

2018

# RBWH

## RESEARCH REPORT



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# Executive Director's Message



**Amanda Dines**  
**Executive Director**  
Royal Brisbane and Women's Hospital

Health and medical research is vital to changing the way we care for patients. It allows us to provide options where previously there have been none through clinical trials or novel treatments. Research gives us the chance to test alternative medications, to offer new materials for devices and prostheses, to provide surgeons with precision guidance, to compare bedside treatments, and to figure out how a disease works. It is crucial to moving healthcare forward to better meet the needs and expectations of the community.

We often see new research celebrated on the news, but what does not make headlines is the many years it has taken to come to the answer. A single 'overnight breakthrough' might actually be the result of a decade of hard slog for a whole team of researchers, hours and hours applying for grants, months of clinical trials, dozens of higher degree students completing PhDs and Masters. Many research projects which do not yield a major outcome, but move forward a larger body of work or even eliminate some of the options and refine the hypothesis.

Research is the foundation of excellence in care at RBWH. In the past year, RBWH researchers working on 646 projects published more than 900 journal articles on a huge range of subjects including psychosocial support for bone marrow donors, the role of nutrition in preventing pressure injuries, reducing brain injury in newborns, the use of antibiotics in burns, diagnosing dementia, and paediatric diabetes. In addition, there have been hundreds of oral and poster presentations throughout the year.

To support this enormous research endeavour, RBWH researchers have attracted more than \$43.6 million in funding. This includes \$24.5 million from the National Health and Medical Research Council (NHMRC) which highlights the incredibly high calibre of research happening at RBWH. Other funders include the Children's Health Foundation who awarded more than \$408,000 to researchers at RBWH, and the US Department of Defence Congressionally Directed Research Programs which provided more than \$687,000 in funding.

Our close partner RBWH Foundation provided more than \$2.2 million in grants and scholarships during the year and RBWH researchers received more than \$82,000 worth of support from Metro North's Collaborative for Allied Health Research, Learning and Innovation (CAHRLI).

The RBWH community also provided support in 2018 to 387 research higher degree students, up from 312 last year. We also supported 377 research fellows, a significant increase from 198 in 2017 which demonstrates our commitment to fostering a strong and vibrant research environment.

The exceptional dedication of researchers across RBWH is one of the reasons this campus continues to be recognised as a state, national and world leader in so many fields. Researchers embody our values of teamwork, compassion and especially high performance. I congratulate all those who contribute to this outstanding body of work.

# RBWH Foundation



**Dr 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 work with and 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 a continuous 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.

We are certainly incredibly proud that our seed funding has enabled several RBWH researchers, such as Professor Jason Roberts and Associate Professor Andrew Mallet, to obtain substantial grants from the NH&MRC in the past few years.

In the 2017/18 financial year, the support we received through donations, sponsorships, bequests and participation at our various events, enabled RBWH Foundation to distribute \$6.77 million to a range of different research and patient care initiatives at the hospital.

RBWH Foundation also manages a number of ‘tied’ funds on behalf of researchers at the hospital and is an official administering institute of NH&MRC, the only official administering body for the hospital. Tied funds are typically comprised of donations instigated by the particular department that established the fund, as well as proceeds from fundraising events, bequests or other activities. The tied funds and any NH&MRC grants kept with the Foundation are simply administered by the Foundation for a zero to minimal administrative fee, and the department is able to access money when required. Full financial support and monthly reporting can also be provided. RBWH Foundation’s support for researchers at the hospital is therefore not just monetary. We also strive to assist in the journey of discovery by enabling them to focus on what they do best without having to worry about the financial reporting and other administrative details.

As the new CEO of RBWH Foundation, I would like to acknowledge the outstanding contribution and dedication of my predecessor, Peter Treseder, to furthering research at the hospital. Peter officially retired from his role in December 2018 after 10 years in the role. During his time with the Foundation, Peter led his team to raise \$100 million to fund people, equipment, programs and research at RBWH.

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.



# Brisbane Diamantina Health Partners



**Ms Areti Gavrilidis**

**General Manager**

Brisbane Diamantina Health Partners

2018 was an important year for Brisbane Diamantina Health Partners (BDHP). This unique partnership between healthcare providers, research institutes, universities and the Department of Health aims to integrate innovative research with education, training and clinical care to deliver the highest quality healthcare for our local and extended communities, and ensure the needs of consumers and the community are met.

There were many highlights during the year with the most prominent being the process to develop the second strategic plan that identified our future direction and a greater alignment of objectives with priorities that have evolved at both local and national levels. Another highlight was the announcement in April 2018, by the Minister for Rural Health, Senator Bridget McKenzie, of \$6.1 million in funding over three years, for a range of programs that will support the translation of research into improved clinical practice and healthcare delivery. A third key highlight was the subsequent announcement of the national consultation to inform the development of the second set of Medical Research Future Fund (MRFF) Australian Medical Research and Innovation Priorities 2018-2020.

### **BDHP significant achievements during the year included:**

- A successful application to the MRFF Rapid Applied Translation Program for \$2M, submitted in September 2018 with an additional \$400k from the Queensland Department of Health, leading to the funding of nine translation projects across health service improvements and addressing knowledge gaps in health including cardiac and cancer-related burdens of disease, health issues impacting vulnerable groups of older and Indigenous people, as well as the prevalence of obesity, diabetes, sepsis and melanoma
- The evaluation of the shared agreement between partners of BDHP (Research Passport Agreement) designed to facilitate research collaboration approvals between the partners by adopting standard legal terms commonly used for health research projects, as the basis for further refinement of the project approval process
- Strong collaboration and engagement with the national Australian Health Research Alliance (AHRA) made up of the nine NHMRC-accredited research translation centres on four national system level initiatives: Health Systems Improvement and Sustainability (HSIS) Framework; Data Drive Healthcare Improvement; Indigenous Research Network and Capacity Building; and Community Involvement in Health Research. Additional collaborative activities across AHRA have included a survey to document the extent of consumer and community involvement in research activities; an assessment of the literature relating to unwarranted clinical variation; and the establishment of a national steering committee in Wound Care and an Aged Care Research Translation and Impact Network
- Hosting international experts including Professor John Øvretveit from the Karolinska Institute in Stockholm, Associate Professor Jeanne M. Huddleston from the Mayo Clinic, Professor Sherry Beaudreau from Stanford University School of Medicine and Professor Inger Hilde Nordhus from the University of Oslo. This enabled shared learnings in clinical and health systems improvement and the exploration of ongoing strategic opportunities across the partners
- Facilitating key events for the Ageing, Chronic Disease, and Brain and Mental Health themes to provide opportunities to bring together experts from across specialist areas to form and strengthen collaborations. The three events, held between June and August 2018, had very high registration and attendance and garnered incredibly positive feedback and ideas for future events including topics, speakers and structure. The 5<sup>th</sup> Annual Brisbane Cancer Conference was also held in November, attracting the biggest program and attendance to date.

We can be very confident that the future for collaboration in research translation, education and clinical care across BDHP and the other NHMRC accredited translation centres is bright with key foundations and plans for an upward trajectory in place. The next few years will see significant scalability, improvements and enhancements in embedding and translating research into the health system.

