Prof Ann Bonner, Prof Theresa Green, Dr Louise Purcell
Eric Tanlaka	PhD, University of Calgary	The impact of wait times on outcomes of stroke rehabilitation	Prof Kathryn King-Shier, Prof Theresa Green
Cheryl Blaber	Masters of Applied Science (Research), Qld University of Technology (2018 – articulated to PhD in 2019)	The assessment and management of pain and suffering in persons with cognitive impairment approaching the end of life as inpatients within an acute tertiary facility	Prof Theresa Green, Dr John Rosenburg, Dr Jenny Fox
Pauline Nicholas	Masters of Applied Science (Research), Qld University of Technology	Using brain training to improve cognition of patients on dialysis	Prof Ann Bonner, Prof Theresa Green, Dr Louise Purcell
Lan Van Huong	Doctor of Philosophy	Exploring of family support for people receiving haemodialysis therapy in Vietnam	Prof Ann Bonner, Prof Theresa Green
Amanda McKie	MPhil, Qld University of Technology	Sexual dysfunction in patients with CKD	Prof Ann Bonner, Prof Theresa Green
Sita Sharma	PhD, Qld University of Technology	Development and testing an educational intervention to reduce symptoms burden and improve quality of life in people with chronic kidney disease in Nepal	Prof Ann Bonner, Prof Theresa Green
India Lye	Masters of Applied Science (Research), Griffith University 2019	Vascular access device associated infections in intensive care units across Australia	Dr Nicole Marsh, Prof Claire Rickard, Amanda Corley
Maja Olsson	PhD, Qld University of Technology	End-of-life Conversations in Palliative Care	John Rosenberg, Jason Mills, Prof Theresa Green
Emily Larsen	PhD, Griffith University 2019-2021	PREMs and PROMs for Peripheral IVs	Prof Claire Rickard, Dr Nicole Marsh, A/Prof Joshua Byrnes
Amanda Corley	PhD, Griffith University 2018-2020	The use of a securement bundle to prevent intravenous catheter failure	Prof Claire Rickard, Assoc. Prof Amanda Ullman, Dr Nicole Marsh

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Emily Larsen	Project Manager/ Honorary Research Fellow	0.2	External	Integrated versus non-integrated Peripheral intravenous catheter. Which is the most clinical and cost-effective system for peripheral intravenous catheter management? (The OPTIMUM trial) Peripherally Inserted Central catheter Securement: the PISCES Trial	Griffith University
Jennifer Palmer	Clinical Nurse, Nursing Research	0.6	Internal	Biochemical characteristics and healing rates of medical device-related pressure injuries: the MEDICI study Evaluation of a closed loop-blood sampling system in intensive care: a pilot randomized controlled trial. ENCLOSE study	Qld University of Technology
Julie Flynn	Project Manager	0.3	External	<i>Controlling device Occlusion and infection by Connector Design And decontamination</i> (The COCOA pilot trial)	Griffith University
Dr Nicole Marsh	Nursing and Midwifery Director of Research	1	External/ Internal	<i>Nursing and Midwifery Services RBWH/School of Nursing and Midwifery, Griffith University</i>	
	Adjunct Assoc. Professor – GU				Griffith University
	Adjunct Assoc. Professor – QUT				Qld University of Technology
Dr Jill Campbell	Joint Appointment	0.7	Internal	<i>'Towards a better understanding of continence management in the acute care setting; A multisite exploratory study'</i>	Qld University of Technology (QUT)
Prof Fiona Coyer	Joint Appointment Professor of Nursing	1	External/ Internal	<i>Nursing and Midwifery Services RBWH/School of Nursing, Qld University of Technology</i>	
	Visiting Professor				University of Huddersfield
Prof Theresa Green	Joint Appointment Professor of Nursing	1	External/ Internal	<i>Nursing and Midwifery Services RBWH/School of Nursing, Qld University of Technology</i>	
	Assoc. Professor of Nursing				1. University of Calgary, Faculty of Nursing and Hotchkiss Brain Institute Alberta Health Services, Dept of Clinical Neurosciences
	Visiting Research Fellow				2. Gold Coast University Hospital
Adj Assoc. Prof Alanna Geary	Adjunct Assoc. Professor	1	Internal	<i>Transforming nursing assessment in acute hospitals: A cluster randomised controlled trial of an evidence-based core assessment protocol (the ENCORE trial)</i>	1. School of Nursing Qld University of Technology
	Adjunct Assoc. Professor				2. School of Nursing and Midwifery Griffith University
	Adjunct Professor				3. School of Nursing and Midwifery University of Qld
Prof Robyn Fox	Professor	1	Internal	<i>Transforming nursing assessment in acute hospitals: A cluster randomised controlled trial of an evidence-based core assessment protocol (the ENCORE trial)</i>	1. School of Nursing Qld University of Technology
	Adjunct Assoc. Professor				2. School of Nursing and Midwifery University of Qld
	Clinical Assoc. Professor				3. Australian Catholic University
Dr Catriona Booker	Clinical Assoc. Professor	1	Internal	<i>Transforming nursing assessment in acute hospitals: A cluster randomised controlled trial of an evidence-based core assessment protocol (the ENCORE trial)</i>	1. Qld University of Technology
	Clinical Fellow				2. Australian Catholic University
	Adjunct Assoc. Professor				3. Griffith University
	Adjunct Assoc. Professor				4. The University of Qld

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	Research Program	Affiliated University/ies
Prof Claire Rickard	Honorary Research Fellow	Numerous Vascular Access Trials	Griffith University
Dr Amy Spooner	Honorary Research Fellow	Cancer Care Research	Qld University of Technology
Assoc. Prof Amanda Ullman	Honorary Research Fellow	Numerous Vascular Access Trials	Griffith University
Dr Anne Bonner	Honorary Research Fellow	Numerous Renal projects – please refer to Internal Medicine Research Report	Qld University of Technology
Jo Wu	Honorary Research Fellow	Cardiac research	University of Sunshine Coast
Prof Samantha Keogh	Honorary Research Fellow	Numerous Vascular Access Trials	Qld University of Technology
Paul Jarrett	Honorary Research Fellow	Intensive Care Services Research	Qld University of Technology
Karen Wynne	Honorary Research Fellow	Intensive Care Services Research	Qld University of Technology
Amanda Corley	Honorary Research Fellow	Critical Care Research; Vascular Access Trials	Griffith University
Dr Carol Reid	Honorary Research Fellow	No current active projects with Nursing Services	Griffith University
Dr Gillian Ray-Barruel	Honorary Research Fellow	Peripheral Intravenous Catheter Awareness Study	Griffith University
Assoc. Prof Carol Windsor	Honorary Research Fellow	Transforming nursing assessment in acute hospitals: A cluster randomised controlled trial of evidence-based nursing core assessment	Qld University of Technology
Monica Stankiewicz	Honorary Research Fellow	No current active projects with Nursing Services	Redcliffe Hospital
Tiffany Harris-Brown	Honorary Research Fellow	Infection Control	University of Qld
Dr Karen New	Honorary Research Fellow	Women's and Newborn Services	University of Qld
Prof Marie Cooke	Honorary Research Fellow	EffEctiveness of Prophylactic fOam dressings in the prevention of saCral pressure injuries in at-risk hospitalised patients Numerous Vascular Access Trials	Griffith University
Anna Doubrovsky	Project Manager	Efficacy of Incontinence-Associated Dermatitis interventions for critically ill patients in intensive care; the Distinct pilot randomised control trial	Qld University of Technology
Tricia Kleidon	Honorary Research Fellow	Numerous Vascular Access Trials	Griffith University
Jessica Schults	Honorary Research Fellow	Numerous Vascular Access Trials	(Griffith University/Qld Children's Hospital)

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i>	Emily Larsen <i>(Nursing and Midwifery Research Centre)</i> , Prof Claire Rickard <i>(Griffith University)</i> , Peter Groom <i>(Wattlebrae)</i> , Tricia Kleidon <i>(Qld Children's Hospital)</i> , Catherine O'Brien <i>(Nursing and Midwifery Research Centre)</i> , Dr Evan Alexandrou <i>(Liverpool Hospital)</i> , Megan Nicholas <i>(Wattlebrae)</i> , Dr Catriona Booker <i>(Workforce Development and Education Unit)</i>	Comparing the use of Midline Catheters versus Peripherally Inserted Central Catheters for patients requiring peripherally Compatible Therapies: A randomised controlled trial (the COMPACT Trial)
Prof Fiona Coyer <i>(Nursing and Midwifery Research Centre/Intensive Care Services)</i>	Assoc. Prof Tony Parker <i>(QUT)</i> , Dr Jill Campbell <i>(Skin Integrity)</i> , Anna Doubrovsky <i>(QUT)</i>	BiocheMical characteristics and hEaling rates of medical device-related pressure Injuries (the MEDICI study); a prospective observational pilot study
Prof Fiona Coyer <i>(Nursing and Midwifery Research Centre/Intensive Care Services)</i>	Jayesh Dhanani <i>(Intensive Care)</i> , Prof Samantha Keogh <i>(QUT)</i> , Flavia Huygens <i>(QUT)</i> , Suzanne Parker <i>(UQ)</i>	Evaluation of a closed loop-blood sampling system in the intensive care: a pilot randomised controlled trial

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Fiona Coyer <i>(Nursing and Midwifery Research Centre/Intensive Care Services)</i>	Dr Jill Campbell <i>(Skin Integrity)</i>	Efficacy of incontinence-associated dermatitis interventions for critically ill patients in intensive care; the Distinct pilot randomised control trial
Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i>	Emily Larsen <i>(Nursing and Midwifery Research Centre)</i> , Julie Flynn <i>(Griffith University)</i> , Prof Claire Rickard <i>(Griffith University)</i> , Sue Cadigan <i>(Qld Children's Hospital)</i> , Barbara Hewer <i>(Vascular Access)</i> , Peter Groom <i>(Wattlebrae)</i>	Managing Intravenous Devices among patients with limited vascular access or prolonged therapy: Investigating the Efficacy of midline catheters – the MIDLINE study
Prof Theresa Green <i>(Nursing and Midwifery Research Centre/Neurology)</i>	Tara Hormann <i>(Stroke)</i> , Assoc. Prof Tony Parker <i>(QUT)</i> , Jonathon Peake <i>(QUT)</i> , Gregory Bix <i>(USA)</i>	Characteristics of physical activity required to elevate circulating neuroprotective LG3 peptide as a novel stroke therapy
Prof Theresa Green <i>(Nursing and Midwifery Research Centre/Neurology)</i>	Anna Farrell <i>(Speech Pathology)</i> , Lee Moylan <i>(Neurology)</i> , Bernd Ploderer <i>(QUT)</i>	An image-based tablet app to support communication of daily activity scheduling between patients with post-stroke aphasia, family and hospital staff
Prof Theresa Green <i>(Nursing and Midwifery Research Centre/Neurology)</i>	Kevin Clark <i>(Medicine)</i> , Aneeka Bott <i>(QUT)</i> , Bernd Ploderer <i>(QUT)</i>	Better Individualised Stroke Care Using Technology (BISCUT)
Prof Theresa Green <i>(Nursing and Midwifery Research Centre/Neurology)</i>	Bernd Ploderer <i>(QUT)</i> , Anna Farrell <i>(Speech Pathology)</i> , Lee Moylan <i>(Neurology)</i>	Aphasia Communication App/ StrokeAssist aphasia app evaluation
Prof Theresa Green <i>(Nursing and Midwifery Research Centre/Neurology)</i>	Dr Andrew Wong <i>(Neurology)</i> , Sandy Jamieson <i>(Neurology)</i> , Meaghan Osbourne <i>(Neurology)</i>	Post-acute NP-led stroke service delivery model: managing residual neurological issues and multiple chronic conditions post discharge – a pilot project
Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i>	Assoc. Prof Amanda Ullman <i>(Griffith University)</i> , Gabor Mihala <i>(Griffith University)</i> , Prof Marie Cooke <i>(Griffith University)</i> , Prof Claire Rickard <i>(Griffith University)</i>	Peripheral intravenous catheter failure and infection in adults: a systematic review and meta-analysis. (a study)
Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i>	Assoc. Prof Amanda Ullman <i>(Griffith University)</i> , Gabor Mihala <i>(Griffith University)</i> , Prof Marie Cooke <i>(Griffith University)</i> , Prof Claire Rickard <i>(Griffith University)</i>	Peripheral intravenous catheter complications in adults: a systematic review and meta-analysis. (a study)
Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i>	Emily Larsen <i>(Nursing and Midwifery Research Centre)</i> , Sam Tapp <i>(HITH)</i> , Prof Claire Rickard <i>(Griffith University)</i>	Hospital In The Home (HITH) – Management of Peripherally Inserted Central Catheters a retrospective cohort study
Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i>	Tricia Kleidon <i>(Qld Children's Hospital)</i> , Assoc. Prof Amanda Ullman <i>(Griffith University)</i> , Vineet Chopra <i>(University of Michigan)</i> , Prof Claire Rickard <i>(Griffith University)</i>	Risk predictors of peripheral IV catheter complications and failure
Emily Larsen <i>(Nursing and Midwifery Research Centre)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Dr Gillian Ray-Barruel <i>(Griffith University)</i> , Dr Evan Alexandrou <i>(Liverpool Hospital)</i> , C Friese, Prof Claire Rickard <i>(Griffith University)</i> , Vineet Chopra <i>(University of Michigan)</i>	One Million Global Catheters (OMG) Oncology/Haematology sub-analysis project
Emily Larsen <i>(Nursing and Midwifery Research Centre)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Dr Nicole Gavin <i>(Cancer Care)</i> , Julie Flynn <i>(Griffith University)</i> , Prof Joan Webster <i>(Nursing and Midwifery Research Centre)</i>	Cancer caRE: The risk factors of vEnous access failuRe (CareTaKER study)
Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i>	Emily Larsen <i>(Nursing and Midwifery Research Centre)</i> , Assoc. Prof Joshua Byrnes <i>(Griffith University)</i> , Prof Claire Rickard <i>(Griffith University)</i> , Tracey Hawkins <i>(Nursing and Midwifery Research Centre)</i> , Adj Prof Kerri McLeod <i>(Nursing and Midwifery Services)</i>	Investigating and Measuring Patient outcome and experience tools to enable implementation within existing exit survey Applications in local Value Based HealthCare Teams (IMPACT Study)

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Claire Rickard <i>(Griffith University)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Prof Maria Cooke <i>(Griffith University)</i> , Assoc. Prof Amanda Ullman <i>(Griffith University)</i> Assoc. Prof Joshua Byrnes <i>(Griffith University)</i> , Andrew Bulmer <i>(Griffith University)</i> , Jessica Schults <i>(Qld Children's Hospital)</i> , Tricia Kleidon <i>(Qld Children's Hospital)</i>	Griffith-BD Catheter Choice Coalition
Bryan Gregory <i>(Intensive Care Services)</i>	Dwarakanathan Ranganathan <i>(Renal Medicine)</i> , Prof Fiona Coyer <i>(Nursing and Midwifery Research Centre/Intensive Care Services)</i>	The effects of renal replacement therapy on immunosuppressive drug concentrations (CITRIC II Study)
Assoc. Prof Amanda Ullman <i>(Griffith University)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Andrew Bulmer <i>(Griffith University)</i> , Naomi Runnegar <i>(Princess Alexandra Hospital)</i> , Tricia Kleidon <i>(Qld Children's Hospital)</i> , Paul Lee-Archer <i>(QLD Children's Hospital)</i> , Benjamin Pearch <i>(Princess Alexandra Hospital)</i> , Deanne August <i>(Griffith University)</i> , Cathy Biles <i>(Princess Alexandra Hospital)</i> , Assoc. Prof Joshua Byrnes <i>(Griffith University)</i> , Vineet Chopra <i>(University of Michigan)</i> , Alan Coulthard <i>(University of Qld)</i> , Rob Ware <i>(Griffith University)</i> , Prof Claire Rickard <i>(Griffith University)</i> , Prof Marianne Wallis <i>(University of the Sunshine Coast)</i> , Peter Mollee <i>(Princess Alexandra Hospital)</i>	Peripherally inserted central catheter innovation to reduce infections and clots: the PICNIC trial
Prof Claire Rickard <i>(Griffith University)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Prof Marie Cooke <i>(Griffith University)</i> , Assoc. Prof Amanda Ullman <i>(Griffith University)</i> , Dr Gillian Ray-Barruel <i>(Griffith University)</i> Tricia Kleidon <i>(Qld Children's Hospital)</i> , Vineet Chopra <i>(University of Michigan)</i>	IMAGINE – Innovative Michigan and Griffith International Network
Lauren Kearney <i>(University of the Sunshine Coast)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Assoc. Prof Amanda Ullman <i>(Griffith University)</i> , Deb Massey <i>(Southern Cross University)</i> , Alison Craswell <i>(University of the Sunshine Coast)</i> , Rachel Nugent <i>(Sunshine Coast Hospital and Health Service)</i> , Guy Godsall <i>(Sunshine Coast Hospital and Health Service)</i>	Peripheral intravenous catheter management in childbirth [PICMIC]: An observational study
Dr Nicole Gavin <i>(Cancer Care Services)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Catherine O'Brien <i>(Nursing and Midwifery Research Centre)</i> , Prof Samantha Keogh <i>(QUT)</i> , Louise Marquart <i>(QIMR Berghofer Medical Research Institute)</i> , Makrina Totsika <i>(QUT)</i>	Standard versus perforated peripheral intravenous catheters. The SURF trial: a pilot randomised controlled trial
Assoc. Prof Clint Douglas <i>(QUT)</i>	Prof Robyn Fox <i>(Nursing and Midwifery Professional Education and Workforce Development)</i> , Dr Catriona Booker <i>(Workforce Development and Education Unit)</i> , Adj Assoc Prof Alanna Geary <i>(Metro North Nursing and Midwifery)</i> , Prof Sandy Middleton <i>(Australian Catholic University, ACU)</i> , Emeritus Prof Glenn Gardner <i>(QUT)</i> , Patrick Kelly <i>(University of Sydney)</i> , Rachael Morton <i>(University of Sydney)</i> , Elizabeth McInnes <i>(ACU)</i> , Carol Windsor <i>(QUT)</i>	Transforming nursing assessment in acute hospitals: A cluster randomised controlled trial of an evidence-based core assessment protocol (the ENCORE trial)
Hal Rice, <i>(Gold Coast University)</i>	Prof Theresa Green <i>(Nursing and Midwifery Research Centre/Neurology)</i> , Laetitia de Villiers <i>(Gold Coast University Hospital, GCUH)</i> , Jason Wenderoth <i>(Prince of Wales Hospital Sydney)</i> , Andrew Cheung <i>(Prince of Wales Hospital Sydney)</i> , Will McAuliffe <i>(Sir Charles Gardner Hospital, Perth)</i> , Tim Phillips <i>(Sir Charles Gardner Hospital, Perth)</i> , Maame Owusu <i>(GCUH)</i> , Justin Whitley <i>(Radiology)</i>	SCOPE-AUS: The Safety and Clinical Effectiveness Of Pipeline™ Flex Embolization devices with Shield Technology™ in patients with intracranial aneurysms: A multicentre retrospective study of an AUStralian cohort
Colette McIntyre <i>(Women's and Newborns Services)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Assoc. Prof Amanda Ullman <i>(Griffith University)</i> , Dr Karen New <i>(University of Qld, UQ)</i> , Deanne August <i>(Griffith University)</i> , Donna Hovey <i>(Longreach Hospital)</i> , Patricia Smith <i>(Women's and Newborn Services)</i> , Pieter Koorts <i>(Neonatology)</i> , Katie Foxcroft <i>(Women's and Newborn Services)</i>	NeOnatal Vascular Access (NOVA) study: an observational study of neonatal vascular access complications
Dr Nicole Gavin <i>(Cancer Care Services)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Assoc. Prof Amanda Ullman <i>(Griffith University)</i> , Tricia Kleidon <i>(Qld Children's Hospital, QCH)</i> , Emily Larsen <i>(Nursing and Midwifery Research Centre)</i> , Prof Claire Rickard <i>(Griffith University)</i> , Dr Jill Campbell <i>(Skin Integrity)</i>	Estimating prevalence of impaired skin surrounding Devices: the EPISODE study
Julie Flynn <i>(Griffith University)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Prof Samantha Keogh <i>(QUT)</i> , Assoc. Prof Amanda Ullman <i>(QUT)</i> , Lee Zhang <i>(Gold Coast Uni)</i> , Prof Claire Rickard <i>(Griffith University)</i>	Evaluating effective decontamination methods for needleless connectors: A pilot randomised control trial
Prof Claire Rickard <i>(Griffith University)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Prof Sandy McCarthy <i>(Griffith University)</i> , Tricia Kleidon <i>(QCH)</i> , Emily Larsen <i>(Nursing and Midwifery Research Centre)</i> , Li Zhang <i>(Gold Coast University Hospital)</i> , Assoc. Prof Amanda Ullman <i>(Griffith University)</i> , Rachel Edwards <i>(QCH)</i> , Melissa Arneil <i>(Princess Alexandria Hospital, PAH)</i>	Controlling device Occlusion and infection by Connector Design And decontamination (The COCOA pilot trial)
Prof Claire Rickard <i>(Griffith University)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Prof Raymond Chan <i>(QUT)</i> , Peter Mollee <i>(PAH)</i> , Geoffrey Playford <i>(PAH)</i> , Li Zhang <i>(Griffith University)</i> , Andrew Hallahan <i>(QCH)</i> , Dr Evan Alexandrou <i>(Liverpool Hospital)</i>	Peripherally InSerted CEntral catheter Securement: the PISCES Trial
Prof Claire Rickard <i>(Griffith University)</i>	Dr Nicole Marsh <i>(Nursing and Midwifery Research Centre)</i> , Peter Carr <i>(Fiona Stanley Hospital)</i> , Gavin Jackson <i>(Fiona Stanley Hospital)</i> , Prof Marie Cooke <i>(Griffith University)</i> , Prof Marianne Wallis <i>(Griffith University)</i>	Integrated versus non-integrated Peripheral InTravenous catheter. Which Is the most clinical and cost-effective system for peripheral InTravenous catheter Management? (The OPTIMUM trial)

Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Led Researchers	RBWH Researchers and Others (RBWH staff in bold)	Research Project Title
Prof Claire Rickard (Griffith University)	Dr Nicole Marsh (Nursing and Midwifery Research Centre), Li Zhang (Griffith University), Prof Marie Cooke (Griffith University), Peter Mollee (PAH), Alexandra McCarthy (PAH), Prof Samantha Keogh (QUT), Dr Cindy Mervin (Griffith University)	Prevention of central venous catheter infection and occlusion by needless connector design and disinfection in haematology-oncology patients
Prof Helen Edwards (QUT)	Prof Fiona Coyer (Nursing and Midwifery Research Centre/Critical Care Services), Patricia Sinasac (TPCH), Kathleen Finlayson (QUT), Christina Parker (QUT), Jessica Schluter (TPCH), Kerrie Coleman (Skin Integrity)	Reducing the prevalence and severity of wounds through implementation of the Champions for Skin Integrity Model – Protecting Skin Integrity (PSI)
Rohan Grimley (Nambour Hospital)	Prof Theresa Green (Nursing and Midwifery Research Centre/Neurology Services), Suzanne Keys (ACU), Louise Gustafsson (Griffith University), Eleanor Horton (USC), Benjamin Chen (Gold Coast Hospital), Ingrid Rosbergen (Physiotherapy), Greg Cadigan (Health Improvement Unit)	Building efficient and equitable pathways to and through rehabilitation in stroke
Michelle Barakat-Johnson (Sydney Local Health District, SLHD)	Prof Fiona Coyer (Nursing and Midwifery Research Centre/Intensive Care Services), John Stephenson (University of Huddersfield), Ashleigh Dolton (RPAH), Sarah Jones (St George), Jayne Campbell (Tamworth ICU), Heidi Buhr (RPAH)	Efficacy of a heel off-loading boot in reducing heel pressure injuries in intensive care patients: a single-blinded randomised controlled trial
Michelle Barakat-Johnson (SLHD)	Prof Fiona Coyer (Nursing and Midwifery Research Centre/Intensive Care Services), Kate White (University of Sydney), John Stephenson (University of Huddersfield)	Effectiveness of a Pressure Injury Clinical Judgement Risk-screening tool and prevention plan: Cluster Randomised Control Trial (EmPIRE RCT)
Michelle Barakat-Johnson (SLHD)	Prof Fiona Coyer (Nursing and Midwifery Research Centre/Intensive Care Services)	A novel implementation of best available evidence into practice for incontinence-associated dermatitis (IMBED)
Dr Gillian Ray-Barruel (Griffith University)	Dr Nicole Marsh (Nursing and Midwifery Research Centre), Min-Lin Wu (Griffith University), Andrew Bulmer (Griffith University), Prof Claire Rickard (Griffith University), Prof Wendy Moyle (Griffith University)	Adaptation of the catheter-associated urinary tract infection (CAUTI) targeted assessment for prevention (TAP) tool for use in the Australian acute healthcare setting: a validation study
Dr Gillian Ray-Barruel (Griffith University)	Dr Nicole Marsh (Nursing and Midwifery Research Centre), Vineet Chopra (University of Michigan), Tricia Kleidon (Qld Children's Hospital), Prof Claire Rickard (Griffith University)	To be or not to be left in situ: Prevalence and complications of ideal intravenous catheters. A secondary analysis of 15,000 catheters
Assoc. Prof Amanda Ullman (Griffith University)	Dr Nicole Marsh (Nursing and Midwifery Research Centre), Emily Larsen (Nursing and Midwifery Research Centre), Prof Claire Rickard (Griffith University)	Consumer-led innovation to implement improvements in central venous access device management: The Vascular Access Passport
Gerben Keijzers (Gold Coast Hospital)	Hugo Evison (Gold Coast Hospital), Amy Sweeney (Gold Coast Hospital), Jamie Ranse (Gold Coast Hospital), Dr Nicole Marsh (Nursing and Midwifery Research Centre), Assoc. Prof Joshua Byrnes (Griffith University), Prof Claire Rickard (Griffith University), Dr Peter Carr (Griffith University)	Clinician decision making in peripheral intravenous cannulation in emergency settings
Prof Claire Rickard (Griffith University)	Amanda Corley (The Prince Charles Hospital), Dr Nicole Marsh (Nursing and Midwifery Research Centre), Assoc. Prof Amanda Ullman (Griffith University), India Lye (The Prince Charles Hospital)	Anti-microbial Disc infection preventions in vascular access (ADORN Trial)
Amanda Corley (The Prince Charles Hospital)	India Lye (The Prince Charles Hospital), Dr Nicole Marsh (Nursing and Midwifery Research Centre), Prof Claire Rickard (Griffith University)	Anti-microbial Disc infection preventions in vascular access (ADORN Trial)
Jessica Schults (Griffith University/Qld Children's Hospital)	Prof Claire Rickard (Griffith University), Prof Marie Cooke (Griffith University), Assoc. Prof Amanda Ullman (Griffith University), Tricia Kleidon (Qld Children's Hospital), Dr Nicole Marsh (Nursing and Midwifery Research Centre), Dr Gillian Ray-Barruel (Griffith University)	Developing a vascular access registry minimum dataset: An international Delphi study
Prof Claire Rickard (Griffith University)	Jessica Schults (Griffith University/Qld Children's Hospital), Assoc. Prof Amanda Ullman (Griffith University), Tricia Kleidon (Qld Children's Hospital), Dr Nicole Marsh (Nursing and Midwifery Research Centre), Dr Gillian Ray-Barruel (Griffith University), Prof Marie Cooke (Griffith University), Gabor Mihala (Griffith University), Robert Ware (Griffith University), Assoc. Prof Joshua Byrnes (Griffith University), Malcolm Wolski (Griffith University), Jolon Faichney (Griffith University)	IVCare: A vascular access clinical registry based at Griffith University
Prof Claire Rickard (Griffith University)	Assoc. Prof Joshua Byrnes (Griffith University), Vineet Chopra (University of Michigan), Assoc. Prof Amanda Ullman (Griffith University), Dr Nicole Marsh (Nursing and Midwifery Research Centre), Emily Larsen (Nursing and Midwifery Research Centre), Prof Raymond Chan (The Princess Alexandra Hospital/Qld University of Technology)	Measuring Quality of Life and Experience for Central Venous Access Devices in Cancer Care: Developing and preliminary testing of MyVAD

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Prof Theresa Green	Acknowledgment of presentation: Intimacy and sexuality post stroke. Presentation available on the World Stroke Organisation Education webpage	2018 World Stroke Congress, Montreal
Dr Nicole Marsh	AVATAR Teacher of the Year Award	Griffith University
Dr Nicole Marsh , Prof Joan Webster, Claire Rickard, Emily Larsen, Deanne August, Julie Flynn, Amanda Corley	Health Service and Implementation Research Award	Metro North 2019 Research Excellence Awards
Prof Joan Webster	Chief Executive Award	Metro North 2019 Research Excellence Awards
Dr Nicole Marsh	2019 Best Paper Prize	Australian Vascular Access Society (AVAS) Scientific Meeting, Sydney
Dr Nicole Marsh	Completed PhD	Griffith University
Claire Rickard, Andrew Bulmer, Amanda Ullman, Dr Nicole Marsh , Tricia Kleidon, Marie Cooke, Joshua Byrnes, Gillian Ray-Barruel and Jessica Schults	Vice Chancellor Health Research Excellence Awards – Research Team Award	Griffith University
Dr Nicole Marsh	Selected to be a part of a working group to develop the National Peripheral Venous Access Clinical Care Standard (PVA CCS).	Australian commission for Safety and Quality
Dr Nicole Marsh , Prof Joan Webster, Emily Larsen, Peter Groom, S Tapp, Megan Nicholas	Service Line Award, RBWH, Quality Awards Recognising Remarkable Initiative and Excellence in Service. Understanding vascular access outcomes at the RBWH	Quarrie Awards

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Prof Fiona Coyer , Jayesh Khanani, Prof Samantha Keogh, Flavia Huygens, Suzanne Parker, Vladislav Ilushin	Nursing and Midwifery Research Centre/ Intensive Care Services	Evaluation of a closed loop-blood sampling system in intensive care: a pilot randomised controlled trial	Royal Brisbane and Women's Hospital Foundation	\$40,000	\$20,000	2019-2020
Prof Claire Rickard, Assoc. Prof Amanda Ullman, Dr Nicole Marsh , Tricia Kleidon, Gerben Keijzers, Jessica Schults, Prof Marie Cooke, Assoc. Prof Joshua Byrnes, Robert Ware, Louise Cullen , Pauline Calleja, Fiona MacFarlane, Steven McTaggart, Henry Goldstein, Nathan Peters , Dr Catriona Booker , Stephanie Hadikusumo , Krispin Hajkowicz , Stuart Watkins, Audra Gedmintas, Adj Prof Kerri McLeod , Herbert Down, Fiona Allsop, Jeremy Wellwood, Mark Elcock	Nursing and Midwifery Research Centre	Difficult peripheral intravenous catheter insertion: Australian considerations for sustainable implementation of ultrasound guided procedures	National Health and Medical Research Council (NHMRC) Partnership Grant	\$1,497,197.00	\$20,000	2019-2022
Prof Fiona Coyer , Dr Jill Campbell	Nursing and Midwifery Research Centre/ Intensive Care Services, Skin Integrity	Efficacy of incontinence-associated dermatitis interventions for critically ill patients in intensive care; the Distinct pilot randomised control trial	3M Science, Applied for life	\$36,036.75	\$36,036.75	2019
L Kearney, Assoc. Prof Amanda Ullman, Deb Massey, Alison Craswell, Rachel Nugent, Guy Godsall, Dr Nicole Marsh	Nursing and Midwifery Research Centre	Peripheral intravenous catheter management in childbirth [PICMIC]: An observational study	University of the Sunshine Coast SNMP Nurture Seed Grants	\$9,654.79	\$3,000	2019-2020

Research Grants (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Nicole Gavin , Prof Samantha Keogh, Louise Marquart, Dr Nicole Marsh , Makrina Totsika, Catherine Saxby	Cancer Care Services, Nursing and Midwifery Research Centre	Standard versUs peRForated peripheral intravenous catheters. The SURF trial: a pilot randomised controlled trial	Metro North Collaborative Research Grants	\$49,410	\$0	2019-2020
Michelle Barakat-Johnson, Prof Fiona Coyer , Kate White, John Stephenson	Nursing and Midwifery Research Centre/ Intensive Care Services	Effectiveness of a Pressure Injury Clinical Judgement Risk-screening tool and prevention plan: Cluster Randomised Control Trial (EmPIRE RCT)	MRFF Rapid Applied Research Translation Funding	\$165,000	\$82,000	2019-2020
Dr Nicole Marsh , Tricia Kleidon Assoc. Prof Amanda Ullman, Vineet Chopra, Prof Claire Rickard	Nursing and Midwifery Research Centre	Risk predictors of peripheral IV catheter complications and failure	Imagine Seed Fund Grant	\$9,000	\$1,200	2019-2020
Jessica Schults, Prof Claire Rickard, Prof Marie Cook, Assoc. Prof Amanda Ullman, Tricia Kleidon, Dr Nicole Marsh , Dr Gillian Ray-Barruel	Nursing and Midwifery Research Centre	Developing a vascular access registry minimum dataset: An international Delphi study	Unrestricted Educational Grant Becton Dickinson (BD)	\$71,165	\$51,000	2019-2020
Dr Gillian Ray-Barruel, Wu Min-Lin, Dr Nicole Marsh , Andrew Bulmer, Prof Claire Rickard, Prof Wendy Moyle	Nursing and Midwifery Research Centre	Adaptation of the catheter-associated urinary tract infection (CAUTI) targeted assessment for prevention (TAP) tool for use in the Australian acute healthcare setting: a validation study	School of Nursing and Midwifery research capacity building seed funding grant round 2019	\$5,000	\$5,000	2019
Dr Gillian Ray-Barruel, Dr Nicole Marsh , Vineet Chopra, Tricia Kleidon, Prof Claire Rickard	Nursing and Midwifery Research Centre	To be or not to be left in situ: Prevalence and complications of idel intravenous catheters. A secondary analysis of 15,000 catheters	Imagine Seed Fund Grant	\$8,500	\$8,500	2019
Emily Larsen , Dr Gillian Ray-Barruel, Dr Evan Alexandrou, Christopher Friese, Dr Nicole Marsh , Prof Claire Rickard, Vineet Chopra	Nursing and Midwifery Research Centre	One Million Global Catheters (OMG) Oncology/Haematology sub-analysis project	Imagine Seed Fund Grant	\$2,500	\$2,500	2019
Assoc. Prof Amanda Ullman Natasha Roberts, Dr Nicole Marsh , Emily Larsen , Prof Claire Rickard	Nursing and Midwifery Research Centre	Consumer-led innovation to implement improvements in central venous access device management: The Vascular Access Passport	Diamond Care Grants, Royal Brisbane and Women's Hospital (RBWH)	\$38,775	\$2,500	2019-2020
Dr Nicole Marsh , Emily Larsen , Assoc. Prof Joshua Byrnes, Prof Claire Rickard, Tracey Hawkins, Adj Prof Kerri McLeod	Nursing and Midwifery Research Centre, Nursing and Midwifery Services	I nvestigating and M asuring P atient outcome and experience tools to enable implementation within existing exit survey A pplications in local V alue Based H ealth C are T eams (IMPACT Study)	Health Group Fostering Research Partnerships Scheme, Griffith University	\$9,872.14	\$1,700	2019-2020
Prof Claire Rickard, Jessica Schults, Assoc. Prof Amanda Ullman, Tricia Kleidon, Dr Nicole Marsh , Dr Gillian Ray-Barruel, Prof Marie Cooke, Gabor Mihala, Robert Ware, Assoc. Prof Joshua Byrnes, Malcolm Wolski, Jolon Faichney	Nursing and Midwifery Research Centre	IVCare: A vascular access clinical registry based at Griffith University	Capacity Grants Scheme, Menzies Health Institute QLD, Griffith University	\$50,000	\$50,000	2019

Research Grants (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Prof Claire Rickard, Assoc. Prof Joshua Byrnes, Vinet Chopra, Assoc. Prof Amanda Ullman, Dr Nicole Marsh , Emily Larsen, Prof Raymond Chan	Nursing and Midwifery Research Centre	Measuring Quality of Life and Experience for Central Venous Access Devices in Cancer Care: Developing and preliminary testing of MyVAD	Seed Grants Scheme, Griffith University	\$99,502	\$5,300	2019-2020
Prof Claire Rickard, Amanda Corley, Dr Nicole Marsh , Assoc. Prof Amanda Ullman, India Lye	Nursing and Midwifery Research Centre	Anti-microbial Disc infection preventions in vascular access (ADORN Trial)	Investigator-initiated Study (ISS) Proposal Cardinal Health	\$20,000	\$20,000	2019
Amanda Corley, India Lye, Dr Nicole Marsh , Prof Claire Rickard	Nursing and Midwifery Research Centre	Anti-microbial Disc infection preventions in vascular access (ADORN Trial)	Australian College of Critical Care Nurses	\$4,955.94	\$4,955.94	2018-2019
Gerben Keijzers, Hugo Evison, Amy Sweeny, Jamie Ranse, Dr Nicole Marsh , Assoc. Prof Joshua Byrnes, Prof Claire Rickard, Prof Peter Carr	Nursing and Midwifery Research Centre	Clinician decision making in peripheral intravenous cannulation in emergency settings	Gold Coast Hospital Health Service Research Grant Scheme	\$34,794	\$500	2019-2020
Dr Nicole Marsh , Julie Flynn, Prof Claire Rickard,	Nursing and Midwifery Research Centre	Managing Intravenous Devices among patients with Limited vascular access or prolonged therapy: InvestigatiNg the Efficacy of midline catheters – the MIDLINE study	Australian College of Nursing	\$30,000	\$30,000	2018-2019
Dr Nicole Marsh , Julie Flynn, Prof Claire Rickard, Sue Cadigan, Barbara Hewer, Peter Groom	Nursing and Midwifery Research Centre	Managing Intravenous Devices among patients with Limited vascular access or prolonged therapy: InvestigatiNg the Efficacy of midline catheters – the MIDLINE study	RBWH and RBWH Foundation Research Project Grant	\$30,000	\$15,000	2019-2020
Michelle Barakat-Johnson, Prof Fiona Coyer	Nursing and Midwifery Research Centre/ Intensive Care Services	A novel implementation of best available evidence into practice for incontinence-associated dermatitis (IMBED)	NSW Health, Translational Research Grant Scheme	\$930,705	\$30,000	2019-2021
Hal Rice, Prof Theresa Green , Laetitia de Villiers, Jason Wenderoth, Andrew Cheung, Will McAuliffe, Tim Philips, Maame Owusu, Justin Whitley	Nursing and Midwifery Research Centre/ Neurology	SCOPE-AUS: The Safety and Clinical Effectiveness Of Pipeline™ Flex Embolization devices with Shield Technology™ in patients with intracranial aneurysms: A multicentre retrospective study of an AUStralian cohort	Medtronic	\$284,875	\$142,437.50	2018-2019
Prof Theresa Green , Bernd Ploderer, Anna Farrell , Lee Moylan	Nursing and Midwifery Research Centre, Speech Pathology, Neurology	Aphasia Communication App/ StrokeAssist aphasia app evaluation	Department of Health/MNHHS	\$35,700	\$20,700	2018-2019
Prof Theresa Green , Kevin Clarke, Aneeka Bott	Nursing and Midwifery Research Centre/ Neurology, Medicine	Better Individualised Stroke Care Using Technology (BISCUT)	MNHHS LINK	\$170,000	\$85,000	2018-2019
Prof Theresa Green , Tara Hormann, Assoc. Prof Tony Parker, Jonathon Peake, Gregory Bix	Nursing and Midwifery Research Centre/ Neurology, Stroke	Characteristics of physical activity required to elevate circulating neuroprotective LG3 peptide as a novel stroke therapy	RBWH Foundation Research Grant	\$40,000	\$30,000	2018-2019

Research Grants (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Prof Clint Douglas, Prof Robyn Fox, Dr Catriona Booker, Assoc. Prof Alanna Geary , Prof Sandy Middleton, Emeritus Prof Glenn Gardner, Patrick Kelly, Rachael Morton, Elizabeth McInnes, Assoc. Prof Carol Windsor	Nursing and Midwifery Professional Education and Workforce Development, Workforce Development and Education Unit, Metro North Nursing and Midwifery	Transforming nursing assessment in acute hospitals: A cluster randomised controlled trial of an evidence-based core assessment protocol (the ENCORE trial)	NHMRC Partnerships for Better Health – Partnership Projects	\$2.1m	\$617,038.50	2018-2020
Bryan Gregory, Dwarakanathan Ranganathan, Prof Fiona Coyer	Intensive Care Services, Renal Medicine, Nursing and Midwifery Research Centre	The effects of renal replacement therapy on immunosuppressive drug concentrations (CITRIC II Study)	RBWH Foundation Research Grant	\$40,000	\$10,000	2019-2020
Prof Claire Rickard, Dr Nicole Marsh , Prof Marie Cooke, Assoc. Prof Amanda Ullman, Assoc. Prof Joshua Byrnes, Andrew Bulmer, Jessica Schults, Tricia Kleidon	Nursing and Midwifery Research Centre	Griffith-BD Catheter Choice Coalition	MHIQ Capacity Grants Scheme	\$50,000	\$20,000	2018-2019
Prof Claire Rickard, Dr Nicole Marsh , Prof Marie Cooke, Assoc. Prof Amanda Ullman, Dr Gillian Ray-Barruel, Tricia Kleidon, Vineet Chopra	Nursing and Midwifery Research Centre	IMAGINE – Innovative Michigan and Griffith International Network	MHIQ Capacity Grants Scheme	\$100,000	\$50,000	2018-2019
Prof Claire Rickard, Dr Nicole Marsh , Prof Raymond Chan, Peter Mollee, Geoffrey Playford, Li Zhang, Andrew Hallahan, Dr Evan Alexandrou	Nursing and Midwifery Research Centre	Peripherally inserted central catheter securement: the PISCES Trial	National Health and Medical Research Council (NHMRC)	\$1,198,006	\$299,501.50	2016-2019
Brigid Gillespie, Prof Wendy Chaboyer, Prof Joan Webster , David Ellwood, Jennifer Whitty, Luckman Thalib, Nicky Cullum, Margarete Somerville, Deborah Birthisel, Dr Rebecca Kimble	Nursing and Midwifery Research Centre	Adding negative pressure to improve healing: The dressing trial	National Health and Medical Research Council (NHMRC)	\$2,324,351.30	\$464,870.26	2015-2019
Maria Castillo, Prof Claire Rickard, Dr Nicole Marsh , Tania Clark, Prof Peter Carr, Gavin Jackson, Li Zhang, Prof Marie Cooke, Prof Marianne Wallis	Nursing and Midwifery Research Centre	Integrated versus non-integrated peripheral intravenous catheter. Which is the most clinical and cost-effective system for peripheral intravenous catheter management? The OPTIMUM Trial	Becton, Dickinson and Company	\$706,224	\$176,556	2016-2019
Prof Fiona Coyer , Assoc. Prof Tony Parker, Dr Jill Campbell , Anna Doubrovsky	Nursing and Midwifery Research Centre/ Intensive Care Services, Skin Integrity	Biochemical characteristics and healing rates of medical device-related pressure injuries (the MEDICI study); a prospective observational pilot study	Qld University of Technology, School of Nursing Pilot Grant Institute of Health and Biomedical Innovation	\$35,000	\$11,666.66	2018-2020
Assoc. Prof Amanda Ullman, Patrick Harris , Andrew Bulmer, Naomi Runnegar, Tricia Kleidon, Paul Lee-Archer, Ben Peach, Cathy Biles, Assoc. Prof Joshua Byrnes, Vineet Chopra, Alan Coulthard , Robert Ware, Dr Nicole Marsh , Peter Mollee, Prof Claire Rickard, Prof Marianne Wallis	Nursing and Midwifery Research Centre Department Medical Imaging Microbiology	Peripherally inserted central catheter Innovation to reduce Infections and Clots: PICNIC trial	National Health and Medical Research Council (NHMRC)	\$706,582	\$214,000	2018-2021