BDHP has received tremendous support from many individuals locally, nationally and internationally who passionately shared their knowledge and contributed to efforts in our journey, shared vision and tripartite mission to improve health and wellbeing through greater integration and alignment. We are especially thankful for the dedication and commitment of our local working groups and committees and the BDHP staff. Further information about BDHP is available on the BDHP website: [www.brisbanediamantina.com](http://www.brisbanediamantina.com).



Menzies Health Institute Queensland (MenziesHIQ) at Griffith University and the Royal Brisbane Women's Hospital (RBWH) have continued to maintain a strong collaboration into 2018. 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. The Alliance for Vascular Access Teaching And Research (AVATAR) group was founded on the partnership between MenziesHIQ (Prof Claire Rickard) and RBWH's Nursing and Midwifery Research Centre (Prof Joan Webster) in 2007. AVATAR continues to conduct world leading research improving access to veins and arteries for medical treatment.

## 2018 highlights included:

- 3 PhD Candidates (Nicole Marsh, Julie Flynn, Nicole Gavin)
- Lancet publication of NHMRC funded, multi-centre, SAVE Trial of dressing and securements for peripheral IV catheters (Rickard C et al)
- The NHMRC funded, multi-centre PISCES Trial continued into antimicrobial dressings and better securement of PICC devices (Rickard C et al)
- New NHMRC funding was received for the PICNIC Trial, a multi-site trial of antithrombotic and antimicrobial catheter materials (Ullman A et al)
- Joint Research Fellow Nicole Marsh awarded Cecilia Brazil Nursing Research Award
- Australian College of Nursing Research Award 2018. Managing Intravenous Devices among patients with Limited vascular access or prolonged therapy: Investigating the Efficacy of midline catheters MIDLINE study (Marsh N)
- MenziesHIQ Excellence in Publication Awards: (i) Marsh N, (ii) Rickard CM
- Pro Vice Chancellor (Health) Research Excellence Award (Research Team)
- Representative on Commission on Safety and Quality in Health Care for development of a national clinical standard for PIVCs (Marsh N)
- >20 high quality, peer-reviewed publications, including the Lancet Infectious Disease, Critical Care Medicine, the International Journal of Nursing Science, Trials, the Cochrane Database of Systematic Reviews, and many others.

## Our strong shared interest in wound care continued with the following 2018 achievements:

- Completion of the NHMRC-funded "Adding negative pRESSure to improve heaLING (the DRESSING trial)" (Gillespie B et al)
- New NHMRC funding received for "Efficacy and Effectiveness of Prophylactic foAm dressings in the prevention of saCral pressure injuries in at-risk hospitalised patients (The EEPOC Trial)" (Gillespie B et al). This trial is the largest in its field, and has recruited over 1,830 participants (total planned recruitment n = 2,090).

We would like to welcome Associate Professor Katrina Campbell who has been newly appointed to a strategic health service-wide conjoint in Health Services Research (Allied Health) in Metro North and Menzies Health Institute Queensland. In this role, she will lead pragmatic clinical trials and implementation trials measuring patient, health service and economic outcomes. Since completing a PhD as a dietitian at RBWH in 2007, Katrina has built a career in research, clinical dietetics, academia, management and consultancy. She has an international profile in the field of nutrition for chronic kidney disease, publishing more than 100 peer-reviewed papers in this field. Katrina is an Advanced Accredited Practising Dietitian and a Board Member of the Dietitians Association of Australia.

Griffith University's MenziesHIQ will continue to collaborate with the RBWH to generate translatable research outcomes that improve health and wellbeing for patients and communities alike.



# 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 baseline of research activity in PQ, reviewing governance and developing a strategic plan. 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 about to begin at The Herston Imaging Research Facility (HIRF). Lung Cancer (Mahendra Singh and Laxmi Nandkumar with Dr David Fielding and Peter Simpson) Project in UQCCR and QIMR to develop next generation sequencing analysis of cytology smears from endoscopic aspirates. Prostate Cancer (Diane Payton and Jo Perry-Keene with Frank Gardiner) Project investigating laproscopic surgery and biomarker discovery for early detection.

## Chemical Pathology:

The Chemical Pathology R&D Unit (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 methodology. Core technologies include robotics, mass spectrometry and immunochemistry with collaborations in cardiology, emergency medicine, intensive care, renal disease, gastroenterology and endocrinology and other internal medicine departments as well as industry. The work resulted in peer-reviewed publication and translation into clinical practice. This group has over 25 current research collaborations.

## 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; [www.agargroup.org](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.

## 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:

- QGHA Genomic Testing Innovation Project (GTI). The GTI project aims to establish systems for the comparison of performance of new genomics approaches for implementation. The report from this project is currently in final draft stage and will be published in 2019
- Pathology Queensland has been designated as the service provider for QGHA round 2 projects which will facilitate the building of capacity and capability in Genomics within Queensland.

The Molecular Diagnostic Unit is involved with the 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.

## 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 Berghofer Medical Research Institute



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

These are exciting times for the Herston Precinct. With the RBWH at its core, the neighborhood also includes multiple activities from UQ and QUT, QIMR Berghofer and HIRF, in which all four partners are working in an alliance.

Plans for the development of Herston have evolved rapidly in the past year and we are very pleased to be a core component of them. When realized, we are sure that Herston will be an extremely strong health precinct. The question marks over the future of the former Children's Hospital and related areas (known as the Herston Quarter) will be clarified in the next months, and then a fully integrated plan can be put in place.

Our engagement with the RBWH is stronger and more significant every year. The leaders of three of our four research programs are active clinicians, and other key researchers here also engage in the delivery of services at RBWH. This, in turn, informs our research activities such that our work is directly relevant towards addressing the clinical needs of the community. QGen Cell Therapeutics, the GMP cell manufacture facility at QIMR Berghofer continues to generate increasing numbers of cellular products for clinical use. This now includes gene modified T cells that are being utilized in the bone marrow transplant program at RBWH.

It has been an important year for the Herston community to have the HIRF fully functioning and generating exciting data. This will facilitate new research and clinical approaches with those on the Herston precinct being best placed to benefit from them. While focusing on the Herston precinct, we are very aware of our engagement and commitment to the Brisbane-wide community through the Brisbane Diamantina Health Partners (BDHP). The activities of the BDHP are increasing rapidly and with greater inter-institutional cooperation becoming apparent. When one combines the new strength and dynamism of the RBWH and Metro North with the greater commitment to collaboration, it should ensure that health outcomes improve constantly. This is the aim of QIMR Berghofer, and we will continue with our engagement and commitment to our neighbors, in particular, to delivering this goal.

# Queensland University of Technology



**Prof. Ross Young**  
Executive Dean  
Faculty of Health QUT Institute

QUT's longstanding partnership with RBWH continued to produce high quality and impactful research, clinical and educational outcomes in 2018. This summary of research activity reflects ongoing engagement between academic staff, clinicians and students that benefit our organisations, patients and community.