2019 Research Publications

Journal Articles

1. Corley, A, Ullman AJ, **Marsh N, Larsen EN**, Mihala G, Harries P, Rickard CM. SECUREment bundles to prevent Peripheral Intravenous Catheter failure: the SECURE-PIVC trial. Study protocol for a pilot randomized controlled trial. *Canadian Vascular Access Association Journal*. 2019; 13(3), 6-14
2. Lin F, Wu Z, Song B, **Coyer F**, Chaboyer W. Pressure injury prevention programs in adult intensive care patients: A systematic review. *Int J Nurs Studies*. 2019; 103483. <https://doi.org/10.1016/j.ijnurstu.2019.103483>
3. Fulbrook P, Miles S, **Coyer F**. Prevalence of pressure injury in adults presenting to the emergency department by ambulance. *Aust Crit Care*. 2019; 32:509-514. <https://doi.org/10.1016/j.aucc.2018.10.002>
4. McIntyre D, **Coyer F**, Bonner A. Identifying nurse sensitive indicators specific to haemodialysis nursing: A Delphi approach. *Collegian*. 2019. <https://doi.org/10.1016/j.colegn.2019.06.003>
5. Lye I, Corley A, Rickard CM, **Marsh N**. Removal versus retention of vascular access devices (VADs) suspected of infection in the intensive care unit (ICU): a narrative review of the literature. *Vascular Access*. 2019; 5(2):42-48. DOI: 10.33235/va.5.2.42-48
6. Webster J, Ray-Barruel G, Rickard C, **Marsh N**, Mihalia G, Alexandrow E. "Just in case". Use of large bore peripheral intravenous catheters in parturient women: A global study. *Vascular Access Journal*. 2019; 5(1)
7. Webster J, Osborne S, **Marsh N**, Rickard CM. Clinically-indicated replacement versus routine replacement of peripheral venous catheters. *Cochrane Database of Systematic Reviews*. 2019; <https://doi.org/10.1002/14651858.CD007798.pub5>
8. Ullman AJ, Mihala G, O'Leary K, **Marsh N**, Woods C, Bugden S, Scott M, Rickard CM. Skin Complications associated with vascular access devices: A secondary analysis of 13 studies involving 10,859 devices. *International Journal of Nursing Studies*. 2019;91:6-13. <https://doi.org/10.1016/j.ijnurstu.2018.10.006>
9. Dunstan E, Cook JL, **Coyer F**. Safety culture in intensive care internationally and in Australia: a review of the literature. *Australian Critical Care*. 2019; <https://doi.org/10.1016/j.aucc.2018.11.003>. Winner ACCCN Best Nursing Review Paper 2016
10. Flynn J, **Larsen E**, Keogh S, Ullman A, Rickard C. Methods for microbial needleless connector decontamination: A systematic review and meta-analysis. *American Journal of Infection Control*. 2019; doi: 10.1016/j.ajic.2019.01.002
11. Dunstan E, **Coyer F**. Safety culture in two Australian tertiary hospital intensive care units: A cross sectional survey. *Aust Crit Care*. 2019; <https://doi.org/10.1016/j.aucc.2018.11.069>
12. Mauk KL, Almahy D, Barks L, **Green T**, et al. Nurse Author: Who Me? Yes, You! *Rehabilitation Nursing Journal*. 2019;44(2):104-114
13. Zerna C, Burley T, **Green T**, Dukelow S, Demchuk A, Hill M. Validation and application of the comprehensive hierarchical evaluation of disability based on activity limitations (miFunction) scale. *I J of Stroke*. 2019; 0(0):1-8. DOI: 10.1177/1747493019840933
14. Grimley RS, Rosbergen IC, Gustaffson L, Horton E, **Green T**, Cadigan G, Kuys S. Assessment and selection for rehabilitation following acute stroke: a prospective cohort study in Queensland, Australia. *Clinical rehabilitation*. 2019; <https://doi.org/10.1177%2F0269215519837585>
15. Barakat-Johnson M, Lai M, **Coyer F**, Wand T, White K. Translating knowledge into practice: A system-wide practice change to combat hospital-acquired pressure injuries – the people, processes and learnings. *J Nurs Care Qual*. 2019; <https://doi.org/10.1097/NCQ.0000000000000395>
16. Hada A, Jack L, **Coyer F**. Using a knowledge translation framework to identify barriers and supports to effective clinical handover: A focus group study. *Heliyon (Open Access)*. 2019;5(6):e10960. <https://doi.org/10.1016/j.heliyon.2019.e01960>
17. Ranse K, Delaney L, Ranse J, **Coyer F**, Yates P. End-of-life care content in postgraduate critical care nursing programs: Structured telephone interviews to evaluate content informing practice. *Aust Crit Care*. 2019; <https://doi.org/10.1016/j.aucc.2019.04.004>
18. Johnston S, Nash R, **Coyer F**. Evaluation of simulation debriefings on student nurses' perceptions of clinical reasoning and learning transfer: a mixed methods study. *Int J Nurs Ed Scholarship*. 2019; <https://doi.org/10.1515/ijnes-2018-0045>
19. Grant A, **Coyer F**. Determining the contextual barriers and facilitators to research utilisation in an Australian adult intensive care unit: A descriptive study. *Aust Crit Care*. 2019; <https://doi.org/10.1016/j.aucc.2019.01.001>
20. Ray-Barruel G, Xu H, **Marsh N**, Cooke M, Rickard CM. Effectiveness of insertion and maintenance bundles in preventing peripheral intravenous catheter-related complications and bloodstream infection in hospital patients: A systematic review. *Infection disease & health*. 2019; <https://doi.org/10.1016/j.idh.2019.03.001>
21. Ray-Barruel G, Woods C, Larsen E, **Marsh N**, Ullman A, Rickard CM. Nurses' decision-making about intravenous administration set replacement: a qualitative study. *Journal of Clinical Nursing*. DOI: 10.1016/j.idh.2019.03.001
22. **Larsen EN**, Gavin N, **Marsh N**, Rickard CM, Runnegar N, Webster J. A systematic review of central-line-associated bloodstream infection (CLABSI) diagnostic reliability and error. *Infection Control & Hospital Epidemiology*. 2019;1-7. DOI: 10.1017/ice.2019.205
23. Choudhury MA, Sidjabat H, Zowawi H, **Marsh N**, Larsen E, Runnegar N, Paterson D, McMillan D, Rickard C. Skin colonisation at peripheral intravenous catheter insertion sites increases the risk of catheter colonisation and infection. *American Journal of Infection Control*. DOI: 10.1016/j.ajic.2019.06.002
24. Barakat-Johnson M, **Coyer F**, Lai M, Wand T, White K. The incidence and prevalence of medical device-related pressure injuries in intensive care: A systematic review. *J Wound Care*. 2019;28(8):1-8
25. Rheault H, **Coyer F**, Jones L, Bonner A. Health literacy in Indigenous people with chronic disease living in remote Australia. *BMC Health Services Research*. 2019;19:523. <https://doi.org/10.1186/s12913-019-4335-5>
26. **Marsh N, Larsen E**, Tapp S, Sommerville M, Mihala G, Rickard C. Management of hospital in the home (HITH) peripherally inserted central catheters: A retrospective cohort study. *Home Health Care Management & Practice*. 2019; 1-6. <https://doi.org/10.1177/1084822319873334>

Journal Articles (cont)

27. **Green T**, Singh P, King-Shier K. The Impact of Ethnic/Racial Status on Access to Care and Outcomes Following Stroke: A Narrative Systematic Review. *J of Vascular Nursing*. 2019. (JVN_2019_25)
28. Tanlaka E, King-Shier K, **Green T**, Seneviratne C, Dukelow S. Inpatient Rehabilitation Care in Alberta: How Much Does Stroke Severity and Timing Matter? *The Canadian journal of neurological sciences. Le journal canadien des sciences neurologiques*. 2019;1-29
29. Hoang V L, **Green T**, Bonner A. Informal caregivers of people undergoing haemodialysis: Associations between activities and burden. *Journal of renal care*. 2019; 00(0):1-8
30. Campbell J, Cook JL, Doubrovsky A, Vann A, McNamara G, **Coyer F**. Exploring incontinence-associated dermatitis in the intensive care setting: A single longitudinal point prevalence study. *J Wound Ostomy Continence Nurs*. 2019; 46(5):401-407
31. Ullman AJ, Keidon TM, Turner K, Gibson V, Dean A, Cattanaach P, Pitt C, Woosley J, **Marsh N**, Gavin N, Takashima M, Rickard CM. Skin complications associated with paediatric central venous access devices: Prevalence, incidence and risk. *Journal of Pediatric Oncology Nursing*. 2019. DOI: 10.1177/1043454219849572. JIF=1.295.

Book Chapters / Letters

1. Grealy B, Johansson L, **Coyer F**. Chapter 5 Essential Nursing Care of the Critically Ill Patient. In L Aitken, A Marshall & W Chaboyer (Eds). *Critical Care Nursing*, 4th Ed. Elsevier, Sydney 2019.

Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Coyer F**. Critical care focus in preventing pressure injuries. Wounds Australia Symposium: Protecting your skin through thick and thin. December 2019
2. **Coyer F**. Provide valuable input into the development of the pressure ulcer/injury prevention and treatment: Clinical Practice Guidelines. 2019 International Prevention and Treatment of Pressure Ulcers/Injuries Conference. November 2019
3. **Coyer F**. Implementation of interventions in emergency department settings and the lessons learned. Health Partner Symposium. October 2019
4. **Coyer F**. Device related pressure injury issues. 2019 World Congress of Intensive Care Conference. October 2019
5. **Marsh N**. How can we improve PIV care? Should we consider Midline catheters? Association for Vascular Access (AVA) Conference, October 2019
6. **Marsh N**. In the line of duty: Improving the performance of PICCs research results from an Australian hospital. Association for Vascular Access (AVA) Conference, October 2019
7. **Marsh N**. Peripheral intravenous Devices in Cancer Care Services – Risk Factors for Failure. Association for Vascular Access (AVA) Conference, October 2019
8. **Green T**. Sexuality and Intimacy after Stroke: a review of the literature. American Association of Neuroscience Nurses Conference, August 2019
9. **Green T**. Experiences of patients with stroke and family members of post-acute rehabilitation decision-making and community-based rehabilitation. European Stroke Organisation Conference. May 2019
10. **Marsh N**. Australian Association of Vascular Access (AVAS), Scientific Meeting, A pilot Randomised Controlled Trial of Two Insertion Models (Expert Vs Generalist). Best Paper Prize. May 2019
11. **Marsh N**. Australian Association of Vascular Access (AVAS), Scientific Meeting, Hospital in the home (HITH) management of peripherally inserted central catheter a retrospective cohort study. May 2019
12. **Marsh N**. Australian Association of Vascular Access (AVAS), Scientific Meeting, Dressing and securing peripheral intravenous catheters: a pilot randomised controlled trial of novel integrated dressing. May 2019
13. **Green T**. Experiences of patients with stroke and family members of post-acute rehabilitation decision-making and community-based rehabilitation. European Stroke Organisation Conference, May 2019
14. **Coyer F**. Social Media and Critical Care Meeting. Share innovative ideas for improving the care of critically ill patients. 25-29 March 2019, Sydney, Australia
15. **Coyer F**. Participate in the International Consensus Panel to discuss medical device-related pressure ulcers, assessment and prevention. 27 February – 2 March 2019, London, UK
16. **Green T**. Evidence-based stroke care transitions and stroke TCM: Implementation challenges. 2019 International Stroke Conference. February 2019.

Poster Presentations

1. Tanlaka E, King-Shier K, **Green T**, Seneviratne C, Dukelow S. Sex differences in stroke rehabilitation care in Alberta. Canadian Stroke Congress 2019. Digital poster
2. Ray-Barruel G, Xu H, **Marsh N**, Cooke M, Rickard C. Determining the benefit of insertion and maintenance bundles for hospitalized patients in preventing peripheral intravenous catheter complications and bloodstream infection: A systematic review. Herston State of the Art Healthcare Symposium. September 2019
3. Wickins J, **Marsh N**. Does evening removal of indwelling urinary catheters compared to morning removal reduce the rate of urinary retention in the acute hospital setting: A systematic review. Herston State of the Art Healthcare Symposium. September 2019

Poster Presentations (cont)

4. Ray-Barruel G, Woods C, **Larsen E, Marsh N**, Ullman A, Rickard C. Perceptions and influences of decision-making for nurses conducting intravenous administration set replacement. Herston State of the Art Healthcare Symposium. September 2019
5. Gavin N, Sommerville M, Ullman A, Kleidon T, **Marsh N, Larsen E**, Campbell J, Mihala G, Rickard CM. Estimating prevalence of impaired skin surrounding devices in cancer care: the preliminary results of a prospective study. Herston State of the Art Healthcare Symposium. September 2019
6. Nicholas M, **Larsen E, Marsh N**, Mihala G, Groom P, Rickard CM. Improving peripherally inserted central catheter (PICC) insertion success and optimal placement with new technology: a retrospective cohort study. Herston State of the Art Healthcare Symposium. September 2019
7. Gavin N, Lippiatt R, Hayes T, Northfield S, Somerville M, **Larsen E, Marsh N**, Rickard C. Improving vascular access care for patients diagnosed with cancer. Herston State of the Art Healthcare Symposium. September 2019
8. Rickard CM, **Larsen E**, Mihala G, **Marsh N, Webster J**, Runnegar N. Bloodstream infections among patients with peripheral intravenous catheters: Incidence and risk with dwell time. Herston State of the Art Healthcare Symposium. September 2019
9. Choudhury MA, Sidjabat HE, Zowawi HM, **Marsh N, Larsen E**, Runnegar N, Paterson D, McMillian DJ, Rickard CM. Exploring the impact or peripheral intravenous catheter skin colonization of infection. Herston State of the Art Healthcare Symposium. September 2019
10. Cobbald L, Lack G, McIntyre C, August D, New K, Smith P, Takashima M, Koorts P, Foxcroft F, **Marsh N**, Ullman A. Difficult intravascular access (DIVA) in neonates: two case reports. Herston State of the Art Healthcare Symposium. September 2019
11. Lye I, **Marsh N**, Corley A, Rickard CM. Infections associated with vascular access devices in intensive care units across Australia. Herston State of the Art Healthcare Symposium. September 2019
12. Gavin N, Lippiatt R, Hayes T, Northfield S, Somerville M, **Larsen E, Marsh N**, Rickard C. Improving vascular access care for patients diagnosed with cancer. Cancer Nurses Society of Australia, 22nd Annual Congress, Melbourne, Australia.

Details of staff that completed their PhDs in 2019 within your department / research group

Name	Name of Project	Completed Date	University Affiliation
Dr Nicole Marsh	Prevention of peripheral intravenous failure	May 2019	Griffith University



Back row (L-R): Jennifer Palmer (RN, Intensive Care Services), Deanne August (Clinical Trial Coordinator), Tara Hutton (RN, Cancer Care Services), Catherine O'Brien (RN, Medical Imaging)

Front row (L-R): Dr Nicole Marsh (Nursing and Midwifery Director, Research), Sharon Ireland (Administration Officer), Prof Fiona Coyer (Professor of Nursing, Critical Care Services), Emily Larsen (Research Fellow, Vascular Access, Griffith University)

SURGICAL & PERIOPERATIVE SERVICES



SURGICAL & PERIOPERATIVE SERVICES



Dr Barry O'Loughlin
Executive Director
Surgical and Perioperative Services

Surgical and Perioperative Services is made up of twelve speciality departments and the operating rooms service at the Royal Brisbane and Women's Hospital. The Service Line provides a wide range of surgical services to Metro North Hospital and Health Service and is a major tertiary referral centre for Queensland. The importance of clinical research is reflected by significant research activities in the departments.

In 2019, the programs of research have greatly expanded across all departments with increased grants awarded and enrolments in higher research degrees. A significant number of our clinicians hold concurrent university academic appointments for research and teaching. Our clinician researchers have been recognised by awards within Queensland, nationally and internationally.

Our clinicians have a strong history of presenting clinical cases at conferences, and in 2019 there were an increased number of research presentations as the result of extensive collaborations. Many of the presentations have also been published in peer-reviewed journals. The rotation of junior clinicians has provided many new research opportunities.

The research momentum continues to build and bodes well for a very productive 2020. Many of our speciality departments have completed preliminary planning for research collaborations with the Herston Biofabrication Institute in association with academics and industry partners.

We acknowledge our continuing growth in research capacity across Surgical and Perioperative Services and look forward to strong research infrastructure and capabilities in the coming year.

DEPARTMENT OF ANAESTHESIA & PERIOPERATIVE MEDICINE/RESEARCH

INTEREST IN ANAESTHESIA (RIGA)

The Department of Anaesthesia and Perioperative Medicine research team continues to grow and expand through collaborations at state, national and international level. Our research aims to improve the efficiency and efficacy of anaesthesia care as well as improving the patient experience. There have been many highlights in 2019 including when the Centre for Excellence and Innovation in Anaesthesia (CEIA) hosted the 3rd Royal Brisbane and Women's Hospital Perioperative Patient Blood Management Symposium. This two-day event showcased local, national and international experts presenting state of the art knowledge and the latest research in Perioperative Patient Blood Management.

The department has been awarded five scholarships and over \$638,000 in grant funding this year. Departmental members have been awarded prizes at the ASA Society of Anaesthetists conference and at the 2019 Herston State of the Art Symposium. This year we are proud to announce that **Assoc. Prof Kersi Taraporewalla** was the recipient of the Stuart Henderson Award, for his excellence and outstanding contribution, scholarship, and mentorship to medical education in the field of anaesthesia and **Prof André van Zundert** has been listed as one of the Top Ten World Experts in Airway Management for 2019, being placed in the top 0.1% of scholars writing about Intratracheal Intubation worldwide over the past 10 years. **Assoc. Prof Kerstin Wyssusek** was awarded the overall Winner of the "Individual Award for Outstanding Achievement" for the 2019 Queensland Health Awards for Excellence with her team also gaining the "Minister Award for Excellence" on their commitment to recycling in operating theatres and received one of three financial prizes from the Honourable Steven Miles, Minister for Health and Minister for Ambulance Services in Queensland.

The department facilitates a research culture providing mentorship, group support and guidance. The department participated in the UQ Summer Research Program which provided three UQ medical students an opportunity to gain research experience with our leading researchers. Three anaesthetists have also completed their PhD confirmation.

With many new research opportunities in our forecast for 2020, our aim of research in anaesthetics is to advance optimal anaesthetic care for patients based on world class, research based clinical practice.

Photo taken at the 2019 Queensland Health Awards for Excellence



Left to right: Honourable Steven Miles, Minister for Health and Minister for Ambulance Services in Queensland, **Assoc. Prof Kerstin Wyssusek**, **Prof André van Zundert**, Alexa Chadwick (RN), Kate Mason (Deputy Executive Director RBWH), Dr Maggie Keys

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Julie Lee	PhD (UQ 2015-2019)	ROTEM Thromboelastometry in Obstetrics	Prof André van Zundert, Assoc. Prof Jeremy Cohen, Assoc. Prof Kerstin Wyssusek, Assoc. Prof Victoria Eley
Dr Michelle Roets	PhD (UQ 2017-2021)	Intraoperative Cell-Salvage: a cost benefit analysis	Assoc. Prof David Sturgess, Prof André van Zundert, Assoc. Prof Kerstin Wyssusek, Dr Melinda Dean
Dr Angela Tognolini	MPhil (UQ 2018-2020)	Intraoperative lignocaine infusions development of an optimised infusion dosing regimen of obese patients	Assoc. Prof Victoria Eley, Prof Jason Roberts
Adj. Assoc. Prof Kersi Taraporewalla	PhD (UQ 2017-2021)	Teaching and learning psychomotor skills in anaesthesia	Prof André van Zundert, Prof Jeffrey Lipman
Dr Louis Guy	MPhil (UQ 2018-2020)	Oxygen delivery in obese patients undergoing bariatric surgery	Assoc. Prof Victoria Eley, Prof André van Zundert, Prof Jeffrey Lipman
Cienwen Town	PhD (UQ 2017-2021)	Regional anaesthesia as an intervention for the treatment of burn related procedural pain	Dr Haakan Strand, Prof André van Zundert, Dr James Johnson
Dr Sue Lawrence	MPhil (2017-2019)	Lumbar interspinous ligament: a detailed anatomical and imaging investigation	Assoc. Prof David Reutens, Assoc. Prof David Sturgess

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Assoc. Prof Victoria ELEY	Associate Professor	0.125 0.625	Fellowship Operational	Faculty of Medicine	University of Queensland
Dr Louis GUY	Senior Lecturer	0.125	Scholarship	Faculty of Medicine	University of Queensland
Dr Julie LEE	Senior Lecturer	0.25 0.25	Scholarship Grant	Faculty of Medicine	University of Queensland
Dr Michelle ROETS	Senior Lecturer	0.125 0.125	Scholarship Grant	Faculty of Medicine	University of Queensland
Dr Angela TOGNOLINI	Senior Lecturer	0.03125 0.03125	Scholarship Grant	Faculty of Medicine	University of Queensland
Christine WOODS	Research Coordinator Nurse Manager	0.8	External	Anaesthetic Department	RBWH
Molly CLARRIS	Clinical Research Nurse	0.6	External	Anaesthetic Department	RBWH
Simon HOLZ	Clinical Research Nurse	0.6	External	Anaesthetic Department	RBWH
Dr Heather REYNOLDS	Clinical Research Nurse	0.5	Operational	Anaesthetic Department	RBWH

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Cienwen Town	Dr James Johnson, Dr Julie Lee, Prof André van Zundert, Dr Jason Brown	Ultrason-Guided Regional Anaesthesia in Patients receiving Dressing Change After Split-Skin Grafting for Upper Limb Burn Injuries: A Prospective Randomized Study, REPAIR Study
Cienwen Town	Dr James Johnson, Dr Julie Lee, Prof André van Zundert, Dr Jason Brown	Ultrason-Guided Regional Anaesthesia in Patients receiving Split-Skin Grafting for Various Burns with Donor Sites from the Upper Thigh: A Prospective Randomized Study, RELIEVE study
Dr Julie Lee	Prof André van Zundert, Assoc. Prof Jeremy Cohen, Assoc. Prof Kerstin Wyssusek, Assoc. Prof Victoria Eley, Dr Amy Krepska, Dr Claire Manning	ROTEM® and platelet function in pre-eclamptic obstetric patients
Dr Julie Lee	Assoc. Prof Victoria Eley, Dr Rebecca Kimble, Prof Andre van Zundert, Dr John Rowell, Assoc. Prof Kerstin Wyssusek	ROTEM® thromboelastometry in obstetrics: baseline parameters in normal and complicated pregnancies. A prospective observational study on labour ward inpatients
Assoc. Prof Kersi Taraporewalla	Assoc. Prof Kersi Taraporewalla, Penelope Sanderson, Marcus Watson, Dr Heather Reynolds, Prof Andre Van Zundert	Respiratory Sonification Trial
Assoc. Prof Kerstin Wyssusek	Cienwen Town, Dr Michelle Roets, Prof Andre Van Zundert	Pre-existing Iron Deficient Anaemia and patient Blood Management practices at RBWH
Assoc. Prof Kerstin Wyssusek	Cienwen Town, Dr Michelle Roets, Prof Andre Van Zundert	Pre-existing Iron Deficient Anaemia and patient Blood Management practices at RBWH in accordance with NSQHS standards Guide: Standard
Assoc. Prof Kerstin Wyssusek	Dr Matthew Wagner, Dr Julie Lee, Dr Michelle Roets, Prof Andre Van Zundert	Ten Year Review of Transfusion Practises During Rapid Transfer in Urgent Trauma Cases (RUPTURE)
Lizanne Dalgleish	Prof Fiona Coyer, Jill Campbell, Kathleen Finlayson, Prof Andre Van Zundert	Microcirculatory dysfunction and Skin Failure in Critically ill patients. An exploratory study
Dr Louis Guy	Dr Rebecca Christensen, Assoc. Prof Victoria Eley, Dr Ben Dodd, Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert	Transnasal humidified Rapid-insufflation ventilator exchange (THRIVE) in obese adults: a randomised controlled trial
Laura McDermott	Dr Amy Krepska, Dr Susie De Jersey, Assoc. Prof Victoria Eley	Oral intake during labour – a survey of post-partum women
Dr Michelle Roets	Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert, Dr Melinda Dean, Dr John-Paul Tung, Prof Robert Flower	Does transfusion-related immune modulation occur following intraoperative cell salvage? A pilot study (TRIMICS)
Dr Michelle Roets	Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert, Dr David Sturgess, Assoc. Prof Louisa Gordon	COSTOMICS (The Cost of Missed Intraoperative Cell Salvage)
Dr Rebecca Christensen	Assoc. Prof Victoria Eley, Prof Leonie Callaway, Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert, Dr Ben Dodd, Dr Michael Stowasser	Validation of Clearsite finger-cuff in patients with problematic non-invasive blood pressure measurement undergoing elective bariatric surgery
Dr Sandra Concha Blamey	Assoc. Prof Kerstin Wyssusek, Dr Kate Taylor	A prospective audit of Patient Blood Management knowledge in a subgroup of junior doctors at the Royal Brisbane and Women's Hospital
Assoc. Prof Victoria Eley	Dr Peter Ceglowski, Katie Lehane, Christopher Chow, Anita Pelecanos, Dr Angela Tognolini	Arm dimensions of patients with obesity and their experiences with blood pressure measurement: an observational study
Assoc. Prof Victoria Eley	Dr Rebecca Christensen, Dr Helen Barrett, Prof Andre Van Zundert, Dr Mathew Smith, Prof Michael Stowasser	Validation of blood pressure readings from the Clearsite finger-cuff compared with invasive blood pressure readings in pregnant women undergoing elective Caesarean section, who have arms which don't suit regular arm cuffs
Assoc. Prof Victoria Eley	Christopher Chow, Dr Peter Ceglowski, Katie Lehane	Blood pressure measurement in patients presenting for bariatric surgery – the patient experience
Assoc. Prof Victoria Eley	Christopher Chow, Dr Peter Ceglowski, Katie Lehane, Anita Pelecanos, Dr Kellie Wren	Arm and finger measurements in adults presenting for elective surgery
Assoc. Prof Victoria Eley	Dr Sarah Emily Douville, Prof Leonie Callaway, Dr Akwasi Amoako, Prof Jason Roberts	Post-caesarean section infection
Dr Angela Tognolini	Dr Dwane Jackson, Assoc. Prof Victoria Eley, Prof Jason Roberts, Prof Jeffery Lipman, Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert	Intraoperative Lignocaine Infusions: Development of an optimised infusion dosing regimen for obese patients

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Andre van Zundert	Assoc. Prof Kerstin Wyssusek, Benjamin Keir, Dr Maria Moon, Anita Pelecanos	Patient risks associated with blue and green ambient light in modern interventional suits and incorrect drug identification by anaesthetic staff
Dr Angela Tognolini	Robert Smith, Dr Dwane Jackson, Assoc. Prof Victoria Eley, Prof Jason Roberts	Determining optimised dosing of prophylactic piperacillin and tazobactam in elective pelvic exenteration surgery
Dr Andrew Souness	Dr Angela Tognolini, Dr Dwane Jackson	Utility of non-invasive and continuous total haemoglobin (SpHb) monitoring in pelvic exenteration surgery
Dr Gillian Wright	Dr Susan Petrie, Dr Carl Lisek, Assoc. Prof Kerstin Wyssusek, Assoc. Prof Alison Mudge, Dr Antony Ji, Sharon Neilson	ASA: A prospective clinical audit looking at perioperative outcomes of high-risk surgical patients admitted to the acute surgical unit at the Royal Brisbane and Women's Hospital during a three-month period
Prof André van Zundert	Assoc. Prof Kerstin Wyssusek, Dr Nathan Peters, K. Pun, Anita Pelecanos, P. Barach, Assoc. Prof Victoria Eley	Comparative study of the neck anatomy in non-obese vs morbidly obese patients using ultrasound of internal jugular vein and common carotid artery
Assoc. Prof Kerstin Wyssusek	Dr Paul Gray, Sandra Concha Blamey, Prof André van Zundert	A cross-sectional study of the relationship between iron deficiency anaemia and chronic pain in patients presenting to a multidisciplinary pain centre in a tertiary referral hospital

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Tomás Corcoran <i>(UWA) Australia</i>	Dr Julie Lee, Dr Gareth Collins, Assoc. Prof Victoria Eley	The Perioperative Administration of Dexamethasone and Infection
Dr Judy Munday <i>(QUT)</i>	Assoc. Prof Kerstin Wyssusek, Prof Andre van Zundert, Dr Samantha Keogh, Dr Niall Higgins	Non-invasive zero-heat-flux thermometry with invasive oesophageal measurements for consistent perioperative temperature monitoring: A pilot study
Prof Tomas Corcoran <i>(ANZCACTN)</i>	Dr Julie Lee, Dr Michael Edwards, Dr Gareth Collins, Assoc. Prof Victoria Eley	The Perioperative Administration of Dexamethasone and Infection trial
Prof Michael Pender <i>(Atara Biotherapeutics)</i>	Assoc. Prof Kerstin Wyssusek	Follow-up of patients with progressive multiple sclerosis treated with autologous Epstein-Barr specific T cell therapy
Prof Michael Pender <i>(Atara Biotherapeutics)</i>	Assoc. Prof Kerstin Wyssusek	A double-blind, randomized, placebo-controlled phase 2 study with a crossover treatment period to evaluate ATA190 in subjects with progressive multiple sclerosis
Dr David Liu <i>(UQCCR)</i>	Michael Reade, Dr Jason Pincus, Dr Elizabeth Hallt, Amelia Livermore, Kymberley Herbst, Alain Humblet	Clonidine at Low dosage postoperatively to Nocturnally Enhance Sleep (CLONES)
Assoc. Prof Bronwyn Laycock <i>(UQ)</i>	Assoc. Prof Kerstin Wyssusek	The volume of polyethylene terephthalate plastic accumulated in the operating theatres at RBWH
Dr Nicole Marsh <i>(AVATAR Group)</i>	Dr Emily Larsen, Julie Flynn, Prof Claire Rickard, Barbara Hewer, Peter Groom, Kaylene Woollett, Catherine O'Brien, Katrina Southam, Evan Alexandrou	Managing Intravenous Devices among patients with Limited vascular access or prolonged therapy: Investigating the Efficacy of midline catheters – the MIDLINE study

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Dr Gunjan Chawla, Charles Cheung, Dr Geoff Messer, Dr Nathan Peters, Assoc. Prof Kerstin Wyssusek	Winner 2019 Fostering Innovation for Minimising hypothermia after surgery	QUARRIES Day of Excellence Awards
Prof André van Zundert	Placed in the top 0.1% of scholars writing about Intratracheal Intubation worldwide over the past 10 years. The ranking is based on 11,552 articles published worldwide since 2009	2019 Top Ten World Experts in Airway Management

Research Awards and Achievements *(cont)*

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Dr Andrew Souness	Winner ANZCA Trainee ePoster Prize	ANZCA Moderated ePoster Prize Session at the ASM in Kuala Lumpur (May 2019)
Assoc. Prof Kersi Taraporewalla	Steuart Henderson Award	Presented at the ANZCA ASM 2019 Conference, for his excellence and outstanding contribution, scholarship, and mentorship to medical education in the field of anaesthesia
Dr Yasmin Whately	Steuart Henderson Award Citation	2019 ANZCA ASM
Dr Angela Tognolini	Emerging Leader Conference Delegate	2019 ANZCA ASM
Dr Maggie Keys, Assoc. Prof Kerstin Wyssusek, Prof André van Zundert	Professor William Egerton Award for Medical Research for The volume of recyclable polyethylene terephthalate plastic accumulated during surgical operations at RBWH	2019 Herston State of the Art Symposium
Dr Julie Lee	ASA Prize Winner	Australian Society of Anaesthetists NSC Sydney 21/9/19
Dr Julie Lee, Assoc. Prof Victoria Eley, Assoc. Prof Kerstin Wyssusek, Dr Rebecca Kimble, M Way, J Cohen, Prof André van Zundert	The Gilbert Troup Prize Session presentation. Project: ROTEM® assessment of the combined effect of term pregnancy and obesity on coagulation in healthy women with uncomplicated pregnancies in Australia: A prospective observational study	Australian Society of Anaesthetists NSC Sydney 21/9/19
Dr Julie Lee	HOW Fellowship	Haematology in Obstetrics and Women's Health Collaboration + Haematology Society of Australia and New Zealand, Perth, October 2019
Assoc. Prof Kerstin Wyssusek	1 st place in Delivering Healthcare and 2 nd place in Individual for Outstanding Achievement	Queensland Health Awards for Excellence 2019
Assoc. Prof Victoria Eley	Integrated Health Free Papers Prize 2019 for Arm circumference and conicity in obese patients – what is the best predictor of arm conicity?	Australian and New Zealand Metabolic and Obesity Surgery Society
Dr Michelle Roets	Intraoperative cell salvage as an alternative to allogeneic (donated) blood transfusion: An evaluation of immune related adverse outcomes	PhD confirmation: 16 August 2019
Dr Louis Guy	Oxygen delivery in obese patients undergoing bariatric surgery	PhD confirmation: 1 October 2019
Dr Angela Tognolini	Intraoperative lignocaine infusions – Development of an optimised infusion dosing regimen of obese patients	PhD confirmation: 8 October 2019

2019 Research Publications

Journal Articles

- Van Zundert AAJ, Wyssusek KH, Pelecanos A, Roets M, Kumar CM.** A prospective randomized comparison of airway seal using the novel vision-guided insertion of LMA-Supreme® and LMA-Protector®. *J Clin Monit Comput.* 2019 Apr 5
- Epstein CR, Forbes JM, **Futter CL, Hosegood IM, Brown RG, Van Zundert AA.** Frequency and clinical spectrum of in-flight medical incidents during domestic and international flights. *Anaesth Intensive Care.* 2019 Jan;47(1):16-22
- Charlesworth M, **van Zundert A.** Medical device regulation: the need for clinical vigilance and oversight. *Anaesthesia* 2019 Feb 21
- Lee J, Eley VA, Wyssusek KH, Coonan E, Way M, Cohen J, Rowell J, van Zundert AA.** Baseline parameters for rotational thromboelastometry (ROTEM®) in healthy women undergoing elective caesarean delivery: a prospective observational study in Australia. *Int J Obstet Anesth.* 2019 May; 38: 10-18
- Van Zundert AAJ, Klein AA.** How to avoid predatory and hijacking publishers? *Eur J Anaesth* 2019; 36 (11): 807-809
- Bos M, **van Zundert AA.** Giant internal jugular vein. *Indian J Anaesth* 2019(6):329-30
- Barach P, **van Zundert A.** The crucial role of human factor engineering in the future of safe perioperative care and resilient providers. *European Society of Anaesthesiology* 2019;(76):1-5
- Bos M, **van Zundert AAJ.** Internal jugular vein location and sono-anatomy. *Acta Anaesthesiol Belg* 2019; (70):49-50
- Town CJ, Johnson J, Van Zundert A, Strand H.** Exploring the Role of Regional Anesthesia in the Treatment of the Burn Injured Patient: A Narrative Review of Current Literature. *Clin J Pain.* 2019;35(4):368-374
- He J Chen J, Huang G, Zhang Z, Zheng H, Zhang P, Zarei R, Sansoto F, Wang R, Ji Y, Xie Z, Wang X, Guo M, Chi C-H, De Souza PA, Zhang J, Lo Y, Chen X, Shi Y, Green D, **Taraporewalla K, van Zundert A.** A polynomial-time algorithm for simple undirected graph isomorphism. *Concurr Comput Pract Exp* 2019: e5484
- Van Zundert AAJ, Hendrickx JFA, Soetens F, Van Gorp J, De Wolf AM.** Contributions to Belgian anesthesia: Dr. Leo Vaes. *Acta Anaesthesiol Belg* 2019;(70):13-21
- Hade AD, Beckmann LA, Basappa BK.** A checklist to improve the quality of central venous catheter tip positioning – *Anaesthesia.* 2019 Jul;74(7):896-903

Journal Articles (cont)

13. **Lee, J, Reynolds, H, Pelecanos, AM, Van Zundert AA.** Bi-national survey of intraoperative cuff pressure monitoring of endotracheal tubes and supraglottic airway devices in operating theatres. *Anaesthesia & Intensive Care* 2019; 47 (4): 378-384
14. **Bright M, Chawla G,** Callaway L, **Eley VA.** A five-year retrospective cohort study of maternal, neonatal outcomes and anesthetic management in women with extreme obesity at an Australian hospital. *Acta Anaesthesiologica Belgica.* 2019; 70: 77-83
15. **Van Zundert A,** Klein A. How to avoid predatory and hijacking publishers? *Eur J Anaesthesiol* 2019; 36:1-4
16. Charlesworth M, **van Zundert AAJ.** Digital dystopias: will the electronic health record ever fulfil its potential? *Anaesthesia.* 2019; 74(11): 1361-1364
17. **Eley VA, Chin A,** Sekar R, **Donovan T, Krepska A,** Lawrence M, Bell S, Ralfe K, McGrath S, Webb L, **Robinson A, van Zundert AAJ,** Marquart L. Increasing body mass index and abdominal subcutaneous fat thickness are associated with increased skin-to-epidural space distance in pregnant women. *Int J Obstet Anesth* 2019; 38:59-65
18. **Wyssusek KH,** Keys MT, **van Zundert AAJ.** Operating Room Greening Initiatives – the old, the new, and the way forward: A Narrative Review. *Waste Management Research* 2019; 37:3-19
19. Epstein CR, Forbes JM, **Futter CL,** Hosegood IM, Brown RG, **Van Zundert AAJ.** Frequency and clinical spectrum of in-flight medical incidents during domestic and international flights. *Anaesth Intensive Care.* 2019 Jan;47(1):16-22
20. Charlesworth M, **Van Zundert AAJ.** Medical device regulation: the need for clinical vigilance and oversight. *Anaesthesia* 2019; 74:693-695
21. Douville S, Callaway L, Amoako A, Roberts J, **Eley VA.** Reducing post-caesarean delivery surgical site infections: a narrative review. *International Journal of Obstetric Anesthesia* 2019; 5 Sep. in press
22. **Lee J, Wyssusek K, Reynolds H,** Khatun M, **van Zundert A.** Intraoperative cuff pressure measurements of supraglottic airway devices in the operating theatre: a prospective audit. *Acta Anaesth Belg (Accepted 20/9/2019)*
23. **Lee J, Reynolds H,** Pelecanos AM, **van Zundert AA.** Bi-national survey of intraoperative cuff pressure monitoring of endotracheal tubes and supraglottic airway devices in operating theatres. *Anaesth Intensive Care.* 2019; 47:378-384. doi: 10.1177/0310057X19850581
24. **Slykerman G, Wiemers MJ, Wyssusek K.** Peer support in anaesthesia: Development and implementation of a peer-support programme within the Royal Brisbane and Women’s Hospital Department of Anaesthesia and Perioperative Medicine. *Anaesth. Intensive Care.* 2019; 47(6): 497-502
25. **Lee J, Wyssusek K,** Kimble R, Way R, **van Zundert A,** Cohen J, Coonan E, Rowell J, **Eley V.** Baseline parameters for rotational thromboelastometry (ROTEM®) in healthy pregnant women: A comparison of labouring women and non-labouring women in Australia. *Int J Obstet Anesth* 2019 Feb; 41: 7-13
26. **Lee J, Eley V, Wyssusek K,** Kimble R, Way M, Coonan E, Cohen J, Rowell J, **van Zundert A.** Baseline parameters for rotational thromboelastometry in healthy labouring women: a prospective observational study. *BJOG* 2020 Jan; 1-8
27. Ceglowski P, Lehane K, Chow C, Pelecanos A, **Tognolini A, Eley VA.** Arm dimensions of patients with obesity and their experiences with blood pressure measurement: an observational study. *Obesity* 2020 (In Press)
28. Ray-Barruel G, **Woods C,** Marsh N, Larsen E, Ullman A, Rickards C. Nurses’ perceptions and decision making about intravenous administration set replacement: a qualitative study. *Journal of Clinical Nursing,* 2019; 28 (21-22): 3786-3795.

Book Chapters / Letters

1. **Roets M,** et al. (2019). Anaesthesia and Immune Modulation. In: *Australasian Anaesthesia 2019.* R. Riley. Melbourne, Australia, Australian and New Zealand College of Anaesthetists. pp. 265-275
2. **Van Zundert A.** (2019). Spinal Anesthesia. In: *Hadzic’s Textbook of Regional Anesthesia and Acute Pain Management.* McGraw Hill, New York, pp. 99-102.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Roets M.** Intraoperative Cell Salvage and Virtual reality. 3rd Perioperative Patient Blood Management Symposium ‘Perioperative Anaemia – From Basic to Complex, February 2019
2. **Eley V.** Blood pressure measurement in obese pregnant women. *Indoanesthesia International Conference,* Jakarta, February 2019
3. **Eley V.** Research in Obstetric Anaesthesia. *Art of Anaesthesia Meeting* Canberra, October 2019
4. **Eley V.** Thesis Support Grant 2014 – presentation of thesis-related research. *Australian Society of Anaesthetists National Scientific Congress,* Sydney 2019
5. **Eley V.** Gender Issues in Anaesthesia. *Australian Society of Anaesthetists National Scientific Congress,* Sydney 2019
6. Endlich, Y. **Culwick, M. Lee, J.** Airway Incidents: WebAIRS. *ANZCA ASM (Kuala Lumpur, Malaysia).* May 2019
7. **Lee, J.** Anaesthesia for Non-Obstetric Surgery and Management of Major Obstetric Haemorrhage. *Midwifery Challenges CPD (Ausmed Education),* Brisbane 27th May 2019
8. **Messer G.** Minimising Hypothermia after surgery. 2019 Royal Brisbane and Women’s Hospital QUARRIES Day of Excellence Awards. Winner – Fostering Innovation 2019
9. **Roets M.** Intraoperative cell salvage in modern anaesthesia. *Redcliffe Hospital Grand Rounds Program,* Redcliffe, QLD. Intraoperative cell salvage in modern anaesthesia
10. **Wyssusek, K.** Case study – Hospital PVC recycling. *Challenging plastics: The PVC challenge.* The University of Queensland, Environmental Science, March 2019 Brisbane

Invited Speakers (cont)

11. **Wyssusek, K.** IMPACT – Perioperative Patient Blood Management. QuARRIE awards presentations. Royal Brisbane & Women’s Hospital
12. **Wyssusek, K.** Local Anaesthetic conversion. Maximising benefits of care. Queensland Clinical Senate Meeting, Brisbane
13. **Wyssusek, K.** Improving Anaemia Management Collaborative. 3rd Perioperative Patient Blood Management Symposium, Brisbane
14. **Van Zundert AAJ.** Anaphylaxis and anaesthesia. ACPAN – Fiona Stanley Hospital Perth
15. **Van Zundert AAJ.** LAST – Local anaesthesia systemic toxicity. ACPAN – Fiona Stanley Hospital Perth
16. **Van Zundert AAJ.** Modern Airway Management Techniques. 2nd Penang Advanced Airway Workshop Conference, Penang Malaysia, February 2019
17. **Van Zundert AAJ.** Modern Airway Management Techniques. University of Malaya, Kuala Lumpur, Malaysia, February 2019
18. **Van Zundert AAJ.** Lecture: Flexible-Tip Bronchoscopy. University of Malaya, Kuala Lumpur, Malaysia
19. **Van Zundert AAJ.** Lecture + workshops: Modern Airway Management Techniques. University of Malaya, Kuala Lumpur, Malaysia
20. **Van Zundert AAJ.** Obesity – the Big Issue in Anaesthesia. University of Udayana Sanglah Hospital, Indonesia, February 2019
21. **Van Zundert AAJ.** How to improve our airway management skills? University of Udayana Sanglah Hospital, Indonesia, February 2019
22. **Van Zundert AAJ.** Optical Stylet Intubation Bronchoscopy. 16th Indo Anaesthesia Congress Indonesian Medical Association, Jakarta Indonesia, February 2019
23. **Van Zundert AAJ.** Obesity – the Big Issue in Anaesthesia. 16th Indo Anaesthesia Congress Indonesian Medical Association, Jakarta Indonesia, February 2019
24. **Van Zundert AAJ.** Anaphylaxis in anaesthesia. Australian College of Peri-anaesthesia Nurses, Melbourne, October 2019
25. **Van Zundert AAJ.** How to prevent and treat Local Anaesthetic Toxicity? Australian College of Peri-anaesthesia Nurses, Melbourne, October 2019
26. **Van Zundert AAJ.** Video-laryngoscopy: a master piece in airway management. Myanmar Society of Anaesthesiology Meeting, Yangon, October 2019
27. **Van Zundert AAJ.** Central venous catheterisation – How to get the best results and the least complications. Myanmar Society of Anaesthesiology Meeting, Yangon, October 2019
28. **Lee J, Eley V, Wyssusek K, Kimble R, Way M, Cohen J, Van Zundert A.** ROTEM® assessment of the combined effect of term pregnancy and obesity on coagulation in healthy women with uncomplicated pregnancies in Australia: A prospective observational study
29. **Lee, J.** ASA Prize Winner Session, Australian Society of Anaesthetists NSC Sydney 21/9/19. ROTEM® in Obstetrics
30. **Zacher, R.** Maternal Wellbeing and Pregnancy Outcomes in Anaesthetic Trainees. ASA National Scientific Congress Committee – September 2019
31. **Roets, M.** Intraoperative cell salvage ameliorates transfusion-related suppression of monocyte and dendritic cell inflammatory responses. 14th World Congress of inflammation, 15-19 September 2019, Sydney Australia. Poster presentation
32. **Van Zundert AAJ.** Panel Discussion: The Essential Ingredients: “Follow your gut instincts”. 9th National Conference Academy of Regional Anaesthesia of India, Coimbatore India
33. **Van Zundert AAJ.** Lecture: Organisational aspects of regional anaesthesia blocks in the operating theatre complex. 9th National Conference Academy of Regional Anaesthesia of India, Coimbatore India
34. **Van Zundert AAJ.** Lecture: Local anaesthetic toxicity – LAST – an update. 9th National Conference Academy of Regional Anaesthesia of India, Coimbatore India
35. **Van Zundert AAJ.** Panel Discussion: The Obese parturient – a big problem in anaesthesia. 9th National Conference Academy of Regional Anaesthesia of India, Coimbatore India
36. **Van Zundert AAJ.** Lecture: Managing acute pain role of non-pharmacological, oral, parenteral and regional anaesthesia. 9th National Conference Academy of Regional Anaesthesia of India, Coimbatore India
37. **Van Zundert AAJ.** Workshops: Peripheral nerve blocks (upper/lower extremities); PEC 1+2; serratus anterior block, TAP block; musculus rector spinae block. Ganga Hospital, Coimbatore India
38. **Lee J, Eley V, Wyssusek K, Kimble R, Way M, Cohen J, van Zundert A.** UQ Faculty of Medicine HDR Symposium, Brisbane, 21/11/19: The influence of obesity on coagulation in healthy term pregnancy as assessed by rotational thromboelastometry (ROTEM®)
39. **Lee J, Eley V, Wyssusek K, Way M, Coonan E, Rowell J, Kimble R, van Zundert A.** UQ Faculty of Medicine HDR Symposium 21/11/19, Brisbane 21/11/19: Rotational thromboelastometry (ROTEM®) in obstetrics: baseline parameters in labouring women with uncomplicated pregnancies. A prospective observational study.

Oral Presentations

1. **Souness, A.** Clinical audit of intravenous lignocaine infusions in non-obstetric patients undergoing intra-abdominal surgery at the RBWH. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
2. **Reynolds H, Gowardman J.** A procedure for insertion and maintenance care of intra-arterial catheters using bundled interventions. Australian Vascular Access Society (AVAS) ASM, Sydney 2019
3. **Lehane K, Ceglowski P, Chow C, Pelecanos A, Tognolini A, Eley VA.** Non-invasive blood pressure measurement in obese patients – arm dimensions and patient experiences. Australian Society of Anaesthetists National Scientific Congress, Gilbert Troup Prize Session, Sydney 2019
4. **Chow C, Lehane K, Ceglowski P, Pelecanos A, Wren K, Eley VA.** Arm size and conicity in adults presenting for elective surgery – implications for blood pressure measurement. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019

Oral Presentations (cont)

5. **Reynolds H.** Consideration of contributing factors to unanticipated cardiac arrest in the cardiac catheter laboratory. International Conference for Perianaesthesia Nurses (ICPAN), Cancun, Mexico 2019
6. ANZMOSS/ANZGOSA (Australian and New Zealand Metabolic and Obesity Surgery Society/Australian and New Zealand Gastric and Oesophageal Surgery Association) Joint Annual Scientific Meeting, Brisbane, October 2019. **Lehane K, Ceglowski P, Chow C, Pelecanos A, Tognolini A, Eley VA.** Arm circumference and conicity in obese patients – what is the best predictor of arm conicity?
7. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019. **Lehane K, Ceglowski P, Chow C, Pelecanos A, Tognolini A, Eley VA.** Non-invasive blood pressure measurement in obese patients – arm dimensions and patient experiences
8. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019. **Bright M, Eley VA.** Arm size and shape in obese pregnant women – recommended cuff size and mode of delivery. Presented in Best Poster Prize Session
9. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019. **Chow C, Lehane K, Ceglowski P, Pelecanos A, Wren K, Eley VA.** Arm size and conicity in adults presenting for elective surgery – implications for blood pressure measurement.

Poster Presentations

1. **Chan, K., Clarris, M, Town, C,** Der Avedissian, A., **Wyssusek, K.** Anaemia and blood management practice in the setting of an emergency department within a major Australian tertiary hospital. NATA 2019, Berlin
2. **Roets M, An T, Wyssusek K.** Assessing Iron Deficiency Anaemia Before Surgery: Can We Do Better? 20th Annual NATA Symposium on Patient Blood Management, Haemostasis and Thrombosis, Berlin, Germany, April 2019
3. **Ryan, R, Jackson D, Hopkins G, Eley VA, Christensen R, van Zundert A, Lipman J, Roberts J. A.** Pharmacokinetic model for optimal prophylactic cefazolin dosing in elective bariatric surgery patients. Gilbert Brown Prize Session, oral presentation by Dr Ryan. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
4. **Bright M, Christensen R,** Klopogge S, **Chawla G, Sekar R, Eley VA.** An audit of surgical site infections following caesarean section. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
5. **Bright M, Chawla G,** Callaway L, **Eley VA.** Anaesthetic and peripartum care and outcomes in women with extreme obesity. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
6. **Chawla G, McLellan E, Harrocks A, Casey P, Eley VA.** A survey of anaesthetists' experience and perspectives of perioperative anaphylaxis. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
7. **Chawla G, Peters N, Messer G, Eley VA.** Perioperative temperature management in major vascular surgery: A prospective audit. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
8. **Reynolds H,** Gowardman J. A procedure for insertion and maintenance care of intra-arterial catheters using bundled interventions. Australian Vascular Access Society (AVAS) ASM, Sydney 2019
9. **Chow C, Lehane K, Ceglowski P, Pelecanos A, Wren K, Eley VA.** Arm size and conicity in adults presenting for elective surgery – implications for blood pressure measurement. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019
10. **Bright M, Eley VA.** Arm size and shape in obese pregnant women – recommended cuff size and mode of delivery, Australian Society of Anaesthetists National Scientific Congress, Best Poster Prize Session, Sydney 2019
11. Asia Pacific Congress of Hypertension, Brisbane, November 2019, Australia. **Ceglowski P, Lehane K, Chow C, Pelecanos A, Tognolini A, Eley VA.** Non-invasive blood pressure measurement – cuff size and experiences of obese patients
12. Asia Pacific Congress of Hypertension, Brisbane, November 2019, Australia. **Chow C, Lehane K, Ceglowski P, Pelecanos A, Wren K, Eley VA.** Arm size and conicity in adults presenting for elective surgery – Implications for blood pressure measurement
13. Asia Pacific Congress of Hypertension, Brisbane, November 2019. **Bright M, Eley VA.** Arm size and shape in obese pregnant women – recommended cuff size and mode of delivery
14. ANZMOSS/ANZGOSA (Australian and New Zealand Metabolic and Obesity Surgery Society/Australian and New Zealand Gastric and Oesophageal Surgery Association) Joint Annual Scientific Meeting, Brisbane, October 2019. **Ceglowski P, Lehane K, Chow C, Pelecanos A, Tognolini A, Eley VA.** Non-invasive blood pressure measurement – cuff size and experiences of obese patients.

Other communications and outputs

Workshop Facilitator

Lee J. Facilitator of UQ Anatomy and Sonoanatomy Cadaver Workshop – upper limb peripheral nerve blockade. Australasian Symposium on Ultrasound and Regional Anaesthesia (ASURA), February 2019.

Lee J. Facilitator of workshop for ROTEM-TEG, rapid interventions, big results. The 3rd Perioperative Patient Blood Management Symposium, February 2019.

Lee J. Facilitator of workshop for Major haemorrhage simulation with real blood sample testing on ROTEM® and TEG. The 3rd Perioperative Patient Blood Management Symposium, February 2019.

Eley V. Session Chair: Gut Microbiome and Hypertension. Asia Pacific Congress of Hypertension, Brisbane, 2019.

Eley V. Session Chair: Obstetric Anaesthesia Special Interest Group Concurrent Session: Australian Society of Anaesthetists National Scientific Congress, Sydney 2019.

Eley V. Metro North Research Interactive Workshops Facilitator July 2019.

Eley V. Metro North Research Workshop Speaker: October 2019.

DEPARTMENT OF GENERAL SURGERY

For the Department of General Surgery, 2019 has proven to be a transformative year for research. General Surgery now boasts seven co-appointed University of Queensland academics: Unit 1, Prof Owen Ung and Dr Kowski Murugappan; Unit 2, Assoc. Prof David Cavallucci and Assoc. Prof Nick O'Rourke; Unit 3, Assoc. Prof David Clark and Assoc. Prof Andrew Stevenson; and Unit 5, Dr Carl Lisec. These academic appointments will increase our research capabilities by building strong links with the university sector.

A dedicated funding effort, led by Dr Jason Brown, was successful in securing a Metro North HHS grant to appoint a Research Coordinator. Dr Danielle Herbert brings a strong research ethos and experience and will be a great asset to General Surgery.

Selected highlights from within the Department:

UNIT 1 BREAST/ENDOCRINE

New research collaborations with the Herston Biofabrication Institute aim to improve cosmetic outcomes for women undergoing complex breast surgery. The ability to 3D-print component tissues for reconstruction is truly exciting.

UNIT 2 HEPATO-PANCREATIC-BILIARY (HPB)

The 2019 publications have focussed on technical aspects of liver and pancreatic surgery. These technical descriptions with a focus on improving patient outcomes have been widely disseminated at multiple international meetings. The focus now moves to increasing participation in several upcoming international multicentre trials in liver and gallbladder surgery for 2020.

UNIT 3 COLORECTAL

During 2019, the Colorectal Research Unit (CRU) continues to strengthen with high quality research output and the expansion of research interests attracting international and national collaborations. As a result, the CRU has succeeded in receiving research funding for collaborative projects identifying pre-diagnostic signature for colorectal cancer and exploring the role of the microbiome in surgical complications. Importantly, the units share in the achievement of obtaining research support to appoint an additional Research Coordinator to further facilitate the research interests of the unit.

Colorectal surgical unit has continued to support higher degrees in the field of Theranostics of malignant colorectal cancer and attracting the interests of new higher degree scholars. In addition, the unit has provided and supported multiple research opportunities, for junior clinicians interested in retrospective and prospective research in the field of colorectal surgery. The CRU looks forward to building on key research outcomes and strengthening multi-disciplinary collaborations.

2019 QUEENSLAND HEALTH AWARD FOR EXCELLENCE – BARIATRIC SURGERY INITIATIVE

This award recognised the efforts of Unit 2 Hepato-Pancreatic-Biliary (HPB) and Unit 4 Upper Gastrointestinal/Bariatric. The Bariatric Surgery Initiative – offering highly-effective bariatric (weight loss) surgery to eligible patients – is an Australian-first in its approach. This initiative ensures an equitable approach to accessing this service statewide irrespective of geography or economic status, to improve the outcomes of Queenslanders with type 2 diabetes.

UNIT 1 BREAST/ENDOCRINE

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Prof Owen Ung	Professor	0.1	External (UQ)	Surgery	University of Queensland
Dr Kowsi Murugappan	Senior Lecturer	0.1	External (UQ)	Medicine	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Ben Green	Prof Owen Ung	Outcomes and time to adjuvant therapy in patients undergoing immediate implant based breast reconstruction surgery
Dr Kowsi Murugappan	Dr Ben Green, Prof Owen Ung	PETAL: Evaluation of the accuracy of ¹⁸ F-FDG PET-MRI scan in detecting regional lymph node disease in breast cancer: a pilot study
Dr Kowsi Murugappan	Dr Ben Green, Prof Owen Ung	Trans Tasman breast cancer survival differences population study
Dr Kowsi Murugappan	Dr Ben Green, Prof Owen Ung	Mastectomy or Breast Conservation Surgery in Early Breast Cancer? Factors Affecting Patient Choice
Dr Kowsi Murugappan	Dr Ben Green, Prof Owen Ung	Importance of axillary dissection: 8-year retrospective analysis of tertiary Breast surgical unit
Dr Clem Wong	Dr Ben Green, Prof Owen Ung	3D printing of nipple for breast reconstruction

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Sunil Lakhani (Pathology)	Dr Ben Green, Prof Owen Ung	BoNSAI: Improving treatments for Brain metastases through Advanced Imaging
Prof Sunil Lakhani (Pathology)	Dr Ben Green, Prof Owen Ung	BROCADE: BREast Origin Cancer tissue donated After DEath
Prof Sunil Lakhani (Pathology)	Dr Ben Green, Prof Owen Ung	Brisbane Breast Tissue Bank: Molecular Pathology and genetic sub-classification of precancerous and cancerous breast lesions
Kirsty Quince	Dr Ben Green, Prof Owen Ung	Incidence of lymphoedema following lymph node removal in the surgical treatment of breast cancer: a retrospective audit

2019 Research Publications

Journal Articles

1. Yip CH, Evans DG, Agarwal G, Buccimazza I, Kwong A, Morant R, Prakash I, Song CY, Taib NA, Tausch C, **Owen U**, Meterissian S. Global disparities in breast cancer genetics testing, counselling and management. World Journal of Surgery. 2019; 43 5: 1264-1270
2. Khoo D, **Owen U**, Blomberger D, Hutmacher DW. Nipple reconstruction: a regenerative medicine approach using 3D-printed tissue scaffolds. Tissue Engineering Part B Reviews. 2019; 25(2): 126-134
3. Edge J, Parker M, Maliepaard M, **Owen U**. Lymph node harvest in breast cancer patients with and without preoperative scintigraphy. South African Journal of Surgery. 2019; 57 (1): 7-10.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Ung O**. Academic pathways within surgical departments. 2019 RACS Combined Queensland State Conference and Surgical Directors Leadership Forum, 12-14 Jul 2019. Gold Coast.

UNIT 2 HEPATO-PANCREATIC-BILIARY^(HPB)

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Assoc. Prof David Cavallucci	Associate Professor	0.2	External (UQ)	Surgery	University of Queensland
Assoc. Prof Nicholas O'Rourke	Associate Professor	N/A	Honorary	Surgery	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Joel Lewin	Dr Peadar Waters, Assoc. Prof Nicholas O'Rourke	Surgical management and long term outcomes in pancreatic acinar cell carcinoma
Dr Laurence Webber	Dr Jimmy Tee, Assoc. Prof David Cavallucci, Assoc. Prof Nicholas O'Rourke	Time to commencement of neoadjuvant chemotherapy in resectable pancreatic cancer
Dr Krishna Pattabathula	Dr Jason Hwang, Assoc. Prof Nicholas O'Rourke	Type 2 auto-immune pancreatitis: an Australian retrospective analysis of biopsy-proven disease and review of ICDC criteria
Dr Peadar Waters	Assoc. Prof Nicholas O'Rourke	Long term outcomes in patients undergoing TC CBD exploration
Dr Richard Bryant	Assoc. Prof Nicholas O'Rourke	The Dorsal approach to laparoscopic major hepatectomy
Dr Will McGahan	Assoc. Prof David Cavallucci, Dr Peadar Waters	Retrospective baseline audit of pancreatic cancer outcomes, and prospective analysis of neoadjuvant outcomes
Dr Andrew Maurice	Prof Mark Smithers (UQ, PAH)	Non-operative management of appendicitis: a trainee-led RCT
Dr Thomas Crawley-Smith	Assoc. Prof Nicholas O'Rourke	Retrospective audit of National Emergency Laparotomy Audit (NELA) score at the RBWH
Dr Will McGahan	Assoc. Prof David Cavallucci, Dr Peadar Waters	The use of CA19-9 to predict the presence of imaging-occult unresectable features in patients with pancreatic cancer, and implications for staging laparoscopy: a population-based retrospective analysis
Assoc. Prof David Cavallucci	Assoc. Prof Nicholas O'Rourke	Implementation of prospective database for pancreatic surgery

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Jane Palmer (QIMR), Dr William Glasson	Assoc. Prof Nicholas O'Rourke, Assoc. Prof David Cavallucci	Genomic profiling of choroidal / ocular melanoma
Jochen Mueller (UQ)	Assoc. Prof Nicholas O'Rourke, Assoc. Prof David Cavallucci	Do environmental toxins contribute to fatty liver disease? Polyfluoroalkyl and perfluoroalkyl substances (PFAS). The PLAB study (PFAS, liver and blood)

UNIT 2 HEPATO-PANCREATIC-BILIARY (HPB) (cont)

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Dr Andrew Maurice	RBWH General Surgery Consultants' Research Award 2019	Laparoscopic appendicectomy versus antibiotics for uncomplicated imaging confirmed appendicitis: a trainee-led collaborative prospective randomised controlled trial (TRAIN trial)
Bariatric Surgery Initiative	Queensland Health 2019 Award for Excellence	The Bariatric Surgery Initiative – offering highly-effective bariatric (weight loss) surgery to eligible patients – is an Australian-first in its approach. This initiative ensures an equitable approach to accessing this service statewide irrespective of geography or economic status, to improve the outcomes of Queenslanders with type 2 diabetes

2019 Research Publications

Journal Articles

1. Brough D, Quinn S, Bartley PB, **Cavallucci D, O'Rourke N**. Primary aortoenteric fistula: a case of delayed diagnosis. ANZ J Surg. 2019; May 8. Doi: 10.1111/ans.15159.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **O'Rourke N**. Symposium chairperson: Optimize surgical techniques with advanced instruments for better outcomes of patients. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan
2. **O'Rourke N**. The evolution of right hepatectomy. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan
3. **O'Rourke N**. Evidence base for laparoscopic resection for HCC. HBP Surgery Week 2019 & 50th Annual Congress of the Korean Association of HBP Surgery, 5-6 Apr 2019. Seoul, South Korea
4. **Cavallucci D**. Robotic pancreaticjejunostomy – how I do it. ANZHPBA Annual Conference, 24-25 Oct 2019. Canberra
5. **Cavallucci D**. Open or minimally invasive hepatectomy. RACS ASC, Bangkok, 2019
6. **Cavallucci D**. Symposium Chair. Minimally invasive liver surgery – videos. Asia-Pacific HPB, Seoul, Korea, 2019.

Oral Presentations

1. McKay B, **Bryant R, Cavallucci D, O'Rourke N**. Laparoscopic resection is safe for large (>10cm) and ruptured hepatocellular adenoma. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan
2. Lewin J, **Bryant R**, Leslie N, Ian M, **Cavallucci D**. Laparoscopic vs open liver resection for large colorectal liver metastases: outcomes and long-term survival using propensity score analysis. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan
3. **Bryant R, O'Rourke N, Cavallucci D**. The dorsal approach to laparoscopic major hepatectomy. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan.

UNIT 3 COLORECTAL

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Tahleesa Cuda	PhD, UQ (2018-current)	Targeted radio-nucleotide therapy for metastatic lower gastrointestinal tumours	Assoc. Prof Andrew Stevenson, Assoc. Prof David Clark, Assoc. Prof Paul Thomas, Dr Damien Petersen , Andrew Riddell, John Hooper, Simon Puttick
Dr Andrew Maurice	PhD, UQ (2019-current)	Laparoscopic appendectomy versus antibiotic for radiologically confirmed acute uncomplicated appendicitis	Prof Mark Smithers, Dr Jason Brown, Assoc. Prof David Clark , Donald Cameron
Nicholas Lyons	PhD, UQ (2019-current)	The search for new theranostic targets for colorectal cancer	John Hooper, Andrew Riddell, Simon Puttick, Assoc. Prof David Clark

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Assoc. Prof David Clark	Associate Professor	N/A	Honorary	Surgery	University of Queensland
Assoc. Prof Andrew Stevenson	Associate Professor	N/A	Honorary	Surgery	University of Queensland
Dr Aleksandra Edmundson	Research Project Officer	0.8	External	Brisbane Colorectal Research Unit (CRU)	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Colorectal Research Unit (CRU) / Assoc. Prof David Clark, Assoc. Prof Andrew Stevenson, Dr Damien Petersen	Andrea Warwick (<i>Redcliffe</i>), John Lumley (<i>Wesley</i>)	Total colectomy for constipation
(CRU) / Assoc. Prof David Clark	Tahleesa Cuda (<i>UQ</i>), Ken Lam (<i>Mater</i>)	Length of bowel resection in surgical management of Crohn's disease
(CRU) / Assoc. Prof David Clark, Dr Craig Harris, Dr Damien Petersen, Dr Carina Chow	John Lumley (<i>Wesley</i>), Bree Stephenson (<i>SCUH</i>), Nicholas Lutton (<i>PAH</i>)	Drain fluid amylase as a sensitive biomarker of anastomotic leak in ileal pouch surgery
(CRU) / Assoc. Prof David Clark	NA	Measurement of amylase and lipase in the stool and drain fluid following a low pelvic anastomosis, as an indicator of anastomotic leak
(CRU) / Assoc. Prof David Clark	Andrew Riddell (<i>Riddell</i>), Ehsan Panahi Sydney, Julie Moore (<i>QCCAT</i>), Shoni Philpot (<i>QCCAT</i>), Andrew Zammit (<i>Bundaberg</i>)	Management of polyps in Queensland
(CRU) / Assoc. Prof David Clark, Assoc. Prof Andrew Stevenson, Dr Craig Harris, Dr Damien Petersen	Tony McGiffin (<i>UQ</i>), John Lumley (<i>Wesley</i>)	Long term functional consequences of anastomotic leak after laparoscopic restorative surgery with low pelvic anastomosis
(CRU) / Assoc. Prof David Clark	Tom Snow (<i>St Vincent's Private</i>), Edward Yeoh (<i>PAH</i>), Jit Pratap (<i>PAH</i>), John Coucher (<i>PAH</i>), Michael Solomon (<i>RPA</i>)	Validation of Gastrografin measurements in ex-vivo surgical fluid and stool
(CRU) / Assoc. Prof David Clark, Dr Craig Harris, Assoc. Prof Andrew Stevenson	Tom Snow (<i>St Vincent's Private</i>), Edward Yeoh (<i>PAH</i>), Jit Pra`tap (<i>PAH</i>), John Coucher (<i>PAH</i>), Michael Solomon (<i>RPA</i>)	Phase 1 feasibility study: The validation of Gastrografin measurement in postsurgical samples following low anterior resection where the rectal tube is flushed with Gastrografin
(CRU) / Assoc. Prof David Clark, Dr Joanna Yu, Dr David Sidhom	NA	Long term functional outcomes of anastomotic leak after restorative proctectomy and ileal pouch surgery in patients not covered with loop ileostomy

UNIT 3 COLORECTAL *(cont)*

Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<i>(CRU)</i> / Assoc. Prof Andrew Stevenson, Assoc. Prof David Clark, Dr Craig Harris, Dr Carina Chow, Dr Damien Petersen, Dr David Taylor	Dr Matthew Burge, Assoc. Prof Paul Thomas	A pilot study of CXCR-PET scanning in operable rectal cancer
<i>(CRU)</i> / Assoc. Prof David Clark	Dr Graham Radford-Smith, Anton Lord <i>(QIMR)</i> , Lisa Simms <i>(QIMR)</i>	Precision medicine for colorectal cancer: defining a pre diagnostic signature
<i>(CRU)</i> / Assoc. Prof David Clark, Dr James Nicholson	Ruoshi Cui <i>(UQ)</i> , Jessica Lim <i>(UQ)</i>	Exploring the relationship between risk taking propensity and surgeon and patient preferences for temporary covering ileostomy
<i>(CRU)</i> / Dr Andrew Maurice, Assoc. Prof David Clark	Dr Jason Brown, Mark Smithers <i>(UQ)</i> , Donald Cameron	Multicentre pilot study: Laparoscopic appendectomy versus antibiotics for radiologically confirmed acute uncomplicated appendicitis
<i>(CRU)</i> / Assoc. Prof Andrew Stevenson	Cora Ianiro <i>(UQ)</i>	Defining “successful surgery” in colonic resection: Patients using patient-reported outcome measures
<i>(CRU)</i> / Assoc. Prof David Clark	Dr Graham Radford-Smith, Lisa Simms <i>(QIMR)</i>	Ileal pouch microbiome: defining a pre-operative microbiological signature that predisposes to anastomotic leak
<i>(CRU)</i> / Assoc. Prof David Clark	Bree Stephensen <i>(SCUH)</i>	Transanal tubes, pelvic drains and defunctioning ileostomies: A surgeons’ preference survey
<i>(CRU)</i> / Assoc. Prof David Clark	John Panizza <i>(UQ)</i>	Hospital readmission for dehydration following creation of a diverting loop ileostomy after colorectal surgery

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Frank Frizelle <i>(NZ)</i> , Andrew McCombie <i>(NZ)</i>	Dr Craig Harris, Dr David Taylor, Assoc. Prof David Clark <i>(CRU)</i>	10-Ten Study: Quality of life after surgery for recurrent rectal cancer
Tahleesa Cuda <i>(UQ)</i> , Andrew Riddell <i>(Redcliffe)</i> , Simon Puttick <i>(CSIRO)</i> , John Hooper <i>(UQ)</i>	Assoc. Prof Andrew Stevenson, Assoc. Prof David Clark <i>(CRU)</i>	Targeted radio-nucleotide therapy for metastatic lower gastrointestinal tumours
Cherry Koh, Michael Solomon <i>(RPA)</i>	Dr Craig Harris, Dr David Taylor, Assoc. Prof David Clark <i>(CRU)</i>	Localised recurrent rectal cancer QoL study (Phase-III)
H. Bonjer, A Lacy, B Hanna, T Koedam, J Tuynman <i>(Netherlands)</i>	Assoc. Prof Andrew Stevenson, Assoc. Prof David Clark, Dr Craig Harris, Dr Carina Chow, Dr Damien Petersen, Dr David Taylor <i>(CRU)</i>	Color III: A multicentre randomised clinical trial comparing transanal TME versus laparoscopic TME for mid and low rectal cancer
Dec Winter, Alexandra Zabrowski <i>(Ireland)</i>	Assoc. Prof David Clark <i>(CRU)</i>	Clinicopathological features and oncological outcomes of patients with early age onset of colorectal cancer (REACT)
Craig Lynch <i>(Melbourne)</i> , Stephen Pillinger <i>(Sydney)</i> , John Simes <i>(CTC)</i> , Kate Wilson <i>(CTC)</i> , Claudia Rutherford <i>(Uni Sydney)</i> , Rachel Morton <i>(CTC)</i> , Darren Tonkin <i>(Adelaide)</i> , Stephen Bell <i>(Melbourne)</i>	Assoc. Prof Andrew Stevenson <i>(CRU)</i>	Robotic versus Laparoscopic Colon: a Randomised trial (RoLaCaRT)

UNIT3 COLORECTAL (cont)

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Assoc. Prof David Clark, Dr Graham Radford-Smith, Anton Lord (<i>QIMR</i>), <i>Ilisa Simms (QIMR)</i>	Colorectal Research Unit / Gut Research Laboratory (<i>QIMR</i>)	Precision medicine for colorectal cancer: defining a pre diagnostic signature	RBWH Foundation	\$20,000	\$20,000	2019
Assoc. Prof Andrew Stevenson, John Hooper (<i>UQ</i>), Tahleesa Cuda (<i>UQ</i>), Simon Puttick (<i>CSIRO</i>)	TRI / UQ	Development of Theranostics for metastatic colorectal cancer using high affinity engineered antibody fragments	RBWH Foundation CSSANZ Foundation	\$40,000 \$20,000	\$40,000 \$20,000	2019 2019
Dr Jason Brown, Assoc. Prof David Clark, Assoc. Prof Andrew Stevenson, Professor Owen Ung, Assoc. Prof David Cavallucci, Dr Ben Green, Dr Ben Dodd, Mr Michael Handy	General Surgery, Trauma and Burns	Research Coordinator for General Surgery, Burns, Trauma Research Hub	MNHHS	\$260,000	\$130,000	2019-2021

2019 Research Publications

Journal Articles

1. **Byrnes A, Clark DA, Mudge A.** Implementation science approaches to enhance uptake of complex interventions in surgical settings. *Australian Health Review* (2019) Apr 15. <https://doi.org/10.1071/AH18193>
2. **Stevenson ARL,** Solomon M, Brown C, et al Disease-free survival and local recurrence after laparoscopic assisted resection or open resection for rectal cancer. *Ann Surg* (2019) 269: 596-602
3. **Clark DA,** Cuda T, Riddell A, **Radford-Smith G,** Solomon M, Drain fluid amylase as a sensitive biomarker for the early detection of anastomotic leakage in ileal pouch surgery. *Colorectal Disease* (2019) 21(4): 460-464
4. **Stevenson ARL.** What does the future hold for ventral rectopexy? Functional outcome after laparoscopic posterior sutured rectopexy versus ventral mesh rectopexy for rectal prolapse: six-year follow-up of a double-blind, randomised single-centre study. *EClinical Medicine* (2019) 16: 2-3
5. Roodbeen SX, de Lacy FB, van Dieren S, Penna M, Ris F, Moran B, Tekkis P, Bemelman WA, Hompes R, on behalf of the International TaTME Registry Collaborative (inc. **Clark DA, Stevenson ARL**). Predictive factors and risk model for positive circumferential resection margin rate after Transanal Total Mesorectal Excision in 2653 patients with rectal cancer. *Ann Surg* (2019) 270(5): 884-891
6. Hamilton AER, Chatfield MD, Johnson CS, **Stevenson ARL.** Totally robotic right hemicolectomy: a multicentre case-matched technical and peri-operative comparison of port placements and da Vinci models. *J Robot Surg* (2019) Aug 29
7. Bell SW, Heriot AG, Warriar SK, Farmer CK, **Stevenson ARL,** Bissett I, Kong JC, Solomon M. Surgical techniques in the management of rectal cancer: a modified Delphi method by colorectal surgeons in Australia and New Zealand. *Tech Coloproctol* (2019) Aug. 23(8):743-749
8. Waters PS, Cheung FP, Peacock O, Heriot AG, Warriar SK, O'Riordain DS, Pillinger S, Lynch AC, **Stevenson ARL.** Successful patient-oriented surgical outcomes in robotic vs laparoscopic right hemicolectomy for cancer - a systematic review. *Colorectal Dis* (2019) Aug 10. doi: 10.1111/codi.14822
9. Curtis NJ, Dennison G, Brown CSB, Hewett PJ, Hanna GB, **Stevenson ARL,** Francis NK. Clinical evaluation of intraoperative near misses in laparoscopic rectal cancer surgery. *Ann Surg* (2019) Jul 3
10. Dickson EA, Penna M, Cunningham C, Ratcliffe FM, Chantler J, Crabtree NA, Tuynman JB, Albert MR, Monson JRT, Hompes R, on behalf of the International TaTME Registry Collaborative (inc. **Stevenson ARL, Clark DA**). Carbon dioxide embolism associated with Transanal Total Mesorectal Excision surgery: a report from the International Registries. *Dis Colon Rectum* (2019) 62(7): 794-801
11. **Stevenson ARL,** Solomon MJ, Brown CSB, Lumley JW, Hewett P, Clouston AD, Gebiski VJ, Wilson K. Disease-free survival and local recurrence after laparoscopic-assisted resection or open resection for rectal cancer: the Australasian laparoscopic cancer of the rectum randomized clinical trial. *Ann Surg* (2019) Apr. 269(4):596-602
12. Penna M, Hompes R, Arnold S, Wynn G, Austin R, Warusavitarne J, Moran B, Hanna GB, Mortensen NJ, Tekkis PP, on behalf of the International TaTME Registry Collaborative (inc. **Stevenson ARL**). Incidence and risk factors for anastomotic failure in 1594 patients treated by Transanal Total Mesorectal Excision: results from the International TaTME Registry. *Annals of Surgery* (2019) April. 269 (4): 700-711
13. Patel B, Watt T, **Petersen D.** Torsion of low-grade appendiceal mucinous neoplasm. *ANZ J Surg* (2019) 89(9): E402-E403
14. **Stevenson ARL.** A perspective on surgical randomised controlled trials. *ANZ J Surg* (2019): in press.

UNIT 3 COLORECTAL *(cont)*

Book Chapter

1. **Stevenson ARL.** Zen and the art of the purse-string. In – Transanal minimally invasive surgery (TAMIS) & Transanal Total Mesorectal Excision (TaTME). Editor: Atallah S. Springer International Publishing. 2019.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Clark DA.** Ileal pouch problems: surgical and mechanical. Australian Gastro Week (AGW), 2019. Adelaide
2. **Clark DA.** Management of strictures in Crohn's Disease. CSSANZ Spring Meeting, 2019. Hobart
3. **Clark DA.** Drain fluid analysis as a biomarker of anastomotic leak. CSSANZ Spring Meeting, 2019. Hobart
4. **Stevenson ARL.** Colorectal surgery. International Colorectal Surgery Fluorescence Consensus Meeting, 2019. Fuzhou, China
5. **Stevenson ARL.** Pelvic floor disorders cadaveric workshop. SingHealth Duke – NUS Surgical & Anaesthesia Congress, 2019. Singapore
6. **Stevenson ARL.** Advanced methods for the management of rectal prolapse. American Society of Colon and Rectal Surgeons Symposium, 2019. Cleveland, USA
7. **Stevenson ARL.** Convenor for TaTME cadaver workshop, Academy for Silant mentor. 17th Congress of Asia Pacific Federation of Coloproctology, 2019. Kuala Lumpur, Malaysia
8. **Stevenson ARL.** TaTME – step-by-step demonstration, identifying the correct planes. 17th Congress of Asia Pacific Federation of Coloproctology, 2019. Kuala Lumpur, Malaysia
9. **Stevenson ARL.** Rectopexy: to mesh or not to mesh. 17th Congress of Asia Pacific Federation of Coloproctology, 2019. Kuala Lumpur, Malaysia
10. **Stevenson ARL.** Debate: there is never a place for synthetic mesh in ventral rectoplexy. Brisbane Functional Conference, 2019. Brisbane.

Poster Presentations

1. Cuda T, Riddell A, **Stevenson ARL, Clark DA,** Hooper J, Rose S, Puttick S, **Thomas P.** 68Galium-PSMA-617 as a novel PET-CT marker for risk stratifying metastatic colorectal cancer: a prospective pilot study. Australia and New Zealand Society of Nuclear Medicine Annual Scientific Meeting, 2019. Adelaide
2. **Wheatley L, Clark DA,** Yeoh E, **Edmundson A,** Pratap J, Snow T, Solomon M, Coucher J. Detection of gastrograffin in ex vivo specimens by dual energy CT scanning. Herston Healthcare Symposium, 2019. Brisbane
3. **Keogh C, Edmundson A, Clark DA.** Drain fluid amylase as an early biomarker of anastomotic leak in colorectal anastomoses. Herston Healthcare Symposium, 2019. Brisbane
4. **Clark DA,** Cuda T, Pretorius C, **Edmundson A,** Solomon M, Riddell AD. Amylase quantitation in the terminal ileum by assessing ileal effluent following formation of an ileostomy. Herston Healthcare Symposium, 2019. Brisbane
5. **Yu J, Sidhom D, Clark DA.** Long-term functional outcomes of anastomotic leakage after restorative proctectomy and ileal pouch-anal anastomosis. Herston Healthcare Symposium, 2019. Brisbane.

UNIT 4 UPPER GASTROINTESTINAL/BARIATRIC

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Ryo Mizumoto	Masters Surgery (MCh) Edinburgh, Scotland (2019)	Operative versus non-operative management of perforated duodenal ulcer: a systematic review and meta-analysis	Dr Barry O'Loughlin
Dr David Mitchell	PhD Notre Dame (2019-2022)	Investigation of laryngopharyngoreflux and correlation with clinical outcomes	Prof Greg Falk (Syd), Prof Hans Van Der Wall (ND)

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr David Mitchell	Dr George Hopkins, Dr Robert Finch	Outcomes of weight-loss in patients with OSA
Dr Pat Walsh	Dr George Hopkins, Dr David Mitchell	Endoscopic RAP procedure for reflux post gastric sleeve
Dr David Mitchell	Dr George Hopkins, Dr Robert Finch	Outcomes in RYGB with varying limb lengths
Dr Ben Dodd	Dr Marilla Dickfos, Dr Jennifer Gillespie	CT prediction of linitus plastic gastric cancer RO resection status
Dr Ben Dodd	Dr Kevin Lah	Laparoscopic management of oesophageal perforations
Dr Ben Dodd	Dr Andrew Maurice, Dr J Punnasseril, Dr S King	Bariatric telehealth patient and clinician satisfaction
Dr Ben Dodd	Dr D Nguyen, Dr Robert Finch, Dr Barry O'Loughlin	Incidence, risk factors and management of chyle leak after Oesophagectomy
Dr Ben Dodd	Dr Robert Finch, Dr David Mitchell	Oesophagectomy and double tract reconstruction for OGI adenocarcinoma
Dr Ben Dodd	Dr George Hopkins	Reflux after revisional single anastomosis gastric bypass
Dr David Mitchell	Prof Greg Falk, Prof Hans van der Wall	Investigation of laryngopharyngoreflux and correlation with clinical outcomes
Dr Yao Huang	Dr George Hopkins	Causes, complications and continued management of revisional sleeve gastrectomy to Roux-en-Y gastric bypass – 30 day operative morbidity, is it worth the risk?

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Guy Sheahan	Dr Richard Reznick, Dr Leslie Flynn, Dr Don Klinger, Dr Boris Zevin	Comparison of faculty versus structured peer feedback: implications of technical skills training. Queen's University, Canada – College Fellowship Surgical Education

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Bariatric Surgery Initiative	Queensland Health 2019 Award for Excellence	The Bariatric Surgery Initiative – offering highly-effective bariatric (weight loss) surgery to eligible patients – is an Australian-first in its approach. This initiative ensures an equitable approach to accessing this service statewide irrespective of geography or economic status, to improve the outcomes of Queenslanders with type 2 diabetes

2019 Research Publications

Journal Articles

1. Lemke M, Lia H, Gabinet-Equihua A, **Sheahan G**, Winthrop A, Mann S, Fichtinger G, Zevin B. Optimizing resource utilization during proficiency-based training of suturing skills in medical students: a randomized controlled trial of faculty-led, peer tutor-led, and holography-augmented methods of teaching. *Surgical Endoscopy* (2019) Jul 8. doi: 10.1007/s00464-019-06944-2
2. **Mitchell D**. Systematic review of lymph node status in early oesophageal adenocarcinoma. (2019) in press
3. **Nguyen D, Finch R, O'Loughlin B, Dodd BR**. Chyle leak following oesophagectomy for cancer – incidence, risk factors and management at a Queensland tertiary centre. *Annals of Esophagus* (2019) in press.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **O'Loughlin B**. David Thiele Lecture. 2019 RACS Combined Queensland State Conference and Surgical Directors Leadership Forum, 12-14 Jul 2019. Gold Coast
2. **Hopkins G**. Panel discussion: Surgical management of major GI complications. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane.

Oral Presentations

1. **Dodd BR**. Reflux after revisional single anastomosis gastric bypass. RACS Surgery 2019: Back to the Suture! Conference, 15-16 Aug 2019. Auckland, New Zealand
2. **Dodd BR**. Revisional bariatric surgery to single-anastomosis bypass: feasible, effective and safe. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
3. **Hopkins G**. MBS in patients below BMI 35. Pros and approach, its not about weight. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane.

Poster Presentations

1. **Dodd BR**. Laparoscopic distal oesophagectomy and double tract reconstruction – a novel surgical option for OGJ adenocarcinoma. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
2. **Nguyen D, Finch R, O'Loughlin B, Dodd BR**. Chyle leak following oesophagectomy for cancer – incidence, risk factors and management at a Queensland tertiary centre. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
3. **Dickfos M, Sommerville J, Barbour A, Gotley D, Smithers BM, Dodd BR**. Predictability of R0 Resections of linitis plastica using computed tomography. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
4. **Lah K, Nguyen DC, Armstrong L, Mitchell D, Chan K, Thomson IT, Smithers BM, Dodd BR**. Laparoscopic management of distal oesophageal perforations – outcomes and lessons. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
5. **Maurice AP, Punnasseril J, King S, Dodd BR**. Telehealth in a state-wide public bariatric service is feasible and with high patient satisfaction. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
6. **Maurice AP, Malik H, Pearson T, Dodd BR**. Consequences of mucosal perforation during laparoscopic Heller myotomy: a systematic review. International Society for Diseases of the Esophagus (ISDE) Conference, 16-19 Sep 2018. Vienna, Austria.



UNIT 5 ACUTE SURGICAL UNIT (ASU)

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Dr Carl Lisec	Conjoint Academic Coordinator	0.3	External (UQ)	<i>RBWH Clinical Unit for Year 3 MBBS / MD</i>	University of Queensland

2019 Conference Presentations – Invited Speaker, Oral and Poster

Poster Presentations

1. Sivasuthan G, **Lisec C**. Epidemiology of penetrating thoracoabdominal trauma. Annual Scientific Congress, Royal Australasian College of Surgeons (RACS), 6-10 May 2019. Bangkok, Thailand
2. Sivasuthan G, **Lisec C**. Imaging in the diagnosis of thoracoabdominal penetrating injuries. Annual Scientific Congress, Royal Australasian College of Surgeons (RACS), 6-10 May 2019. Bangkok, Thailand.



RBWH Department of General Surgery with Professor Wendy Brown (Melbourne) for the Visiting Professor Programme, 26-27 November 2019



Unit 3 Colorectal with Professor Wendy Brown



Unit 4 Upper GI with Professor Wendy Brown

DEPARTMENT OF OPHTHALMOLOGY

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Prof Tim Sullivan	Professor	N/A	Operational	Ophthalmology, Faculty of Medicine	University of Queensland
Assoc. Prof Lawrence Lee	Associate Professor	N/A	Operational	Ophthalmology, Faculty of Medicine	University of Queensland
Dr Kailing Yong	Honorary Fellow	N/A	Operational	Ophthalmology, Faculty of Medicine	University of Queensland
Dr Alison Fraenkel	Honorary Fellow	N/A	Operational	Ophthalmology	University of Queensland
Dr Matt Cranstoun	Honorary Fellow; Associate Lecturer	1.0	External	Oculoplastics, lacrimal and orbital Disease	University of Queensland

2019 Research Publications

Journal Articles

- Fraenkel A, Lee LR**, Lee GA. Managing corneal foreign bodies in office based general practice. *Aust Fam Physician* 2017 Mar; 46(93): 89-93
- Porter A, **Lee L**, Bradshaw C. Bispectral index monitoring in vitrectomy surgery under local anaesthetic block with sedation: a single surgeon, single anaesthetist review. *Eye (Lond)* 2017 Jul; 31(7):1115-1116
- Rowland CJ, **Lee LR**. Ocular causes of visual distortions. *Aust J Gen Pract* 2019;48(8):525–30
- Sharpless M, Mahady K, **Sullivan TJ**. Conservative management of spontaneous intraorbital arteriovenous fistulas. *Clin Exp Ophthalmol* 2020 Jan; 48 (1): 121-123
- Lee A, **Sullivan TJ**. Orbital mycoses in a pediatric subtropical population: a case series. *JAAPOS* 2019 Oct; 23 (5): 270.e1-270.e7
- Joos Z, **Sullivan TJ**. Congenital lacrimal fistula presenting in adulthood: a case series. *Clin Exp Ophthalmol* 2019 Sep; 47(7): 949-952
- Lee A, Ellul D, Sommerville J, Earnshaw J, **Sullivan TJ**. Bony orbital changes in allergic fungal sinusitis are reversible after treatment. *Orbit*. 2020 Feb; 39(1): 45-47.

Book Chapter

- Fraenkel A, Lee LR**. Chapter 34: Modified cow hitch suture fixation. In: *Advanced IOL fixation techniques*. SLACK Inc: Thorofare USA. 2019.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

- Sullivan TJ**. Keynote Lecture. International Society of Ocular Oncology Biennial Meeting, Marina Del Rey, Los Angeles, USA, Mar 2019
- Sullivan TJ**. Biologics for thyroid eye disease, what's new and what works. 5th International Thyroid Eye Disease Society Meeting, Singapore, Feb 2019
- Sullivan TJ**. Is this thyroid eye disease or not? An interactive Quiz. 5th International Thyroid Eye Disease Society Meeting, Singapore, Feb 2019
- Sullivan TJ**. Medial wall and orbital floor decompression. Cadavaric Dissection Course, 5th International Thyroid Eye Disease Society Meeting, Singapore, Feb 2019
- Sullivan TJ**. Paediatric orbital disease. Subspeciality Day, 121st Meeting of the Korean Ophthalmological Society, Busan, Korea, Apr 2019
- Sullivan TJ**. Keynote lecture. An overview of orbital tumours. 121st Meeting of the Korean Ophthalmological Society, Busan, Korea, Apr 2019
- Sullivan TJ**. Structural, infectious and inflammatory orbital disease in childhood. International Communications at the Society Española de Cirugía Plástica Ocular y Orbitaria Meeting, Barcelona, España, 6-8th Jun 2019

Invited Speakers (cont)

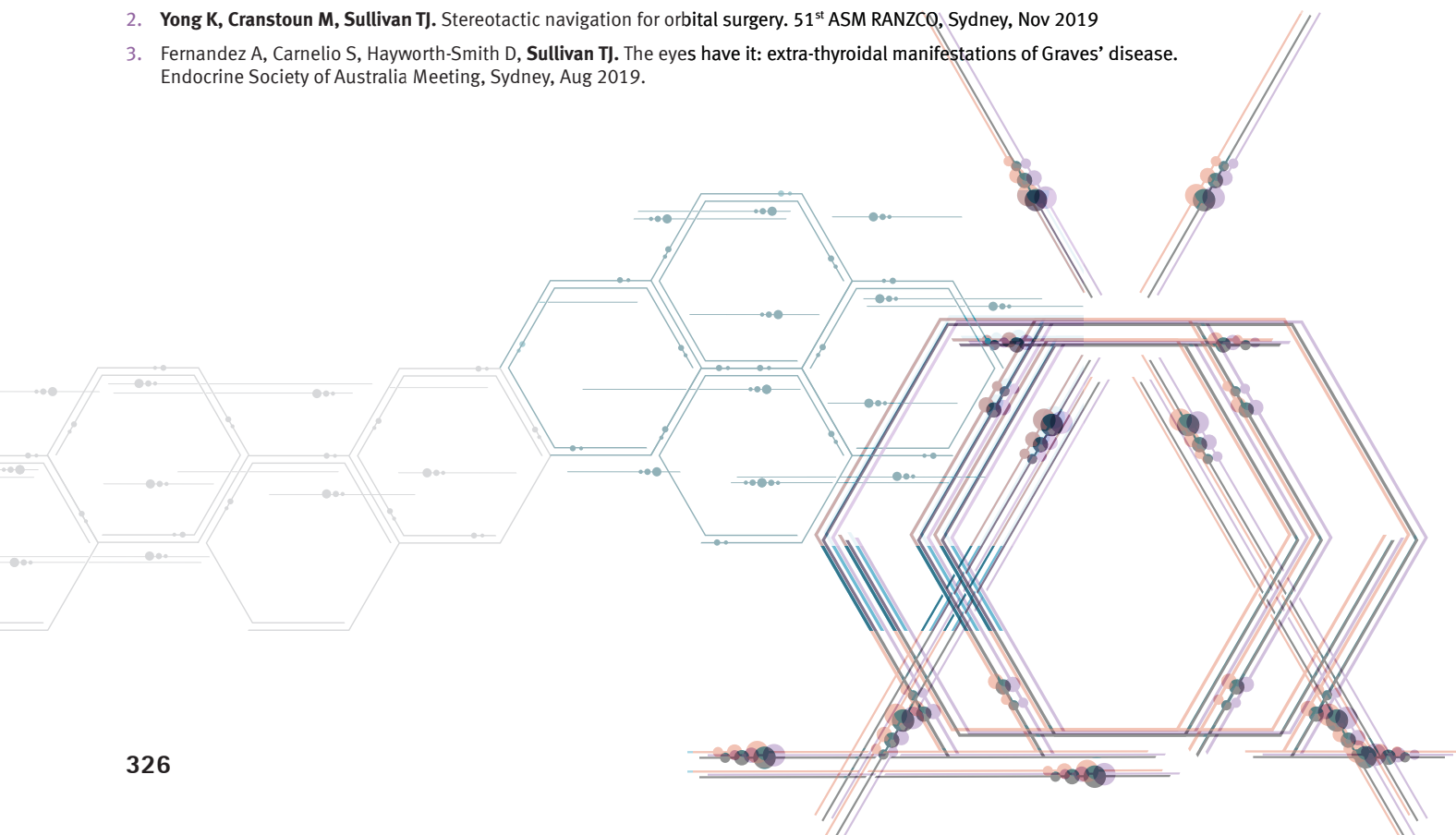
8. **Sullivan TJ.** Keynote lecture: Comprehensive management of paediatric ptosis. Society Española de Cirugía Plástica Ocular y Orbitaria Meeting, Barcelona, España, 6-8th June 2019
9. **Sullivan TJ.** Thyroid eye disease: advances in pathogenesis, medical and surgical management. Combined RANZCO Tasmanian Branch and Australian and New Zealand Society of Ophthalmic Plastic Surgeon's Joint meeting, Hobart, Jun 2019
10. **Sullivan TJ.** An approach to orbital disease for the general ophthalmologist. Combined RANZCO Tasmanian Branch and Australian and New Zealand Society of Ophthalmic Plastic Surgeon's Joint meeting, Hobart, June 2019.