The QUT Nursing Professorial Precincts Team at RBWH received a 2018 QUT Vice-Chancellor's Award for Excellence, recognising their collaborative clinical, practical and translational nursing research. The Stroke Nursing Professorial Unit continued to develop a mobile app, implemented a process evaluation of the Stroke Nurse Practitioner Outpatient Stroke Clinic, and presented preliminary results of the LG3 peptide study at the International Neurosciences Nursing Conference. The Intensive Care Nursing Professorial Unit completed studies on incontinence-associated dermatitis, medical device related pressure injuries and pressure injury prevention. The Renal Nursing Professorial Unit, partnering with the NHMRC Chronic Kidney Disease Centre of Research Excellence (CRE), received a Kidney Australia grant investigating sleep quality in people with advanced CKD. The Cancer Nursing Professorial Unit created two new joint appointments and mentored over 250 cancer nurses.

The Centre for Palliative Care Research and Education, led by Distinguished Professor Patsy Yates, continued to enhance palliative care services in Queensland while the NHMRC End-of-Life Care CRE published high impact outputs in *BMC Palliative Care and Palliative and Supportive Care*. The NHMRC Partnership Project for the ENCORE Trial is progressing well with QUT and Metro North Hospital and Health Services (MNHHS) as the central hub for the multi-centre study.

The Jamieson Trauma Institute (JTI) based at Metro North/RBWH involves multiple university, health service and industry partners to advance trauma prevention, research, systems, and clinical management to deliver the best possible care for people who suffer a traumatic injury. JTI-QUT links were enhanced through the joint appointments of Director Professor Michael Schuetz and Principal Research Fellow Associate Professor Kirsten Vallmuur.

The Australian Centre for Health Services Innovation (AusHSI) and RBWH continued to provide expert health economics, statistical and implementation science advice, including the *intervention on hospital use for patients at risk of long stay* project. AusHSI and MNHHS developed a Health Services Innovation major for the QUT Graduate Certificate in Health Science to increase health professionals' capacity to implement innovative health services. AusHSI continues to provide training to RBWH researchers, students, clinicians and managers on cost-effectiveness analysis, statistical analysis and research translation and implementation. AusHSI funded projects to improve nutritional care of acute hospital patients; and to validate a diagnostic protocol for Aboriginal and Torres Strait Islander patients with suspected Acute Coronary Syndrome.

The Herston Biofabrication Institute is a partnership between QUT and MNHHS. Opening in 2019, the Institute will advance knowledge and technology in 3D scanning, modeling and printing of bone, cartilage and other human tissue to repair tissue that is lost or damaged. Clinical research programs are being established in orthopaedics, vascular surgery, burns and trauma, urology, and cancer care services.

## Other QUT–RBWH collaborative research in 2018 included:

- **psychology and neuroscience** projects examining the role of exercise in treatment of PTSD and mild traumatic brain injury; how adherence to CPAP affects neuropathology associated with sleep apnoea; and how PET and MRI can be used to best diagnose brain trauma in boxers;
- **public health** research to reduce emergency department demand through expanded primary healthcare practice; develop workforce and activity-based funding modelling for emergency departments; and assess the impact of the four hour rule in emergency departments;
- **transdisciplinary** projects evaluating health services and interventions for patients with burns/burn scars, musculoskeletal conditions, orthopaedic injuries, radiation dermatitis, and pain associated with chemotherapy induced peripheral neuropathy;
- **optometry** research on a novel night lighting system to reduce patient falls in hospital; and using functional MRI scanning to understand human visual system responses to image blur to enhance our understanding of normal eye growth and eye conditions including myopia;
- **nutrition and dietetics** research conducted in Vietnam resulted in publications on the prevalence and associated risk factors of malnutrition among hospitalised adults; validity of nutritional screening tools for inpatient adults; and characteristics of dietary intake among adult hospital patients. Other publications focused on the integration of pregnancy weight gain charts into antenatal care; and diagnosis and management of gestational diabetes mellitus in Australia; and
- **biomedical sciences** diagnostic research involved salivary biomarkers for head and neck cancers, lung cancer diagnostic and treatment pathways, and a study of pollen allergy impact on asthma in Queensland.

# The University of Queensland

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**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.

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.



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

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 2018

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**Dr Peter Window**

## Allied Health

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### Title of Project:

2D motion analysis measurements in low back pain

### Month Completed:

March 2018



**Dr James Hughes**

## Critical Care and Clinical Support Services

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### Title of Project:

The Person, Environment, Health and Illness Factors Influencing Time to First Analgesic Medication and the Experience of Pain in the Adult Emergency Department

### Month Completed:

November 2018

## Critical Care and Clinical Support Services

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### Dr Julian Williams

### Title of Project:

Identifying Risk Factors for MRSA

### Month Completed:

December 2018

# Successful PHD Candidates in 2018

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**Kate McCarthy**

## Internal Medicine Services

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### Title of Project:

*Pseudomonas aeruginosa* blood stream infections: clinical and molecular epidemiology, virulence and outcome

### Month Completed:

November 2018



**Patrick Harris**

## Internal Medicine Services

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### Title of Project:

Multi-drug resistant Gram-negative bacterial infection

### Month Completed:

2018



**Craig Winter**

## Surgical and Perioperative Services

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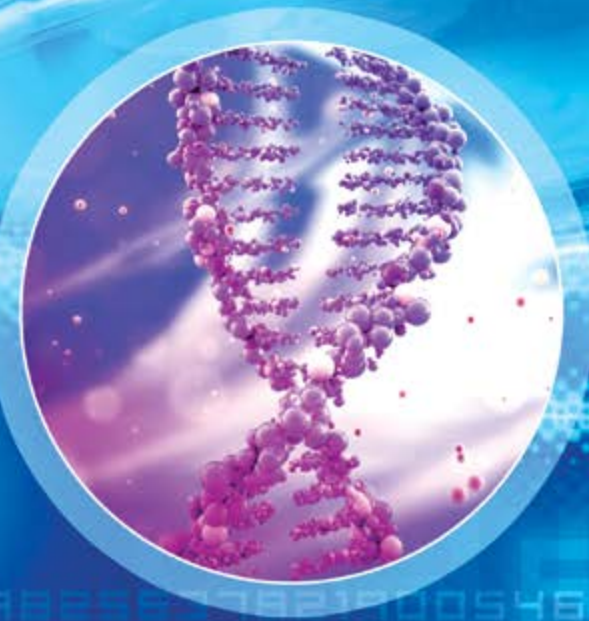
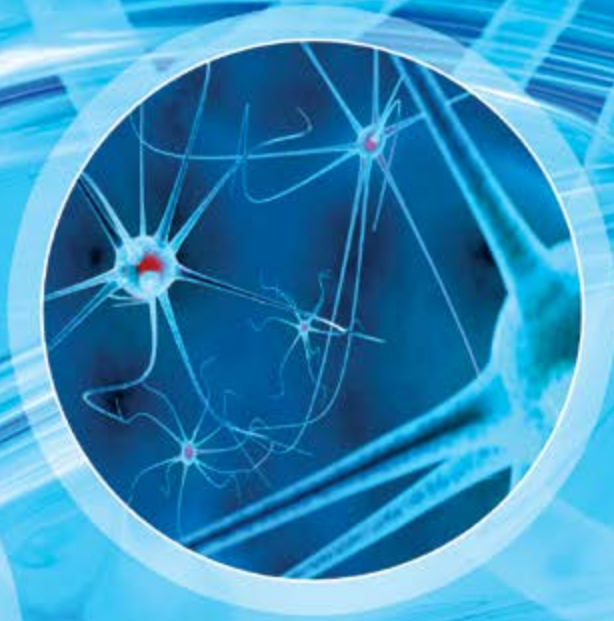
### Title of Project:

Does S100B protein correlate with severity of brain injury or blood-brain barrier dysfunction? PhD Cambridge University, UK

### Month Completed:

2018

# RESEARCH SERVICES



RESEARCH

US ALL VENTURUM LED IN HRC ABENTASE PLATER DICTUMST SED EFFICITUR  
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# Research Executive Director's Report



Research Services is committed to growing research capability and capacity at the RBWH. During 2018 there has been ongoing increased engagement with our clinician researchers, both established and commencing, the Metro North Research team and our external partners aiming to streamline processes and make conducting research easier! During 2018, the RBWH Ethics team, led by Dr Gordon McGurk also became part of Research Services alongside the research governance team, with the purpose of working together more productively. Research services also provides secretariat and management of the RBWH grants program, including Scholarships, annual Project Grants and Post-doctoral Fellowships.

**Merrilyn Banks**  
Executive Director  
Research Services

## 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*

## Human Research Ethics Committee and Research Governance

The National Statement on Ethical Conduct in Human Research published by the National Health and Medical Research Council (NHMRC), obliges all institutions involved in the practice of research ensure research participant safety and the integrity of research studies through review by a Human Research Ethics Committee. The RBWH HREC plays an integral role in ensuring research across Australia, but particularly within the RBWH, is ethically acceptable. In the last year, the HREC reviewed around 600 applications for review of research, including full applications, low risk applications amendments and exemptions. The HREC also provides advice on whether activities comprise research, or are other non-research activities such as clinical audit; service evaluation; and quality improvement.

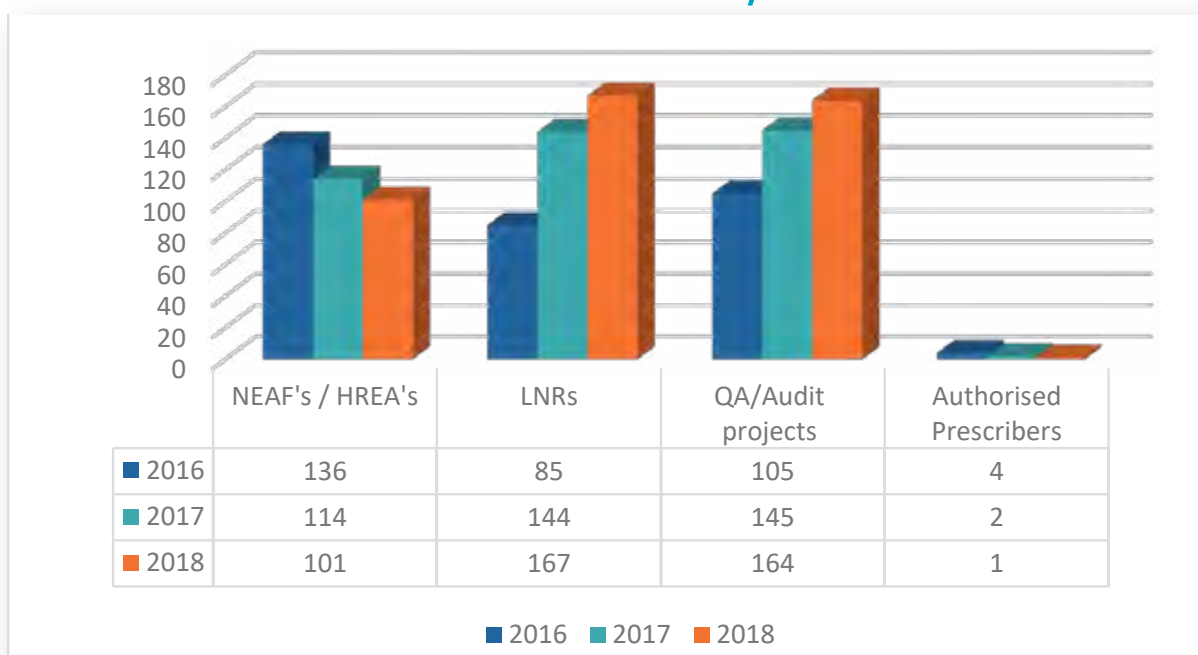
The RBWH HREC remains one of 50 HRECs in Australia whose ethics review processes have been certified as part of the NHMRC's certification process. In addition to the existing categories of certification, which include clinical trials Phase I-IV, qualitative research, mental health research and population health research, the HREC will be seeking certification in other categories including:

- Research involving First Nations Peoples
- Paediatric Research.

As part of a project to streamline HREC and site authorisation processes, the HREC has also been developing mechanisms to expedite ethics review and to work more efficiently with departments within the hospital to understand their needs and meet contemporary expectations. These mechanisms include:

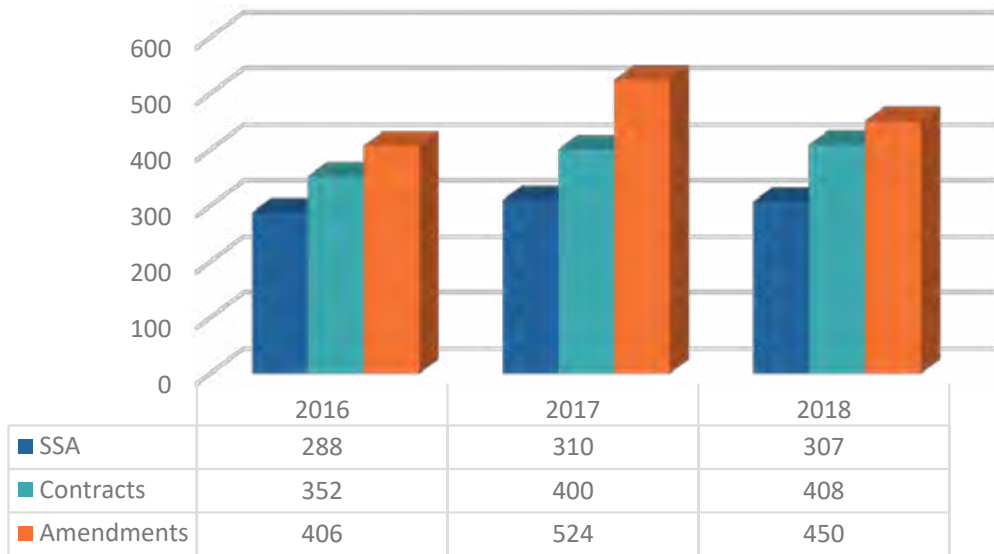
- Bolstering the review of low risk applications by the addition of expert reviewers from throughout the hospital who have agreed to provide input where required. This will add some research expertise to the reviews
- Setting and implementing clear, published and accountable timelines
- Comprising ethics and governance information and advice 'clinics' to provide guidance to researchers on aspects of ethics and governance prior to application submission
- Providing information sessions on aspects of review such as the difference between research and non-research activities.