Oral Presentations

1. **Sullivan TJ,** Muir J, Kennedy D. Skin Cancer in the beautiful triangle. RACRRM Nationwide Educational Online Interactive Webinar, Mar 2019
2. **Sullivan TJ.** Peri-levator triamcinolone for upper eyelid retraction in thyroid eye disease. 44th Orbital Society Meeting, Mallorca, Spain, Jun 019
3. **Sullivan TJ.** Stereotactic navigation in orbital surgery. 44th Orbital Society Meeting, Mallorca, Spain, Jun 2019
4. Lee A, **Sullivan TJ.** Mucoceles involving the orbit: a retrospective review. 51st ASM RANZCO, Sydney, Nov 2019
5. Goldberg RA, Justin, Ugradeer Shoaib H, Manta, A, **Sullivan TJ.** Impromptu Grand Rounds: **Case 1**) 55yo female orbital abscess with sinus disease, to drain or not to drain; **Case 2**) 12 yo boy orbital floor fracture with full EOMs, for conservative management; **Case 3**) 60 yo white actor, immunocompetent in good health, unilateral blindness, restricted EOM's and cavernous sinus thrombosis, a case of Mucormycosis. Visiting Professor, Jules Stein Eye Institute, UCLA, Los Angeles, USA, 26 Mar 2019
6. **Sullivan TJ.** Orbital margin zone lymphoma with neural invasion presenting as a painful mass. Orbital Tumour Course American Academy of Ophthalmology, San Francisco, Oct 2019
7. **Sullivan TJ.** Epithelial myoepithelial carcinoma ex pleomorphic adenoma. Orbital Tumour Course American Academy of Ophthalmology, San Francisco, Oct 2019
8. **Sullivan TJ.** Specific orbital inflammation of the orbit. Orbital Disorders Instruction Course, American Academy of Ophthalmology, San Francisco, USA, Oct 2019
9. **Yong K, Sullivan TJ.** Unrecognised perineural spread from SCC presenting as a fourth nerve palsy. 25th ANZSOPS Meeting, Sydney, Nov 2019
10. **Sullivan TJ.** Orbital arterio-venous malformation: imaging features and surgical management. 25th ANZSOPS meeting, Sydney. Nov 2019.
11. **Sullivan TJ.** Biology and management of periocular malignancy. Orbital Disorders Instruction Course, American Academy of Ophthalmology, San Francisco, USA, Oct 2019
12. **Chan S, Park J.** Management of proliferative retinopathy secondary to acute myeloid leukaemia. 13th APVRS Congress, Shanghai, China, 22-24 Nov 2019.

Poster Presentations

1. Lee A, **Sullivan TJ.** Traumatic orbital haemorrhage: a 15 year review at a tertiary trauma centre. 51st ASM RANZCO, Sydney, Nov 2019
2. **Yong K, Cranstoun M, Sullivan TJ.** Stereotactic navigation for orbital surgery. 51st ASM RANZCO, Sydney, Nov 2019
3. Fernandez A, Carnelio S, Hayworth-Smith D, **Sullivan TJ.** The eyes have it: extra-thyroidal manifestations of Graves' disease. Endocrine Society of Australia Meeting, Sydney, Aug 2019.



DEPARTMENT OF ORAL & MAXILLOFACIAL SURGERY

The year saw a consistent output of research articles and presentations for the department. Ongoing randomised controlled trials continue to recruit patients steadily. The department formed important collaborations with external organisations to expand our research activities particularly in the area of head and neck oncology and reconstructive surgery.

The department continued operating a virtual surgical planning and 3D printing facility, producing various projects in this exciting surgical planning arena.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Michael Hurrell	PhD UQ (2014-2019)	Treatment delay in facial trauma	Assoc. Prof Martin Batstone
Mr Timothy Liu	PhD UQ (2018-current)	Treatment decisions in Oral Cavity Cancer	Assoc. Prof Martin Batstone
Dr Benjamin Fu	MPhil UQ	Odontogenic infection at the RBWH	Assoc. Prof Martin Batstone
Dr Darius Khadembashi	MPhil UQ	Osseointegrated implant survival in head and neck cancer	Assoc. Prof Martin Batstone
Dr Joshua Russell	MPhil UQ	Donor site morbidity in composite free flaps	Assoc. Prof Martin Batstone

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Prof Frank Monsour	Honorary Consultant	In kind	RBWH Honorary Position	University of Queensland
Adj. Prof Caroline Acton	Honorary Consultant	In kind	RBWH Honorary Position	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Assoc. Prof Martin Batstone	Prof Mark Smyth , QIMR Immuno-oncology group	Immune infiltrate of head and neck cancer

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Andrew Higgins, Assoc. Prof Martin Batstone	Oral and Maxillofacial	Intraoperative CT in facial trauma	ANZAOMS	\$3210.44	\$3210.44	2019

2019 Research Publications

Journal Articles

1. Armstrong LTD, **Subramaniam SS, Borgna S**. Adenoid cystic carcinoma of the palate with isolated cutaneous metastasis: a unique case and review of current and future treatment modalities of metastatic disease. *International Journal of Oral and Maxillofacial Surgery*. 2019;in press doi:10.1016/j.ijom.2019.11.012
2. Briery GI, Ren J, Baldwin J, Saifzadeh S, Theodoropoulos C, Tsurkan MV, Lynham A, **Hsu E**, Nikolarakos D, Werner C, Woodruff MA, Hutmacher DW, Bray LJ. Investigation of Sustained BMP Delivery in the Prevention of Medication-Related Osteonecrosis of the Jaw (MRONJ) in a Rat Model. *Macromolecular Bioscience*. 2019;19(11):e1900226
3. **Fisher BM, Batstone MD**. Pregnancy and childbirth after an iliac crest free flap. *The British journal of oral & maxillofacial surgery*. 2019;57(10):1148-9
4. **Higgins A**, Hurrell M, **Harris R, Findlay G**, David M, **Batstone M**. A study protocol for a randomised controlled trial evaluating the effects of intraoperative computed tomography on the outcomes of zygomatic fractures. *Trials*. 2019;20(1):514
5. Hurrell MJL, David MC, **Batstone MD**. Patient compliance and mandible fractures: a prospective study. *International journal of oral and maxillofacial surgery*. 2019;48(6):759-68
6. Liu T, David M, Ellis O, Hubert Low TH, Palme CE, Clark J, **Batstone M**. Treatment for oral squamous cell carcinoma: Impact of surgeon volume on survival. *Oral Oncology*. 2019;96:60-5
7. Pateman KA, Weerakoon AT, **Batstone MD**, Ford PJ. A culture shock in dental hygiene: exploring the management of oral health after head and neck cancer. *International journal of dental hygiene*. 2019;17(2):183-91
8. Turner J, Yates P, Kenny L, Gordon LG, Burmeister B, Hughes BGM, McCarthy AL, Perry C, Chan RJ, Paviour A, Skerman H, **Batstone M**, Mackenzie L. The ENHANCES study: a randomised controlled trial of a nurse-led survivorship intervention for patients treated for head and neck cancer. *Supportive care in cancer: official journal of the Multinational Association of Supportive Care in Cancer*. 2019;27(12):4627-37
9. Webster JD, **Batstone M**, Farah CS. Missed opportunities for oral cancer screening in Australia. *Journal of oral pathology & medicine : official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology*. 2019;48(7):595-603
10. Willaert R, Nevens D, Laenen A, **Batstone M**, Politis C, Nuyts S. Does intensity-modulated radiation therapy lower the risk of osteoradionecrosis of the jaw? A long-term comparative analysis. *International journal of oral and maxillofacial surgery*. 2019;48(11):1387-93.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Batstone M**. Oral cancer – From warts to immunotherapy. Townsville Study Day. 10.5.19. Townsville
2. **Batstone M**. Head and neck reconstruction. From mild to wild. Townsville Study Day. 10.5.19 Townsville
3. **Batstone M**. Oral and Maxillofacial Surgery. Incision Surgical interest Group. UQ. 16 July 2019
4. **Batstone M**. Intraoperative CT in facial fractures. Queenstown, NZOMS August 2019
5. **Batstone M**. Implants in head and neck cancer patients. Queenstown NZOMS August 2019
6. **Batstone M**. Antibiotic overuse in dentistry and Oral and Maxillofacial Surgery. National AMR Forum. Brisbane Nov 2019.

Oral Presentations

1. **Batstone M**. High volume Surgery, like immunotherapy only better and cheaper. IA00 Rome. September 2019.

DEPARTMENT OF ORTHOPAEDIC SURGERY

More than 100 publications have come directly from the RBWH Department of Orthopaedic Surgery in the past 5 years a testament to our sustained commitment and dedication to research and education of the highest calibre. We have a long tradition of internationally recognised academic activity, highlighting the innovation, clinical excellence, and high-quality research characteristic of our Department.

We continue to have a very active interest in 3D modelling and printing and have emerged over the past few years as a global leader in this field within orthopaedic surgery. We expect further development in this area with the highly anticipated opening of the Herston Biofabrication Institute in the coming year and are looking forward to working there together with our many academic and industry partners.

The key achievement for the year 2019 was that the preliminary results were published regarding our extensive investigations into the biology of the Masquelet induced membrane, used to reconstruct post-traumatic long bone defects. When presented at the Limb Lengthening and Reconstruction Society in Boston, this study was selected as the outstanding Basic Science Research Paper. In cooperation with our academic partners at the University of Texas Health Sciences Center in San Antonio, this will be by far the largest series of human specimens that has ever been compiled and evaluated using the most sophisticated techniques available, with several further publications expected to appear in the coming year. **Dr Richard Hanly, Dr Jerry van de Pol, Dr John Roe, Dr David Miller, Dr James Brown,** and **Dr Andrew Mayo** are all representative of the next generation of academically active surgeons affiliated with the Department, poised to lead our research and education initiatives into the coming decade. Together, they hope to fill the shoes of the many outstanding clinicians, surgeons, and scientists whose efforts in the past few decades have brought international attention within the global community of orthopaedic surgeons to our cohesive unit at the Royal Brisbane and Women's Hospital.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Min Tri Phan	PhD QUT	Femoral morphology variations and relevant implant fit in relation to peritrochanteric and distal femur fractures	Dr Kevin Tetsworth, Dr Beat Schmutz <i>(QUT)</i>
Dr Antony Rapisarda	PhD UNSW	Identification of serum biomarkers for the diagnosis of orthopaedic infections and sepsis	Dr Kevin Tetsworth, Prof Jeffrey Lipman, Dr Ross Crawford <i>(TPCH)</i>
Naomi Paxton	PhD QUT	The future of clinical biofabrication: Creating patient-specific melt-electrospun scaffolds for bone regeneration	Dr Kevin Tetsworth, Prof Mia Woodruff <i>(QUT)</i>
Dr Chris Conyard	PhD UQ	Knee pain after IM nailing of tibial shaft fractures: Randomised controlled trial of infra-patellar vs supra-patellar insertion techniques	Dr Kevin Tetsworth, Dr Ross Crawford <i>(TPCH)</i>

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Nick Green	Orthopaedic 3D Medical Modeller	1.0	Operationally Funded	3D Modelling and Printing in Orthopaedic Surgery, Herston Biofabrication Institute	QUT
Dr Kevin Tetsworth	Clinical Lead Orthopaedic Stream	0.4	Operationally Funded	3D Modelling and Printing in Orthopaedic Surgery, Herston Biofabrication Institute	QUT

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Richard Hanly	Dr Luca Daniele, James Powell	Prospective case-controlled series using ankle arthroscopy in trauma
Dr Andrew Mayo	Dr Luca Daniele	The effect of scaphoid reduction on carpal kinematics in scaphoid nonunion
Dr Paul McEniery	Dr Luca Daniele	Assessment of biomechanical stability and kinematics using a novel anatomic distal radio-ulnar joint reconstruction
Dr Jerry van de Pol	Dr John Kinyanjui, Macy Lu	Randomised controlled trial comparing short vs long tunnels for anterior cruciate ligament knee reconstructions: Clinical and radiographic characteristics
Dr Jerry van de Pol, Dr Kevin Tetsworth	Dr Luca Daniele, Dr Gurpreeth Singh	Tension band wiring vs cannulated screw augmented fixation for patella fractures
Dr Kevin Tetsworth, Dr Jerry van de Pol	Dr Steven Kent	Validation of a classification scheme for malunions and nonunions of the proximal tibia and tibial plateau
Dr Kevin Tetsworth, Dr Jerry van de Pol	Dr Tom Crookes	Clinical and radiographic outcomes after internal fixation of glenoid neck fractures through a modification of the modified Judet approach
Dr Kevin Tetsworth, Dr Jerry van de Pol, Assoc. Prof Michael Doran (QUT)	Dr John Anderson	A phase 1 study to evaluate the safety and feasibility of mesenchymal stromal cell therapy in participants with non-unions of tibia fractures
Dr Kevin Tetsworth, Dr Jerry van de Pol	Dr Timothy Wong, Dr Vaida Glatt <i>(Texas)</i> , Dr Anna Woloszyk <i>(Texas)</i>	Clinical outcomes in a clinical series of massive femoral bone defects using custom 3D printed titanium cages placed into a Masquelet induced membrane
Dr Kevin Tetsworth	Dr Vaida Glatt <i>(Texas)</i> , Dr Will O'Callaghan, Dr Henry Burnand, Dr Erik Hohmann <i>(Dubai UAE)</i>	Proposed classification scheme for post-traumatic skeletal defects, with a validation study in a clinical series of long bone fractures
Dr Kevin Tetsworth	Nick Green , Dr Steven Kent, Dr Vaida Glatt, Dr Joyce Antony, Dr George Banic	Statistical shape modelling from CT scans to assess the morphology and morphometry of adult human cadaveric tali: gender-specific differences
Dr Kevin Tetsworth	Nick Green, Dr Luke Visscher	Statistical shape modelling from CT scans to assess the morphology and morphometry of the adult human scapula: Design considerations for implants for surgical stabilisation
Dr Kevin Tetsworth	Nick Green, Dr Luke Visscher	Statistical shape modelling from CT scans to assess the morphology and morphometry of the adult human humerus
Dr Kevin Tetsworth	Nick Green, Dr Luke Visscher , Dr Erik Hohmann <i>(Dubai UAE)</i>	Statistical shape modelling from MRI scans to assess the morphology and morphometry of the adult human glenoid, to assess the contribution of the labrum and its influence on version and inclination: The relationship with shoulder instability
Dr Kevin Tetsworth	Dr Luke Visscher	The natural history of post-traumatic malalignment: radiographic correlation between varus/valgus and medial/lateral degenerative arthritis
Dr Kevin Tetsworth	Nick Green, Dr Miran Stubican , Dr Frode Vindenes, Gregory Barlow	Clinical and radiographic characteristics of combined pilon and talus/talar dome injuries
Dr Kevin Tetsworth	Dr Ibin Varughese	Clinical series using the Masquelet induced membrane technique for long bone reconstruction
Dr Kevin Tetsworth	Dr Luca Daniele, Qusai Abdel Rahman	Meta-synthesis of outcomes after anterior minimally invasive plating for stabilization of humeral shaft fractures – the first 1,000 cases published globally
Dr Kevin Tetsworth	Dr Luke Visscher, Nick Green	Design considerations for an implant specific for percutaneous anterior minimally invasive plating of humeral shaft fractures
Dr Kevin Tetsworth	Dr Luke Visscher, Nick Green	Design considerations for an implant specific for stabilisation of scapular fractures
Dr Kevin Tetsworth	Ishwar Bhattarai, Dr Elliott D'Costa <i>(Canberra)</i> , Alberto Blanco Sevilla <i>(Barcelona)</i> , Matias Vicente Goma-Camps <i>(Barcelona)</i> , Pablo Corona <i>(Barcelona)</i>	The burden of orthopaedic infection in Australia – audit of clinical activity and acute referrals to a general orthopaedic unit in a major metropolitan public hospital
Dr Kevin Tetsworth	Dr Alexey Borshch	Analysis of failure of surgical treatment for adult chronic osteomyelitis

Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Kevin Tetsworth	Dr Daryl Wall, Bilal Zahoor, Dr Josh Piercey	A cohort of pelvic fractures at a single Australian tertiary referral center 2010-2016: Epidemiology of pelvic fractures and bio-markers associated with mortality in extra-peritoneal pelvic packing for haemorrhagic pelvic fractures
Dr Kevin Tetsworth	Prof Jeffrey Lipman , Dr Antony Rapisarda, Dr Sara Martinez-Martos	Identification of serum biomarkers for the diagnosis of orthopaedic infections and sepsis

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Dr Kevin Tetsworth , Dr Anna Woloszyk (Texas), Dr Vaida Glatt (Texas)	Selected as 1 st prize for the outstanding basic science paper: Biology of the Masquelet induced membrane: temporal differences in gene expression comparing human tibial and femoral specimens	28 th Annual Scientific Meeting of North American Limb Lengthening and Reconstruction Society, Boston, MA, USA, 19-20 July 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Assoc. Prof Michael Doran (QUT/TRI), Dr Kevin Tetsworth , Dr Cameron Cooke, Kathryn Futegra, Dr Kate Campbell, Mark Young, Jodie Robinson	Department of Orthopaedic Surgery	Using placenta-derived mesenchymal stem/stromal cells (pMSC) to repair non-union bone fractures	2018-2019 Cord Blood Research Grant (Inner Wheel Australia Foundation Trust)	\$65,000	\$30,000	2018-2019

2019 Research Publications

Journal Articles

- Hanly RJ**, Whitehouse SL, Lorimer M, de Steiger R, Timperley AJ, Crawford RW, van Bavel D. The outcome of cemented acetabular components in total hip replacement for osteoarthritis defines a proficiency threshold – results of 22,956 cases from the Australian Orthopaedic Association National Joint Replacement Registry. *J Arthroplasty*. 2019;34(8):1711-1717. <https://doi.org/10.1016/j.arth.2019.03.061>
- McAuliffe MJ, Garg G, Orschulok T, **Roe J**, Whitehouse SL and Crawford R. Coronal plane laxity of valgus osteoarthritic knee. *J of Orthopaedic Surg* 2019; 27(1): 1-8
- Hohmann E, Keough N, Glatt V, **Tetsworth K**, Putz R, Imhoff A. The mechanical properties of fresh versus fresh-frozen and preserved (Thiel and formalin) long head of biceps tendons: a cadaveric investigation. *Annals of Anatomy (Anatomischer Anzeiger)* 2019; <https://doi.org/10.1016/j.aanat.2018.05.002>
- Manjra MA, Naude J, Birkholtz F, Glatt V, **Tetsworth K**, Hohmann E. The relationship between gait and functional outcomes in patients treated with circular external fixation for malunited tibial fractures. *Gait and Posture* 2019. *Gait & Posture* 68: 569-574
- Tetsworth K**, Woloszyk A, Glatt V. 3D printed titanium cages combined with the Masquelet technique for the reconstruction of segmental femoral defects. Preliminary clinical results and molecular analysis of the biological activity of human induced membranes. *OTA International Journal* 2019; 2(1): e016; <http://dx.doi.org/10.1097/OI9.000000000000016>
- Hohmann E, Glatt V, **Tetsworth K**. Open versus arthroscopic acromioclavicular joint resection: a systematic review and meta-analysis. *Arch Orthop Trauma Surg* (2019). <https://doi.org/10.1007/s00402-019-03114-w>
- Hohmann E, **Tetsworth K**, Glatt V. The hamstring/quadriceps ratio is an indicator of function in ACL-deficient, but not in ACL-reconstructed knees. *Arch Orthop Trauma Surg* 2019; 139: 91-98. <https://doi.org/10.1007/s00402-018-3000-3>
- Tuckett P, Hope M, **Tetsworth K**, van de Pol J, McDougall C. Transarticular tibiototalcaneal nailing versus open reduction and internal fixation for treatment of the elderly ankle fracture: protocol for a multicentre, prospective, randomised controlled trial. *BMJ Open* 2019; 9: e026360. doi: 10.1136/bmjopen-2018-026360
- Thomson S, Thomson A, **Tetsworth K**, Lu W, Zreiqat H, Al Muderis M. Radiographic evaluation of bone remodeling around osseointegration implants among transfemoral amputees. *J Orthop Trauma*. 2019; 33: e303-e308. doi: 10.1097/BOT.00000000000001488
- Hohmann E, **Tetsworth K**, Glatt V. Operative treatment of Neer type II distal clavicle fractures. An overview of contemporary techniques. *JBJS Reviews* 2019; 7(5): e5; DOI: 10.2106/JBJS.RVW.18.00046

Journal Articles (cont)

11. Thomson S, Lu W, Zreiqat H, Li JJ, **Tetsworth K**, Muderis AM. Proximal bone remodeling in lower limb amputees reconstructed with an osseointegrated prosthesis. *J Orthop Res* 2019; 2019 Aug 19. doi: 10.1002/jor.24445
12. **Tetsworth K**, Glatt V. Tipping the balance: Manipulating the mechanical environment by reverse dynamization can accelerate bone healing. *J Limb Lengthen Reconstr* 2019; 5:1-3
13. Van Zyl R, Van Schoor AN, Du Toit PJ, Suleman FE, Velleman MD, Glatt V, **Tetsworth K**, and Hohmann E. The association between anterior cruciate ligament length and femoral epicondylar width measured on preoperative magnetic resonance imaging or radiograph. *Arthroscopy Sports Medicine and Rehabilitation* 2019; published ahead of print 23 December 2019
14. Hohmann E, Angelo R, Arciero R, Bach BR, Cole B, Cote M, Farr J, Feller J, Gelbhart B, Gomoll A, Imhoff A, LaPrade R, **Tetsworth K**, Glatt V: "Truss implant with rounded corners"; US Patent Application 15/804,008 2019
15. Bhandari M, Einhorn TA, Guyatt G, Schemitsch EH, Zura RD, Sprague S, Frihagen F, Guerra-Farfan E, Kleinlugtenbelt YV, Poolman RW, Rangan A, Bzovsky S, Heels-Ansdell D, Thabane L, Walter SD, Devereaux PJ, for the HEALTH Investigators. Total Hip Arthroplasty or Hemiarthroplasty for Hip Fracture. *N Engl J Med*. 2019 Dec 5;381(23):2199-2208. doi: 10.1056/NEJMoa1906190. Epub 2019 Sep 26. PMID: 31557429. (**Tetsworth K**, Steering Committee).

Book Chapters / Letters

1. Glatt V, Evans C, **Tetsworth K**. A concert between biology and biomechanics: The influence of the mechanical environment on bone healing, in Orsini G, Putignano A, Mitsiadis TA, eds. (2019), *Advances in Craniofacial and Dental Materials Through Nanotechnology and Tissue Engineering*. Lausanne: Frontiers Media. doi: 10.3389/978-2-88945-858-5
2. **O'Callaghan W**, Donnelly W: Prevention of total hip arthroplasty instability: leg length, offset, center of rotation in the age of robotic surgery, in Prof Catani Ed., *Robotic surgery for total hip and knee replacement*, Minerva Medical (Turin).

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Roe J**. Graft options at the knee. Queensland branch meeting of the AOA. Noosa, QLD May 2019
2. **Roe J**. ACL surgery: before, during, and after. Queensland Academy of Sport. Brisbane, QLD August 2019
3. **O'Callaghan W**. Three-dimensional CT based leg length evaluation is highly dependent on anatomical landmark selection and pelvic symmetry. AOA Annual Scientific Meeting, Canberra, ACT, 10 October 2019
4. **Van der Pol J**. Semi-extended tibial nailing: suprapatellar and lateral extra-articular approaches. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
5. **Van der Pol J**. Biology and Biomechanics of Intramedullary Nailing, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
6. **Tetsworth K**, O'Carrigan T. Post-traumatic ankle deformities: When is a child an adult? Limb Lengthening and Reconstruction Society – Specialty Day, AAOS Meeting, Las Vegas Nevada, USA. 16 March 2019
7. **Tetsworth K**. Gradual correction of knee flexion contractures. Limb Lengthening and Reconstruction Society – Specialty Day, AAOS Meeting, Las Vegas Nevada, USA. 16 March 2019
8. **Tetsworth K**, Al Muderis M. Reconstructing amputated limbs: osseointegration update 2019. Limb Lengthening and Reconstruction Society – Specialty Day, AAOS Meeting, Las Vegas Nevada, USA. 16 March 2019
9. Maine S, **Tetsworth K**. Rotational alignment of the knee extensor mechanism: the role of quadriceps torsion. Limb Lengthening and Reconstruction Society – Specialty Day, AAOS Meeting, Las Vegas Nevada, USA. 16 March 2019
10. **Tetsworth K**, Al Muderis M. Osseointegrated implants for lower limb amputees: evaluation of changes in bone mineral density over time. 1st Pan Arabic Meeting of Orthotics and Prosthetics, Amman, Jordan, 15-17 April 2019
11. **Tetsworth K**, Al Muderis M. Osseointegration with titanium press-fit implants in trans-tibial amputees. 1st Pan Arabic Meeting of Orthotics and Prosthetics, Amman, Jordan, 15-17 April 2019
12. **Tetsworth K**. Suppressive antibiotics for fracture related infections: who, when, why. Debugging the bug: Discussions regarding fracture related infections. 29th Mid-Year Meeting of the Philippines Orthopaedic Association. Vigan City, Ilocos Sur, Philippines, 24-26 April 2019
13. **Tetsworth K**. Options after implant removal: alternatives for the reconstruction of infected post-traumatic bone defects. Debugging the bug: Discussions regarding fracture related infections. 29th Mid-Year Meeting of the Philippines Orthopaedic Association. Vigan City, Ilocos Sur, Philippines, 24-26 April 2019
14. **Tetsworth K**. 2cd International consensus meeting Philadelphia 2019: open fracture recommendations. Debugging the bug: Discussions regarding fracture related infections. 29th Mid-Year Meeting of the Philippines Orthopaedic Association. Vigan City, Ilocos Sur, Philippines, 24-26 April 2019
15. **Tetsworth K**, Al Muderis M. Osseointegration for the reconstruction of devastating military and terrorist blast injuries. 4th World Orthopaedic Limb Reconstruction Congress: Combined Meeting of ASAMI and the ILLRS. Liverpool, UK, 27-30 August 2019
16. **Tetsworth K**. Pre-operative planning of lower extremity deformity: malalignment test, CORA method, and osteotomy rules. 5th Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
17. **Tetsworth K**. Taylor Spatial Frame: how does it differ from Ilizarov? 5th Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
18. **Tetsworth K**. Advantages of the Masquelet technique. 5th Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019

Invited Speakers (cont)

19. **Tetsworth K.** Combined techniques for the safe correction of very large tibial rotational deformities in adults. 5th Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
20. **Tetsworth K.** Osseointegration: the ultimate post-traumatic limb reconstruction? 5th Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
21. **Tetsworth K.** Peroneal nerve decompression. 5th Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
22. **Tetsworth K.** Talus Fracture Management. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
23. **Tetsworth K.** 3D modelling and printing in the management of segmental bone defects. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
24. **Tetsworth K.** Minimally invasive plate osteosynthesis for the stabilization of humeral shaft fractures. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
25. **Tetsworth K.** Distal humerus fracture exposure. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
26. **Tetsworth K.** Tibial plateau fractures: postero-medial and antero-lateral exposures. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
27. **Tetsworth K.** Peroneal nerve decompression. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
28. **Tetsworth K.** Neglected trauma: management of type 4 open tibia fractures. Management of Orthopaedic and Trauma Infections: Current Concepts and Future Challenges. Brisbane, Queensland, 8-9 February 2019
29. **Tetsworth K.** Treatment options for segmental skeletal defects. Management of Orthopaedic and Trauma Infections: Current Concepts and Future Challenges. Brisbane, Queensland, 8-9 February 2019
30. **Tetsworth K.** Extra-articular deformity and TKA. Orthopaedics Down Under: Complex Revision Arthroplasty and Infection, Sydney, New South Wales, 1-2 March 2019
31. **Tetsworth K.** Options to reconstruct the extensor mechanism after TKA. Orthopaedics Down Under: Complex Revision Arthroplasty and Infection, Sydney, New South Wales, 1-2 March 2019
32. **Tetsworth K.** The role of cemented femoral stems in revision THA. Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
33. **Tetsworth K.** How do we reduce the dislocation risk in revision THR? Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
34. **Tetsworth K.** Current standards for the treatment of joint infection in 2019: the ANZ perspective. Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
35. **Tetsworth K.** Core skills: IM nailing entry points. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
36. **Tetsworth K.** Difficult tibial nails: proximal, distal, and segmental fractures. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
37. **Tetsworth K.** Distal femur fractures: fracture reduction and blocking screws. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
38. **Tetsworth K.** Update: malunions and non-unions. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
39. **Tetsworth K.** Update: patient-specific 3D printed titanium cages to reconstruct massive femoral defects. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
40. **Tetsworth K** and O'Carrigan T. Ankle equinus deformity correction using external fixation. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
41. **Tetsworth K.** The history and evolution of limb lengthening and deformity correction. Australian Orthopaedic Trauma Society Annual Meeting, Cairns, Queensland, 20-23 June 2019
42. **Tetsworth K.** The biology of limb lengthening and bone regeneration. Australian Orthopaedic Trauma Society Annual Meeting, Cairns, Queensland, 20-23 June 2019
43. **Tetsworth K.** Core skills: IM nailing entry points. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 28 June 2019
44. **Tetsworth K.** Minimally invasive plate osteosynthesis for the stabilization of humeral shaft fractures. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
45. **Tetsworth K.** Distal humerus fracture exposure. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
46. **Tetsworth K.** Tibial plateau fractures: postero-medial and antero-lateral exposures. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
47. **Tetsworth K.** Peroneal nerve decompression. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
48. **Tetsworth K.** Neglected trauma: management of type 4 open tibia fractures. Management of Orthopaedic and Trauma Infections: Current Concepts and Future Challenges. Brisbane, Queensland, 8-9 February 2019

Invited Speakers (cont)

49. **Tetsworth K.** Treatment options for segmental skeletal defects. Management of Orthopaedic and Trauma Infections: Current Concepts and Future Challenges. Brisbane, Queensland, 8-9 February 2019
50. **Tetsworth K.** Extra-articular deformity and TKA. Orthopaedics Down Under: Complex Revision Arthroplasty and Infection, Sydney, New South Wales, 1-2 March 2019
51. **Tetsworth K.** Options to reconstruct the extensor mechanism after TKA. Orthopaedics Down Under: Complex Revision Arthroplasty and Infection, Sydney, New South Wales, 1-2 March 2019
52. **Tetsworth K.** The role of cemented femoral stems in revision THA. Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
53. **Tetsworth K.** How do we reduce the dislocation risk in revision THR? Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
54. **Tetsworth K.** Current standards for the treatment of joint infection in 2019: the ANZ perspective. Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
55. **Tetsworth K.** Core skills: IM nailing entry points. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
56. **Tetsworth K.** Difficult tibial nails: proximal, distal, and segmental fractures. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
57. **Tetsworth K.** Distal femur fractures: fracture reduction and blocking screws. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
58. **Tetsworth K.** Update: malunions and non-unions. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
59. **Tetsworth K.** Update: patient-specific 3D printed titanium cages to reconstruct massive femoral defects. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
60. **Tetsworth K** and O'Carrigan T. Ankle equinus deformity correction using external fixation. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
61. **Tetsworth K.** Semi-extended tibial nailing: suprapatellar and lateral extra-articular approaches. Intramedullary Nailing Techniques, Registrar Educational Course, Brisbane, Queensland, 28 June 2019
62. **Tetsworth K.** Difficult tibial nails: proximal, distal, and segmental fractures. Intramedullary Nailing Techniques, Registrar Educational Course, Brisbane, Queensland, 28 June 2019
63. **Tetsworth K.** Distal femur fractures: fracture reduction and blocking screws. Intramedullary Nailing Techniques, Registrar Educational Course, Brisbane, Queensland, 28 June 2019
64. **Tetsworth K.** Deformity assessment and management options. Taylor Spatial Frame Applications, Registrar Educational Course, Brisbane, Queensland, 29 June 2019
65. **Tetsworth K.** Correction of malunions and non-unions. Taylor Spatial Frame Applications, Registrar Educational Course, Brisbane, Queensland, 29 June 2019
66. **Tetsworth K.** Observational gait analysis. Australian Foot and Ankle Society Meeting, Gold Coast, QLD, 8 August 2019
67. **Tetsworth K.** Anterior intra-pelvic approach for acetabular fractures. OTC Masters Hip and Pelvis Surgery Course, Macquarie University Hospital, Sydney, NSW, 24-25 August 2019
68. **Tetsworth K.** Pitfalls in acetabular fracture surgery exposure. OTC Masters Hip and Pelvis Surgery Course, Macquarie University Hospital, Sydney, NSW, 24-25 August 2019
69. **Tetsworth K.** Posterior column screw insertion techniques. OTC Masters Hip and Pelvis Surgery Course, Macquarie University Hospital, Sydney, NSW, 24-25 August 2019
70. **Tetsworth K.** Plate bending techniques: posterior wall/posterior column. OTC Masters Hip and Pelvis Surgery Course, Macquarie University Hospital, Sydney, NSW, 24-25 August 2019
71. **Tetsworth K.** Osseointegration: innovations in trauma care. 22cd Meeting of the Australasian Trauma Society, Sydney, NSW, 5 October 2019
72. **Tetsworth K.** Tibial Shaft Fracture. Mini Masters Fracture Forum, Sydney, NSW, 7 November 2019
73. **Tetsworth K.** Proximal Tibia Fracture. Mini Masters Fracture Forum, Sydney, NSW, 7 November 2019
74. **Tetsworth K.** Biomechanics and a stable frame construct. Advanced Taylor Spatial Frame Applications, Registrar Educational Course, Auckland, New Zealand, 9 November 2019
75. **Tetsworth K.** Preoperative planning: complex fractures and post-traumatic deformity. Advanced Taylor Spatial Frame Applications, Registrar Educational Course, Auckland, New Zealand, 9 November 2019
76. **Tetsworth K.** Orthopaedic surgery in the 21st Century: integration of engineering and medicine. Macquarie University Medical/Engineering Research Collaboration Workshop, Macquarie Park, NSW, 7 June 2019
77. **Tetsworth K.** Introduction to osseointegration for the reconstruction of amputated limbs. University of Louisville Medical Center, Louisville, Kentucky, USA, 29 July 2019
78. **Tetsworth K.** Antibiotic spacers for staged management of prosthetic joint infection. Orthopaedic Grand Rounds, Multi-disciplinary Approach to Prosthetic Joint Infection, St George Private Hospital, Sydney, NSW, 22 August 2019

Oral Presentations

1. **Van der Pol J.** Tunnel widening and graft incorporation in short vs long tunnel ACL reconstruction. French Sports Medicine Society, GRAAL ACL Symposium, Paris, France 23 November 2019
2. **Tetsworth K,** Woloszyk A, Glatt V. Biology of the Masquelet induced membrane: temporal differences in gene expression comparing human tibial and femoral specimens (selected 1st prize outstanding basic science paper). 28th Annual Scientific Meeting of North American Limb Lengthening and Reconstruction Society, Boston, MA, USA, 19-20 July 2019
3. **Tetsworth K,** Glatt V. Preliminary results using patient specific 3D printed titanium cages for the reconstruction of massive femoral bone loss. 4th World Orthopaedic Limb Reconstruction Congress: Combined Meeting of ASAMI and the ILLRS. Liverpool, UK, 27-30 August 2019
4. **Tetsworth K,** Woloszyk A, Glatt V. Masquelet induced membrane biology: temporal differences in gene expression comparing tibial and femoral samples (selected among the top 4 papers, Best of the Best session). 4th World Orthopaedic Limb Reconstruction Congress: Combined Meeting of ASAMI and the ILLRS. Liverpool, UK, 27-30 August 2019.

Details of staff that completed their PhDs in 2019 within your department / research group

Name	Name of Project	Completed Date	Affiliated University/ies
Dr Bilal Zahoor	A cohort of pelvic fractures at a single Australian tertiary referral center 2010-2016: Epidemiology of pelvic fractures and bio-markers associated with mortality in extra-peritoneal pelvic packing for haemorrhagic pelvic fractures	December 2019	University of Queensland

Other communications and outputs:

Dr Dennis Hartig Google Scholar Profile: <https://scholar.google.com.au/citations?user=VY5f5jAAAAAJ&hl=en>

Dr Jerry van de Pol Google Scholar Profile: <https://scholar.google.com.au/citations?user=hp0pFGMAAAAJ&hl=en>

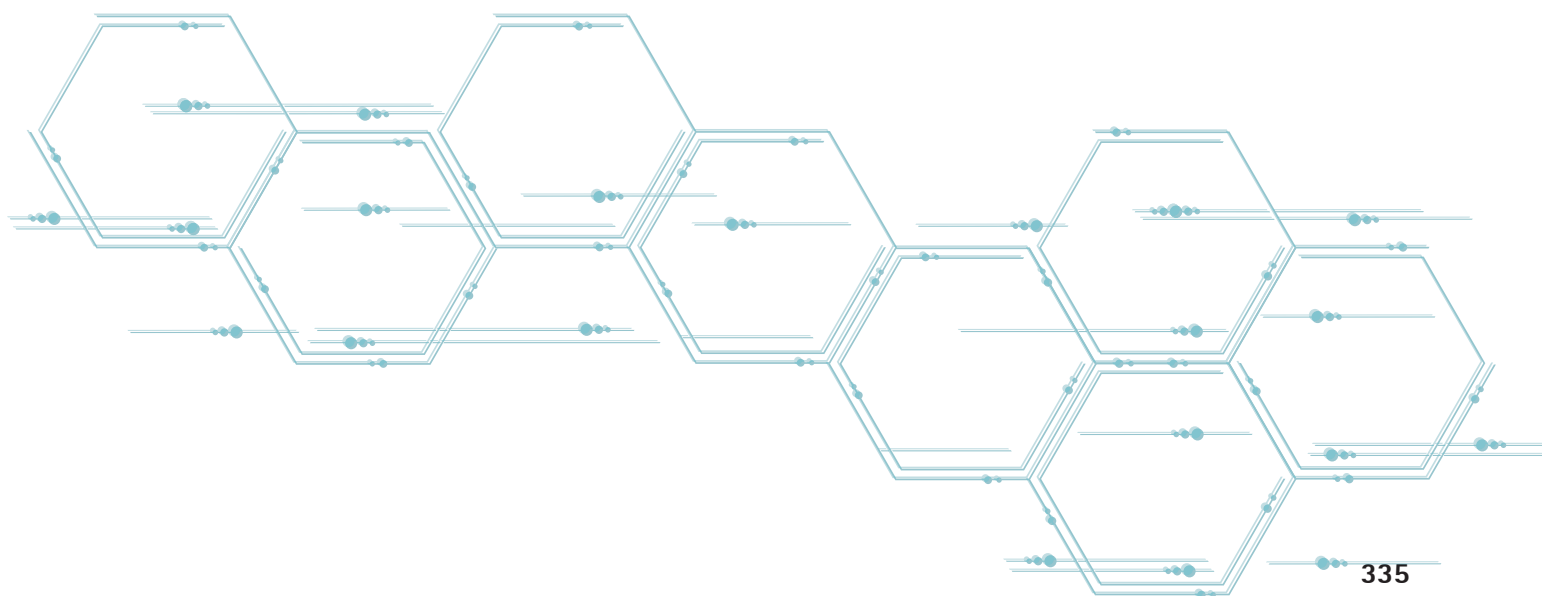
Dr Kevin Tetsworth on the AOA Research Networking Map: <https://www.aoa.org.au/research/researchmap>

Dr Kevin Tetsworth Google Scholar Profile: <https://scholar.google.com.au/citations?user=bx9ktUgAAAAAJ&hl=en>

Dr Kevin Tetsworth ResearchGate Profile: https://www.researchgate.net/profile/Kevin_Tetsworth

Dr Kevin Tetsworth PubMed/NCBI:

<https://www.ncbi.nlm.nih.gov/sites/myncbi/1nUyisxHnhkQe/bibliography/53341976/public/?sort=date&direction=ascending>



DEPARTMENT OF OTOLARYNGOLOGY, HEAD & NECK SURGERY (EAR, NOSE & THROAT)

The trial on the Dupilumab (monoclonal IL-4 and IL-13 antibody) for chronic sinusitis with nasal polyps performed at the ENT Department of RBWH and other sites, has now been published in the Lancet. (Lancet 2019 Nov 2;394 1638-50).

Participating in developing new European Guidelines for the treatment of Chronic Rhinosinusitis (EPOS2020: development strategy and goals for the latest European Position Paper on Rhinosinusitis. Rhinology. 2019).

Member of the International Society of Otitis Media (ISOM) NIH supported Research panel on Microbiome of Otitis Media (OM)/ Microbial Shifts with use of antibiotics and/or broad licensure and use of vaccines. Hollywood, USA, June 2019.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Andrea Coleman	PhD UQ	The microbiome of otitis media and development of a probiotic to prevent otitis media in Australian Indigenous children	Prof Anders Cervin , Dr Seweryn Bialasiewicz, Dr Eva Grahn-Hakansson
Dr Anders Martensson	PhD <i>(Lund University, Sweden)</i>	Microbiome therapy of chronic rhinosinusitis	Prof Anders Cervin , Prof Lennart Greiff
Sinead Ahern	PhD UQ	Cytokines in chronic rhinosinusitis	Prof Anders Cervin
Dr Nathan Quigley	MPhil UQ	Systematic Evaluation of Laryngopharyngeal Investigations in LPR	Dr Sarju Vasani , Prof Anders Cervin
Dr Zhen Liu	MPhil UQ	HPV as a biomarker in monitoring OPSCC following treatment	Dr Sarju Vasani , Prof Chamindie Punyadeera, Prof Lizbeth Kenny
Dr Jennifer Chen	MPhil UQ	Narrowband Imaging and Low dose CT in screening Head and Neck Cancer patients for Upper and Lower airway second primary and recurrence	Dr Sarju Vasani , Prof David Fielding

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Kathryn Girling	Research Nurse, Clinical Trials Coordinator	0.6	Externally Funded	Intranasal steroid depot for chronic sinusitis; Probiotic for chronic sinusitis; Clinical management of HHT	University of Queensland
Dr Diane Maresco-Penisi	Research Manager	0.6	Externally Funded	Probiotic treatment of otitis media and chronic sinusitis	University of Queensland
Dr Zhen Liu	Research Coordinator	0.4	Externally funded	Head and Neck and Skull Base Cancer research	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Anders Cervin	Rhinology Fellow	iPro8, a nasal probiotic spray for purulent chronic rhinosinusitis
Dr James Earnshaw, Prof Anders Cervin	N/A	Avastin nasal spray in hereditary haemorrhagic teleangiectasia
Dr James Earnshaw, Prof Anders Cervin	Dr Cameron Grigg , Dr Chin Mun Soong (<i>TPCH</i>)	Propranolol in hereditary haemorrhagic teleangiectasia
Dr Ryan Sommerville	Dr Charles Lin, Dr Brett Hughes, Dr Ashvini Abeysekera, Dr Touraj Taheri, Dr Catherine Barnett , Dr Michele Teng (<i>QIMR</i>)	Investigation of CXCR4, PD-1 and CD-8 T cells in Perineural Spread
Dr Ryan Sommerville	Dr Charles Lin, Dr Jennifer Gillespie, Dr Ashvini Abeysekera , Dr Marcus Barth (<i>UQ</i>), Dr Aiman Al-Najjar (<i>UQ</i>)	Use of high resolution 3T and ultra-high resolution 7T MRI in assessment of perineural spread
Dr Ryan Sommerville	Dr Touraj Taheri, Dr Charles Lin , Dr Ann-Marie Patch (<i>QIMR</i>), Dr Katia Nones (<i>QIMR</i>)	Immunogenomics of Perineural Spread in Head and Neck Cutaneous Squamous Cell Carcinomas
Dr Ryan Sommerville	N/A	Collaborative research into head and neck cancer via Material Transfer Agreement with Jefferson University, Pennsylvania
Dr Sarju Vasani	A/Prof Chamindie Punyadeera (<i>QUT</i>), Prof Laurie Walsh , Prof Lizbeth Kenny , A/Prof Brett Hughes , Dr Kai Tang	HPV in OPSCC research group

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Christine Cong Guo (<i>QUT</i>)	Prof Anders Cervin	Developing early biomarkers for Alzheimer's disease using olfactory mucosa
Dr Robyn Marsh (<i>Menzies Darwin</i>), Dr Rachel Lappan (<i>Telethon, Perth</i>)	Prof Anders Cervin	The Australian Microbiota in Otitis Media Network
Prof Phil Hugenholtz (<i>UQ</i>) Dr Seweryn Bialasiewicz (<i>UQ</i>)	Prof Anders Cervin	Microbiome in Otitis Media and Metagenomics of the upper airway microbiome
Prof Kirsten Spann (<i>UQ</i>)	Prof Anders Cervin	Defects in antiviral defence in the upper airways of children susceptible to ear infections and/or lower respiratory tract infections
Dr Annika Antonsson (<i>QIMR</i>)	Prof Anders Cervin	Natural history of oral HPV infection – what risk factors are associated with persistent oral HPV infections?
Dr Hon Trinh	Dr Ryan Sommerville	Genomic characterisation of Sinonasal Undifferentiated Carcinoma
Assoc. Prof Chamindie Punyadeera	Dr Sarju Vasani	HPV in OPSCC

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Ryan Sommerville, Dr Charles Lin, Dr Brett Hughes, Dr Ashvini Abeysekera, Dr Touraj Taheri, Dr Catherine Barnett , Dr Michele Teng (<i>QIMR</i>)	ENT	Investigation of CXCR4, PD-1 and CD-8 T cells in Perineural Spread	RBWH Diamond Care Grant	\$33,695	\$10,000	2018-2020
Dr Ryan Sommerville, Dr Charles Lin, Dr Jennifer Gillespie, Dr Ashvini Abeysekera , Dr Marcus Barth (<i>UQ</i>), Dr Aiman Al-Najjar (<i>UQ</i>)	ENT	Use of high resolution 3T and ultra-high resolution 7T MRI in assessment of perineural spread	RBWH Diamond Care Grant	\$31,200	\$10,000	2018-2020

2019 Research Publications

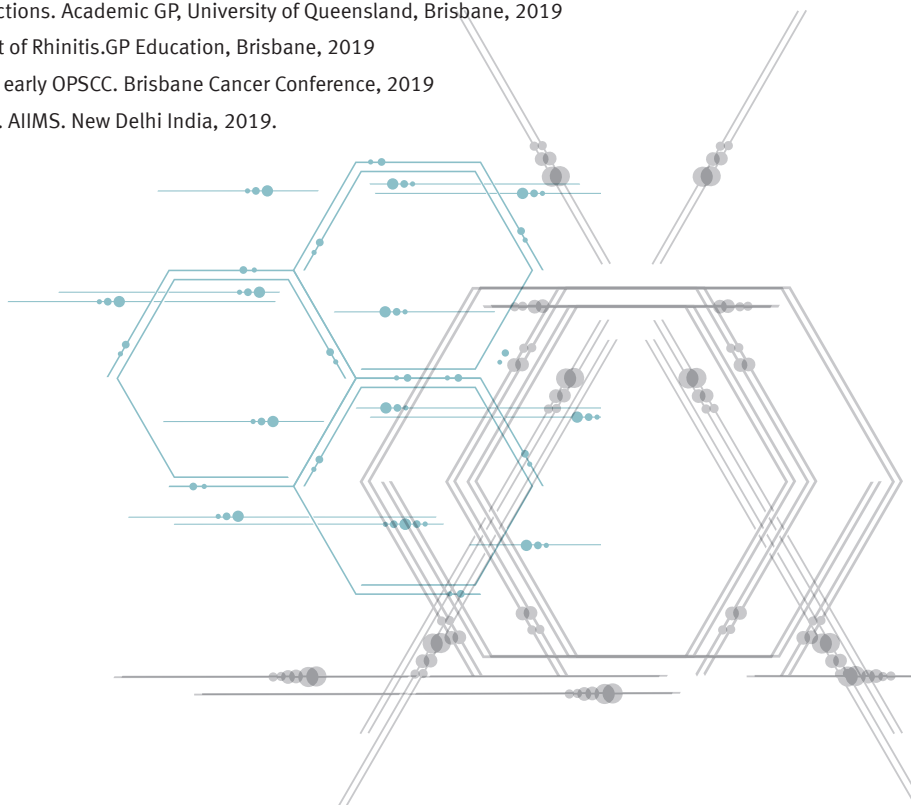
Journal Articles

1. Marsh RL, Aho C, Beissbarth J, Bialasiewicz S, Binks M, **Cervin A**, Kirkham LS, Lemon KP, Slack MPE, Smith-Vaughan HC. Recent advances in understanding the natural history of the otitis media microbiome and its response to environmental pressures. *Int J Pediatr Otorhinolaryngol*. 2019 Dec 18;109836. doi: 10.1016/j.ijporl.2019.109836
2. Bachert C, Han JK, Desrosiers M, Hellings PW, Amin N, Lee SE, Mullol J, Greos LS, Bosso JV, Laidlaw TM, **Cervin A**, Maspero JF, Hopkins C, Olze H, Canonica GW, Paggiaro P, Cho SH, Fokkens WJ, Fujieda S, Zhang M, Lu X, Fan C, Draikiwicz S, Kamat SA, Khan A, Pirozzi G, Patel N, Graham NMH, Ruddy M, Staudinger H, Weinreich D, Stahl N, Yancopoulos GD, Mannent LP. Efficacy and safety of dupilumab in patients with severe chronic rhinosinusitis with nasal polyps (LIBERTY NP SINUS-24 and LIBERTY NP SINUS-52): results from two multicentre, randomised, double-blind, placebo-controlled, parallel-group phase 3 trials. *Lancet*. 2019 Nov 2;394(10209):1638-1650. doi: 10.1016/S0140-6736(19)31881-1
3. Balch G, Heal C, **Cervin A**, Gunnarsson R. Oral corticosteroids for painful acute otitis externa (swimmer's ear): A triple-blind randomised controlled trial. *Aust J Gen Pract*. 2019 Aug;48(8):565-572. doi: 10.31128/AJGP-12-18-4795
4. Fokkens W, Desrosiers M, Harvey R, Hopkins C, Mullol J, Philpott C, Alobid I, Anselmo-Lima WT, Bachert C, Baroody F, Bernal-Sprekelsen M, von Buchwald C, **Cervin A**, Cohen N, Constantinidis J, De Gabory L, Douglas R, Gevaert P, Hafner A, Hellings P, Joos G, Kalogjera L, Kern R, Knill A, Kocks J, Landis BN, Limpens J, Lebeer S, Lourenco O, Matricardi PM, Meco C, O Mahony L, Reitsma S, Ryan D, Schlosser R, Senior B, Smith T, Teeling T, Tomazic PV, Toppila-Salmi S, Wang DY, Wang D, Zhang L, Lund V. EPOS2020: development strategy and goals for the latest European Position Paper on Rhinosinusitis. *Rhinology*. 2019 Jun 1;57(3):162-168. doi: 10.4193/Rhin17.253
5. Douglas RG, Psaltis AJ, Rimmer J, Kuruvilla T, **Cervin A**, Kuang Y. Phase 1 clinical study to assess the safety of a novel drug delivery system providing long-term topical steroid therapy for chronic rhinosinusitis. *Int Forum Allergy Rhinol*. 2019 Apr;9(4):378-387. doi: 10.1002/alr.22288
6. Coleman A, **Cervin A**. Probiotics in the treatment of otitis media. The past, the present and the future. *Int J Pediatr Otorhinolaryngol*. 2019 Jan; 116:135-140. doi: 10.1016/j.ijporl.2018.10.023
7. Bell-Allen N, **Cervin A**, **Vasani S**. Trends in the quality & quantity of otorhinolaryngology research in Australia: 1989-2018. *Australian Journal of Otolaryngology*. 2019 Nov 4;2.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Presentations

1. **Cervin A**. In Office Turbinoplasty – the Royal Brisbane & Women's Hospital Experience. ASOHNS, Melbourne, 2019
2. **Cervin A**. Probiotic therapy in upper airway disease – what is the evidence? ASOHNS, Melbourne, 2019
3. **Cervin A**. Adult chronic rhinosinusitis update on medical management (Panel). Rhinoworld, Chicago, USA, 2019
4. **Cervin A**. Surgical failures, how to predict (Panel). Rhinoworld, Chicago, USA, 2019
5. **Cervin A**. Doxycycline and macrolides for chronic rhinosinusitis (Presentation and Panel). Rhinoworld, Chicago, USA, 2019
6. **Cervin A**. Sinonasal microbiome transplant for chronic rhinosinusitis without nasal polyps. Patient reported outcomes and effect on nasal cytokines. Australia and New Zealand Rhinologic Society, Melbourne, 2019
7. **Cervin A**. Post-operative management following sinus surgery (Panel). Australia and New Zealand Rhinologic Society, Melbourne, 2019
8. **Cervin A**. Probiotics and respiratory tract infections. Academic GP, University of Queensland, Brisbane, 2019
9. **Cervin A**. Modern diagnosis and management of Rhinitis.GP Education, Brisbane, 2019
10. **Vasani S**. Salivary HPV as a screening tool for early OPSCC. Brisbane Cancer Conference, 2019
11. **Vasani S**. Laryngectomy functional technique. AIIMS. New Delhi India, 2019.



DEPARTMENT OF PLASTIC & RECONSTRUCTIVE SURGERY

The ongoing project on Lip SCC Metastasis has now become a multi-centre study with data collected from the Princess Alexandra Hospital. With the data from the Royal Brisbane and Women's Hospital this is the largest study of its kind in the world with an expected publication in 2020.

Effective work has been carried out on developing new reconstructive options that require coverage of large skin defects and concomitant bone defects.

There have been strong collaborations within the Department and between the departments of Radiation Oncology and Medical Oncology. These collaborations have enabled a combination of novel immunotherapy treatments and surgery (both pre and post).

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
Dr Matthew Peters	Senior Lecturer	N/A	External (UQ)	Plastic and reconstructive surgery	University of Queensland
Dr Cameron Mackay	Senior Lecturer	N/A	External (UQ)	Hand and reconstructive surgery	University of Queensland
Dr Eddie Cheng	Clinical Lecturer	N/A	External (UQ)	Plastic and reconstructive surgery	University of Queensland; Bond University
Dr Drew Cronin	Clinical Lecturer	N/A	External (UQ)	Plastic and reconstructive surgery	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Darryl Dunn	Dr Michael Wagels (PAH)	A multicentre trial of lymph node metastatic disease in lip squamous cell carcinoma

2019 Conference Presentations – Invited Speaker, Oral and Poster

Oral Presentations

- O'Hare C, Calvisi R, Wagels M, **Dunn D**. Squamous cell carcinoma of the lip lymph node metastasis. Australian New Zealand Head and Neck Cancer Society Meeting, Adelaide, Sept 2019
- Jansen Van Rensburg A, Dunn D**. Anterolateral thigh osteomyocutaneous (ALTO) flap in mandibular reconstruction for head and neck cancer. Australian New Zealand Head and Neck Cancer Society Meeting, Adelaide, Sept 2019
- Bilbao RT, Kyle S, Inglis P, Rughani MG**. Surgery after adjuvant treatment in melanoma: a novel technique for excising metastases
- Combining nuclear medicine and surgery for melanoma metastases: a novel technique in Queensland. The Multidisciplinary Melanoma Service, Royal Brisbane & Women's Hospital, Brisbane, 2019.

DEPARTMENT OF UROLOGY

2019 was another strong year for research within the RBWH Department of Urology with a total of 45 research papers published. The large amount of data generated from results of PSMA PET scanning has led to several papers defining the utility and indications for the scan in staging prostate cancer, as well as its relatively novel use in high risk/advanced clear cell renal cancer.

We published robust clinical outcomes of our protocol whereby men with an elevated PSA are triaged to an MRI scan before their first outpatient visit where clinicians can make an informed decision whether to recommend a biopsy. Given that 1 in 5 men are diagnosed with prostate cancer in their lifetime, initiatives such as this are important to reduce the diagnosis of clinically insignificant cancer and reduce the burden on the public purse.

Dr John Yaxley and **Prof RA “Frank” Gardiner** and their team have been successful in gaining a \$500,000 research grant from RBWH Foundation to further refine the diagnostic approach to prostate cancer through imaging and biomarkers.

Additionally, **Dr Matthew Roberts**, who will be joining our team in 2020, was awarded a Metro North Clinical Research Fellowship (four years clinical backfill) to establish the Metro North Urological Research Centre, a world class Urological research unit based at the RBWH with close collaboration throughout MNHHS Urology (TPCH, Redcliffe) and other medical units (radiation and medical oncology, medical imaging and nuclear medicine, infectious diseases, renal medicine, clinical pharmacology) as well as with allied health and laboratory-based colleagues. This will specifically focus on developing, improving and using methodologies to improve diagnosis, guide prognosis and optimise cancer treatments.

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Prof Frank Gardiner	Professor	Urology, Faculty of Medicine	University of Queensland
Assoc. Prof John Yaxley	Associate Professor	Urology, Faculty of Medicine	University of Queensland
Dr Matthew Roberts	Senior Lecturer	Beyond the scalpel: surgeon-led multidisciplinary urological care with innovative precision diagnostics and therapeutics (Clinician Research Fellowship)	University of Queensland

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Dr Andrew Morton	2019 Queensland RACS Papers Prize Competition	RACS Queensland State Conference

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Geoff Coughlin, Assoc. Prof Matthew Roberts, et al	Urology	A prospective randomized controlled trial of Partial nephrectomy using Open, Laparoscopic or Robotic surgical approach (POLAR)	Royal Brisbane and Women’s Hospital Foundation	\$40,000	\$40,000	2019

2019 Research Publications

Journal Articles

1. Ali S, Ahn T, Papa N, Perera M, **Teloken P, Coughlin G**, Wood ST, **Roberts MJ**. Changing trends in surgical management of renal tumours from 2000 to 2016: a nationwide study of Medicare claims data. *ANZ J Surg* 2019; Sep 2
2. **Coughlin GD**, Youl PH, Philpot S, Wright MJ, Honore M, Theile DE. Outcomes following radical cystectomy: a population-based study from Queensland Australia. *ANZ J Surg*, 2019. 89(6): 752-757
3. **Donato P, Morton A, Yaxley J, Ranasinghe S, Teloken**, Kyle S, **Coughlin G, Esler R, Dungleison N, Gardiner RA, Roberts MJ**. (68) Ga-PSMA PET/CT better characterises localised prostate cancer after MRI and transperineal prostate biopsy: Is (68) Ga-PSMA PET/CT guided biopsy the future? *Eur J Nucl Med Mol Imaging* 2020; 7 Jan
4. **Donato P, Morton A, Yaxley J, Teloken PE, Coughlin G, Esler R, Dungleison N, Gardiner RA, Roberts MJ**. Improved detection and reduced biopsies: the effect of a multiparametric magnetic resonance imaging-based triage prostate cancer pathway in a public teaching hospital. *World J Urol*, 2020; 38(2): 371-379
5. Hodges P, Stafford R, **Coughlin GD**, Kasza J, Ashton-Miller J, Cameron AP, Connelly L, Hall LM. Efficacy of a personalised pelvic floor muscle training programme on urinary incontinence after radical prostatectomy (MaTchUP): protocol for a randomised controlled trial. *BMJ Open* 2019; 9(5): e028288
6. **Honore M, Roberts MJ, Morton A, Teloken PE, Navaratnam A, Coughlin GD**. Outcomes and learning curve for robotic-assisted radical cystectomy: an Australian experience. *ANZ J Surg* 2019; 89(12): 1593-1598
7. Lieng H, Kneebone A, Hayden AJ, Christie DRH, Davis BJ, Eade TN, Emmett L, Holt T, Hruby G, Pryor D, Sidhom M, Skala M, **Yaxley J**, Shakespeare TP. Radiotherapy for node-positive prostate cancer: 2019 recommendations of the Australian and New Zealand Radiation Oncology Genito-Urinary group. *Radiother Oncol*, 2019; 140: 68-75
8. **Macdonald A, Roberts MJ**. Editorial Comment from Dr Macdonald and Dr Roberts to use of fosfomycin as targeted antibiotic prophylaxis before prostate biopsy: a prospective randomized study. *Int J Urol* 2019; 26(3): 397-398
9. **Navaratnam A**. Author reply. *Urology* 2019; 134: 133-134
10. **Navaratnam A**, Faraj K, Rose K, Abdul-Muhsin H, Singh V, Schwartz A, Beauchamp C, Castle EP. Robot assisted cystectomy with holmium laser debridement for osteomyelitis of the pubic symphysis with urinary fistula. *Urology* 2019; 134: 124-134
11. Newton RU, Galvao DA, Spry N, Joseph D, Chambers SK, **Gardiner RA**, Wall BA, Bolam KA, Taaffe DR. Exercise mode specificity for preserving spine and hip bone mineral density in prostate cancer patients. *Med Sci Sports Exerc* 2019; 51(4): 607-614
12. Occhipinti S, Zajdlewicz L, **Coughlin GD, Yaxley JW, Dungleison N, Gardiner RA**, Chambers SK. A prospective study of psychological distress after prostate cancer surgery. *Psychooncology* 2019; 28(12): 2389-2395
13. **Raveenthiran S, Esler R, Yaxley J**, Kyle S. The use of (68) Ga-PET/CT PSMA in the staging of primary and suspected recurrent renal cell carcinoma. *Eur J Nucl Med Mol Imaging* 2019; 46(11): 2280-2288
14. **Raveenthiran S, Yaxley J**, Gianduzzo T, Kua B, McEwan L, Wong D, Tsang G, MacKean J. The use of (68) Ga-PET/CT PSMA to determine patterns of disease for biochemically recurrent prostate cancer following primary radiotherapy. *Prostate Cancer Prostatic Dis* 2019; 22(3): 385-390
15. **Roberts MJ**, Papa N, Perera M, Joshi A, Scott S, Bolton D, Lawrentschuk N, **Yaxley J**. Declining use of radical prostatectomy and pelvic lymphadenectomy despite more robotics: national population data over 15 years. *Asia Pac J Clin Oncol* 2019; May 6. doi: 10.1111/ajco.13158
16. **Roberts MJ**, Papa N, Perera M, Scott S, **Teloken PE**, Joshi A, Vela I, Pryor D, Martin J, Woo H. A contemporary, nationwide analysis of surgery and radiotherapy treatment for prostate cancer. *BJU Int* 2019; 124 (S1): 31-36
17. Samaratunga H, Delahunt B, Egevad L, Srigley JR, Billis A, Bostwick DG, Camparo P, Cheng L, Clouston D, Denham J, Furusato B, Hartmann A, Jufe L, Kench J, Kenwright JN, Kristiansen G, Leite KRM, MacLennan GT, Merrimen J, Moch H, Oxley J, Pan CC, Paner G, Ro J, Sesterhenn IAM, Shanks J, Thunders M, Tsuzuki T, Wheeler T, **Yaxley JW**, Varma M. Intraductal carcinoma of the prostate is an aggressive form of invasive carcinoma and should be graded. *Pathology* 2020; 52(2): 192-196
18. Srigley JR, Delahunt B, Samaratunga H, Billis A, Cheng L, Clouston D, Evans A, Furusato B, Kench J, Leite K, MacLennan G, Moch H, Pan CC, Rioux-Leclercq N, Ro J, Shanks J, Shen S, Tsuzuki T, Varma M, Wheeler T, **Yaxley J**, Egevad L. Controversial issues in Gleason and International Society of Urological Pathology (ISUP) prostate cancer grading: proposed recommendations for international implementation. *Pathology* 2019; 51(5): 463-473
19. Stafford RE, **Coughlin G**, Hodges PW. Comparison of dynamic features of pelvic floor muscle contraction between men with and without incontinence after prostatectomy and men with no history of prostate cancer. *NeuroUrol Urodyn* 2020; 39(1): 170-180
20. Taaffe DR, Galvao DA, Spry N, Joseph D, Chambers SK, **Gardiner RA**, Hayne D, Cormie P, Shum DHK, Newton RU. Immediate versus delayed exercise in men initiating androgen deprivation: effects on bone density and soft tissue composition. *BJU Int* 2019; 123(2): 261-269
21. Tanaka K, Amoako AA, **Gray K**, Baartz D. Unilateral ureteric endometriosis at the pelvic brim resulting in complete loss of renal function. *Case Rep Obstet Gynecol* 2019 Oct 13; 2019: 9194615
22. **Teloken P**, Katz D. Medical management of Peyronie's disease: review of the clinical evidence. *Med Sci (Basel)* 2019 Sep 18; 7(9): E96
23. Truong V, Finch R, **Martin B**, Buzacott K, Singh M, Patel B. Littoral cell angioma of spleen. *ANZ J Surg* 2019; 89(4): E158-159
24. **Yaxley JW**. Will favourable functional results with salvage robot-assisted laparoscopic radical prostatectomy increase the uptake of primary focal therapy for localised prostate cancer? *Eur Urol* 2019; 76(1): 31-32
25. **Yaxley JW, Raveenthiran S**, Nouhaud FX, Samaratunga H, **Yaxley WJ, Coughlin G**, Yaxley AJ, Gianduzzo T, Kua B, McEwan L, Wong D. Risk of metastatic disease on (68) gallium-prostate-specific membrane antigen positron emission tomography/computed tomography scan for primary staging of 1253 men at the diagnosis of prostate cancer. *BJU Int* 2019; 124(3): 401-407

Journal Articles (cont)

26. **Yaxley JW, Raveenthiran S, Nouhaud FX**, Samartunga H, Yaxley AJ, **Coughlin G**, Delahunt B, Egevad L, McEwan L, Wong D. Outcomes of primary lymph node staging of intermediate and high risk prostate cancer with (68)Ga-PSMA positron emission tomography/computerized tomography compared to histological correlation of pelvic lymph node pathology. *J Urol* 2019; 201(4): 815-820
27. Yoneyama T, Tobisawa Y, Kaneko T, Kaya T, Hatakeyama S, Mori K, Sutoh Yoneyama M, Okubo T, Mitsuzuka K, Duivenvoorden W, Pinthus JH, Hashimoto Y, Ito A, Koie T, Suda Y, **Gardiner RA**, Ohyama C. Clinical significance of the LacdiNAC-glycosylated prostate-specific antigen assay for prostate cancer detection. *Cancer Sci* 2019; 110(8): 2573-2589
28. Franklin A, Gianduzzo A, **Yaxley J**, Kua B, Coughlin G, Samarantunga H, Gianduzzo T. The use of a trizonal schema to assess targeting accuracy of fusion prostate biopsy. *BJU International Suppl* 2019; 0992.R1
29. Occhipinti S, Zajdlewicz L, Coughlin G, **Yaxley J**, **Dunglison N**, Gardiner RA, Chambers S. A prospective study of psychological distress after prostate cancer surgery. *Psycho-Oncology* 2019; 28(12): 2389-2395
30. Pereira R, Joshi A, Roberts M, **Yaxley J**, Vela I. Open retropubic radical prostatectomy *Transl Androl Urol* 2019 doi.org/10.21037/tau.2019.09.15
31. Delahunt B, Dagher J, Egevad L, **Yaxley J**, Varma M, Samarantunga H. Is the uicc/ajcc pt2 staging category for clear cell renal cell carcinoma meaningful? *Am J Surg Pathol*. 2019 Jun 18. doi: 10.1097/PAS.0000000000001308
32. Leing H, Kneebone A, Hayden A, Christie D, Davis B, Eade T, Emmett L, Holt T, Hriby G, Pryor D, Sidhom M, Skala M, **Yaxley JW**, Shakesphere T. Radiotherapy for node positive prostate cancer: recommendations of the Australian and New Zealand Radiation Oncology Genitourinary Group. *Radiother Oncol*. 2019 Jun 6; 140:68-75. doi: 10.1016/j.radonc.2019.05.016
33. Lindh C, Kis L, Delahunt B, Samarantunga H, **Yaxley J**, Wiklund P, Clements M, Egevad L. PD-L1 Expression and deficient mismatch repair in ductal adenocarcinoma of the prostate *APMIS Journal of Pathology Microbiology and Immunology* 2019; 127: 554–560. doi: 10.1111/apm.12970
34. Pokorny M, **Yaxley J**. Three-dimensional elastic augmented reality for robot assisted laparoscopic prostatectomy: pushing the boundaries but cutting it fine. *Eur Urol*. 2019 Oct;76(4):515-516. doi: 10.1016/j.eururo.2019.04.025
35. McEwan L, McBean R, **Yaxley J**, Wong D. Unexpected significant findings non-related to prostate cancer identified using combined prostate-specific membrane antigen positron emission tomography/CT and diagnostic CT scan in primary staging for prostate cancer. *J Med Imaging Radiat Oncol*. 2019 Jun;63(3):318-323. doi: 10.1111/1754-9485.12864
36. Delahunt B, Eble J, Egevad L, **Yaxley J**, Thunders M, Samarantunga H. Emerging entities of renal cell neoplasia. *Surgical and Experimental Pathology* 2019; 2:10. doi.org/10.1186/s42047-019-0035-x
37. Egevad L, Delahunt B, **Yaxley J**, Samarantunga H. Evolution, controversies and the future of prostate cancer grading. *Pathol Int*. 2019 Feb;69(2):55-66. doi: 10.1111/pin.12761
38. Pokorny M, **Esler R**, **Yaxley J**, Kua B, Samarantunga H, **Dunglison N**, Gianduzzo T, Coughlin G, Holt R, Laing B, Ault D, Brown N, Parkinson R, Thompson L. MRI guided In-Bore biopsy for prostate cancer - what does the evidence say? A case series of 554 patients and a review of the current literature. *World J Urol*. 2019 Jul;37(7):1263-1279. doi: 10.1007/s00345-018-2497-y
39. Newton RU, Galvão DA, Spry N, Joseph D, Chambers SK, **Gardiner RA**, Wall BA, Bolam KA, Taafe DR. Exercise Mode Specificity for Preserving Spine and Hip Bone Mineral Density in Prostate Cancer Patients. *Med Sci Sports Exerc* 2019 Apr; 51(4):607-614
40. Taafe DR, Galvão DA, Spry N, Joseph D, Chambers SK, **Gardiner RA**, Hayne D, Cormie P, Shum DHK, Newton RU. Immediate versus delayed exercise in men initiating androgen deprivation: effects on bone density and soft tissue composition. *BJU Int*. 2019 Feb;123(2):261-269
41. Faraj KS, Abdul-Muhsin HM, Rose KM, **Navaratnam AK**, Patton MW, Eversman S, Singh R, Eversman WG, Cheney SM, Tyson MD, Castle EP. Robot assisted radical cystectomy vs open radical cystectomy: over 10 years of the Mayo Clinic experience. *Urologic Oncology* 2019; 37(12): 862-869.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Oral Presentations

1. **Donato P, Morton A, Coughlin G, Esler R, Dunglison N, Gardiner RA, Yaxley J, Roberts M**. Could 68Ga-PSMA PET/CT play a role in primary prostate cancer localization? A single institution comparative analysis of 68Ga-PSMA PET/CT, multiparametric MRI and prostate biopsy. EAU ASC, Barcelona, 2019
2. **Morton A, Donato P, Roberts M, Yaxley J**. Increased primary tumour maximal standardized uptake value on 68Ga-PSMA PET/CT correlates with histologically aggressive prostate cancer. SIU ASC, Athens, 2019.

Poster Presentations

1. **Pearce AK**, Reid A, Huddart R, Mayer EK, Nicol DL. Comparison of outcomes of pc-rplnd with national registry data. USANZ ASM, Brisbane, 2019
2. **Pearce AK**, Walker S, Whibley J, Mayer EK, Nicol DL. Identifying factors which affect length of stay in post-chemotherapy retroperitoneal lymph node dissection. EAU ASC, Barcelona, 2019 and AUA ASC, Chicago, 2019
3. **Morton A, Donato P, Roberts M, Yaxley J**. Cognitive-registration biopsy targeting for prostate cancer has a steep learning curve: experience from a large public tertiary teaching hospital. SIU ASC, Athens, 2019
4. **Morton A, Donato P, Roberts M, Coughlin G, Esler R, Dunglison N, Gardiner RA, Yaxley J**. The introduction of a multiparametric magnetic resonance imaging-based triage pathway in a public teaching hospital improved prostate cancer detection and reduced biopsies. SIU ASC, Athens, 2019.

DEPARTMENT OF VASCULAR SURGERY

During 2019, the Vascular Surgery Department has actively participated in various research activities including recruitment for four new trials, technology to engage with consumers and the continued study of devices to treat abdominal aneurysms.

Vascular have significant collaborations with the James Cook University. **Dr Jason Jenkins** is the Principal Investigator alongside Dr Sophie Rowbotham of University of Queensland and Prof John Golledge of James Cook University, for a behavioural intervention trial and two new multicentre randomised placebo-controlled medication trials. The Metformin Aneurysm Trial (MAT) will assess the impact of metformin on the progression of abdominal aortic aneurysms over the next 4 years. Metformin is also the focus of the second collaborative trial and looks at the effect of the medication on the pathological causes of peripheral arterial disease. In addition to looking at medical therapy, recruitment for a behavioural intervention to increase physical activity in those with PAD is also underway.

Within the RBWH, an aspirin resistance trial has been commenced by **Dr Thomas Cavaye** and **Dr Stacie Hodge**, under the supervision of Dr Jenkins. The role of aspirin resistance in complications following vascular procedures will be explored and undertaken over the next two years.

Dr Hodge and **Dr Krishna Pattabathula**, in conjunction with students of Queensland University of Technology and under supervision of Dr Jenkins and **Dr Nigel Pinto**, have developed an iOS/android application for roll-out in early 2020. The application is designed for patient access and aims to encourage patient autonomy in optimising their health pre-operatively and enhancing post-operative recovery.

Through funding provided by the Herston Biofabrication Institute, 3D modelling and printing continues to be explored by Dr Jenkins and Dr Pinto. This research will allow anatomical replicas to be constructed for patient and department education, surgical training and planning of complex cases. It will also lay the foundation for plans to develop endovascular implants, thus personalising devices to unique anatomy.

Finally, a clinical research nurse has joined the Vascular Research Team in 2019 collecting retrospective data on numerous surgical interventions and natural progression of disease. Funding for 2020 sees the continuation of the clinical research nurse with expansion of the research team with a Senior Research Fellow and Principal House Officer.

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
Dr Jason Jenkins	Senior lecturer	N/A	Honorary	Faculty of Medicine	University of Queensland
Dr Simon Quinn	Senior lecturer	N/A	Honorary	Faculty of Medicine	University of Queensland
Dr Danella Favot	Senior lecturer	N/A	Honorary	Faculty of Medicine	University of Queensland
Dr Nigel Pinto	Senior lecturer	N/A	Honorary	Faculty of Medicine	University of Queensland
Michelle McGrath	Clinical Research Nurse	0.4	Funded in-kind	Vascular	University of Queensland
Matthew Dally-Watkins	Associate Investigator	Casual	Externally funded	Behavioural intervention for peripheral arterial disease	University of Queensland
Matthew Dally-Watkins	Associate Investigator/Site Co-ordinator	Casual	Externally funded	Metformin for treating peripheral artery disease-related walking impairment (MERIT)	University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Dr Sophie Rowbotham	Honorary	0.8	Metformin for treating peripheral artery disease-related walking impairment (MERIT)	James Cook University
Matthew Dally-Watkins	Senior Research Technician	Casual	Metformin for treating peripheral artery disease-related walking impairment (MERIT)	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Jason Jenkins, Dr Nigel Pinto	Prof Mia Woodruff (<i>QUT</i>), Mathilde Desselte (<i>QUT</i>)	Advanced manufacturing and simulation of vascular anatomy, novel endovascular devices, medical applications of graphene
Dr Stacie Hodge, Dr Thomas Cavaye, Dr Jason Jenkins, Dr Nigel Pinto	Ms Michelle McGrath	Aspirin resistance in vascular surgical patients undergoing intervention

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Jason Jenkins, Prof Jon Golledge (<i>JCU</i>)	Dr Sophie Rowbotham, Matthew Dally Watkins	Behavioural intervention for peripheral arterial disease
Dr Jason Jenkins, Prof Jon Golledge (<i>JCU</i>)	Dr Sophie Rowbotham, Matthew Dally-Watkins	Metformin for treating peripheral artery disease-related walking impairment (MERIT)
Dr Jason Jenkins, Prof Jon Golledge (<i>JCU</i>)	Dr Sophie Rowbotham, Matthew Dally-Watkins	Metformin aneurysm trial (MAT): a randomised placebo-controlled trial of the effects of metformin on outcomes among people with small AAA

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Dr Jason Jenkins	2019 Royal Alumni Research Encouragement Award	2019 RBWH and RBWH Foundation Grant Awards Ceremony

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Jason Jenkins, Dr Nigel Pinto	Vascular	Advanced manufacturing and simulation of vascular anatomy, novel endovascular devices, medical applications of graphene	The Herston Biofabrication Institute	\$1,600,000	\$40,000	2018-2024
Dr Nicola Burton, Dr Jason Jenkins , Prof Jon Golledge, Prof Paul Norman, Prof Maria Fiatarone Singh, Assoc. Prof Anthony Leicht, Assoc. Prof Zanfina Ademi.	Vascular	Assessment of the efficacy of a brief behaviour intervention designed to improve physical activity in patients with peripheral artery disease	NHMRC Project Grant administered by James Cook University	\$131,257.26	\$50,000	2014-2019
Dr Jason Jenkins, Prof Jon Golledge	Vascular	Metformin for treating peripheral artery disease-related walking impairment (MERIT)	RBWH Foundation	\$40,000	Nil	2019-2020

2019 Research Publications

Journal Articles

1. Golledge J, Morris DR, Pinchbeck J, **Rowbotham, SE, Jenkins J**, Bourke M, Bourke B, Norman PE, Jones R, Moxon JV. Editor's Choice – Metformin Prescription is Associated with a Reduction in the Combined Incidence of Surgical Repair and Rupture Related Mortality in Patients with Abdominal Aortic Aneurysm. *Eur J Vasc Endovasc Surg*. 2019; 57(1), 94–101. Doi: 10.1016/j.ejvs.2018.07.035
2. Manapurathe DT, Moxon JV, Krishna SM, **Rowbotham SE**, Quigley F, **Jenkins J**, Bourke M, Bourke B, Jones RE, Golledge J. Cohort Study Examining the Association Between Blood Pressure and Cardiovascular Events in Patients with Peripheral Artery Disease. *J Am Heart Assoc*. 2019 Mar 8; 8(6). doi: 10.1161/JAHA.118.010748
3. Brough D, **Quinn S**, Batley PB, Cavallucci D, O'Rourke N. Primary aortoenteric fistula: a case of delayed diagnosis. *ANZ J Surg*. 2019 May; doi: 10.1111/ans.15159 [Epub ahead of print]
4. **Robertson C**, Varcoe RL, Black S, Thomas SD. Histopathology of ilioacaval venous in-stent restenosis treated with directional atherectomy. *J Endovasc Ther*. 2019; 26(5), 742-746. Doi: 10.1177/1526602819857240
5. **Elliott J, Jenkins J**. Management of a large ruptured popliteal artery aneurysm involving combined deployment of a covered stent graft and evacuation of popliteal fossa haematoma. *J Vasc Surg Cases and Innovative Techniques*. 2019; Accepted for publication
6. **Deboghossian T, Cavaye T, Quinn S, Pinto N**. Symptomatic infrarenal aortic aneurysm sac expansion five years post endovascular repair without an identifiable endoleak. *Australas J Ultrasound Med*. 2019; Accepted for publication.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited speakers

1. **Jenkins J**. Driving clinical innovation through partnerships. Herston Biofabrication Institute Conference, 22 Mar 2019, Brisbane, Australia
2. **Jenkins J**. Vascular clinical program (panel discussion). Herston Biofabrication Institute Conference, 22 Mar 2019, Brisbane, Australia.

Oral Presentations

1. **Deboghossian T**. Doppler angle correction in vascular sonography. VERVE Symposium 2019. Sydney
2. **Robertson C**. Deep venous in-stent restenosis: Pathological evidence as to its cellular origins. VERVE Symposium 2019. Sydney, Australia
3. **Cavaye T**. The novel endovascular plication of a thigh arteriovenous fistula using an EVAR limb to treat high-output cardiac failure. VERVE Symposium 2019. Sydney, Australia
4. **Cavaye T**. Aortic hygroma following endovascular repair of an abdominal aortic aneurysm. VERVE Symposium 2019. Sydney, Australia.

Poster Presentations

1. **Cavaye T**. Cystic adventitial disease of the common femoral vein. VERVE Symposium 2019. Sydney
2. **Cavaye T**. Dysphagia lusoria from a Kommerell diverticulum treated with a carotid-subclavian bypass and Amplatzer plug. VERVE Symposium 2019. Sydney
3. **Cavaye T**. Endovascular reconstruction of a pseudoaneurysm of an open hepatic artery aneurysm repair. VERVE Symposium 2019. Sydney
4. **Elliott JE, Kruger A, Clouston J**. Endovascular management for inadvertent placement of a 14Fr vascath in the left common carotid artery. VERVE Symposium 2019. Sydney
5. **Elliott JE, Iyer A**. Acute limb ischemia following elective left upper lobectomy for early NSCLC: a rare but serious complication arising from the pulmonary vein stump. ANZSCTS Annual Scientific Meeting 2019. Hobart, Australia
6. **Elliott JE, Cole C**. Large iatrogenic pneumothorax secondary to narrow bore enteral feeding nasogastric tube: vulnerable patients, common procedures, life-threatening complications. ANZSCTS Annual Scientific Meeting 2019. Hobart, Australia
7. **Elliott JE, Lo W**. Excision of an extremely rare thymic basaloid carcinoma: first to be excised via redo sternotomy. ANZSCTS Annual Scientific Meeting 2019. Hobart, Australia.

Other communications and outputs:

TECHNOLOGY

Dr Stacie Hodge, Dr Jason Jenkins. *Enhancing your recovery: a mobile application for patients undergoing intervention*.

TEACHING

Dr Nigel Pinto, McCarthy K, Miller D. *Diabetic foot infection forum*. 2019 Nov; ASID trainees' weekend. Brisbane, Australia.

KENNETH G JAMIESON

DEPARTMENT OF NEUROSURGERY

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Programt	Affiliated University/ies
Assoc. Prof Lindy Jeffree	Associate Professor	N/A	External (UQ)	Neuro-oncology Surgery	University of Queensland
Dr Craig Winter	Senior Lecturer	N/A	External (UQ)	Neurosurgery	University of Queensland
Dr Hamish Alexander	Senior Lecturer	N/A	External (UQ)	Neurosurgery	University of Queensland
Dr Jason McMillen	Senior Lecturer	N/A	External (UQ)	Neurosurgery	University of Queensland

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Benjamin Chua	Jacqui Keller, Assoc. Prof Lindy Jeffree, Prof Chamindie Punyadeera (QUT), Assoc. Prof Zarnie Lwin	The use of non-invasive biomarkers in glioblastoma: a pilot study
Dr Benjamin Chua	Assoc. Prof Lindy Jeffree, Assoc. Prof Zarnie Lwin, Dr Po-Ling Inglis	Using molecular-guided PET/MRI imaging to target hypoxia in glioblastoma: a pilot study to identify novel pathways and define molecular signatures associated with hypoxia and poor patient outcome

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Browne E, Leonard R, Besser M, Nowak AK, Vajdic C, Churches T, Gan HK, Gedye C, Gottardo N, Fraser C, Zalcborg, Sachchithananthan M, Assoc. Prof Lindy Jeffree	Most Outstanding Poster Presentation	Cooperative Trials Group for Neuro-oncology (COGNO) Annual Scientific Meeting, Sydney, 27-29 Oct 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Craig Winter, M Allenby, Dr John Clouston, Dr Marita Prior	Neurosurgery	A biofabricated surgical referral suite to predict intracranial aneurysmal rupture	RBWH Foundation	\$39,876	\$10,000	2019-2020
Dr Craig Winter, Dr Fatima Nasrallah (UQ), Dr Maria Hennessy (TI)	Neurosurgery	A magnetic resonance imaging approach to investigate blood brain barrier dysfunction in brain injury and subarachnoid haemorrhage patients as a predictor of patient outcome	Jamieson Trauma Institute	\$101,895	\$15,000	2019-2021
Dr Melissa Eastgate, Assoc. Prof Lindy Jeffree	Neurosurgery	Clinicopathological features predicting survival after brain metastasectomy in melanoma	RBWH Foundation, Phoebe Eales Melanoma Research Grant	\$39,350	\$39 350	2019

Research Publications

Journal Articles

1. **Tingate C, Alexander H.** Primary intraventricular abscess of the third ventricle. *J Clin Neurosci.* 2019 Jul; 65:154-157
2. Lim YC, Ensbeys KS, Offenhäuser C, D'Souza RCJ, Cullen JK, Stringer BW, Quek H, Bruce ZC, Kijas A, Cianfanelli V, Mahboubi B, Smith F, **Jeffree RL**, Wiesmüller L, Wiegmanns AP, Bain A, Lombard FJ, Roberts TL, Khanna KK, Lavin MF, Baek K, Hamerlik P, Johns TG, Coster MJ, Boyd AW, Day BW. Simultaneous targeting of DNA replication and homologous recombination in glioblastoma with a polyether ionophore. Targeting DNA replication and homologous recombination in radioresistant glioblastoma with a polyether ionophore. *Neuro Oncol* 2019 Aug 30; pii: noz159
3. Day BW, Lathia JD, Bruce ZC, D'Souza RCJ, Baumgartner U, Ensbeys KS, Lim YC, Stringer BW, Akgül S, Offenhäuser C, Li Y, Jamieson PR, Smith FM, Jurd CLR, **Robertson T, Inglis PL, Lwin Z, Jeffree RL**, Johns TG, Bhat KPL, Rich JN, Campbell KP, Boyd AW. The dystroglycan receptor maintains glioma stem cells in the vascular niche. *Acta Neuropathol* 2019 Dec; 138(6): 1033-1052
4. **Shaw T, Jeffree RL, Thomas P, Goodman S, Debowski M, Lwin Z, Chua B.** Diagnostic performance of 18F-fluorodeoxyglucose positron emission tomography in the evaluation of glioma. *Journal of Medical Imaging and Radiation Oncology* 2019 Oct; 63(5): 650-656
5. Gedye C, Sachchithanathan M, Leonard R, **Jeffree RL**, Buckland ME, Ziegler DS, Graeber MB, Day BW, McDonald KL, Lasocki A, BCBA Consortium, Nowak AK. Driving innovation through collaboration: development of clinical annotation datasets for brain cancer biobanking. *Neuro-Oncology Practice* 2020; 7(1): 31-37
6. Brownsett SLE, Ramajoo K, Copland D, McMahon KL, Robinson G, Drummond K, **Jeffree RL**, Olson S, Ong B, De Zubicaray G. Language deficits following dominant hemisphere tumour resection are significantly underestimated by syndrome-based aphasia assessments. *Aphasiology* 2019; 33(10): 1163-1181
7. Akgül S, Patch A, D'Souza RCJ, Mukhopadhyay P, Nones K, Kempe S, Kazakoff SH, **Jeffree RL**, Stringer BW, Pearson JV, Waddell N, Day BW. Intratumoural heterogeneity underlies distinct therapy responses and treatment resistance in glioblastoma cancers. *Cancers (Basel)* 2019 Feb 6; 11(2): pii: E190
8. Stringer BW, Day B. W., D'Souza J, Jamieson PR, Ensbeys KS, Bruce ZC, Lim YC, Goasdoué K, Offenhäuser C, Akgül S, **Allan S, Robertson T, Lucas P, Tolleson G, Campbell S, Winter C**, Do H, Dobrovic A, **Inglis P, Jeffree RL**, Johns TG, Boyd AW. A reference collection of cell line and xenograft models of proneural, classical and mesenchymal glioblastoma. *Scientific Reports* 2019 Mar 20; 9(1): 4902
9. **Dux C**, Lim S-C, **Jeffree RL, Heaydon S, De Jersey S.** Improving nutrition care for neurosurgery patients through a nurse-led transition feeding protocol. *Nutrition and Dietetics* 2019; 76: 158-65
10. Lim M, Puttick S, Houston ZH, Thurecht KJ, Kalita-de Croft P, Mahler S, Rose SE, **Jeffree RL**, Mazzieri R, Dolcetti R, **Lakhani SR**, Saunus JM. Innovative therapeutic strategies for effective treatment of brain metastases. *International Journal of Molecular Sciences* 2019 Mar 14; 20(6): E1280.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Jeffree RL.** Lifting the lid on decompressive craniectomy. College of Intensive Care Medicine Annual Scientific Meeting, Cairns, June 2019
2. **Jeffree RL.** A surgical perspective on unmet needs in neuro-oncology. COGNO Ideas Generation Workshop, Sydney, May 2019.