### HREC Activity





## Governance Activity



**Members of RBWH HREC and RBWH RGO:**

*(Left to Right):* Rhondda Boyle (HREC Administration Officer), Janani Balakrishnah (A/Research Support Officer), Ann-Maree Gordon (HREC Coordinator), Anitha Dinesh (A/Research Governance Officer), Gordon McGurk (HREC Chairperson), Merrilyn Banks (Executive Director), Leah Hoppe (Executive Support Officer), Mamta Tanwar (HREC Assistant Coordinator), Emma Raymond (Business Manager). *Absent:* Liana Tongia (Administration Officer, Research Governance)

## RBWH and RBWH Foundation Research Advisory Committee



**Prof. Gerard Byrne**  
**Chair**  
Research Advisory Committee

The Research Advisory Committee (RAC) was established to provide assistance to the Royal Brisbane and Women's Hospital Foundation (the Foundation) and Royal Brisbane and Women's Hospital (the Hospital) in fulfilling their oversight responsibilities for the funding of health science research at the Hospital. The RAC members provide their services on an honorary basis attending four meetings throughout the year.

### The 2018 Membership Included:

Prof Gerard Byrne – <b>Chair</b>	Prof Claire Rickard
Dr Merrilyn Banks	Prof Robert Tindle
Adjunct Assoc Prof Ian Coombes	Dr Helen Healy
Adjunct Assoc Prof Robyn Fox	Prof Joan Webster
Prof Grant Ramm	Prof Jeff Lipman

### Other Attendees:

Ms Anitha Dinesh	Ms Kaelah Bosanquet
Ms Leah Hoppe	

Throughout 2018 a staggering \$2,400,000 was funded for scholarships, project grants and fellowships. A total of \$1,500,000 was received via the Private Practice Trust Fund plus \$900,000 from the RBWH Foundation. It is the role of the RAC members to give priority to the scholarships and those postgraduate research students who obtain external support (e.g. NHMRC or ARC) are eligible for top-up funds.

RAC received a total of 18 scholarship applications, 13 of which were successful for funding, with a total value for scholarships of \$522,653.16. In addition, 140 Research grants were received, blind ranked by the committee and divided into Early career applicants (40% – \$364,703.00) and Experienced Research (60% – \$564,124.68), leaving a total of 65 applications. Overall, 10 out of 29 were successful for early career researcher grants and 14 out of 36 were successful for experienced research grants.

In addition, 10 fellowship applications were received, 4 of which proceeded to the interview process. This was an opportunity to receive \$50,000 over a 2-year timeframe, there were 3 successful applicants who received this funding.

After many years of exceptional and voluntary service, the time has come to say farewell to Professor Robert Tindle. On behalf of myself and all the committee members, we would like to thank you for your hard work and dedication and will be missed by all.

I thank the RBWH Private Practice Trust Fund and the RBWH Foundation for their continuing support of research on campus.

# Symposium Research Award Winners

## 27<sup>th</sup> Annual RBWH Healthcare Symposium Research Awards 2018

### Winners:

**Danielle Silvestro** (The Professor Lawrie Powell AC Early Career Research Award)

**Dr Melissa Eastgate** (The Professor William Egerton Award for Medical Research): Trends in outcomes of resected intracranial metastatic melanoma across pre and post era of modern systemic therapies

**Nicole Marsh** (The Cecilia Brazil Nursing Research Award): Peripheral intravenous catheter failure and complications within the adult population: a systematic review

**Adrienne Young** (Health Practitioners Research Award): Improving nutritional intake and care for older in-patients

**Katrina Kildey** (Discovery and Innovation Research): Functional specialisation of natural killer cell subsets in human kidney transplant rejection

**Abirami Ratnasingham** (Clinical Research Award): Reduced fat-free mass at birth is predictor of childhood obesity

**Lisa Mitchell** (Complex Health Challenges Research Award): Safety partnerships in action: zero hospital acquired pressure injuries

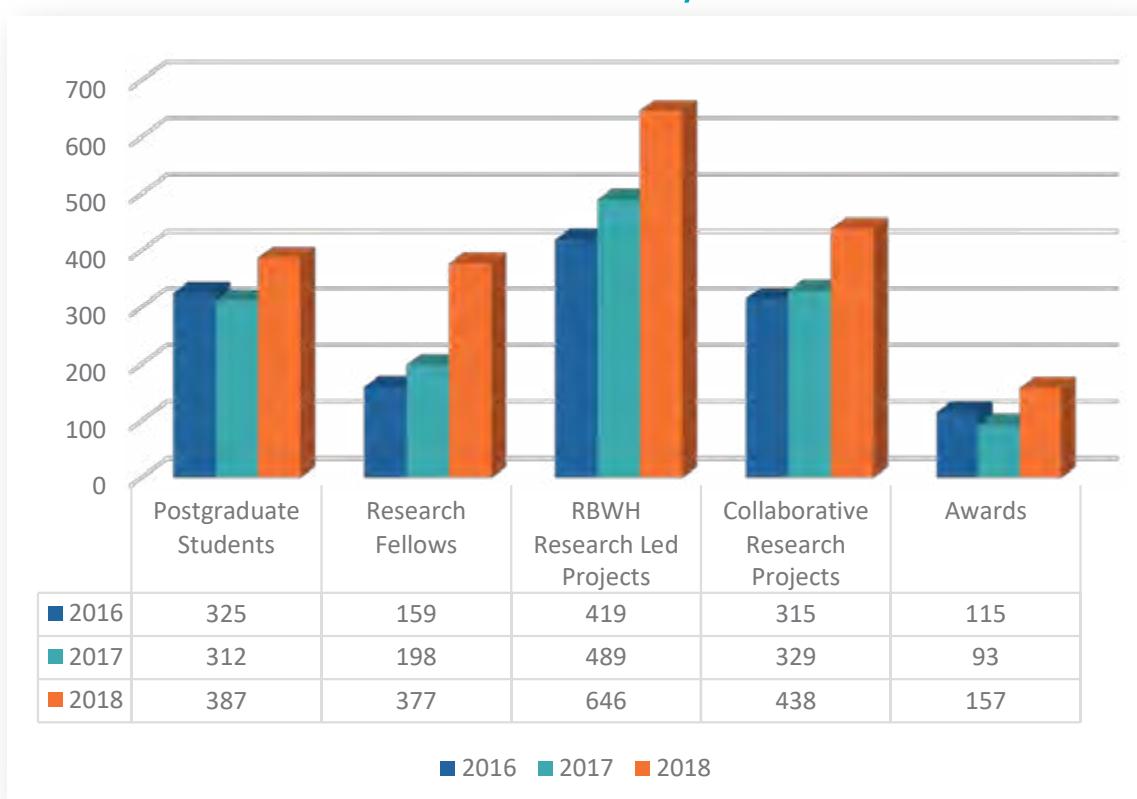
**Mary Fenn** (Health Services Implementation Research Award): Up late at RBWH improves staff experience