Oral Presentations

1. Nichols P, Campbell M, Miller S, **Bjorkman T**, Nasrallah F, **Winter C.** The quantification of blood-brain barrier disruption in traumatic brain injury using serum levels of matrix metalloproteinases (MMP-1, 2, and 9) and the volume transfer constant K_{trans} (DEC-MRI). Neurosurgical Society of Australasia Annual Scientific Meeting, Melbourne, 21-23 Aug 2019
2. **Papacostas J, Winter C.** Role of SEEG in lesional epilepsy. Neurosurgical Society of Australasia Annual Scientific Meeting, Melbourne, 21-23 Aug 2019
3. **Pearce P**, Thevathasan W, Perera T, Kim B, Milicevic M, Bulluss K, **Winter C.** Accuracy of electrode placement in the awake patient for deep brain stimulation in Parkinson's disease. Neurosurgical Society of Australasia Annual Scientific Meeting, Melbourne, 21-23 Aug 2019.

Poster Presentations

1. Browne E, Leonard R, Besser M, Nowak AK, Vajdic C, Churches T, Gan HK, Gedye C, Gottardo N, Fraser C, Zalcborg, Sachchithanathan M, **Jeffree RL.** Developing a National Brain Cancer Registry: a clinical feasibility study. COGNO Annual Scientific Meeting, Sydney, 27-29 Oct 2019
2. **Jeffree RL.** An audit of outcomes following decompressive craniectomy at RBWH. NSA AGM, Melbourne, Aug 2019
3. Colditz M, Lee SF, Olson S, Pinkham M, **Eastgate M**, Elder S, Hamilton E, Brandis P, **Jeffree RL.** Gross total resection of cerebral melanoma metastasis is associated with improved survival. American Association of Neurological Surgeons Annual Scientific Meeting, San Diego, USA, April 2019.

PROFESSOR STUART PEGG BURNS CENTRE

The Professor Stuart Pegg Burns Centre provides all adult burn care for the state of Queensland. The centre represents the largest burn unit in Australia and New Zealand treating up to 500 inpatient burns in 2019. The centre treats a large proportion of severe burns in Australia, providing an excellent opportunity to take research outcomes and translate them into clinical practice. It is co-located with the Queensland Skin Culture Centre and the Herston Biofabrication Institute and has collaborations with The Jamieson Trauma Institute.

The Herston Biofabrication Institute began construction in 2019 and will open in mid-2020. At the Institute, the burns program is one of five core clinical programs. Through the use of virtual reality, advanced imaging and tissue engineering techniques, the research performed in partnership with The Herston Biofabrication Institute will ensure that burn injured Queenslanders continue to receive world leading treatment.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Olivia McGifford	PhD QUT (2019-current)	Optimising the growth of skin for burn research and treatment	Assoc. Prof Leila Cuttle (QUT), Prof Damien Harkin (QUT), Prof Mia Woodruff (QUT), Dr Jason Brown

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Programt	Affiliated University/ies
Dr Carl Lisec	Conjoint Academic Coordinator	0.3	External (UQ)	RBWH Clinical Unit for Year 3 MBBS / MD	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Jason Brown	Dr Jason Miller, Dr Carl Lisec	A prospective, non-controlled evaluation of the synthetic NovoSorb™. Biodegradable Temporising Matrix (BTM) for dermal repair after deep burn injury
Dr Jason Brown	Dr Peter Gillies	Herston Biofabrication Institute Burns Clinical Program
Dr Jason Brown	Michelle Donovan, Dr Zephania Tyack (UQ), Prof Steven McPhail (QUT)	Feasibility, acceptability, costs and preliminary effect of an innovative ablative fractional CO2 laser service for people with burn scars
Dr Jason Brown	Dr Peter Gillies, Rebecca Dawson, Assoc. Prof Leila Cuttle (QUT), Prof Damien Harkin (QUT), Olivia McGifford (QUT)	In vitro analysis of keratinocyte cell culture conditions. Biofabrication for better burns treatment
Dr Elizabeth Vujcich	Assoc. Prof Paul Gray, Mathilde Desselle	Virtual reality for pain management in burn trauma care

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Zephania Tyack (UQ)	Dr Jason Brown , ME Carrière, LB Mokkink, MJ Westerman, PPM van Zuijlen, HCW de Vet (Netherlands)	POSAS 3.0: refinement of the patient scale using focus groups in Australia and the Netherlands (Australian study arm)
Prof Jenny Strong	Sarah O'Reilly , Dale Trevor, Jodie Copley, Tammy Aplin, Joanna Mollison , Nicole Coghlan, Sue Laracy , Dr Jason Brown	The lived experience of pressure garments: an exploration of the partnership between expert consumers and occupational therapists in a tertiary MDT burns centre
Anita Plaza	Dr Jennifer Paratz (UQ), Michelle Cottrell , Dr Jason Brown	Evaluating the effectiveness of a home based telerehabilitation model for the delivery of physiotherapy exercise programs following burn injury
Prof Cliff Pollard (JTI)	Dr Elizabeth Vujcich (Burns Led)	Remote virtual reality and augmented reality for burns trauma care
Dr Gillian Wright, Assoc. Prof Kerstin Wyssusek	Dr Carl Lisec	ASPECT
Australian and New Zealand Burn Association (ANZBA)	Dr Carl Lisec	ANZBA Research Committee

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Dr Jason Brown , Dr Peter Gillies	Herston Biofabrication Institute	Burns clinical program	Herston Biofabrication Institute	\$2,499,645	\$90,000	2018–2023
Dr Jason Brown , Michelle Donovan , Dr Zephania Tyack (UQ), Prof Steven McPhail (QUT)	Professor Stuart Pegg Burns Centre	Feasibility, acceptability, costs and preliminary effect of an innovative ablative fractional CO2 laser service for people with burn scars	Royal Brisbane and Women's Hospital Foundation	\$39,944	Nil	2019–2020
Prof Jenny Strong , Sarah O'Reilly , Dale Trevor, Jodie Copley (UQ), Tammy Aplin (UQ), Joanna Mollison , Nicole Coghlan (QCH), Sue Laracy , Dr Jason Brown	Occupational Therapy, Professor Stuart Pegg Burns Centre	The lived experience of pressure garments: An exploration of the partnership between expert consumers and occupational therapists in a tertiary MDT burns centre	Royal Brisbane and Women's Hospital Foundation	\$14,9645	\$7,482	2018–2019
Sarah O'Reilly , Prof Jenny Ziviani (UQ), Prof Jenny Strong , Dr Jason Brown	Occupational Therapy, Professor Stuart Pegg Burns Centre	Investigating the use of elastic based tapes for management of hypertrophic scar formation to the upper limb post burn injury	CAHRLI	\$5,000	\$2,500	2018–2019

2019 Research Publications

Book Chapters

- Muller M.** Chapter 13: Burns. In: Boffard KD, editor. Manual of Definitive Surgical Trauma Care, Fifth edition. Florida, USA: CRC Press, Taylor & Francis Group. (2019) p233-248
- Muller M.** Burns. In: Primary Clinical Care Manual, 10th edition. Brisbane: Queensland Government. (2019) p217-226.

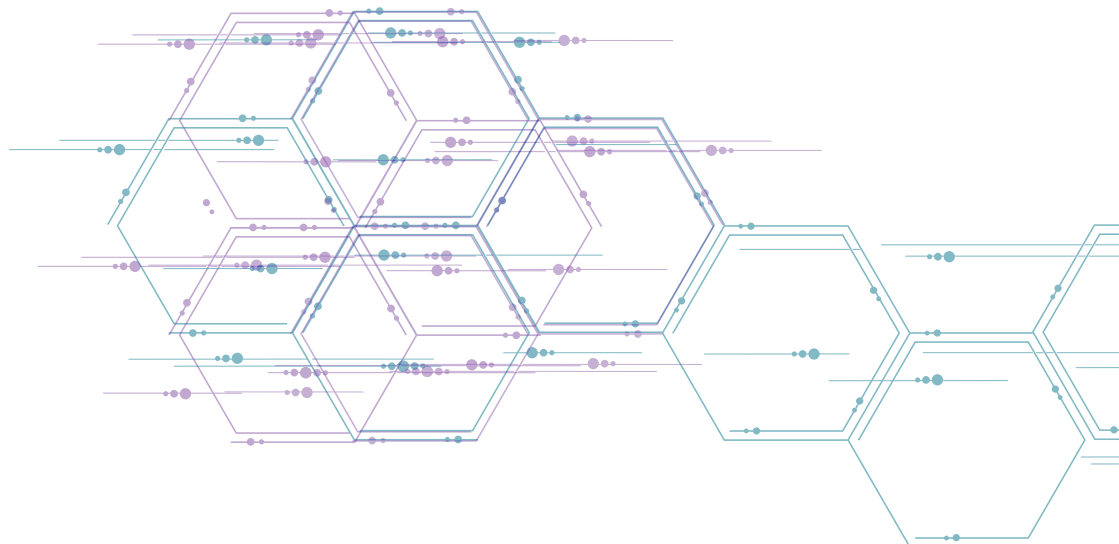
2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Brown J.** Biofabrication in burns treatments. Herston Biofabrication Institute Conference, 22 Mar 2019, Brisbane, Australia
2. **Brown J.** Burns clinical program (panel discussion). Herston Biofabrication Institute Conference, 22 Mar 2019, Brisbane, Australia
3. **Brown J.** A unique approach to managing challenging wounds. Jamieson Trauma Institute Breakfast Seminar, 17 May 2019, Brisbane, Australia
4. **Brown J.** Mass casualties in burns: how to manage. Trauma 2019 Conference, Australasian Trauma Society, 3-6 Oct 2019, Sydney, Australia
5. **Vujcich E.** BTM the Brisbane experience. 43rd Annual Scientific Meeting of the Australian and New Zealand Burns Association (ANZBA), 15-18 Oct 2019, Hobart, Australia
6. **Brown J.** Chapter 7. Health and Biomedical Sciences. Evidence based clinical practice (podcast). Certified Health Informatician Australasia (CHIA) Graduates. Dec 2019, Brisbane, Australia
7. **Brown J.** Chapter 10 Health and Biomedical Science. Models of care delivery (podcast). Certified Health Informatician Australasia (CHIA) Graduates. Dec 2019, Brisbane, Australia
8. **Lisec C.** Trauma update: burns. 15th Annual Queensland Autumn Symposium, 23-24 May 2019, Brisbane, Australia
9. **Lisec C.** Management of minor burn injury (webinar). Australian College of Rural and Remote Medicine (ACRRM), 31 Jul 2019, Brisbane, Australia
10. **Lisec C.** Burns management. Independent Pathway Workshop, Australian College of Rural and Remote Medicine (ACRRM), Aug 2019, Brisbane, Australia
11. **Lisec C.** How deep is that burn? Practical tips on assessing burn depth and the initial management of minor burn injuries in adults. Rural Medicine Australia Conference, 24-26 Oct 2019, Gold Coast, Australia
12. **Lisec C.** Reader for Master's thesis and panel member for viva defence. 2019. Brisbane.

Oral Presentations

1. Carrière ME, Mookink LB, Pijpe A, De Vet HCW, Van Zuijlen PPM, **Brown J**, Tyack Z. Development of the Patient and Observer Scar Assessment Scale 3.0. 18th European Burns Association Congress, 4-7 Sep 2019, Helsinki, Finland
2. Grigg M, **Brown J**, Town C. Donor site dressings: how much do they affect pain? 18th European Burns Association Congress, 4-7 Sep 2019, Helsinki, Finland
3. Newton JF, Gowardman J, **Miller J.** Heterogeneity in burns intensive care management. A retrospective review of patients admitted over two years to a quaternary burns intensive care unit. 18th European Burns Association Congress, 4-7 Sep 2019, Helsinki, Finland
4. **Black N.** Initial experience and cost implications with a novel Biodegradable Temporising Membrane (BTM) in major burns over 40% self-immolation: a 20 year experience of severe self-inflicted burns in a statewide tertiary Australian burns service. Burn and Wound Care Symposium, 3-7 February 2019, Maui, USA
5. **McKittrick A, Jones A, Brown J.** A retrospective review of the management and functional outcomes of patients who developed heterotopic ossification in one or bilateral upper limbs post severe burn injury at Royal Brisbane and Women's Hospital (RBWH) between 2006 and 2016. 43rd Annual Scientific Meeting of the Australian and New Zealand Burns Association (ANZBA), 15-18 Oct 2019, Hobart, Australia.



TRAUMASERVICE

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Programt	Affiliated University/ies
Michael Handy	Adjunct Associate Lecturer	N/A	In-kind	School of Nursing, Midwifery and Social Work	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Michael Rudd	Kerena Grant, Michael Handy, Jodie Ross, Sarah Pearce, Robyn Charles, Kristy Jackman, Olivia Zheng, Assoc. Prof David Douglas (JT), Jacelle Warren (JT), Dr Cate Cameron (JT), Dr Victoria McCreanor (JT)	Impact of frailty in trauma patients admitted to RBWH Trauma Service
Sarah Weber (PAH)	Prof Julia Cilly (GU, GCUH), Prof Marion Mitchell (GU, PAH), Dr Jamie Ranse (GU, GCUH), Dr Nathan Watkins (GCUH), Ben Mackie (GU, SCH), Dr Paula Lister (SCUH), Prof Martin Wullschleger (GU, GCUH), Joe Sharpe (Townsville), Michael Handy , Matt Boyd (Oakey)	Reaction of Emergency Services uPON Disasters in Queensland – the RESPOND study

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Bhavik Patel	Dr Michael Rudd , Assoc. Prof Cliff Pollard	Management of splenic injuries in Qld: retrospective trend analysis over five years and one-year prospective evaluation of clinical practice guideline implementation

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

- Patel B**, Pollard C, Wall D, Wullschleger M, **Rudd M**. Outcome of splenic injuries retrospective: 16-year experience and prospective 18-month multi institutional study on implementation of clinical practice guidelines. Surgical Research Society of Australasia Conference, Nov 2019. Melbourne
- Handy M**. Preparing your team and trauma room – tips and TRAPS. The TRAPS Lecture series, May 2019. Brisbane
- Handy M**. TRAPS skill laboratories. Medical Engineering Research Facility (MERF), Jun & Nov 2019. Brisbane
- Handy M**. Traumatic wounds. 11th Close Health Company, Gallipoli Barracks, Enoggera, Dec 2019. Brisbane.

Oral Presentations

- Patel B**. Implementation of clinical practice guidelines for haemodynamically stable blunt splenic injury patients. Queensland Trauma Symposium, Feb 2019, Brisbane, Australia.

Poster Presentations

- Devlin M, Williamson F, **Handy M**, et al. Performing the tertiary survey: a Comparison of medical officer and trauma nurse (007). Queensland Trauma Symposium, Feb 2019, Brisbane, Australia.



WOMEN'S & NEWBORN SERVICES

WOMEN'S & NEWBORN SERVICES



A/Prof Karin Lust
Service Director
Women's and Newborn Services

Women's and Newborn services (WNS) offer a wide, diverse and innovative range of health care services to women, infants and families from across QLD and beyond. We are dedicated to evidenced based, quality interdisciplinary health care which is evident in our commitment to expanding research within our service line.

In 2018, we established a research strategic plan for the service line and have made excellent progress on many elements of that plan. We will undertake a refresh of our strategic plan in early 2020.

In the last year, our research productivity has improved dramatically with a nearly 30% improvement in research publications and research higher degree students. Research leadership is now embedded in the service line. This is critical in our ongoing drive to deliver high quality care.

Overall, there are 11 trials currently underway with 4 trials anticipated to commence in 2020. There have been 2 new RBWH Foundation scholarships awarded with 1 RBWH Foundation scholarship ongoing. Added to this achievement, there have been 7 RBWH Foundation Project Grants conferred on Women's and Newborn services which represents 27% of the grants awarded.

WNS has 12 PhD or research higher degree qualified clinical staff, and 9 clinical staff currently undergoing research higher degrees.

We continue to have strong links with our research partners across Brisbane Diamantina Health Partners, Queensland Institute of Medical Research, The University of Queensland, Queensland University of Technology, Griffith University, Australian Catholic University, and many professional organizations. This leads to high quality research supervision, grant management, and collaboration.

WOMEN'S & NEWBORN SERVICES *(cont)*



Prof Leonie Callaway
Director of Research
Women's and Newborn Services

Key highlights of the year included:

The department of Obstetrics and Gynaecology undertakes research in Obstetrics, Gynaecology, Maternal Fetal Medicine, Paediatric and Adolescent Gynaecology, Urogynaecology and Reproductive Endocrinology and Infertility. There has been an increase in the number of posters and presentations at national and international meetings, with extensive trainee engagement in research. The department provides tertiary and quaternary obstetrics and gynaecology services to MNHHS and QLD. Research undertaken is collaborative, and both innovative as well as addressing research into common clinical issues to improve patient care. Members of the dept have presented and published nationally and internationally.

The department of Obstetric Medicine continues to conduct high level research into complex pregnancies. There are a large number of collaborate research projects being undertaken with engagement in a range of nationally funded trials (Medical Research Futures Fund, NH&MRC) around asthma, obstetric cholestasis, and the early diagnosis and treatment of gestational diabetes. The department is heavily active on a local level having five oral and sixteen poster presentations at the annual Australasian Scientific meeting this year, one of which was awarded the best scientific poster.

Research in the Grantley Stable Neonatal Unit (GSNU) continues to grow. A research survey conducted earlier this year was fruitful in identifying strengths and opportunities for improving research capacity and collaboration. Securing funding for a part time neonatal research coordinator and several successful RBWH Hospital Foundation Research Grants means in 2020, the team will continue to build on these exciting developments.

2019 has been a successful year for the Perinatal Research Centre (PRC). We were delighted for Prof Paul Colditz to be awarded Researcher of the Year at the 2019 Metro North Research Excellence Awards. Our ongoing funding is creating amazing results and media interest and we look forward to another year of high impact translational research. We would like to thank RBWH Foundation, Lions Medical Research Foundation, and so many members of the public for their generous support which is vital to improving outcomes for mothers and babies through research.

The Queensland Centre for Gynaecological Cancer (QCGC) Research's mission is to research and develop the best standard of care for women experiencing gynaecological cancer. This includes finding causes for and preventing gynaecological cancer; and finding better treatment options to cure women affected by gynaecological cancer. We have a focus on conducting surgical clinical trials. In 2019 we continued our studies of exercise in ovarian cancer; completed recruitment in a trial of non-surgical treatment for early stage endometrial cancer; and continued the IMAGINE Study which aims to implement and evaluate a model of training for practising gynaecologists in Total Laparoscopic Hysterectomy.

GRANTLEY STABLE NEONATAL UNIT (GSNU)

RBWH Neonatal Research continues to work towards a strategic plan to improve research resources. A survey was conducted to gauge perceptions behind strengths and weaknesses of research within the department of neonatology and to identify potential opportunities for improvement. Results showed that staff were keen to engage in more clinical research, recognising that assisting with research was an important professional requirement.

The Humidity Trial, a randomised controlled trial investigating the effects of humidification in the second week of life for extremely preterm infants has started recruitment. The study is led by Clinical nurse Gill Noreiks and is projected to take 2 years to recruit all participants required to detect differences between 2 different levels of humidification and any effects on body temperature and electrolyte balance. Research culture continues to improve with increasing numbers attending the monthly unit research meeting including attendance by members of collaborating research groups.

RBWH Neonatal Research has been successful in securing much needed funding for a part-time Research Coordinator position to assist with increasing our research culture and productivity within the unit. This senior nursing position over the next 2 years will provide a central person to evaluate, monitor and report on all research activities and outcomes, as well as assist with development of research protocols and managing approval of ethical and clinical governance. Another exciting achievement has been setting up a tied fund account through the RBWH Foundation to provide parents and families the opportunity to donate and raise funds for our unit's research activities. A few of our proposed clinical trials have progressed through the EOI stage to the next round of research grant funding.

RBWH Neonatal Research continues to make progress with collaboration and building of the research group. Deanne August is our new research coordinator, marking our first step towards increasing dedicated research time and funding.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Donna Franklin	PhD, University of Queensland	Nasal High flow therapy in infants with bronchiolitis	John Fraser, Mark Davies
Luke Jardine	PhD, University of Queensland	Development of early predictors of long-term neurodevelopmental outcome in preterm infants	Mark Davies, Paul Colditz
Michelle Paliwoda	PhD, University of Queensland	Standardisation of neonatal physiological parameters and development of neonatal early warning tools	Karen New, Fiona Bogossian, Mark Davies
Kobi Best	PhD, University of Queensland	Sensory Exposure to Language in the Newborn Care Unit: A Multi-Method Trial of Sound and Language Exposure in Neonates Cared for in Single-Room Environments on Developmental Outcomes up to 2 years	Karen New, Fiona Bogossian, Ian Hughes, Mark Davies
Alison D'Souza	MPhil, University of Queensland	The impact of macronutrient intake and growth on neurodevelopmental outcome in preterm infants	Tim Donovan , Barbara Lingwood, Yvonne Eiby, Paul Colditz
Melissa Lai	PhD, University of Queensland	Towards Optimizing Neurodevelopmental Outcomes of Very Preterm Infants; the Effects of Infant Massage by the Mother	Paul Colditz , Simon Finnigan, Jurgen Fripp
Abirami Ratnasingham	PhD, University of Queensland	Long-term consequences of altered neonatal adiposity	Barbara Lingwood, Tim Donovan , Yvonne Eiby, Marloes Dekker, Peter Davis

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Katie Foxcroft	Adjunct Fellow/ Clinical Trial Coordinator	PREBO, Supreme, PAEAN, NEBO	University of Queensland
Deanne August	Research Coordinator	NOVA	Griffith University
Gill Lack	Research Nurse	NOVA, PEACH	University of Queensland
Linda Cobbald	Research Nurse	NOVA	
Lisa McKeown	Research Nurse	PAEAN, NEBO	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Deborah Gilmour	Mark Davies	What sound/light/vibration/acceleration are babies experiencing on retrievals?
Jasmine Antoine	Mark Davies, Garry Inglis	Bacterial colonisation of endotracheal tube (ETT) in infants less than 32 weeks gestation
Michelle Paliwoda	Mark Davies, Karen New, Fiona Bogossian	Standardisation of neonatal physiological parameters and development of neonatal early warning tools
Melissa Weber	Melissa Lai, Mark Davies	An Audit of Noise levels in a Level Six Intensive Care Neonatal Unit
Kristin O'Connor	Mark Davies	Determining the criteria for predicting successful extubation with systemic dexamethasone in premature infants
Gill Noreiks	Melissa Lai, Mark Davies	HUMIDITY – Incubator humidity for 1 or 2 weeks for ELBW babies
Mark Davies	Deborah Gilmour	NeoSTRESS: Study of Transfer and Retrieval Environmental StressorS upon neonates via a smartphone application – ACCELERATION/VIBRATION, LIGHT & SOUND
Tim Donovan	Paul Colditz	PEACH: Long-term Outcome of Neonatal Adiposity
Dayan DeAlwis	Mark Davies	Cochrane review – Late surfactant in very preterm neonates who still required mechanical ventilation after day 7
Neeraj Mehta	Melissa Lai, Drum Patel	Neonatal transfusions and clinical triggers
Paul Colditz	Roslyn Boyd, A Malhotra, Stephen Rose, B Boashash, M Ditchfield, M Fahey, K Pannek, R Moldrich	PREBO Neurodevelopment of the preterm infant
Drum Patel	Pieter Koorts, Karen Langford, Lyn Chapple, Melissa Lai, Mark Davies, Kate Cogill	Pasteurised Donor Human Milk in late preterm and term infants: A Randomised Controlled Trial
Nu Nu Lwin	Melissa Lai, Mark Davies	Very preterm infants and ELBW outcomes in a tertiary nursery
Stefanie Rutz	Melissa Lai, Kate Cogill, Mark Davies	Optimising term LBW infants' discharge home – RCT
Adam Hoellering		Retrospective review of IVH in a tertiary nursery
Misty Curry	Melissa Lai, Mark Davies, Donna Bostock, Colette McIntyre	Improving Maternal BM supply for preterm infants
Pieter Koorts	Suzanne Parker, Melissa Lai, Jason Roberts	Establishing an effective treatment of Sedation for Neonates requiring life-saving Tracheal Intubation (SoNaTIna Study)
Jany Pienaar	Mark Davies	Retrospective review of HFOV and CO2 levels in a tertiary nursery

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Julie Wixey, Jany Pienaar, Paul Colditz, Ian Wright	Jany Pienaar, Melissa Lai	Retrospective study of ibuprofen administration on neurodevelopmental outcomes in IUGR neonates in Australia
Zornitz Stark, Sebastian Lunke, Marcel Dinger	Chirag Patel	Australian Genomic Health alliance; Acute care genomic testing
Anndrea Flint	Mark Davies	Determining reference ranges for well term neonates overnight oximetry
Roslyn Boyd	Pieter Koorts	NEBO: Neonatal Encephalopathy Brain Outcomes: Prospective study of Clinical and MRI Biomarkers in term born infants to improve accurate and earlier prediction of Cerebral Palsy
Amanda Ullman, Deanne August	Colette McIntyre, Katie Foxcroft, Linda Cobbald, Gill Lack	NeOnatal Vascular Access (NOVA) study: an observational audit of neonatal vascular access complications
Peter Dargaville	Tim Donovan, Melissa Lai	RCT– OPTIMIST-A Trial. Multicentre randomised controlled trial of minimally-invasive surfactant therapy in preterm infants 25-28 weeks gestation on continuous positive airway pressure

Collaborative Research Activity involving RBWH Research Group / Department *(cont)*

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Elsa Wynd	Melissa Lai, Adam Hoellering	AIM-PREM: Assessing the Impact of Prematurity on Renal Medulla development
Paul Dawson	Pieter Koorts, Paul Colditz , Nadia Badawi, Roslyn Boyd, Vicki Flenady, Elizabeth Hurriion, Francis Bowling, Sailesh Kumar	Neuroprotective role of sulphate among preterm babies (SuPreme Study)
Iona Novak	Paul Colditz	RCT – GAME: Harnessing Neuroplasticity to Improve Motor Performance in Infants with Cerebral Palsy: a Pragmatic Randomized Controlled Trial
Helen Liley	Paul Colditz	RCT – PAEAN -Preventing Adverse Outcomes of Neonatal Hypoxic Ischaemic Encephalopathy with Erythropoietin: A Phase III Randomised Placebo Controlled Multicentre Clinical Trial
Roslyn Boyd	Paul Colditz	RCT – REACH: Randomised trial of Rehabilitation very EARly in Congenital Hemiplegia
Alicia Spittle	Pieter Koorts, Melissa Lai	Early identification of infants with cerebral palsy: implementation of evidence-based guidelines into practice

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Mark Davies	Research Coordinator Grant	

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups /Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Gill Noreiks	Grantly Stable Neonatal Unit	HUMIDITY – Incubator humidity for 1 or 2 weeks for ELBW babies	RBWH Foundation	\$40,000	\$30,000	2019-2020

2019 Research Publications

Journal Articles

- August DL**, Kandasamy Y, Ray R, Lindsay D and New K. Fresh perspectives on hospital-acquired neonatal skin injury prevalence from a multicentre study: length of stay, acuity and incomplete course of antenatal steroids. *Journal of Perinatology*, 2019 (Under review)
- August DL**, Hitchcock I, Tangney J, Ray R, Kandasamy Y, and New K. Graduated colour tape measure: Development and demonstration in a case series of neonatal skin injuries. *Journal of Tissue Viability*, 2019; 28(3)133-138
- August DL**, van der Vis K, and New K. Conceptualising skin development diagrammatically from foetal and neonatal scientific evidence. *Journal of Neonatal Nursing* Accepted 3 July 2019; In print
- Gilmor D**, Duong K, Gilmore I, **Davies M**; NeoSTRESS: Study of Transfer and Retrieval Environmental StressorS Upon Neonates via a Smartphone Application–Light. *Air Medical Journal* 2019; *Article in Press*
- Eley V, Sekar R, Chin A, **Donovan T**, Krepska A, Lawrence M, Bell S, McGrath S, Robinson A, Webb L, Marquart L. Increased maternal abdominal subcutaneous fat thickness and body mass index are associated with increased cesarean delivery: A prospective cohort study. *Acta Obstet Gynecol Scand*. 2019 Feb;98(2):196-204. doi: 10.1111/aogs.13486. Epub 2018 Nov 15
- Eley VA, Chin A, Sekar R, **Donovan T**, Krepska A, Lawrence M, Bell S, Ralfe K, McGrath S, Webb L, Robinson A, van Zundert A, Marquart L. Increasing body mass index and abdominal subcutaneous fat thickness are associated with increased skin-to-epidural space distance in pregnant women. *Int J Obstet Anesth*. 2019 May; 38:59-65. doi: 10.1016/j.ijoa.2018.10.005. Epub 2018 Oct 19
- Al-Theyab NA, **Donovan TJ**, Eiby YA, Colditz PB, Lingwood BE. (2019) Fat trajectory after birth in very preterm infants mimics healthy term infants. *Pediatric Obesity*, 14 3: e12472. doi:10.1111/ijpo.12472
- Davies MW**, Pearson C. (2019) Coroner's report on the death of a baby from complications of herpes simplex virus type 1 infection. *Journal of Paediatrics and Child Health*, 55 2: 239-239. doi:10.1111/jpc.14350.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

- McIntyre C, August DL**. What's growing on me? A case series review of moisture blisters. Council of International Neonatal Nurses Conference in Auckland NZ; 2019 5-8 May

Invited Speakers (cont)

2. **McIntyre C**, Stone K. Butterfly meets hummingbird: An end of life collaboration. Council of International Neonatal Nurses Conference in Auckland NZ; 2019 5-8 May
3. **August DL**. Neonatal Skin and Pressure Injury Study: Language, Frequency, Emerging Themes. Council of International Neonatal Nurses Conference in Auckland NZ; 2019 5-8 May.

Oral Presentations

1. Ratnasingham A, **Donovan T**, Eiby Y, Dekker Nitert M, **Lingwood B**. Infant body composition predicts childhood obesity. In: Proceedings of the 33rd Annual Meeting, Fetal and Neonatal Workshop of Australia and New Zealand; 2019 15-16 March; Gold Coast
2. **August, DL, Cobbald L, Lack G, McIntyre C**, New K, **Smith P**, Takashima M, **Koorts P, Foxcroft K**, Marsh N, Ullman A. Neonatal Observation Vascular Access (NOVA) An Australian Audit. In: Proceedings of the 3rd Joint European Neonatal Societies; Maastricht Netherlands; September 2019
3. Lingwood BE, Eiby YA, Al-Theyab N, Colditz PB, **Donovan TJ**. Predictors of adiposity in very preterm infants before term corrected age. In: Proceedings of the Fetal and Neonatal Physiology Society, Marysville, Australia; 2019 16-19 October
4. Ratnasingham A, **Donovan TJ**, Eiby YA, Dekker Nitert M, Lingwood BE. Infant body composition predicts childhood obesity. In: Proceedings of the 11th DoHAD World Congress, Melbourne, Australia; 2019 20-23 October.

Poster Presentations

1. **August DL**. Guideline to Cot-side: Translating Skin Care Evidence into Clinical Practice. In: Proceedings of the Council of International Neonatal Nurses Conference in Auckland NZ; 2019 5-8 May
2. **August DL**. Bringing Attention to MRSI: Reducing the Risk in Neonates. In: Proceedings of the Council of International Neonatal Nurses Conference in Auckland NZ; 2019 5-8 May
3. Berkhout A, Kapoor V, Heney C, Jones C, Clark JE, Vaska, V, **Lai M**, Nourse C. Neonatal Herpes Simplex Infection Rates in Queensland Above National Average. In: Proceedings of the 28th Annual RBWH Healthcare Symposium. September 2019
4. Cobbald L, **Lack G, McIntyre C, August D**, New K, **Smith P**, Takashima M, **Koorts P, Foxcroft K**, Marsh N, Ullman A. Difficult intravascular access (DIVA) in neonates: two case reports. In: Proceedings of the 28th Annual RBWH Healthcare Symposium. September 2019
5. **Cogill K, Palmer-Field K**, Clarke S and Escott C. A neonatal nurse, lactation consultant and speech pathologist walk into a room. A collaborative approach to feeding in Special Care Nursery. In Proceedings from the 2019 Australian and New Zealand Neonatal Network (ANZNN) Clinical Practice Improvement (CPI) Conference; September 2019
6. **Cogill K and Taylor K**. Introduction of a Neonatal Nurse Clinic to support transition to home. In Proceedings from the 2019 Australian and New Zealand Neonatal Network (ANZNN) Clinical Practice Improvement (CPI) Conference; September 2019
7. **Lai M, McIntyre C, White K, Hose K, College M, Argyros S, McLaughlin L, Powell J, Sharpe J, and Inglis G**. A Round Around the Board: Optimising QI Communication In: Proceedings of the 2019 Australian and New Zealand Neonatal Network (ANZNN) Clinical Practice Improvement (CPI) Conference; September 2019
8. **McIntyre C, Bostock D, Lai M, Conderm K, Palmerfield K, Hose K, McLaughlin L, Koorts P, Davies M, Hollering A, White K, Sharpe J, Donovan T**, and Inglis G. A Standardised Feeding Regimen for LBWBs: Does it make a difference? In: Proceedings of the 2019 Australian and New Zealand Neonatal Network (ANZNN) Clinical Practice Improvement (CPI) Conference; September 2019
9. **McIntyre C and August D**. Mind the Gap! Best Practice for Bi-Nasal CPAP in ELBW and Severe IUGR: A Case Report In: Proceedings of the 2019 Australian and New Zealand Neonatal Network (ANZNN) Clinical Practice Improvement (CPI) Conference; September 2019.



Back row (L-R): Lisa McKeown, Deanne August, Linda Cobbald, Colette McIntyre, Cathy Rowe, Karen New, Kate Cogill, Gill Noreiks
Front row (L-R): A/Prof Tim Donovan, Katie Foxcroft, Dr Pieter Koorts, Mel Lai

OBSTETRICS & GYNAECOLOGY

The Department of Obstetrics and Gynaecology provides tertiary and quaternary obstetrics and gynaecology services for MNHHS and QLD. The departments are involved in multidisciplinary research to ensure the care of the women we treat and manage is contemporary and evidenced based.

The multidisciplinary services include:

- Birthing Services and Birthing Centre
- Antenatal Day Assessment Service
- Obstetric Review Centre
- Maternity Outpatients Service
- Endocrine Service
- Young Parents Program
- General Practitioner Maternity shared care program
- Team midwifery models in conjunction with obstetric care
- Midwifery group practice
- Eligible Private Practice Midwives
- Lactation Service
- Obstetric Medicine Services and Obstetric Telehealth Services
- Maternal Fetal Medicine and Centre for Advanced Prenatal Care
- General Gynaecology
- Colposcopy
- Advanced laparoscopic surgery and endometriosis services
- Gestational trophoblastic disease
- Acute and emergency gynaecological care
- Early pregnancy assessment unit
- Reproductive Endocrinology and Infertility services
- Urogynaecology service
- Paediatric and adolescent gynaecology
- Gynaecology oncology service
- Multidisciplinary BRAC 1 clinic.

Maternity Services collaborate closely with the Perinatal Research Centre, University of QLD and UQCCR for local state and commonwealth grants and multi-centre research projects. The department has been progressive in the enhancement of research activities in the area of antenatal care, general obstetrics and gynaecology.

There has been extensive specific ongoing research into endometriosis under the guidance of Dr Akwasi Amoako (Conjoint O & G Specialist UQ and RBWH) and Dr. Keisuke Tanaka with a current application underway for federal funding of a \$9million grant to expand the current research into endometriosis.

The Maternal Fetal Medicine unit has been very proactive in fostering an environment conducive to prospective and retrospective research and audits as well as partnering with centres in both Australia and New Zealand to develop collaborative research. This includes the international STRIDER trial which has come to completion.

The Paediatric and Adolescent Gynaecology Statewide Service is active in research and presents and publishes internationally. The unit provides outreach services to the Queensland Children's Hospital.

Professor Chris Maher, Urogynaecologist, is involved in international multicentre research and Cochrane reviews aimed at researching the most effective treatments for women with urogynaecological issues to improve patient outcomes. He has published extensively in the area of pelvic organ prolapse and incontinence surgery in women. He was awarded for the best presentation at the 28th National Conference in Incontinence.



Left to Right: Dr Kellie Tathem, Dr Matthew Smith, Dr David friend, Dr Tapasi Bagchi, Dr Matthew McNoulty, Dr Thangeswaran Rudra, Dr Akram Khalil

OBSTETRICS & GYNAECOLOGY (CONT)

Reproductive endocrinology and infertility is a division of the Department of Gynaecology. Professor Hayden Homer is the Christopher Chen Chair in Reproductive Medicine at UQ and has established Queensland's first Oocyte Biology Research Laboratory situated in the UQCCR and Queensland's first human oocyte research program. Professor Homer is the director of the lab, the lead for the "Fertility" research theme at UQCCR and an Associate Editor for the Australian and New Zealand Journal of O&G. His role as a co-investigator on a unique large-scale genome-wide association study investigating genetic associations with miscarriage is also ongoing. A major aspect of his research seeks to better understand the molecular determinants of oocyte quality and to identify pathways that could be amenable to modification for reversing poor oocyte quality. This knowledge will improve the efficiency of IVF with associated reduction in risks and costs to patients. Additionally, a major objective of this research is to develop novel and less invasive approaches for female fertility preservation. This is particularly relevant to women of reproductive age who have survived cancer and wish to achieve a pregnancy. The research unit is developing agents that can possibly be administered as a simple pill to increase oocyte resilience to chemotoxicity thereby preserving fertility (termed oncofertility). The world standard techniques established by Professor Homer and as recognised internationally in 2018 in "Nature Communications" continue as the basis of the ongoing research into oncofertility.

The Obstetrics and Gynaecology department continues to collaborate with numerous other departments within Metro North Hospital and Health Service (MNHHS) as well as with UQ, QUT, UQCCR, Mater Hospital, interstate hospitals and New Zealand.

Supervised Post-Graduate Research Students

Name <small>(RBWH staff in bold)</small>	Current Studies <small>(e.g. PhD, Masters etc.)</small> University <small>(duration)</small>	Research Project Title	Supervisors <small>(RBWH staff in bold)</small>
Ameer Alhusuny	PhD (UQ) (2016-2020)	Neck/Shoulder and Vision Problems in Surgeons Performing Minimally Invasive Surgeries	Venerina Johnston, Margaret Cook, Akram Khalil
Goutham Subramanian	PhD, UQ (2016-2019)	Role of DNA damage response proteins in oocyte development	Hayden Homer , Kum Kum Khanna
Jessica Greaney	PhD, UQ (2017-2020)	Asymmetric cell division in mammalian oocytes	Hayden Homer , Carlos Salomon-Gallo
Juvita DeLancy	PhD, UQ (2017-2019)	Sirtuin regulation of oocyte quality in obesity and during ageing	Hayden Homer , Carlos Salomon-Gallo
Sara Pagliarani	PhD, UQ (2018-2020)	Chlamydia infection in the ovary: effects on fertility in female koalas	Chiari Palmieri, Steve Johnston, Hayden Homer
Nanthini Jayabalan	Master of Science, UQ	Effect of Maternity Obesity and Gestational Diabetes Mellitus (GDM) on the Placental Exosome Trafficking During Gestation	Carlos Soloman-Gallo, Gregory Rice, Gregory Duncombe , Martha Lappas
Grace Boyd	MPhil, UQ	Maternal, obstetric and perinatal outcomes of pregnancies complicated by socio-demographic medical, surgical or intapartum risk factors	Silesh Kumar , Gregory Duncombe

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <small>(RBWH Staff in bold)</small>	Type of Position	Research Program	Affiliated University/ies
Hayden Homer	Christopher Chen Chair of Reproductive Medicine	Oocyte Biology Research Laboratory, UQCCR, Faculty of Medicine	University of Qld
Karin Lust	Associate Professor	Faculty of Medicine	University of Qld
Rebecca Kimble	Associate Professor	Faculty of Medicine UQ	University of Qld
	Adjunct Associate Professor	Faculty of Health Science QUT	Queensland University of Technology
Akwasi Amoako	Doctor	Faculty of Medicine	University of Qld
Christopher Maher	Professor	Faculty of Medicine	University of Qld
Gregory Duncombe	Associate Professor	Faculty of Medicine	University of Qld
Katie Foxcroft	Adjunct Fellow / Clinical Trial Coordinator	WNS and Perinatal Research Centre, My Baby Moves, PINC, LEAP	University of Qld

RBWH Research Staff with research roles, positions or appointments e.g. Coordinators, etc (cont)

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Annelise Kirkham	Research Nurse	My Baby Moves, Prostaglandin Inpatient iNduction of labour Compared with BALLOon Outpatient iNduction of labour: a randomised controlled trial (PINC)INC	
Emma Shipton	Research Nurse	Lactoferrin Evaluation in Anaemia in Pregnancy: LEAP-Should we treat iron deficiency anaemia of pregnancy with lactoferrin? A randomised controlled trial HREC/14/HNE/294 (LEAP)	
Felicity Stalley	Research Nurse	LEAP - Lactoferrin Evaluation in Anaemia in Pregnancy: LEAP-Should we treat iron deficiency anaemia of pregnancy with lactoferrin? A randomised controlled trial HREC/14/HNE/294 (LEAP)	

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Akwasi Amoako, Keisuke Tanaka, Akram Khalil, David Baartz, Matthew Smith	Grant Montgomery <i>(IMB, UQ)</i> , Brett Mckinnon <i>(IMB, UQ)</i> , Sally Mortlock <i>(IMB, UQ)</i> , Joanna Crawford <i>(IMB, UQ)</i>	Endocannabinoid Signalling in Endometriosis-Associated Pain: A potential Therapeutic Target
Akwasi Amoako, Keisuke Tanaka, Akram Khalil, David Baartz, Matthew Smith	Grant Montgomery <i>(IMB, UQ)</i> , Brett Mckinnon <i>(IMB, UQ)</i> , Sally Mortlock <i>(IMB, UQ)</i> , Joanna Crawford <i>(IMB, UQ)</i>	Somatic mutation in endometriotic lesions and their relationship to disease progression, severity and symptoms
Keisuke Tanaka, Akram Khalil, David Baartz, Akwasi Amoako, Renuka Sekar	Emma Ballard, Elise Coghill	Management of caesarean scar pregnancy with high dose intravenous methotrexate infusion therapy: 10-year experience at a single tertiary centre
Akwasi Amoako, Renuka Sekar, Christoph Lehner	Cathy Liu, Nicole Po , Anh D Nguyen	Prediction and Prevention of preterm labour
Keisuke Tanaka, Akram Khalil, David Baartz, Akwasi Amoako	Stephanie Zhu	Comparing Surgical and Medical Management of Tubo-Ovarian Abscess: A Retrospective Single Tertiary Centre Study
Akwasi Amoako, Christoph Lehner, Shannyn Rosser	Thomas Yeung	Comparison of maternal and fetal/neonatal outcomes for women undergoing water birth compared to land birth
Akwasi Amoako, Renuka Sekar, Christoph Lehner, Shannyn Rosser	Geraldine Herweijer	Accuracy of fetal biometry, particularly estimated fetal head circumference in third trimester ultrasound: A retrospective cohort study
Akram Khalil, David Baartz, Akwasi Amoako	Pathmila Navaratne	Management of Tubal ectopic pregnancy with intravenous Methotrexate
Keisuke Tanaka, Akram Khalil, David Baartz, Akwasi Amoako	Kath Adams	Management and Outcomes of Ovarian Torsion: A Retrospective Analysis

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Grant Montgomery <i>(IMB, UQ)</i> , Brett Mckinnon <i>(IMB, UQ)</i> , Sally Mortlock <i>(IMB, UQ)</i> , Joanna Crawford <i>(IMB, UQ)</i>	Akwasi Amoako, Keisuke Tanaka, Akram Khalil, David Baartz, Matthew Smith	Genetics of Reproductive Disorders – Functional Consequences of Genetic Variations in Endometriosis
Murray D Mitchell <i>(QUT)</i> , Hassendrini N Peiris <i>(QUT)</i> , Olivia Holland <i>(QUT)</i>	Fatema B Almughlli, Yong Q Koh, Kanchan Vaswani, Keisuke Tanaka, Christoph Lehner, Renuka Sekar, Akwasi A Amoako, Sailesh Kumar	Identification of true preterm labour-uses of eicosanoids and exosomes as biomarkers
Grant Montgomery <i>(IMB, UQ)</i> , Brett Mckinnon <i>(IMB, UQ)</i> , Sally Mortlock <i>(IMB, UQ)</i> , Joanna Crawford <i>(IMB, UQ)</i>	Akwasi Amoako, Keisuke Tanaka, Akram Khalil, David Baartz, Matthew Smith	Progesterone and Immune induced transcriptomic changes in endometrial stromal fibroblasts, their contribution in endometriosis pathogenesis and potential for targeted treatment
Mike Beckmann	Karen Baker	Prostaglandin Inpatient iNduction of labour Compared with BALLOon Outpatient iNduction of labour: a randomised controlled trial

Collaborative Research Activity involving RBWH Research Group / Department *(cont)*

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Vicky Flenady	Yogesh Chada	My Baby's Movements: a stepped wedge cluster randomised controlled trial to raise maternal awareness of fetal movements during pregnancy
Katie Groom	Renuka Sekar/ Pieter Koorts	Childhood Outcomes of STRIDER NZAus: a randomised controlled trial of sildenafil therapy in dismal prognosis early-onset intrauterine growth restriction (New Zealand and Australia)
Tarnow-Mordi, W et al <i>(University of Sydney)</i>	Karen Baker	Lactoferrin Evaluation in Anaemia in Pregnancy: LEAP-1 Should we treat iron deficiency anaemia of pregnancy with lactoferrin? A randomised controlled trial HREC/14/HNE/294
Jodie Painter <i>(QIMR)</i> , Cecelia Lindgren <i>(Oxford)</i>	Hayden Homer	Large-scale genome-wide analyses to investigate the genetic aetiology of miscarriage (NHMRC funded)
Venerina Johnston, Margaret Cook, Ameer Alhusuny	Akram Khalil	Neck/Shoulder and Vision Problems in Surgeons Performing Minimally Invasive Surgeries

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Cathy Lui	Dr Stephen Morrison Early Clinical Research Award	28 th Annual RBWH Healthcare Symposium
Chris Maher	Best Presentation	28 th National Conference on Incontinence

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Akwasi Amoako , Grant Montgomery, Akram Khalil , Keisuke Tanaka	Endometriosis Collaborative Research Group	Somatic mutation in endometriotic lesions and their relationship to disease progression, severity and symptoms	Metro North Collaborative Research Grant	\$47,625	\$47,625	2019
Jessica Greaney Prof Hayden Homer	WNS RBWH – Oocyte Biology Research Lab	Asymmetric division in mammalian oocytes	Australian Government RTP Scholarship	\$56,000	\$28,000	2018-2019
Jodie Painter <i>(QIMR)</i> , Cecelia Lindgren <i>(Oxford)</i> , Prof Hayden Homer	WNS RBWH – Oocyte Biology Research Lab	Large-scale genome-wide analyses to investigate the genetic aetiology of miscarriage	NHMRC	\$195,328.00	\$97,664	2018-2019
Prof Hayden Homer , David Sinclair, Lindsay Wu	Oocyte Biology Research Lab UQCCR/Laboratory for Ageing, UNSW	Nicotinamide adenine dinucleotide (NAD+) raising agents for improving oocyte quality	NHMRC	\$445,827	\$98,758	2017-2020

2019 Research Publications

Journal Articles

1. Eley V, **Sekar R**, Chin A, Donovan T, Krepska A, Lawrence M, Bell S, McGrath S, Robinson A, Webb L, Marquart L. Increased maternal abdominal subcutaneous fat thickness and body mass index are associated with increased cesarean delivery: A prospective cohort study. *Acta Obstet Gynecol Scand*. 2019 Feb;98(2):196-204. doi: 10.1111/aogs.13486. Epub 2018 Nov 15
2. **Homer HA**. Preimplantation genetic testing for aneuploidy (PGT-A): The biology, the technology and the clinical outcomes. *Aust N Z J Obstet Gynaecol*. 2019 Apr;59(2):317-324. doi: 10.1111/ajo.12960. Epub 2019 Feb 27
3. **Tanaka K**, Mayne L, **Khalil A**, **Baartz D**, Eriksson L, Mortlock SA, Montgomery G, McKinnon B, **Amoako AA**. Endocannabinoid System: A potential Therapeutic Target for Endometriosis. *Eur J Obstet Gynecol Reprod Biol*. 2019 *(In press)*
4. **Liu CZ**, **Ho N**, Nguyen AD, **Lehner C**, **Renuka R**, **Amoako AA** (2019). The Risk of Preterm Delivery and Pregnancy Outcomes in Women with Asymptomatic Short Cervix: A Retrospective Cohort Study. *J Matern Fetal Neonatal Med (In press)* DOI:10.1080/14767058.2019.1647163

Journal Articles (cont)

5. **Tanaka K**, Coghil E, Ballard E, **Sekar R**, **Amoako AA**, **Khalil A** and **Baartz D** (2019) Management of caesarean scar pregnancy with high dose intravenous methotrexate infusion therapy: 10-year experience at a single tertiary centre. *Eur J Obstet Gynecol Reprod Biol.* 2019 Apr 9; 237:28-32. doi: 10.1016/j.ejogrb.2019.04.008
6. Nguyen AD, **Liu CZ**, **Lehner C**, **Amoako AA** and **Sekar R** (2019) The efficacy of quantitative fetal fibronectin in predicting spontaneous preterm birth in symptomatic women: A retrospective cohort study. *Australian and New Zealand Journal of Obstetrics and Gynaecology.* doi:10.1111/ajo.12947
7. **Liu C**, Lodge J, Flatley C, Gooi A, Ward C, Eagleson K, **Kumar S** (2018) Obstetric and perinatal outcomes in pregnancies with isolated foetal congenital heart abnormalities, *J Matern Fetal Neonatal Med.* 2019 Sep;32(18):2985-2992. doi: 10.1080/14767058.2018.1453799. Epub 2018 Apr 3
8. **Ho N**, **Liu C**, Nguyen AD, **Lehner C**, **Amoako A**, **Renuka R**. Prediction of Time of Delivery using Cervical Length Measurement in Women with Threatened Preterm Labour. *J Matern Fetal Neonatal Med.* 2019. doi:10.1080/14767058.2019.1670798
9. **Tanaka K**, **Amoako A**, Gray K, and **Baartz D** (2019) Unilateral ureteric endometriosis at the pelvic brim resulting in complete loss of renal function. *Case Reports in Obstetrics and Gynecology*, 2019 1-6. doi:10.1155/2019/9194615
10. **Ho N**, **Liu C**, Nguyen A, **Lehner C**, **Amoako A** and **Sekar R**, (2019) Prediction of time of delivery using cervical length measurement in women with threatened preterm labor. *The Journal of Maternal-Fetal & Neonatal Medicine*, doi:10.1080/14767058.2019.1670798
11. Douville, S. E., Callaway LK, **Amoako, A**, Roberts, J. and Eley, V. A. (2019) Reducing post-caesarean delivery surgical site infections: a narrative review. *International Journal of Obstetric Anesthesia*, doi: 10.1016/j.ijoa.2019.08.007
12. Alhusuny A, Cook M, **Khalil A**, Xie Y, Johnston V. Neck/Shoulder Problems and Visual Disturbances Among Surgeons: A Scoping Review. *J Surg Res.* 2019 Oct 31. pii: S0022-4804(19)30709-7. doi: 10.1016/j.jss.2019.09.064
13. Rosenfeld E B, Yurteri-Kaplan LA, **Maher C**, Bazi T, Svabik K, Houlihan S, Grimes CL. (2019) FPMRS challenges on behalf of the Collaborative Research in Pelvic Surgery Consortium (CoRPS): managing complicated cases series 4: is taking out all of a mesh sling too extreme? *International Urogynecology Journal*,. doi:10.1007/s00192-019-04172-9
14. **Maher C**. (2019) There is still a place for vaginal mesh in urogynaecology: FOR: there is still a place for vaginal mesh in urogynaecology. *BJOG: An International Journal of Obstetrics and Gynaecology*, 126 8: 1074-1074. doi:10.1111/1471-0528.15694
15. **Maher C**, Biuttini M. (2019) No vaginal estrogen therapy arm in an RCT trial on genitourinary syndrome of menopause is a concern. *Climacteric*, 22 4: 1-1. doi:10.1080/13697137.2019.1597842
16. **Tanaka K**, Eriksson L, Asher R, Obermair A. Incidence of adverse events, preventability and mortality in gynaecological hospital admissions: A systematic review and meta-analysis. *Aust N Z J Obstet Gynaecol.* 2019 Apr;59(2):195-200. doi: 10.1111/ajo.12937. Epub 2019 Jan 20
17. Leeks R, Bartley C, O'Brien B, **Bagchi T**, **Kimble RMN**. Menstrual Suppression in Pediatric and Adolescent Patients with Disabilities Ranging from Developmental to Acquired Conditions: A Population Study in an Australian Quaternary Pediatric and Adolescent Gynecology Service from January 2005 to December 2015. *J Pediatr Adolesc Gynecol.* 2019 Jun 8. pii: S1083-3188(19)30201-3. doi: 10.1016/j.jpag.2019.05.005
18. Becherel OJ, Fogel BL, Zeitlin SI, Samaratunga H, Greaney J, Homer H, Lavin MF. Disruption of Spermatogenesis and Infertility in Ataxia with Oculomotor Apraxia Type 2 (AOA2). *Cerebellum.* 2019 Jun;18(3):448-456. doi: 10.1007/s12311-019-01012-w
19. Costello MF, Garad RM, Hart R, Homer H, Johnson L, Jordan C, Mocanu E, Qiao J, Rombauts L, Teede HJ, Vanky E, Venetis CA, Ledger WL. A Review of Second- and Third-line Infertility Treatments and Supporting Evidence in Women with Polycystic Ovary Syndrome. *Med Sci (Basel).* 2019 Jun 26;7(7). pii: E75. doi: 10.3390/medsci7070075. Review
20. Gabbett MT, Laporte J, Sekar R, Nandini A, McGrath P, Sapkota Y, Jiang P, Zhang H, Burgess T, Montgomery GW, Chiu R, Fisk NM. Molecular Support for Heterogonesis Resulting in Sesquizygotic Twinning. *N Engl J Med.* 2019 Feb 28;380(9):842-849. doi: 10.1056/NEJMoa1701313
21. Groom KM, McCowan LM, Mackay LK, Lee AC, Gardener G, Unterscheider J, Sekar R, Dickinson JE, Muller P, Reid RA, Watson D, Welsh A, Marlow J, Walker SP, Hyett J, Morris J, Stone PR, Baker PN. RIDER NZAus: a multicentre randomised controlled trial of sildenafil therapy in early-onset fetal growth restriction. *BJOG.* 2019 Jul;126(8):997-1006. doi: 10.1111/1471-0528.15658. Epub 2019 Mar 14
22. Eley VA, Chin A, **Sekar R**, Donovan T, Krepska A, Lawrence M, Bell S, Ralfe K, McGrath S, Webb L, Robinson A, van Zundert A, Marquart L. Increasing body mass index and abdominal subcutaneous fat thickness are associated with increased skin-to-epidural space distance | in pregnant women. *Int J Obstet Anesth.* 2019 May; 38:59-65. doi: 10.1016/j.ijoa.2018.10.005. Epub 2018 Oct 19
23. **Maher CF**, Biuttini .M (2019) No vaginal estrogen therapy arm in an RCT trial on genitourinary syndrome of menopause is a concern. *Climacteric*, 22 4: 1-1. doi:10.1080/13697137.2019.1597842
24. Haylen BT, Lee JKS, Sivagnanam V, **Maher CF**. Total tape ban: Not the answer! *Neurourol Urodyn.* 2018 Aug;37(6):2035-2037. doi: 10.1002/nau.23794
25. Jauniaux E, Ayres-de-Campos D, Langhoff-Roos J, Fox KA, Collins S; FIGO Placenta Accreta Diagnosis and Management Expert Consensus Panel. FIGO classification for the clinical diagnosis of placenta accreta spectrum disorders. *Int J Gynaecol Obstet.* 2019 Jul;146(1):20-24. doi: 10.1002/ijgo.12761
26. Costello M, Garad R, Hart R, **Homer H**, Johnson L, Jordan C, Mocanu E, Qiao J, Rombauts L, Teede HJ, Vanky E, Venetis C, Ledger W. A Review of First Line Infertility Treatments and Supporting Evidence in Women with Polycystic Ovary Syndrome. *Med Sci (Basel).* 2019 Sep 10;7(9). pii: E95. doi: 10.3390/medsci7090095. Review
27. Zhou C, Hancock JL, Khanna KK and **Homer H**. (2019) First meiotic anaphase requires Cep55-dependent inhibitory cyclin-dependent kinase 1 phosphorylation. *Journal of Cell Science*, 132 18: jcs233379. doi:10.1242/jcs.233379
28. **Tanaka K**, Mayne L, **Khalil A**, **Baartz D**, Eriksson L, Mortlock SA, Montgomery G, McKinnon B, **Amoako AA**. The role of the Endocannabinoid System in aetiopathogenesis of endometriosis: A potential Therapeutic Target. *Eur J Obstet Gynecol Reprod Biol.* 2019 Nov 15; 244:87-94. doi: 10.1016/j.ejogrb.2019.11.012. [Epub ahead of print] Review.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Maher C.** Credentialing in gynaecology. RANZCOG Queensland/New South Wales/ Provincial Fellows Regional Scientific Meeting, June 2019
2. **Baartz D.** Gestational trophoblastic disease. RANZCOG Queensland/New South Wales/ Provincial Fellows Regional Scientific Meeting, June 2019
3. **Tanaka K.** Caesarean scar pregnancy: Quick overview of management options and intravenous methotrexate infusion therapy at the Royal Brisbane and Women's Hospital. RANZCOG Queensland/New South Wales/Provincial Fellows Regional Scientific Meeting, June 2019
4. **Hayden Homer:** Reproductive biology, preconception care, and fertility services in the public sector. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
5. **Akwasi Amoako:** "The Human Sperm Apocalypse: Have We Reached a Crucial 'Tipping Point'?" In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019.

Oral Presentations

1. Alhusuny A, Cook M, **Khalil A**, Johnston V: Neck/Shoulder and Vision Problems in Surgical Team Performing Minimally Invasive Surgeries. In Proceedings of the 20th Congress International Ergonomics Association; Florence Italy; 31 August -1 September 2018
2. **Liu CZ, Ho N**, Nguyen AD, **Lehner C, Renuka R, Amoako AA:** The Association between Gestational Age at Diagnosis of Asymptomatic Cervical Shortening and Risk of Preterm Birth. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
3. **Pathmanathan U**, Wilkinson R, **Amoako A, Rudra T.** Is Routine Kleihauer-Betke Test Useful Tool in the Management of Women with Decreased Foetal Movements? In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019.

Poster Presentations

4. Vaswani K, Almughlilq FB, Koh YQ, Peiris HN, **Sekar R, Amoako AA, Kumar S**, Mitchell MD. The Effect of Interleukin 1 Beta on Eicosanoid Enzyme Gene Expression in Endometrium and Trophoblast Cells in a Co-Culture Model. In: Proceedings of the 66th Annual Scientific Meeting of the Society for Reproductive Investigation, "From Innovation to Impact" Paris, France, March 12 - 16, 2019. Reproductive Sciences. 2019; 26, 199A-200A
5. Peiris HN, Vaswani K, Almughlilq FB, Koh YQ, **Sekar R, Amoako AA, Kumar S**, Mitchell MD. Effect of 2-Arachidonoylglycerol on the Production of Prostaglandin E2 by Human Amnion Explants. In: Proceedings of the 66th Annual Scientific Meeting of the Society for Reproductive Investigation, "From Innovation to Impact" Paris, France, March 12-16, 2019. Reproductive Sciences. 2019; 26, 210A-211A
6. Almughlilq FB, Koh YQ, Peiris HN, Vaswani K, **Sekar R, Amoako AA, Kumar S**, Mitchell MD. Chronic Maternal/Fetal Inflammation Differentially Regulates Eicosanoid Enzyme Gene Expression in Endometrium and Trophoblast. In: Proceedings of the 66th Annual Scientific Meeting of the Society for Reproductive Investigation, "From Innovation to Impact" Paris, France, March 12 - 16, 2019. Reproductive Sciences. 2019; 26, 301A-301A
7. Almughlilq FB, Koh YQ, Peiris HN, Vaswani K, **Sekar R, Amoako AA, Kumar S**, Mitchell MD. Eicosanoid Enzyme Gene Expression Profiling in an In Vitro Co-Culture Model of Maternal-Fetal Communication. In: Proceedings of the 66th Annual Scientific Meeting of the Society for Reproductive Investigation, "From Innovation to Impact" Paris, France, March 12 - 16, 2019. Reproductive Sciences. 2019;26, 377A-378A
8. **Rudra T, Pathmanathan U, Amoako AA.** Absent Foetal Movements in Third Trimester – Is it a New Clinical Entity? In: Proceedings of the RCOG World Congress 2019, London, United Kingdom, June 17-19, 2019
9. **Ho N, Liu CZ**, Nguyen AD, **Lehner C, Amoako AA, Sekar R.** Prediction of Time of Delivery Using Cervical Length Measurement in Women with Threatened Preterm Labour. In: Proceedings of the RCOG World Congress 2019, London, United Kingdom, June 17-19, 2019
10. **Liu CZ, Ho N**, Nguyen AD, **Lehner C, Amoako AA, Sekar R.** Iatrogenic Late Preterm Births and Neonatal Outcomes in A Single Tertiary Centre: Retrospective Cohort Study. In: Proceedings of the RCOG World Congress 2019, London, United Kingdom, June 17-19, 2019
11. **Liu CZ, Ho N**, Nguyen AD, **Lehner C, Amoako AA, Sekar R.** The Association between Gestational Age at Diagnosis of Asymptomatic Cervical Shortening and Risk of Preterm Birth. In: Proceedings of the RCOG World Congress 2019, London, United Kingdom, June 17-19, 2019
12. **Zhu S, Tanaka K, Khalil A, Baartz D, Amoako AA:** A Retrospective Comparison of Surgical and Medical Management of Tubo-Ovarian Abscess. In: Proceedings of the RANZCOG 2019 Queensland/New South Wales/ Provincial Fellows Regional Scientific Meeting, Gold Coast, Queensland, 6-9 June 2019
13. **Tanaka K**, Petersen D, **Amoako A A, Khalil A, Baartz D.** Bowel endometriosis requiring anterior resection: 5-year experience at a single tertiary centre. In: Proceedings of the 28th Annual RBWH Healthcare Symposium. September, Brisbane, 2019
14. **Zhu S, Tanaka K, Khalil A, Baartz D, Amoako AA:** Comparing Surgical and Medical Management of Tubo-Ovarian Abscesses: A Retrospective Single Tertiary Centre Study. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
15. **Adams K, Tanaka K, Khalil A, Baartz D, Amoako AA:** Management and Outcomes of Ovarian Torsion: A Retrospective Analysis. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
16. **Liu CZ, Ho N, Lehner C, Renuka R, Amoako AA:** Association between prolonged second stage of labour and subsequent preterm birth. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
17. **Liu CZ, Ho N, Lehner C, Renuka R, Amoako AA:** Stage of labour at time of caesarean section delivery and subsequent preterm birth risk. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
18. **Ho N, Liu C, Lehner C, Amoako A, Sekar R.** How does time of the first spontaneous vaginal delivery influence subsequent preterm birth? In: Proceedings of the 28th Annual RBWH Healthcare Symposium; Herston; September 2019
19. **Ho N, Liu CZ, Lehner C, Renuka R, Amoako AA:** The risk of subsequent spontaneous preterm birth in term induction of labour. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019

Poster Presentations (cont)

20. **Ho N, Liu CZ, Nguyen AD, Lehner C, Renuka R, Amoako AA:** Prediction of Time of Delivery Using Cervical Length Measurement in Women with Threatened Preterm Labour. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
21. **Ho N, Liu CZ, Lehner C, Renuka R, Amoako AA:** Does the gestational age of the first spontaneous vaginal delivery influence the risk of subsequent preterm birth. In: Proceedings of the 28th Annual RBWH Healthcare Symposium. September 2019
22. **Chui M, Sahu A, Lah D, Rudra T:** Obstetrics outcome following instrumental delivery in theatre. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
23. **Cheer K, Gupta A, Song W, Rudra T:** managing placenta accreta spectrum disorders – are we doing it right? In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
24. **Ho N, Artis K, Bagchi T:** Does the Use of Fetal Pillow® in Fully Dilated Caesarean Sections Improve Maternal and Fetal Outcomes? In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
25. **Lehner C, Farquharson J, Goder Z:** Midwifery continuity of care to reduce the rate of preterm birth – a single centre experience at the Royal Brisbane and Women’s Hospital (RBWH). In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
26. **Lehner C** for the Queensland APTBPA: The Australian Preterm Birth Prevention Alliance (APTBPA) – an initiative to reduce the rising rate of preterm births in Australia: the Queensland perspective. In: Proceedings of the 28th Annual RBWH Healthcare Symposium, Brisbane, September 2019
27. **Pathmanathan U, Wilkinson R, Amoako A, Rudra T.** Is Routine Kleihauer-Betke Test Useful Tool in the Management of Women with Decreased Foetal Movements? In: Proceedings of the 28th Annual RBWH Healthcare Symposium; Herston; September 2019
28. **Bright M, Christensen R, Klopogge, Chawla G, Sekar R, Eley V.** An audit of surgical site infections following caesarean section. In: Proceedings of the 28th Annual RBWH Healthcare Symposium; Herston; September 2019
29. **Lee J, Eley V, Wyssusek K, Kimble R, Way M, Cohen J, Van Zundert A.** Rotational Thromboelastometry (ROTEM®) Assessment of the Combined Effect of Term Pregnancy and Obesity on Coagulation in Healthy Women with Uncomplicated Pregnancies in Australia: A Prospective Observational Study. In: Proceedings of the 28th Annual RBWH Healthcare Symposium; Herston; September 2019
30. **Young T.** To evaluate the obstetric and neonatal outcomes for low risk women undergoing water immersion only during the first stage of labour compared with low risk women labouring on land In: Proceedings of the 28th Annual RBWH Healthcare Symposium; Herston; September 2019
31. **Chung P, Laporte J, Sekar R, Minuzzo L, Craven A-M:** Case Report: Delayed Diagnosis of Uterine Incarceration in a Multiparous Woman with Anuric End Stage Renal Disease. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
32. **Tanaka K, Petersen D, Amoako AA, Khalil A, Baartz D.** Bowel endometriosis requiring anterior resection: 5-year experience at a single tertiary centre. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
33. **Zhu S, Tanaka K, Khalil A, Baartz D, Amoako AA:** A Retrospective Comparison of Surgical and Medical Management of Tubo-Ovarian Abscess. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
34. **Adams K, Tanaka K, Khalil A, Baartz D, Amoako AA:** Management and Outcomes of Ovarian Torsion: A Retrospective Analysis. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
35. **Liu CZ, Ho N, Lehner C, Renuka R, Amoako AA:** Prolonged second stage of labour and the risk of subsequent preterm birth: a retrospective cohort study. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
36. **Liu CZ, Ho N, Lehner C, Renuka R, Amoako AA:** Stage of labour at caesarean section delivery and risk of subsequent preterm birth: a retrospective cohort study. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
37. **Ho N, Liu CZ, Lehner C, Renuka R, Amoako AA:** Time of Spontaneous Vaginal Delivery and Subsequent Preterm Birth. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
38. **Ho N, Liu CZ, Lehner C, Renuka R, Amoako AA:** Does term induction of labour influence the risk of subsequent spontaneous preterm birth? In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
39. **Ho N, Liu CZ, Nguyen AD, Lehner C, Renuka R, Amoako AA:** Prediction of Time of Delivery Using Cervical Length Measurement in Women with Threatened Preterm Labour. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
40. **Chung P, Cheer K, Hurst C and Rudra T.** Obstetric Outcomes in Major Praevia Compared to Minor Praevia. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
41. **Coates C and Sekar R.** Procedure-Related Risk of Invasive Prenatal Testing: A Retrospective Review in a Tertiary Centre. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
42. **Ho N, Artis K and Bagchi T.** Maternal and Fetal Outcomes Following the Use of Fetal Pillows in Fully Dilated Caesarean Section. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
43. **Rudra T, Sahu A, Chui M and Lah D.** Obstetric Outcome Following Trial of Instrumental Delivery in Theatre. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
44. **Rudra T, Pathmanathan U, Amoako A** and Wilkinson R. Is Routine Kleihauer-Betke Test Useful Tool in the Management of Women with Decreased Fetal Movements? In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
45. **Foo A and Rudra T.** Undiagnosed Breech: Can We Do Better? In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
46. **Chung P, Cheer K, Hurst C and Rudra T.** Placenta Praevia – Can We Do Any Better? In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019
47. **Adikari T and O'Brien B.** Presentations and Outcomes of Patients with Disorders of Sexual Development (DSD) in a Tertiary Paediatric and Adolescent Gynaecology (PAG) Service. In: Proceedings of the RANZCOG 2019 Annual Scientific Meeting, Melbourne, Victoria, 13-16 October 2019.

OBSTETRIC MEDICINE

The department of Obstetric Medicine conducts high level research into complications of pregnancy and maternal and fetal outcomes. There are currently six staff undertaking research higher degrees within the department and a large number of research nurses involved in multiple studies. The department collaborates with other research centres across Australia to further our understanding of complex pregnancies, particularly in the field of cardiology, maternal metabolism and asthma. The department was very active at the annual Australasian scientific meeting in Obstetric Medicine this year with five oral presentations and sixteen poster presentations, one of which was awarded the best scientific poster.

Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Alison Green	PhD University of Queensland	Gestational Diabetes in General Practice	Leonie Callaway , David McIntyre, Ben Mitchell
Naomi Achong	PhD University of Queensland	Breastfeeding in Type 1 Diabetes	Leonie Callaway , Emma Duncan, David McIntyre
Alka Kothari	PhD University of Queensland	Forgotten Fathers	Leonie Callaway , Joel Dulhunty
Helen Robinson	PhD University of Queensland	Ketosis in Pregnancy	Leonie Callaway , Helen Barrett, Marloes Dekker
Fiona Britten	Master of Philosophy University of Queensland	Breastfeeding in Type 2 Diabetes	Leonie Callaway , Emma Duncan
Emma Shipton	PhD University of Queensland	Models of Care and Breastfeeding	Leonie Callaway , Susan de Jersey, Katie Foxcroft
Lisa McKeown	Master of Philosophy University of Queensland	Do parents of preterm infant's experience symptoms of post-traumatic stress disorder?	Vanessa Cobham, Leonie Callaway , Katie Foxcroft

Obstetric Medicine Team



Back row (L-R): Emma Shipton, Katie Foxcroft, Dr Fiona Britten, Dr Penny Wolski, Dr Annabelle Lamprecht
Front row (L-R): A/Prof Karin Lust, Prof Leonie Callaway, Dr Ann-Maree Craven

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Prof Leonie Callaway	Director of Research Women's and Newborn Services	Women's Health and the importance of the intrauterine and neonatal environment in influencing long term adult health	
	Professor of Medicine – UQ	Women's and Newborn Services/Faculty of Medicine	University of Qld
Katie Foxcroft	Adjunct Fellow	WNS and Perinatal Research Centre	University of Qld
Annelise Kirkham	Research Nurse	My Baby Moves, Neuroprotective role of sulphate among preterm babies (SuPreme Study)	
Felicity Stalley	Research Nurse	Breathing for Life – A randomised trial of fractional exhaled nitric oxide (FENO)-based management of asthma during pregnancy and its impact on perinatal outcomes and infant and childhood respiratory health LEAP -Lactoferrin Evaluation in Anaemia in Pregnancy: To evaluate, in a randomised controlled trial (RCT), oral bovine lactoferrin (bLF) vs iron sulphate (FeSO ₄) in iron deficiency anaemia in pregnancy (IDAP), Offspring – Offspring – Do Probiotics in Pregnancy Prevent Allergic disease in Children	
Lisa McKeown	Research Nurse	PAEAN – Preventing Adverse Outcomes of Neonatal Hypoxic Ischaemic Encephalopathy with Erythropoietin NEBO – Neonatal Encephalopathy Brain Outcomes: Prospective study of Clinical and MRI Biomarkers in term born infants to improve accurate and earlier prediction of Cerebral Palsy LIFT – Lactoferrin Infant Feeding Trial	
Emma Shipton	Research Nurse	LEAP1 -Lactoferrin Evaluation in Anaemia in Pregnancy: To evaluate, in a randomised controlled, trial (RCT), oral bovine lactoferrin (bLF) vs iron sulphate (FeSO ₄) in iron deficiency anaemia in pregnancy (IDAP), Offspring – Do Probiotics in Pregnancy Prevent Allergic disease in Children	
Linda Cobbald	Research Nurse	NOVA – NeOnatal Vascular Access: an observational audit of neonatal vascular access complications	
Gill Lack	Research Nurse	NOVA – NeOnatal Vascular Access: an observational audit of neonatal vascular access complications	

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Sarah Davidson	Honorary Research Student		The effect of using ultrasound-guided management of gestational diabetes on maternal and neonatal outcomes in pregnant women	Duke University, North Carolina

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Jeanette Tyler, Katie Foxcroft		Feasibility and acceptability of web-based auditing of hospital staff and maternity patients for compliance with Baby Friendly Health Initiative (BFHI) standards
Leonie Callaway, Katie Foxcroft	Helen Barrett, Marloes Dekker, David McIntyre	Do Probiotics in Pregnancy Prevent Allergic Disease in Children?

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Murphy V, Gibson P, Hensley M, Mattes J, Giles W, Peek M, Bisits A, McCaffery K	Callaway L, Colditz P, Barrett H	Breathing for Life Trial
EURObservational research programme	Lust K, Parsonage W	Registry of pregnancy and cardiac disease
Sullivan E, Cordina R, Simmons L, Pollock W, Kennedy D, Vaughan G, Li Z, O'Brien A, Turnbull K, Peek M, Celermajer D, Parsonage W, Lam L, Zentner D, Hyett J, Clarke M	Lust K, Parsonage W	NSW longitudinal study of first-time mothers with heart disease and their babies
Regan AK, Andrews RM, Moore HC, Binks MJ, McHugh L, Pereira G, Blyth CC, Van Buynder PG	Lust K	Links2HealthierBubs: Influenza and pertussis vaccine effectiveness in pregnancy

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Helen Robinson	Best Scientific Poster	SOMANZ Annual Scientific Meeting 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Simmons D, Callaway L , Dekker M, Ng D	Obstetric medicine	Trophoblast cell-cell fusion in preeclampsia	National Health and Medical Research Council	\$487,273	\$162,424.33	2017-2019
Murphy V, Gibson P, Hensley M, Mattes J, Giles W, Peek M, Bisits A, Callaway L , McCaffery K, Barrett H	Obstetric medicine	The Breathing for Life Trial (BLT): A randomized trial of fractional exhaled nitric oxide-based management of asthma during pregnancy and its impact on perinatal outcomes and infant and childhood respiratory health	National Health and Medical Research Council	\$1,647,906	\$28,500	2014-2019
Graves N, Hillman K, Willmott L, White B, Harvey G, Callaway L , Cardona-Morrell M, Barnett A, Lee X	Obstetric Medicine	Reducing Non-Beneficial Treatment at the End-of-Life	National Health and Medical Research Council Partnership Project	\$1,008,215	\$504,107.50	2018-2020
Hague W, Dodd J, Morris J, Stark M, Peek M, Middleton P, Shand A, Newnham J, Callaway L , Walker S	Obstetric Medicine	Treatment of Severe Early Onset Intrahepatic Cholestasis of Pregnancy	Medical Research Future Fund Research Grant	\$1,191,769	\$595,844.50	2018-2020
Shipton E	Obstetric Medicine	PhD models of care and Breastfeeding	RBWH Foundation	\$38,082.52	\$38,082.52	2019
Sullivan E, Cordina R, Simmons L, Pollock W, Lust K , Parsonage W, Kennedy D, Vaughan G, Li Z, O'Brien A, Turnbull K, Peek M, Celermajer D, Lam L, Zentner D, Hyett J, Clarke M	Obstetric medicine	NSW longitudinal study of first-time mothers with heart disease and their babies	Heart Foundation, NSW Cardiovascular Research Network Women and Heart Disease Grant	\$150,000	\$75,000	2017-2020
Regan AK, Andrews RM, Moore HC, Binks MJ, McHugh L, Pereira G, Blyth CC, Van Buynder PG, Lust K	Obstetric medicine	Links2HealthierBubs: Influenza and pertussis vaccine effectiveness in pregnancy	National Health and Medical Research Council Grant	\$676,333.20	\$16,9083.30	2017-2020
Leonie Callaway, Katie Foxcroft , Helen Barrett, Marloes Dekker, David McIntyre	Obstetric medicine	Do Probiotics in Pregnancy Prevent Allergic Disease in Children	RBWH Foundation	\$39,936	\$19,968	2018-2019

2019 Research Publications

Journal Articles

- Brooks EK, Schweitzer D, **Robinson HL**. A Case of Paramyotonia congenita in pregnancy. *Obstetric Medicine*. Doi. org/10.1177/1753495X18816171
- Callaway LK**, McIntyre HD, Barrett HL, **Foxcroft K**, Tremellen A, Lingwood BE, Tobin JM, Wilkinson S, Kothari A, Morrison M, O'Rourke P, Pelecanos A, Dekker Nitert M. Probiotics for the Prevention of Gestational Diabetes Mellitus in Overweight and Obese Women: Findings From the SPRING Double-Blind Randomized Controlled Trial. *Diabetes Care*. 2019 Mar;42(3):364-371. doi: 10.2337/dc18-2248. Epub 2019 Jan 19
- Kilgour C**, Bogossian F, **Callaway L**, Gallois C. Experiences of women, hospital clinicians and general practitioners with gestational diabetes mellitus postnatal follow-up: A mixed methods approach. *Diabetes Res Clin Pract*. 2019 Feb; 148:32-42. doi: 10.1016/j.diabres.2018.12.005. Epub 2018 Dec 21
- Kothari A, Thayalan K, Dulhunty J, **Callaway L**. The forgotten father in obstetric medicine. *Obstet Med*. 2019 Jun;12(2):57-65. doi: 10.1177/1753495X18823479. Epub 2019 Feb 18. Review
- Schoenaker DAJM, **Callaway LK**, Mishra GD. The Role of Childhood Adversity in the Development of Gestational Diabetes. *Am J Prev Med*. 2019 Jul 20. pii: S0749-3797(19)30242-9. doi: 10.1016/j.amepre.2019.04.028. [Epub ahead of print]
- Robinson H**, Barrett H, Gomez-Arango L, McIntyre HD, Callaway L, Dekker Nitert M. Ketonuria Is Associated with Changes to the Abundance of *Roseburia* in the Gut Microbiota of Overweight and Obese Women at 16 Weeks Gestation: A Cross-Sectional Observational Study. *Nutrients*. 2019 Aug 8;11(8). pii: E1836. doi: 10.3390/nu11081836

Journal Articles (cont)

- Douville SE, **Callaway LK**, **Amoako A**, Roberts JA, Eley VA. Reducing post-caesarean delivery surgical site infections: a narrative review. *Int J Obstet Anesth.* 2019 Sep 5. pii: S0959-289X(19)30530-8. doi: 10.1016/j.ijoa.2019.08.007. [Epub ahead of print] Review
- Lowe SA, Armstong G, Beech A, Bowyer L, Grzeskowiak L, Marnoch CA, **Robinson H**. SOMANZ position paper on the management of nausea and vomiting in pregnancy and hyperemesis gravidarum. *ANZJOG* Oct 2019 doi.org/10.1111/ajo.13084
- Sarna M, Andrews R, Moore H, Binks MJ, McHugh L, Pereira GF, Blyth CC, Van Buynder P, **Lust K**, Effler P, Lambert SB, Omer SB, Mak DB, Snelling T, D'Antoine HA, McIntyre P, de Klerk N, Foo D, Regan AK. "Links2HealthierBubs" cohort study: protocol for a record linkage study on the safety, uptake and effectiveness of influenza and pertussis vaccines among pregnant Australian women. *BMJ Open.* 2019 Jun 20;9(6)
- Rigg J, Gilbertson E, Barrett HL, **Britten FL**, **Lust K**. Primary Hyperparathyroidism in Pregnancy: Maternofetal Outcomes at a Quaternary Referral Obstetric Hospital, 2000 Through 2015. *J Clin Endocrinol Metab.* 2019 Mar 1;104(3):721-729
- Dawson AJ, Krastev Y, Parsonage WA, Peek M, **Lust K**, Sullivan EA. Experiences of women with cardiac disease in pregnancy: a systematic review and metasynthesis. *BMJ Open.* 2019 Sep 28;9(9)
- Schaap T, Bloemenkamp K, Deneux-Tharoux C, Knight M, Langhoff-Roos J, Sullivan E, van den Akker T; **INOSS**. Defining definitions: a Delphi study to develop a core outcome set for conditions of severe maternal morbidity. *BJOG.* 2019 Feb;126(3):394-401.
- Carter HE, Lee XJ, Gallois C, Winch S, **Callaway L**, Willmott L, White B, Parker M, Close E, Graves N. Factors associated with non-beneficial treatments in end of life hospital admissions: a multicentre retrospective cohort study in Australia. *BMJ Open.* 2019 Nov 4;9(11):e030955. doi: 10.1136/bmjopen-2019-030955.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

- Callaway L**. Compassionate Care and Mindfulness in Medicine. In: Proceedings of the New Zealand Society for the Study of Diabetes Annual Scientific Meeting, Napier New Zealand, May 7-10, 2019
- Callaway L**. GDM: Models of Care. In: Proceedings of the New Zealand Society for the Study of Diabetes Annual Scientific Meeting, Napier New Zealand, May 7-10, 2019
- Callaway L**. Insights into Birth Trauma from Obstetric Medicine. In: Proceedings of The Australian Birth Trauma Conference, Brisbane August 16, 2019
- Callaway L**. The consumer perspective on GDM. In: Proceedings of the Australian Diabetes in Pregnancy Society Scientific Meeting. Sydney August 23-25, 2019
- Callaway L**. The SPRING Study Findings. In: Proceedings of the Australian Diabetes Congress, Sydney August 23, 2019
- Callaway L**. Unscrambled Complement for Breakfast: Diseases of Innate Immunity in Pregnancy. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
- Callaway L**. Psychosocial Issues in Obesity. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
- Callaway L**. The Hidden Epidemic in Obstetric Care – and Why It Matters to Us All. In: Proceedings of the Metro North Health Forum Brisbane October 16, 2019.
- Callaway L**. Oops...Accidental Clinician Scientist. In: Proceedings of the Mater Inaugural Research Symposium, Brisbane October 25, 2019
- Parsonage W. Risk stratification of pregnancy in women with heart disease. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
- Lust K**. Obstetric Medicine Disorders in pregnancy, In. RANZCOG Queensland FRANZCOG Examination Preparation Course Brisbane 2019.

Oral Presentations

- Callaway L**. Frank feedback – Consumers perspectives on GDM. In: Proceedings of the Australasian Diabetes in Pregnancy Society Annual Scientific Meeting, 23-25 August 2019
- Britten F**. Breastfeeding in Women with Type 1 and type 2 Diabetes. In: Proceedings of the Australasian Diabetes in Pregnancy Society Annual Scientific Meeting, 23-25 August 2019
- Jinewen He**. A case series of pregnancies in solid organ transplant recipients at the Royal Brisbane and Women's Hospital in the past 10 years. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
- Fanning E**. Gestational weight loss in obese pregnant women. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019.

Poster Presentations

- Bright M, Chawla G, **Callaway L**, Eley VA: Anaesthetic and peripartum care and outcomes in women with extreme obesity. In: Proceedings of the Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, Kuala Lumpur, April 29–May 3, 2019
- Sweeney, A, Katikireddi, S, **Poulsen, K**: Prevalence of Antiphospholipid Antibodies in Women with Early Onset Preeclampsia in a Tertiary Centre. In: Proceedings of the Asia Pacific League of Associations for Rheumatology (APLAR) 21st Annual Scientific Meeting, Brisbane, 2019 April
- Nightingale, B**. A Retrospective Audit of the Efficacy of New Glycemic Targets in the Treatment of Gestational Diabetes Mellitus (GDM) in the Sunshine Coast Hospital and Health Service District (SCHHS). In: Proceedings of the Australasian Diabetes in Pregnancy Society Annual Scientific Meeting, 23-25 August 2019

Poster Presentations (cont)

4. **Robinson, H**, Barrett H, Gomez-Arango L, McIntyre D, **Callaway L**, Dekker –Nitert M. Ketonuria is associated with changes to the abundance of Roseburia in the gut microbiota of overweight and obese women at 16 weeks gestation. In: Proceedings of the Australasian Diabetes in Pregnancy Society Annual Scientific Meeting, 23-25 August 2019
5. Green, A, **Callaway L**, Mitchell B. Diagnosing and providing initial management for patients with Gestational Diabetes: What is the General Practitioner's experience? In: Proceedings of the Australasian Diabetes in Pregnancy Society Annual Scientific Meeting, 23-25 August 2019
6. Kilgour C, Bogossian F, **Callaway L**, Gallois C. Experiences of women, hospital clinicians and general practitioners with gestational diabetes mellitus postnatal follow-up: A mixed methods approach. In: Proceedings of the 28th Annual RBWH Healthcare Symposium; Herston; September 2019
7. Powlesland H, Guthrie T, **Callaway L**, Wilkinson S, Eakin E, de Jersey S. Advertising antenatal healthy lifestyle telephone coaching service through direct text messaging increases self-referral and overall service access. In: Proceedings of the 28th Annual RBWH Healthcare Symposium; Herston; September 2019
8. Guthrie T, Powlesland H, Wilkinson S, **Callaway L**, Eakin E, de Jersey S. Staff and participant satisfaction with a dietetic-led telephone coaching program to support healthy gestational weight gain. In: Proceedings of the 28th Annual RBWH Healthcare Symposium; Herston; September 2019
9. **Britten FL, Duke M, Lee W, Lust K**. Azathioprine Toxicity in Pregnancy. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
10. Butler-Mader R, Fassbind I, **Craven AM**. Transdermal Granisetron in the treatment of Hyperemesis Gravidarum. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
11. **Lust KM**, Sarma M, Andrews RM, Moore HC, Binks MJ, McHugh L, Pereira G, Blyth CC, Van Buynder P, Regan A. The 'Links2HealthierBubs' Cohort Study: Protocol for a record linkage study on the safety, uptake and effectiveness of influenza and pertussis vaccines among pregnant Australian women. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
12. **Nightingale B, Craven AM**. Cerebral venous thrombosis, a misdiagnosis with MR-venography. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
13. **Nightingale B, Robinson H**. A mediastinal mass with sever superior vena cava compression. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
14. **Robinson H, Dekker N, Callaway L**, Barrett H. Maternal ketones in gestational diabetes mellitus: a clinical practice survey. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
15. **Robinson H**, Barrett H, Gomez-Arango L, McIntyre D, **Callaway L**, Dekker –Nitert M. Ketonuria is associated with changes to the abundance of Roseburia in the gut microbiota of overweight and obese women at 16 weeks gestation: a cross-sectional observational study. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
16. **Tellam JJ, Craven AM**. Management of heparin allergy in pregnancy. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
17. **Tellam JJ, Lust K**. Anaemia in pregnancy with an unexpected aetiology In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
18. **Chung P**, Laporte J, Sekar R, Minuzzo L, **Craven AM**. Case Report: Delayed Diagnosis of Uterine Incarceration in a Multiparous Woman with Anuric End Stage Renal Disease. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
19. Young K, Bennett O, **Lamprecht A, Callaway L, Craven AM**. Acute Hepatitis C Infection in Pregnancy. A case report of second trimester diagnosis and term delivery. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
20. Dekker EE, Gomez-Arango LF, **Callaway LK**, McIntyre D, Morrison M, Barrett H & Dekker Nitert M. Gut wall barrier function is impaired in women who develop pregnancy complications and is no longer associated with dietary fibre intake. Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
21. Barrett H, Gomez-Arango LF, McIntyre D, **Callaway LK**, Dekker Nitert M. Lower abundance of the butyrateproducer Coprococcus in the gut microbiota of women with future preeclampsia Faisal Altemani. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
22. Tomsett K, Barrett H, **Callaway LK**, McIntyre D, Dekker Nitert M. High dietary fibre intake alters the composition of the gut microbiota in women who develop hypertensive disorders of pregnancy. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
23. **Fanning E**, Lee W. Gestational weight loss in obese pregnant women. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019
24. Sekar P, **Wolski P**. A case of severe hyperemesis resulting in subcutaneous emphysema. In: Proceedings of the Society of Obstetric Medicine of Australia and New Zealand, Annual Scientific Meeting, Melbourne October 11-13, 2019

Details of staff that completed their PhDs in 2019 within your department / research group

Name	Name of Project	Completed Date	Affiliated University/ies
Naomi Achong	Breastfeeding in Type 1 Diabetes	2019	University of Queensland

PERINATAL RESEARCH CENTRE

The Perinatal Research Centre (PRC), directed by Professor Paul Colditz, is committed to improving health for mothers and babies through world class biomedical and clinical research. Our multidisciplinary research team, consisting of clinicians, scientists, allied health professionals and engineers, aims to discover and translate research advances into clinical practice and better health outcomes for mothers and babies. Research within the PRC covers several related areas including neonatal brain injury and neuroprotection led by Dr Tracey Bjorkman, intrauterine growth restriction led by Dr Julie Wixey, systems physiology led by Dr Barbara Lingwood and Dr Yvonne Eiby, signal processing led by Prof Boualem Boashash as well as clinical trials involving the Royal Brisbane and Women's Hospital.

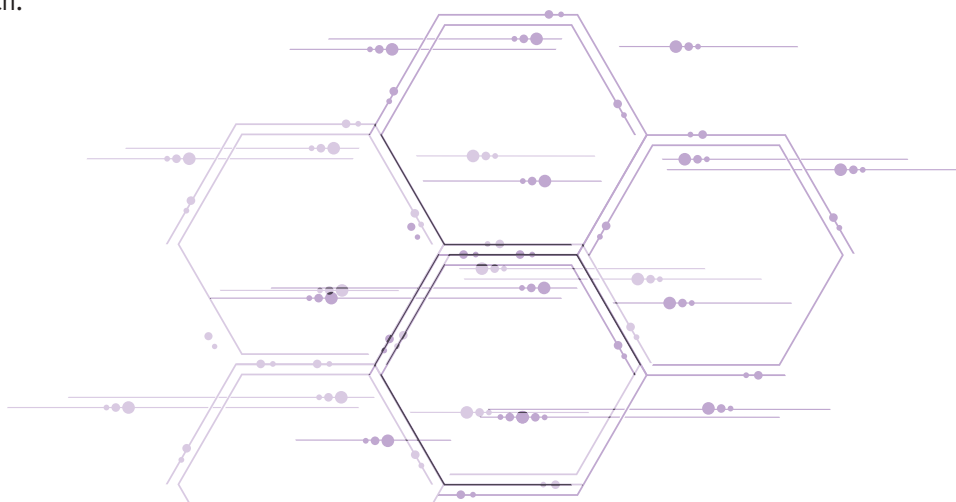
2019 has been a successful year for the Perinatal Research Centre. We were delighted for Prof Paul Colditz to be awarded Researcher of the Year at the 2019 Metro North Research Excellence Awards. We were also awarded two research grants in 2019 from RBWH. One grant led by Dr Lai and Dr Bjorkman is examining a novel treatment to reduce brain injury in newborn babies. A lack of oxygen around the time of birth results in damage to the brain (HIE) causing lifelong mental and physical disabilities including epilepsy and cerebral palsy. This pilot project will investigate a potential adjunctive therapy (fetuin) to complement hypothermia to reduce brain injury and improve neurodevelopmental outcomes.

Dr Pienaar and Dr Wixey are leading a grant examining protection of the intrauterine growth restricted (IUGR) newborn brain. IUGR can affect the developing brain resulting in poor outcomes such as intellectual impairment and cerebral palsy. No therapy exists to protect the IUGR newborn brain. The blood-brain barrier (BBB) plays a critical role in protecting the brain against the entry of toxic substances. We hypothesise the BBB is disrupted in the IUGR newborn brain and this disruption is associated with brain impairment. Further, we will assess whether ibuprofen treatment can reduce BBB disruption in the IUGR newborn brain and thus improve outcomes.

Professor Paul Colditz continues to lead a \$1.65 million NHMRC grant over 5 years to predict neurodevelopmental disability in babies born very preterm. By identifying structural and functional brain connectivity features earlier and more accurately than currently possible in the preterm brain, this research will enable better prediction of longer-term motor and neurodevelopmental function. This will lay the groundwork for new interventions to prevent or effectively treat brain injury. Dr Barbara Lingwood and Dr Yvonne Eiby also continue their 2017 NHMRC project examining whether early blood transfusion is more effective than saline to improve cerebral oxygen delivery in very preterm neonates. NHMRC and external sources have been instrumental in our continuing work on IUGR and HIE projects using placental stem cells as a treatment for brain injury. Data from our encouraging preliminary studies have been presented at multiple National and International conferences.

The RBWH NICU will contribute to a new multicentre Phase III randomised controlled trial funded by NHMRC to determine whether Erythropoietin treatment can prevent adverse outcomes in babies with HIE. Other ongoing clinical trials which utilise state-of-the-art methods and techniques include predicting motor outcomes in preterm babies using MRI, optimising adaptation of the cardiovascular system to extrauterine life in the very preterm baby and determining the effects of different feeding regimens on development in preterm babies.

Our ongoing funding is creating amazing results and media interest and we look forward to another year of high impact translational research. We would like to thank RBWH Foundation, Lions Medical Research Foundation, and so many members of the public for their generous support which is vital to improving outcomes for mothers and babies through research.



Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Ms Rebecca Caesar	PhD, UQ (2012-2019)	Early predictors for neurodevelopmental outcome and prioritisation of service delivery for at risk premature infants	Roslyn Boyd, Paul Colditz
Ms Elizabeth Forbes	MPhil, UQ (2013-2019) <i>Submitted 2019</i>	Changes in cardiac structure and biochemistry during transition to extra uterine life in preterm and term piglets	Yvonne Eiby, Barbara Lingwood , Karen Moritz
Ms Kate Goasdoue	PhD, UQ (2015-2019) <i>Awarded 2019</i>	A novel therapy for neonatal seizures	Tracey Bjorkman, Julie Wixey
Dr Luke Jardine	PhD, UQ (2015-2019)	Development of early predictors of long-term neurodevelopmental outcome for preterm infants	Paul Colditz , Mark Davies
Ms Ji Yeon Kim	PhD, UQ (2015-2019)	Understanding how remote application of near infrared light induces neuroprotection	Paul Colditz , Jonathon Stone
Ms Annice Kong	PhD, UQ (2014-2019) <i>Awarded 2019</i>	The relationship between brain structure assessed using diffusion MRI and function assessed using dense array EEG of very preterm infants and the ability to predict neurodevelopmental outcomes	Paul Colditz , Simon Finnigan, Roslyn Boyd, Stephen Rose
Dr Melissa Lai	PhD, UQ (2015-2019)	Environmental manipulation of the very preterm infant: Can dense array EEG detect developmental differences at term equivalent age	Paul Colditz , Simon Finnigan, Jurgen Fripp
Dr Norman Ma	MPhil, UQ (2011-2019)	Brain injury severity in a neonatal model of hypoxic ischemia following potential neuroprotective interventions	Tracey Bjorkman, Craig Winter , Paul Colditz
Ms Abirami Ratnasingham	PhD, UQ (2016-2019) <i>Submitted 2019</i>	Long term consequences of altered neonatal adiposity	Barbara Lingwood , Timothy Donovan , Marloes Nitert Dekker, Peter Davies, Yvonne Eiby
Ms Sonia Sam	PhD, UQ (2011-2019)	Cardiovascular factors associated with poor outcome in preterm infants	Barbara Lingwood , Paul Colditz
Mr Timothy Sherry	PhD, UQ (2015-2019)	Identification of brain events via electroencephalogram EEG through blind source separation	Paul Colditz
Dr Karen Barlow	PhD, UQ (2017-2020)	Melatonin in improving outcome after acquired brain injury	Ros Boyd, Paul Colditz
Mr Caleb Stewart	MPhil, UQ (2017-2019)	Modelling the impact of preterm birth on neurodevelopmental trajectories via neonatal MRI maturation index	Paul Colditz , Kerstin Pannek
Mr Elliot Teo	PhD, UQ (2017-2020)	Novel adjunctive therapies for the treatment of neonatal hypoxic-ischemic encephalopathy	Tracey Bjorkman, Paul Colditz
Ms Lara Jones	PhD, UQ (2018-2021)	Effect of placental stem cells on the blood brain barrier in a model of hypoxic-ischemic encephalopathy	Paul Colditz , Tracey Bjorkman

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Paul Colditz	Professor of Perinatal Medicine	Clinical neonatology, neuroscience, biomedical signal processing	University of Queensland
Timothy Donovan	Associate Professor	Improving outcomes for preterm infants particularly in the area of nutrition, growth/ body composition and development. Ongoing research in the use of telemedicine to provide outreach care of sick infants in regional hospitals. Epidemiology of gastroschisis	University of Queensland
Katie Foxcroft	Adjunct Fellow	Clinical Trial Coordinator	University of Queensland
Annelise Kirkham	Research Nurse	Clinical Trials	University of Queensland
Melissa Lai	Senior Lecturer	EEG in preterm babies	University of Queensland
Gillian Lack	Research Nurse	Clinical Trials	University of Queensland
Barbara Lingwood	Senior Research Fellow	Cardiovascular function in the preterm infant, infant body composition	University of Queensland
Eliza Hughes	Research Nurse	Clinical Trials	University of Queensland
Lisa McKeown	Research Nurse	Clinical Trials	University of Queensland
Emma Gibbs	Research Nurse	Clinical Trials	University of Queensland

RBWH Research Staff with research roles, positions or appointments e.g. Coordinators, etc (cont)

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Bonnie McNeill	Research Nurse	Clinical Trials	University of Queensland
Angela Backen	Research Nurse	Clinical Trials	University of Queensland
Jany Pienaar	Academic Title Holder	Intrauterine growth restriction studies	University of Queensland
Kylie Smart	Research Nurse	Clinical Trials	University of Queensland
Karen Taylor	Research Nurse	Clinical Trials Group supporting: Enhanced parenting to improve developmental outcomes in preterm infants	University of Queensland

Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	Research Program	Affiliated University/ies
Tracey Bjorkman	Senior Research Fellow	Hypoxic-ischaemic brain injury, growth restriction, inflammation and seizures in the neonate	University of Queensland
Nigel Barnett	Honorary Senior Fellow	The effects of hypoxia/ischaemia in visual development and disease	University of Queensland
Boualem Boashash	Emeritus Professor	Time-frequency signal analysis, biomedical signal processing, spectral estimation, signal detection and classification	University of Queensland
Kirat Chand	Research Officer	Hypoxic-ischaemic brain injury, growth restriction, inflammation and seizures in the neonate	University of Queensland
Yvonne Eiby	Research Fellow	The cardiovascular system of preterm infants	University of Queensland
Christine East	Honorary Professor	Fetal monitoring	University of Queensland
Simon Finnigan	Senior Research Fellow	Brain monitoring techniques to improve outcomes for critically ill patients (e.g. extremely premature babies; stroke patients)	University of Queensland
Kate Goasdoue	Research Technician	Newborn brain injury	University of Queensland
Annice Kong	Research Technician	EEG in the newborn brain	University of Queensland
Janet Hammill	Honorary Senior Fellow	Collaboration for Alcohol Related Developmental Disorders	University of Queensland
Lisa Kubenk	Senior Research Technician	Cardiovascular function in the preterm infant	University of Queensland
Penny Love	Honorary Fellow	Preterm massage study	University of Queensland
John Luff	Senior Research Assistant	Hypoxic-ischaemic brain injury, growth restriction, inflammation and seizures in the neonate	University of Queensland
Eugene Lumbers	Honorary Professor	Fetal origins of adult diseases, hypertension, development of control of the circulation, exercise and training, and renal development and function	University of Newcastle
Lipsa Mohanty	Senior Research Technician	Hypoxic-ischaemic brain injury, growth restriction, inflammation and seizures in the neonate	University of Queensland
Randal Moldrich	Honorary Fellow	Preterm brain outcomes	University of Queensland
Stephanie Miller	Research Officer	Hypoxic-ischaemic brain injury, growth restriction, inflammation and seizures in the neonate	University of Queensland
Kym Morris	Research Assistant	Clinical Trials	University of Queensland
Margo Pritchard	Honorary Senior Fellow	Child health surveillance and intervention	Australian Catholic University
Stephen Rose	Honorary Professor	Development and application of advanced MRI techniques to aid the detection and monitoring of disease processes	University of Queensland
Julie Wixey	Research Fellow	Hypoxic-ischaemic brain injury, intrauterine growth restriction and inflammation in the neonatal brain	University of Queensland
Ian Wright	Honorary Professor	Neonatal microcirculation	University of Wollongong
Elliott Teo	Research Technician	EEG in the Newborn Brain	University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Paul Colditz	Bjorkman T, Wixey J	Inflammation in the growth restricted newborn
Jany Pienaar	Wixey J, Chand K, Colditz P	Is the blood brain barrier disrupted in intrauterine growth restricted newborns?
Mel Lai	Bjorkman T, Wixey J, Colditz P	Does the plasma protein fetuin protect the injured newborn brain?
Paul Colditz	Khosrotehrani K, Wixey J	Improving brain outcomes in the growth restricted newborn using placental stem cell treatment
Paul Colditz	Khosrotehrani K, Bjorkman T, Patel J, Wixey J	Stem cell treatment for neonatal hypoxic ischemic encephalopathy
Paul Colditz	Wixey J, Bjorkman T	Reducing inflammation in growth restricted newborn brains
Paul Colditz	Khosrotehrani K, Bjorkman T, Fisk N, Lingwood B , Wixey J	Improving brain oxygen levels in babies using stem cell treatment
Barbara Lingwood	Stark M, Colditz P , Wright I, Eiby Y	A pre-clinical trial of early blood transfusion for improving cerebral oxygen delivery in very preterm neonates
Paul Colditz	Koorts P , Liley H, Hunt R, Jacobs S, Badawi N, Morris S, Osborn D	PAEAN: Preventing Adverse Outcomes of Neonatal Hypoxic Ischaemic Encephalopathy with Erythropoietin: A Phase III Randomised Placebo Controlled Multicentre Clinical Trial
Paul Colditz	Boyd R, Malhotra A, Rose S, Boashash B, Ditchfield M, Fahey M, Pannek K, Moldrich R	Neurodevelopment of the preterm infant (PREBO)

Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
James Roberts	Michael Breakspear, Sampsa Vanhatalo, Paul Colditz	Novel methods for early bedside detection and prognosis of preterm brain injury
Julie Wixey	Kirat Chand, Tracey Bjorkman, Paul Colditz	Contribution of systemic inflammatory response to brain injury in growth restricted newborns
Roslyn Boyd	I Novak, E Wallace, N Badawi, M Fahey, S Rose, P Colditz , J Ziviani, C Elliott, N Stott	Australasian Cerebral Palsy Clinical Trials Network (AusCP-CTN): optimizing interventions and effective services for children with cerebral palsy
Roslyn Boyd	Paul Colditz , S Rose, M Karunanithi, A Smith, A Scuffham, P Edwards, I Novak, C Morgan, N Badawi	Advancing Cerebral Palsy in Queensland
Roslyn Boyd	Novak, Euan Wallace, Nadia Badawi, Michael Fahey, Stephen Rose, Paul Colditz , Ziviani, Elliott, Stott	Australasian Cerebral Palsy Clinical Trials Network (AusCP-CTN): optimizing interventions and effective services for children with cerebral palsy

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Paul Colditz	Researcher of the Year	2019 Metro North Research Excellence Awards
Kirat Chand	Publication of the Month February	UQCCR
Kate Goasdoue/Stephanie Miller	New Investigator Award	Perinatal Society of Australia and New Zealand
Julie Wixey	Finalist + Winner of QLD People's Choice Award	Fresh Science
Tracey Bjorkman	Leader of the Future Award (Academic)	Faculty of Medicine Excellence Awards, The University of Queensland
Tracey Bjorkman	Early Career Researcher Supervisor of the Year	UQ Centre for Clinical Research Directors Awards
Barbara Lingwood	Special Award for Contribution to UQCCR	UQ Centre for Clinical Research Directors Awards
Julie Wixey	Early Career Researcher of the Year	UQ Centre for Clinical Research Directors Awards
Tracey Bjorkman, Stephanie Miller, Kirat Chand, Julie Wixey, Yvonne Eiby, Barbara Lingwood	Facilitators Award	CSIRO On Prime

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Lai M , Bjorkman T, Wixey J, Colditz P	Perinatal Research Centre	Does the plasma protein fetuin protect the injured newborn brain?	RBWH and RBWH Research Project Grant	\$40,000	\$40,000	2019
Pienaar J , Wixey J, Chand K, Colditz P	Perinatal Research Centre	Is the blood brain barrier disrupted in intrauterine growth restricted newborns?	RBWH and RBWH Research Project Grant	\$40,000	\$40,000	2019
Wixey J, Chand K	Perinatal Research Centre	Contribution of systemic inflammatory response to brain injury in growth restricted newborns	NHMRC Project grant	\$358,371	\$179,185	2018-2020
Colditz P , Khosrotehrani K, Bjorkman T, Patel J, Wixey J	Perinatal Research Centre	Stem cell treatment for neonatal hypoxic ischemic encephalopathy	NHMRC Project grant	\$954,195	\$318,065	2018-2019
Roberts J, Breakspear M, Vanhatalo S, Colditz P	Perinatal Research Centre	Novel methods for early bedside detection and prognosis of preterm brain injury	NHMRC Project grant	\$630,880	\$210,293	2018-2020
Colditz P , Khosrotehrani K, Wixey J	Perinatal Research Centre	Improving brain outcomes in the growth restricted newborn using placental stem cell treatment	Financial Markets Foundation for Children	\$140,000	\$46,666	2018-2020
Colditz P , Bjorkman T, Wixey J	Perinatal Research Centre	Inflammation in the growth restricted newborn brain	RBWH HIRF Research Project	In kind	In kind	2019
Lingwood B , Stark M, Colditz P, Wright I, Eiby Y	Perinatal Research Centre	A pre-clinical trial of early blood transfusion for improving cerebral oxygen delivery in very preterm neonates	NHMRC Project grant	\$970,603	\$323,534	2017-2019
Colditz P , Boyd R, Malhotra A, Rose S, Boashash B, Ditchfield M, Fahey M, Pannek K, Moldrich R	Perinatal Research Centre	Neurodevelopment of the preterm infant (PREBO)	NHMRC Project grant	\$1,645,141	\$274,190	2015-2020

2019 Research Publications

Journal Articles

- Wixey JA, Sukumar KR, Pretorius R, Lee KM, **Colditz PB**, Bjorkman ST, Chand KK. Ibuprofen Treatment Reduces the Neuroinflammatory Response and Associated Neuronal and White Matter Impairment in the Growth Restricted Newborn. *Front Physiol.* 2019; 10:541
- Wixey JA, Lee KM, Miller SM, Goasdoue K, **Colditz PB**, Tracey Bjorkman S, Chand KK. Neuropathology in intrauterine growth restricted newborn piglets is associated with glial activation and proinflammatory status in the brain. *J Neuroinflammation.* 2019;16(1):5
- Popat H, Galea C, Evans N, **Lingwood B**, **Colditz PB**, Halliday R, et al. Effect of Delayed Cord Clamping on Cerebral Oxygenation in Very Preterm Infants. *Neonatology.* 2019;115(1):13-20
- Loudon W, Wong A, Finnigan S, Tippet V. Stroke Prehospital Informed Decision-Making Using EEG Recordings (SPIDER). *Disaster and Emergency Medicine.* 2019:s87-s8
- Lingwood BE**, Eiby YA, Bjorkman ST, Miller SM, Wright IMR. Supporting preterm cardiovascular function. *Clin Exp Pharmacol Physiol.* 2019;46(3):274-9
- Lewindon PJ, Puertolas-Lopez MV, Ramm LE, Noble C, Pereira TN, Wixey JA, et al. Accuracy of Transient Elastography Data Combined With APRI in Detection and Staging of Liver Disease in Pediatric Patients With Cystic Fibrosis. *Clin Gastroenterol Hepatol.* 2019
- Gunaratne AW, Makrides M, Collins CT, Gibson RA, McPhee AJ, Sullivan TR, Gould JF, Green TJ, Doyle LW, Davis PG, French NP, **Colditz PB**, Simmer K, Morris SA, Best KP. Docosahexaenoic acid supplementation of preterm infants and parent-reported symptoms of allergic disease at 7 years corrected age: follow-up of a randomized controlled trial. *Am J Clin Nutr.* 2019;109(6):1600-10
- Goasdoue K, Chand KK, Miller SM, Lee KM, **Colditz PB**, Wixey JA, et al. Seizures Are Associated with Blood-Brain Barrier Disruption in a Piglet Model of Neonatal Hypoxic-Ischaemic Encephalopathy. *Dev Neurosci.* 2019:1-16
- Colditz PB**, Boyd RN, Winter L, Pritchard M, Gray PH, Whittingham K, et al. A Randomized Trial of Baby Triple P for Preterm Infants: Child Outcomes at 2 Years of Corrected Age. *J Pediatr.* 2019
- Callaway LK, McIntyre HD, Barrett HL, **Foxcroft K**, Tremellen A, **Lingwood BE**, et al. Probiotics for the Prevention of Gestational Diabetes Mellitus in Overweight and Obese Women: Findings From the SPRING Double-Blind Randomized Controlled Trial. *Diabetes Care.* 2019;42(3):364-71
- Al-Theyab NA, Donovan TJ, Eiby YA, **Colditz PB**, **Lingwood BE**. Fat trajectory after birth in very preterm infants mimics healthy term infants. *Pediatric obesity.* 2019;14(3):e12472.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

1. **Barbara Lingwood**. Preterm Body Composition: Is it Normal and Does it Matter. 33rd Annual Congress of Perinatal Society of Australia and New Zealand, Gold Coast, Australia. 17-20 March 2019
2. J Wixey. Placental stem cells to protect the growth restricted newborn brain. TERMIS International conference, Brisbane, Australia. 14-17 October 2019.

Oral Presentations

1. Eiby YA, Wright IMR, Bjorkman ST, Miller SM, **Colditz PB**, Stark M, **Lingwood BE**. Volume expansion with packed RBCs maintains blood pressure and cerebral oxygenation more effectively than saline in preterm piglets. Fetal and Neonatal Physiology Society, Marysville, Australia
2. Eiby YA, Wright IMR, Bjorkman ST, Miller SM, **Lingwood BE**. A practical method for measuring blood volume in neonatal piglets. Fetal and Neonatal Physiology Society, Marysville, Australia
3. Lingwood BE, Eiby YA, Al-Theyab N, **Colditz PB**, **Donovan TJ**. Predictors of adiposity in very preterm infants before term corrected age. Fetal and Neonatal Physiology Society, Marysville, Australia
4. Ratnasingham A, Eiby YA, Wright IMR, Bjorkman ST, Miller SM, **Lingwood BE**. Infant body composition predicts later health risk. Fetal and Neonatal Physiology Society, Marysville, Australia
5. Ratnasingham A, Donovan TJ, Eiby YA, Dekker Nitert M, **Lingwood BE**. Infant body composition predicts childhood obesity DoHAD World Congress, Melbourne, Australia
6. Wixey J, Mohanty L, Teo E, Jones L, Luff J, Sim S-L, Patel J, Khosrotehrani K, **Colditz P**, Bjorkman T, Chand K. Maintaining blood vessel stability in the brain of growth restricted newborns following placental stem cell treatment. Queensland Perinatal Consortium, Gold Coast, Australia. 1 November 2019
7. Wixey J, Chand K, Teo E, Jones L, Luff J, Sim S-L, Patel J, Kiarash Khosrotehrani, **Paul Colditz**, S. Tracey Bjorkman. Using stem cells sourced from the placenta to protect the growth restricted newborn. Herston Healthcare Symposium, Brisbane, Australia. 9-12 September 2019
8. Wixey J, Pretorius R, Sukumar K, Miller S, Goasdoue K, **Colditz P**, Bjorkman T, Chand K. Therapeutically reducing neuronal and white matter impairment in the growth restricted newborn brain. In: Proceedings of the 11th International Conference on Brain Monitoring and Neuroprotection in the Newborn. Florida, USA. Feb 2019
9. Eiby Y, Wright I, **Lingwood B**. Does the vascular response to adrenergic agents explain their ineffectiveness in preterm piglets? In: Proceedings of the 33rd Annual Meeting, Fetal and Neonatal Workshop of Australia and New Zealand; 15-16 March 2019; Gold Coast
10. Ratnasingham A, **Donovan T**, Eiby Y, Dekker Nitert M, **Lingwood B**. Infant body composition predicts childhood obesity. In: Proceedings of the 33rd Annual Meeting, Fetal and Neonatal Workshop of Australia and New Zealand; 2019 15-16 March; Gold Coast
11. Wixey J, Chand K, Teo E, Jones L, Pretorius R, Miller S, Luff J, Sim SL, Patel J, Khosrotehrani K, **Colditz P**, Bjorkman T. Placental stem cells to protect the newborn IUGR brain. In: Proceedings of the 33rd Annual Fetal and Neonatal Workshop of Australia and New Zealand, Gold Coast, Australia. 15-16 March 2019
12. Jones L, Miller S, Luff J, Chand K, Teo E, Sim SL, Patel J, Khosrotehrani K, **Colditz P**, Wixey J, Bjorkman T. Investigating the effect of placental stem cells on the blood brain barrier in a model of HIE. In: Proceedings of the 33rd Annual Fetal and Neonatal Workshop of Australia and New Zealand, Gold Coast, Australia. 15-16 March 2019
13. Miller S, Eiby Y, Wixey J, Chand K, Sim SL, Patel J, Khosrotehrani K, **Colditz P**, **Lingwood B**, Bjorkman T. Effect of stem cells on vascular stability in the preterm. In: Proceedings of the 33rd Annual Fetal and Neonatal Workshop of Australia and New Zealand, Gold Coast, Australia. 15-16 March 2019
14. Julie Wixey, Kirat Chand, Elliot Teo, Lara Jones, John Luff, Seen-Ling Sim, Jatin Patel, Kiarash Khosrotehrani, **Paul Colditz**, S. Tracey Bjorkman. Using stem cells sourced from the placenta to protect the growth restricted newborn. In: Proceedings of the 28th Annual RBWH Healthcare Symposium; 2019 9-12 September; Herston Australia.

Poster Presentations

1. van Zoest RJ, Pannek K, Cowin GJ, **Colditz P**, Wixey J, Bjorkman T. Detecting brain injury after intrauterine growth restriction using probabilistic tractography, DTI and NODDI in the neonatal piglet. In: Proceedings of the 33rd Annual Congress of Perinatal Society of Australia and New Zealand, Gold Coast, Australia. 17-20 March 2019
2. Wixey JW, Teo E, Jones L, Luff J, Sim S, Patel J, Khosrotehrani K, Chand KK, **Colditz PB**, Bjorkman ST. Placental stem cell treatment to protect the growth restricted newborn brain. 33rd Annual Congress of Perinatal Society of Australia and New Zealand, Gold Coast, Australia. 17-20 March 2019
3. Goasdoue K, Miller SM, Billing L, **Colditz PB**, Bjorkman T. Hypothermia Ameliorates KCC2 expression in Newborn Hypoxic-Ischaemic Piglet. 33rd Annual Congress of Perinatal Society of Australia and New Zealand, Gold Coast, Australia. 17-20 March 2019
4. Kiarash Khosrotehrani, Julie Wixey, Elliot Teo, Lara Jones, John Luff, Seen L. Sim, Kirat Chand, Tracey Bjorkman, **Paul Colditz**, Jatin Patel. Combination placental mesenchymal and endothelial progenitor cell treatment to protect the growth restricted newborn brain. ISSCR Annual Meeting, Los Angeles, California, USA. 26-29 June 2019
5. Wixey JW, Chand KK, Teo E, Jones L, Luff J, Sim S, Patel J, Khosrotehrani K, **Colditz PB**, Bjorkman ST. Using stem cells sourced from the placental to protect the growth restricted newborn. 28th Annual RBWH Healthcare Symposium; 2019 9-12 September; Herston Australia
6. Eiby YA, Wright IMR, **Colditz PB**, **Lingwood BE**. Effective volume expansion to protect the preterm brain. 28th Annual RBWH Healthcare Symposium; 2019 9-12 September; Herston Australia
7. Elliot Teo, Tracey Bjorkman, Kirat Chand, Julie Wixey, Stephanie Miller, Seen-Ling Sim, Jatin Patel, Kiarash Khosrotehrani, **Paul Colditz**. From vein to brain: stem cells for the treatment of newborn hypoxic-ischemic encephalopathy. 2019 Neuroimmunology Australia Workshop. Brisbane, Australia. July, 2019
8. Lara Jones, Elliot Teo, Stephanie Miller, Kirat Chand, Julie Wixey, **Paul Colditz**, Tracey Bjorkman, Jatin Patel, Seen-Ling Sim, Kiarash Khosrotehrani. Interrogating blood brain barrier disruption attributable to neonatal hypoxic-ischemic encephalopathy and potential therapeutic targets. Queensland Perinatal Consortium, Gold Coast, Australia. 1 November 2019
9. Stephanie M Miller, Kate Goasdoue, Leah Billing, Elliot J Teo, Lara E Jones, Julie A Wixey, **Paul B Colditz**, S. Tracey Bjorkman. Hypothermia attenuates KCC2 expression after neonatal hypoxia-ischemia. Queensland Perinatal Consortium, Gold Coast, Australia. 1 November 2019

Poster Presentations (cont)

10. Lara Jones, Elliot Teo, Stephanie Miller, Kirat Chand, Julie Wixey, **Paul Colditz**, Tracey Bjorkman, Jatin Patel, Seen-Ling Sim, Kiarash Khosrotehrani. Interrogating blood brain barrier disruption attributable to neonatal hypoxic-ischemic encephalopathy and potential therapeutic targets. UQ Faculty of Medicine – HDR Clinical and public health symposium.

Details of staff that completed their PhDs in 2019 within your department / research group

Name	Name of Project	Completed Date	Affiliated University/ies
Kate Goasdoue	A novel therapy for neonatal seizures	2019	The University of Queensland
Annicc Kong	The relationship between brain structure assessed using diffusion MRI and function assessed using dense array EEG of very preterm infants and the ability to predict neurodevelopmental outcomes	2019	The University of Queensland

Other communications and outputs:

<https://www.uq.edu.au/news/article/2019/04/common-anti-inflammatory-could-protect-baby-brains>

Dr Julie Wixey – UQ news article – ibuprofen treatment to protect the growth restricted newborn

<https://research.uq.edu.au/research-capabilities-showcase>

Dr Tracey Bjorkman. Events at Birth. Research Showcase Capabilities, St Lucia, Brisbane. 20 September 2019

Wixey J. Ibuprofen treatment to protect the growth restricted newborn brain. Fresh Science Finals, QUT, Brisbane. November

Teo E. The Stem cell therapy: A new hope for neonatal hypoxic-ischemic encephalopathy. 21 August 2019

Wixey J. Neuroprotective effects of placental stem cell treatment for the intrauterine growth restricted newborn. UQCCR Seminar Series, Brisbane. 4 September 2019

Bjorkman Y. Implications for healthy brain development UQCCR Seminar Series, Brisbane. 12 June 2019

<https://freshscience.org.au/events/south-queensland>

https://freshscience.org.au/state/qld/__trashed

<https://www.medianet.com.au/releases/182383/>

Dr Wixey – Fresh Science articles

Chand K. Neuroimmunomodulation in the growth restricted newborn. UQCCR Seminar Series, Brisbane. 11 December 2019.

Perinatal Research Centre Team



Left to Right: Annelise Kirkham, Christine Finn, Gill Lack, Prof Paul Colditz, Lisa McKeown, Kym Morris, Kylie Smart, Katie Foxcroft

QUEENSLAND CENTRE FOR GYNAECOLOGICAL CANCER

The Queensland Centre for Gynaecological Cancer (QCGC) is a state-wide service for the management of women with gynaecological cancer. QCGC Research is the research branch of QCGC. The Director of QCGC Research is Professor Andreas Obermair who leads and develops the unit to produce meaningful research outcomes.

QCGC Research's mission is to research and develop the best standard of care for women experiencing gynaecological cancer. This may include finding causes for and preventing gynaecological cancer; and finding better treatment options to cure women affected by gynaecological cancer.

QCGC Research's focus is on conducting surgical clinical trials in the field of gynaecological cancer but we also perform ground-breaking work outside the conventional clinical trials framework.

Our research is funded partly by competitive research grants (NHMRC project grants, smart state research grants, Cancer Australia), by support from individual and corporate donors as well as from fundraising events.

Our research activities help improve patient outcomes by researching the most effective treatment for women with gynaecological cancers.

In 2019 we completed training at four Queensland Health Hospitals for the IMAGINE Study. The IMAGINE Study aims to implement and evaluate a model of training for practising gynaecologists in Total Laparoscopic Hysterectomy. We also continued recruiting for the ECHO Trial which examines the benefits of exercise during chemotherapy for ovarian cancer. This study is a collaboration between the Queensland University of Technology, NHMRC Clinical Trials Centre and QCGC Research. The feMMe trial, which allows a large number of women to have effective treatment of their endometrial cancer without the need for major surgery and its implications, completed recruitment in 2019.



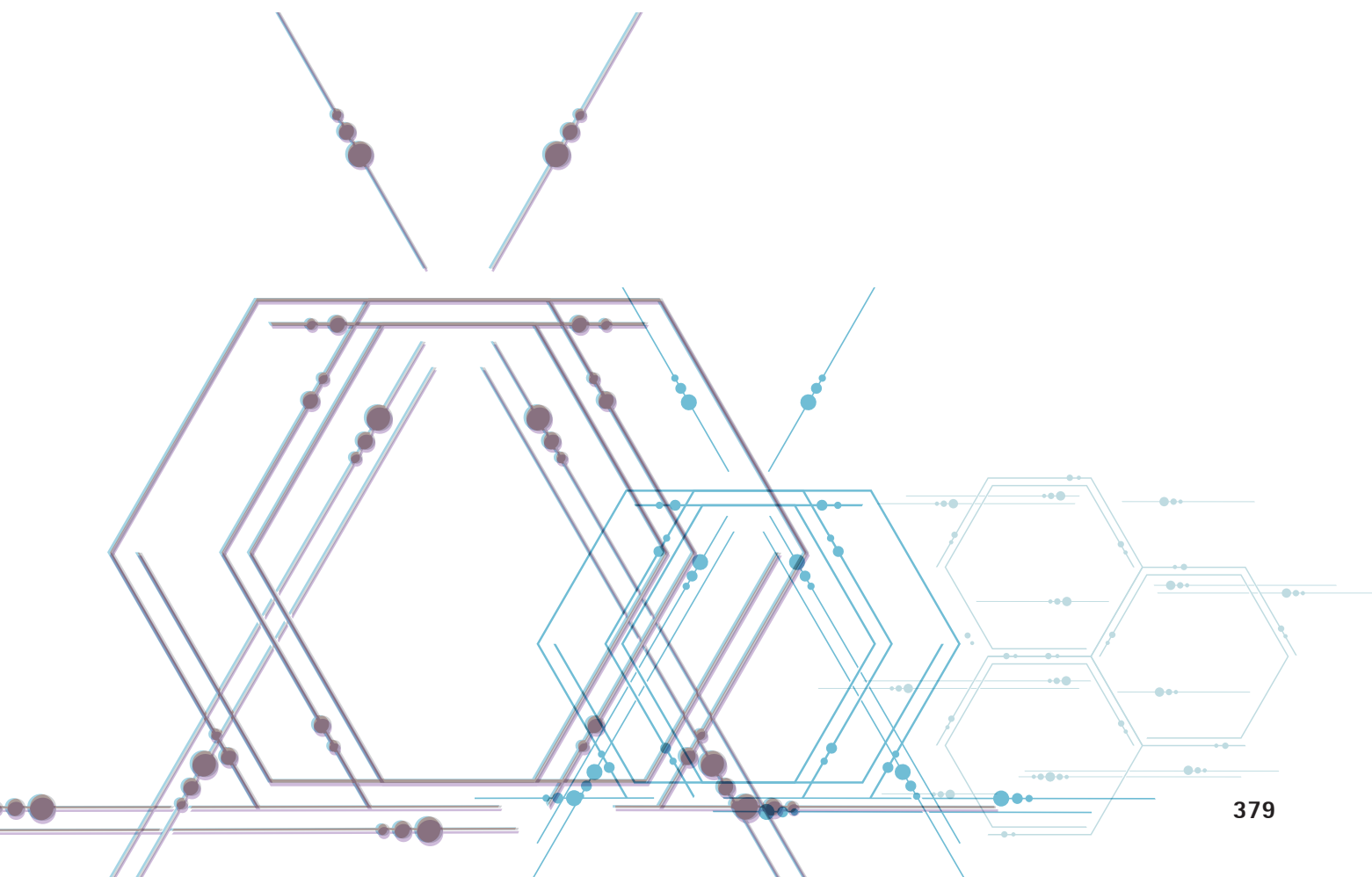
Back row (L-R): Karen Sanday, Vanessa Behan, Kerry Millgate, Vanessa Taylor, Trudi Cattley
Front row (L-R): Dr Andrea Garrett, Prof Andreas Obermair

RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
Trudi Cattle	Clinical Research Manager	Gynaecological Oncology	The University of Queensland
Vanessa Behan	Clinical Trial Manager	Gynaecological Oncology	The University of Queensland
Vanessa Taylor	Clinical Trial Manager	Gynaecological Oncology	The University of Queensland
Kerry Millgate	Clinical Trial Coordinator	Gynaecological Oncology	The University of Queensland

Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Andreas Obermair	Jim Nicklin (<i>Gyn Onc</i>), Russell Land (<i>Gyn Onc</i>), Andrea Garrett (<i>Gyn Onc</i>), Amy Tang (<i>Gyn Onc</i>), Lewis Perrin (<i>Mater</i>), Marcelo Nascimento (<i>GCUH</i>), Jonathan Carter (<i>Chris O'Brien</i>), Orla McNally (<i>The Women's</i>), Kym Reid (<i>Monash</i>), Yee Leung (<i>KEMH</i>), Stuart Salfinger (<i>SJOG</i>), Peter Sykes (<i>Christchurch</i>), Cecile Bergzoll (<i>Wellington</i>), Lois Eva (<i>Auckland</i>)	A Phase II Randomised Clinical Trial of Mirena® ± Metformin ± Weight Loss Intervention in Patients with Early Stage Cancer of the Endometrium
Prof Andreas Obermair	Monika Janda (<i>QUT</i>)	A stepped wedge cluster trial to implement and evaluate a model of training for practising gynaecologists in Total Laparoscopic Hysterectomy
Prof Andreas Obermair , Paul Thomas	Jim Nicklin (<i>Gyn Onc</i>), Russell Land (<i>Gyn Onc</i>), Andrea Garrett (<i>Gyn Onc</i>), Amy Tang (<i>Gyn Onc</i>)	Impact of gated PET/CT on the diagnosis of distant metastases of advanced epithelial ovarian, fallopian tube, and primary peritoneal cancer



Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Sandi Hayes (QUT)	Prof Andreas Obermair (Gyn Onc), Jim Nicklin (Gyn Onc), Russell Land (Gyn Onc), Andrea Garrett (Gyn Onc), Amy Tang (Gyn Onc)	A Phase III randomised controlled trial of exercise during chemotherapy for patients commencing first line treatment for ovarian cancer
Pedro Ramirez (MD Anderson USA)	Prof Andreas Obermair (Gyn Onc), Jim Nicklin (Gyn Onc), Russell Land (Gyn Onc), Andrea Garrett (Gyn Onc)	A Phase III Randomized Clinical Trial Comparing Laparoscopic or Robotic Radical Hysterectomy versus Abdominal Radical Hysterectomy in Patients with Early Stage Cervical Cancer

Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
QCGC Research	Award for Excellence in Service – Commendation	2019 UQ Awards for Excellence
QCGC Research	Award for Clinical Trial Expertise	UQ Centre for Clinical Research Director Awards 2019

Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Janda M, Obermair A , Gebiski V, Graves N, Armfield N	QCGC Research	The Implementation of Minimally Invasive hysterectomy (IMAGINE) trial	NHMRC Partnership Grant	\$893,854	\$310,623	2018-2020

2019 Research Publications

Journal Articles

1. **Obermair A**, Armfield NR, Graves N, GebSKI V, Hanna GB, Coleman MG, Hughes A, Janda M. How to train practising gynaecologists in total laparoscopic hysterectomy: protocol for the stepped-wedge IMAGINE trial. *BMJ Open*. 2019 May 9;9(5): e027155
2. Armfield NR, Janda M, **Obermair A**. *Int J Qual Health Care*. 2019 May 1;31(4):283-288. Obesity in total laparoscopic hysterectomy for early stage endometrial cancer: health gain and inpatient resource use
3. Tanaka K, Eriksson L, Asher R, **Obermair A**. Incidence of adverse events, preventability and mortality in gynaecological hospital admissions: A systematic review and meta-analysis. *Aust N Z J Obstet Gynaecol*. 2019 Apr;59(2):195-200
4. Robertson JA, **Sanday K**, **Nicklin J**. Malignant ovarian germ cell tumours in the post-menopausal population. *Aust N Z J Obstet Gynaecol*. 2019 Apr;59(2):285-287
5. **Obermair A**, Simunovic M, Janda M. The impact of team familiarity on surgical outcomes in gynaecological surgery. *J Obstet Gynaecol*. 2019 Sep 13:1-3
6. Steele ML, Janda M, Vagenas D, Ward LC, Cornish BH, Box R, Gordon S, Matthews M, Poppitt SD, Plank LD, Yip W, Rowan A, Reul-Hirche H, **Obermair A**, Hayes SC. A Bioimpedance Spectroscopy-Based Method for Diagnosis of Lower-Limb Lymphedema. *Lymphat Res Biol*. 2019 Sep 5
7. **Obermair A**, Asher R, Pareja R, Frumovitz M, Lopez A, Moretti-Marques R, Rendon G, Ribeiro R, Tsunoda A, Behan V, Buda A, Bernadini MQ, Zhao H, Vieira M, Walker J, Spirtos NM, Yao S, Chetty N, Zhu T, Isla D, Tamura M, **Nicklin J**, Robledo KP, GebSKI V, Coleman RL, Salvo G, Ramirez PT. Incidence of adverse events in minimally invasive versus open radical hysterectomy in early cervical cancer: Results of a randomized controlled trial. *Am J Obstet Gynecol*. 2019 Oct 3.

2019 Conference Presentations – Invited Speaker, Oral and Poster

Invited Speakers

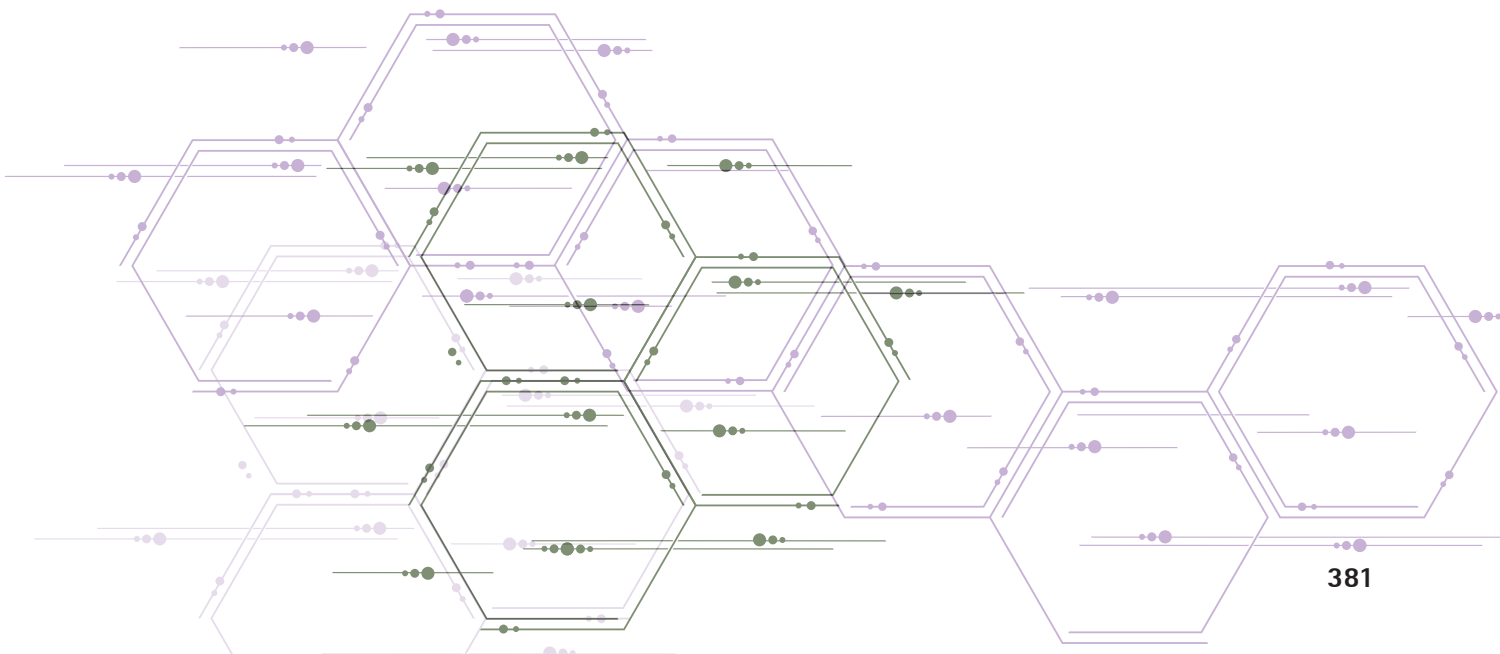
1. Schmeler K, Hyde S, Saidi S, **Nicklin J**. ASGO Debate: Minimally invasive surgery is contra-indicated in patients with early stage cervical cancer. In: Proceedings of the Australian Society of Gynaecologic Oncologists Annual Scientific Meeting Sydney June 5th-9th 2019
2. **Garret A**. Facilitating the Wellbeing of our Trainees. In: Proceedings of the Australian Society of Gynaecologic Oncologists Annual Scientific Meeting, Sydney June 5th-9th 2019
3. Janda M, **Obermair A**. The implementation of a standardized surgical training program for specialist gynaecologists to decrease the rate of open, abdominal hysterectomy. In: Proceedings of the International Gynecologic Cancer Society Annual Global Meeting, Rio de Janeiro, Brazil September 19-21, 2019
4. Janda M, GebSKI V, Forder P, **Obermair A**. Weight perception and sociodemographic characteristics following endometrial cancer treatment. In: Proceedings of the International Gynaecologic Cancer Society Annual Global Meeting, Rio de Janeiro, Brazil September 19-21, 2019.

Oral Presentations

1. **Obermair A**. Quality Assurance in Cervical Cancer Clinical Trials. 21st European Congress on Gynaecological Oncology, Nov 2-5, 2019, Athens Greece
2. **Obermair A**. LACC Trial – Interpreting of the Trial Results and Implications on Future Clinical Trial Design. 21st European Congress on Gynaecological Oncology, Nov 2-5, 2019, Athens Greece.

Poster Presentations

1. Sanjida S, **Obermair A**, Janda M. Anxiety and depression in patients with endometrial cancer according to the hospital anxiety and depression scale: A longitudinal analysis. In: Proceedings of the 28th Annual RBWH Healthcare Symposium. September 2019.





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