**Dr Melissa Eastgate** (Best Overall Presentation): Trends in outcomes of resected intracranial metastatic melanoma across pre and post era of modern systemic therapies



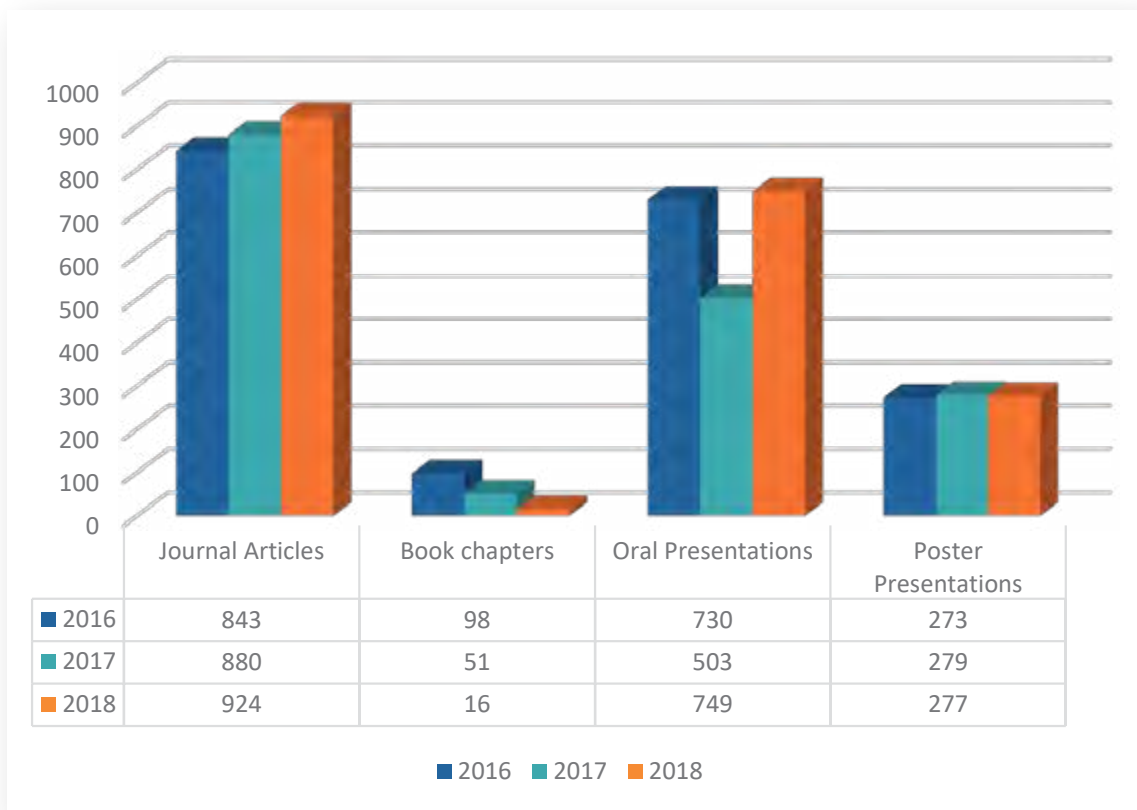
## RBWH Research Output

### Research Activity 2018



■ 2016 ■ 2017 ■ 2018

### Publications



■ 2016 ■ 2017 ■ 2018

## 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 2018:

The Centre Director awarded the prestigious Distinguished Researcher award by the International Oncology Nursing Society (ONS) Congress 2018; and the Clinical Research Program Leader awarded the Bill Siganto award at the 2018 Young Investigator Symposium and Mater Research Awards for Research Excellence. CPCRE staff have continued research projects funded by National Health and Medical Research Council (NHMRC), Australian Research Council, Mater Medical Research Institute, 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. The Centre Director and Clinical Research Program Leader hold appointments on national and international Palliative Care/Oncological and Nursing 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 Palliative Care Update Symposium (topic rotates 3 yearly between general medicine, oncology and supportive care).

### 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	<b>Patsy Yates</b> , Carol Windsor
<b>Elise Button</b>	PhD, QUT (2014-2018)	Identifying risk of deteriorating and dying in people with haematological malignancy	<b>Patsy Yates</b> , Raymond Chan, Shirley Chambers, Jason Butler
James Hughes	PhD, QUT (2014-2018)	Person, environment and health and illness factors influencing time to analgesia and patient experience of pain management	<b>Patsy Yates</b> , Kimberly Alexander
Nguyen Thuy Ly	PhD, QUT (2015-2018)	A pilot randomised controlled trial of a psychoeducational intervention for symptom cluster management among cancer patients undergoing treatments in Vietnam	<b>Patsy Yates</b> , Kimberly Alexander
Sarah Northfield	Masters by Research, QUT (2014-2018)	The palliative care referral decision-making process in the acute cancer setting: Nurses' advocacy behaviours and the factors influencing these behaviours	<b>Patsy Yates</b> , Raymond Chan, John Rosenberg
Doreen Tapsall	Professional Doctorate, QUT (2011-2019)	Factors influencing Nurses engagement in continuing professional development in cancer nursing	<b>Patsy Yates</b> , Kimberly Alexander
Alison Bowers	PhD, QUT (2016-2020)	Paediatric life-limiting conditions: prevalence and palliative care needs	<b>Patsy Yates</b> , 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	<b>Patsy Yates</b> , Raymond Chan, Steven McPhail

## Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
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, <b>Patsy Yates</b> , Sonia Hines
Piyada Chaisri	PhD, QUT (2018-2022)	Health related quality of life in children with cancer in Thailand	<b>Patsy Yates</b> , Natalie Bradford
Tai-Rae Downer	PhD, QUT (2018-2021)	Health services use in older cancer survivors	Raymond Chan, <b>Patsy Yates</b> , Louise Gordon, Catherine Olsen
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	<b>Patsy Yates</b> , 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	<b>Patsy Yates</b> , Raymond Chan, Stuart Ekberg
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	<b>Patsy Yates</b> , Sandie McCarthy
Alisha Wintour	Masters by Research, QUT (2016-2020)	Evaluation of an information pamphlet for HPV positive oropharyngeal cancer patients	<b>Patsy Yates</b> , Kimberly Alexander
Cynthia Akuoko	PhD, QUT (2017-2021)	Achieving health services and supportive care needs of women with advanced breast cancer in Ghana	<b>Patsy Yates</b> , Shirley Chambers
Thi Nguyen	PhD, QUT (2014-2018)	Lifestyle factors and health related quality of life in Vietnamese women after breast and gynaecological cancer: What are the relationships?	<b>Patsy Yates</b> , Debra Anderson, Charlotte Seib
Wendy O'Dea	Masters of Philosophy, QUT (2018-2022)	What is the preparedness of cancer nurses caring for patients receiving immunotherapy	Raymond Chan, <b>Patsy Yates</b>
Theodora Ogle	PhD, QUT (2017-2023)	Self-initiated comfort strategies for chemotherapy-induced peripheral neuropathy	Raymond Chan, <b>Patsy Yates</b>
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, <b>Patsy Yates</b>
Emma Sayers	PhD, QUT (2017-2025)	Ethical decision-making in end of life care – moving beyond patient autonomy and rational choice. The development of a framework rooted in the complex experiences of consumers, carers and clinicians.	<b>Patsy Yates</b> , Carol Windsor
Porawan Witwanukool	PhD, QUT (2017-2021)	Implementing evidence based physical activity and exercise guidelines by oncology nurses in Thailand	<b>Patsy Yates</b> , Raymond Chan
Rani George	PhD, Griffith University (2013-2018)	Individualisation of pain management in cancer patients – Methadone	<b>Janet Hardy</b>
Alana Delaforce	PhD, University of Newcastle (2018-2020)	A theoretical analysis of the barriers and facilitators to implementing patient blood management guidelines: a mixed method restricted review	Jed Duff, Judy Munday, <b>Janet Hardy</b>
Thomas Dilana	PhD, University of Queensland (2018-2020)	Patient attitudes towards medicinal cannabis	<b>Janet Hardy</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>John Haberecht</b>	Visiting Fellow	Palliative Care	Queensland University of Technology (2016 – current)
<b>Elise Button</b>	Nurse Researcher	Cancer Nursing	Queensland University of Technology (2017 – current)
<b>Nicole Gavin</b>	Nurse Researcher	Cancer Nursing	Queensland University of Technology (2017 – current)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Hardy, J., Yates, P.</b>	<b>Hardy, J.</b> , Good, P., Lintzeris, N., Martin, J., <b>Yates, P.</b> , Chye, R., Haywood, A., Olsen, R.	Medicinal cannabinoids to relieve symptom burden in the palliative care of patients with advanced cancer
<b>Yates, P.</b>	<b>Yates, P.</b> , 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
<b>Yates, P.</b>	<b>Yates, P.</b> , Carter, R.	TrueNTH Solutions: an integrated multi-component intervention to improve the lives of men with prostate cancer in Australia
<b>Yates, P.</b>	<b>Yates, P.</b> , 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
<b>Yates, P., Button, E.</b>	Chan, R., Blades, R., <b>Yates, P.</b> , McPhail, S., Dickie, G., Wyld, D., Sylvander, S., Crowe, S., <b>Button, E.</b> , Walsh, C., Keller, J., Jones, L.	A non-blinded, randomised, controlled, superiority trial of StrataXRT <sup>®</sup> versus 10% Glycerine (Sorbolene) cream for prophylaxis and management of radiation dermatitis in head and neck cancer patients receiving radical radiotherapy with or without concurrent systemic therapy

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Danby, S., Ekberg, S., Rendle-Short, J., <b>Yates, P.</b> , Herbert, A., Bradford, N., Bluebond-Langner, M.	<b>Yates, P.</b>	Extraordinary yet mundane talk: children navigating palliative care
Bradford, N., <b>Yates, P.</b> , Chan, R. & Tjondronegoro, D.	<b>Yates, P.</b>	RESPONse: Remote Symptom Management in Paediatric Oncology
Juraskova, I., Butow, P., Laidsaar-Powell, R., Boyle, F., <b>Yates, P.</b> , Schofield, P., Kay, J. and Costa, D.	<b>Yates, P.</b>	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., <b>Douglas, C.</b> , Nelson, C., Leon, D., Waugh, D., Kulkarni, H., Tan, K.-S., Brown, M., Jose, M., <b>Yates, P.</b>	<b>Yates, P.</b>	Chronic Kidney Disease Centre for Research Excellence
Ekberg, S., <b>Yates, P.</b> , Danby, S., Herbert, A., Bradford, N.	<b>Yates, P.</b>	The 'So Many Questions' Project

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Patsy Yates</b>	The Association of Queensland Nursing and Midwifery Leaders (AQNML) 2018 Outstanding Achievement in Nursing/Midwifery Award	The Association of Queensland Nursing and Midwifery Leaders (AQNML) Annual Conference
<b>Patsy Yates</b>	Awarded title of Distinguished Professor in recognition of outstanding achievements and ground-breaking research in cancer and palliative care nursing	
<b>Patsy Yates</b>	Oncology Nursing Society (ONS) Distinguished Researcher Award	Oncology Nursing Society (ONS) Congress 2018
<b>Janet Hardy</b>	Nominee, Individual Award	2018 Mercy Day Mission Awards
<b>Janet Hardy</b>	Bill Siganto Award	2018 Young Investigator Symposium and Mater Research Awards for Research Excellence

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Hardy, J.</b> , Good, P., Lintzeris, N., Martin, J., <b>Yates, P.</b> , 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	\$203,556	\$1,363,040 (2018-2021)
Danby, S., Ekberg, S., Rendle-Short, J., <b>Yates, P.</b> , 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	\$320,376	\$588,592 (2018-2021)
Bradford, N., <b>Yates, P.</b> , Chan, R. & Tjondronegoro, D.	Centre for Palliative Care Research and Education	RESPONse: Remote Symptom Management in Paediatric Oncology	Children's Health Foundation Queensland	\$18,350	\$255,370 (2018-2020)
Juraskova, I., Butow, P., Laidsaar-Powell, R., Boyle, F., <b>Yates, P.</b> , Schofield, P., Kay, J. & 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	\$197,065	\$593,202 (2018-2020)
<b>Yates, P.</b> , 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	\$213,260	\$2,495,543 (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., <b>Yates, P.</b>	Centre for Palliative Care Research and Education	Chronic Kidney Disease Centre for Research Excellence	NHMRC CRE in Health Services	\$67,918	\$2,496,981 (2014-2019)
<b>Yates, P.</b> , 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	\$369,347	\$1,365,755 (2014-2019)
Ekberg, S., <b>Yates, P.</b> , Danby, S., Herbert, A., Bradford, N.	Centre for Palliative Care Research and Education	The 'So Many Questions' Project	Gilead Sciences Europe Ltd	--	\$56,749 (2017-2018)
<b>Yates, P.</b> , 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	\$208,685	\$713,418 (2017-2021)
Chan, R., Blades, R., <b>Yates, P.</b> , McPhail, S., Dickie, G., Wyld, D., Sylvander, S., Crowe, S., <b>Button, E.</b> , Walsh, C., Keller, J., Jones, L.	Centre for Palliative Care Research and Education	A non-blinded, randomised, controlled, superiority trial of StrataXRT® versus 10% Glycerine (Sorbolene) cream for prophylaxis and management of radiation dermatitis in head and neck cancer patients receiving radical radiotherapy with or without concurrent systemic therapy	Stratpharma	\$53,978	\$112,000 (2016-2018)
<b>Hardy, J.</b> , <b>Yates, P.</b> , 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	\$5,000	\$20,000 (2015-2018)



## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
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	\$5,000	\$19,320 (2016-2018)
Good, P., Sullivan, K., Woodward, N, <b>Hardy, J.</b>	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	\$5,000	\$20,000 (2015-2018)
<b>Hardy, J.</b> , 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	\$5,000	\$19,496 (2017-2019)
Good, P., <b>Hardy, J.</b>	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	\$5,000	\$20,000 (2017-2019)
Cross, J., Good, P., <b>Hardy, J.</b> , Martin, J., Galettis, P., Zeng, L.	Centre for Palliative Care Research and Education	Using pharmacokinetic and pharmacodynamics data to optimise cannabinoid dosing in palliative care setting	Mater Medical Research Institute Seeding Grant	\$10,000	\$20,000 (2018-2019)
Richard, E., Mitchell, G., Nikles, J., Good, P., Senior, H., Steadman, K., <b>Hardy, J.</b>	Centre for Palliative Care Research and Education	Oral pilocarpine tablets for xerostomia	Mater Medical Research Institute Seeding Grant	\$10,000	\$19,947 (2018-2019)
Good, P., <b>Hardy, J.</b>	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	\$10,000	\$19,947 (2018-2019)
<b>Hardy, J.</b>	Centre for Palliative Care Research and Education	Research into prostate cancer	Mater Medical Research, Bill Siganto Award	\$10,000	\$10,000 (2018-2019)

## 2018 Research Publications

### Journal Articles:

1. **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*, (2018), 21(12), 1729-1740
2. Mitchell, G., Senior, H., Johnson, C., Fallon--Ferguson, J., Williams, B., Monterosso, L., Rhee, J., McVey, P., Grant, M., Aubin, M., Nwachukwu, H. & **Yates, P.** Systematic review of general practice end-of-life symptom control. *BMJ Supportive & Palliative Care*, (2018), 8(4), 411-420
3. Ekberg, S., Bradford, N., Herbert, A., Danby, S & **Yates, P.** Healthcare users' experiences of communicating with healthcare professionals about children who have life-limiting conditions: a qualitative systematic review. *Journal of Palliative Medicine*, (2018), 21(10), 1518-1528
4. Willmott, L., White, B., Piper, D., **Yates, P.**, Mitchell, G. & Currow, D. Providing palliative care at the end of life: Should health professionals fear regulation? *Journal of Law & Medicine*, (2018), 26(1), 214-245
5. McCarthy, A.L., Pell, N.M., Gillespie, K.M., Berry, R., Walpole, E., **Yates, P.** & Hubbard, R.E. Validation of a frailty index in older cancer patients with solid tumours. *BMC Cancer*, (2018), 18:892
6. Seib, C., Porter-Steele, J., Ng, S.K., Turner, J., McGuire, A., McDonald, N., Balaam, S., **Yates, P.**, McCarthy, A. & Anderson, D. Life stress and symptoms of anxiety and depression in women after cancer: The mediating effect of stress appraisal and coping. *Psycho-Oncology*, (2018), 27(7), 1787-1794

### Journal Articles (cont):

7. **Douglas, C.**, Schmalkuche, D., Nizette, D., **Yates, P.** & Bonner, A. Nurse-led services in Queensland: a scoping study. *Collegian*, (2018), 25(4), 363-370
8. Lo, W.-T., **Yates, P.** & Chan, R.J. Unmet supportive care needs and symptom burden in Taiwanese cancer survivors who have completed primary treatment. *European Journal of Oncology Nursing*, (2018), 35, 79-84
9. Chambers, S., Healy, H., Hoy, W., Kark, A., Ratanjee, S., Mitchell, G., **Douglas, C.**, **Yates, P.** & Bonner, A. Health service utilisation during the last year of life: A prospective, longitudinal study of the pathways of patients with chronic kidney disease stages 3-5. *BMC Palliative Care*, (2018), 17(1):57
10. Bonner, A., Chambers, S., Healy, H., Hoy, W., Mitchell, G., Kark, A., Ratanjee, S. & **Yates, P.** Tracking patients with advanced kidney disease in the last 12 months of life. *Journal of Renal Care*, (2018), 44(2), 115-122
11. Hardy, J., Skerman, H., Glare, P., Philip, J., Hudson, P., Mitchell, G., Martin, P., Spruyt, O., Currow, D. & **Yates, P.** (2018) A randomized open-label study of guideline-driven antiemetic therapy versus single agent antiemetic therapy in patients with advanced cancer and nausea not related to anticancer treatment. *BMC Cancer*, (2018), 18(1):510
12. Nguyen, L.T., Alexander, K. & **Yates, P.** Psychoeducational intervention for symptom management of fatigue, pain, and sleep disturbance cluster among cancer patients: A pilot quasi-experimental study. *Journal of Pain and Symptom Management*, (2018), 55(6), 1459-1472
13. Pidgeon, T., Johnson, C., Lester, L., Currow, D., **Yates, P.**, Allingham, S., Bird, S. & Eagar, K. Perceptions of the care received from Australian palliative care services: A caregiver perspective. *Palliative and Supportive Care*, (2018), 16(2), 198-208
14. Chan, R., **Button, E.**, Thomas, A., Gates, P. & **Yates, P.** Nurses attitudes and practices towards provision of survivorship care for people with a haematological cancer on completion of treatment. *Supportive Care in Cancer*, (2018), 26(5), 1401-1409
15. Chan, R., Marx, W., Bradford, N., Gordon, L., Bonner, A., **Douglas, C.**, Schmalkuche, D. & **Yates, P.** Clinical and economic outcomes of nurse-led services in the ambulatory care setting: a systematic review. *International Journal of Nursing Studies*, (2018), 81, 61-80
16. Turner, J., Mackenzie, L., Kelly, B., Clarke, D., **Yates, P.** & Aranda, S. Building psychosocial capacity through training of front-line health professionals to provide brief therapy: Lessons learned from the PROMPT study. *Supportive Care in Cancer*, (2018), 26(4), 1105-1112
17. Munday, J., Osborne, S. & **Yates, P.** Intrathecal morphine-related perioperative hypothermia in women undergoing cesarean delivery: A retrospective case-control study. *Journal of PeriAnesthesia Nursing*, (2018), 33(1), 3-12
18. Munday, J., Osborne, S., **Yates, P.**, Sturgess, D, Jones, L & Gosden, E. Preoperative warming versus no preoperative warming for maintenance of normothermia in women receiving intrathecal morphine for cesarean delivery: a single blinded, randomized controlled trial. *Anesthesia & Analgesia*, (2018), 126(1), 183-189
19. Good, P., Pinkerton, R., Bowler, S., Craig, J., **Hardy, J.** Impact of opioid therapy on sleep and respiratory patterns in adults with advanced cancer receiving palliative care. *Journal of Pain and Symptom Management*, (2017), Dec 2. pii: S0885-3924(17)30691-7. doi: 10.1016/j.jpainsymman.2017.11.026. [Epub ahead of print] 2018, Mar 55 (3):962-967
20. Heng, S., Good, P., **Hardy, J.** A retrospective audit on usage of Diatrizoate Meglumine (Gastrografin®) for intestinal obstruction or constipation in patients with advanced neoplasms. *Palliative Medicine*, (2018), Jan 32(1)294-298 Epub 2017, Aug 14 <https://doi.org/10.1177/026921631772264>
21. Sullivan, K., Kingi, N., Vayne-Bossert, P., Good, P., & **Hardy, J.** Ref.: Ms. No. ijpn.2016.0075R1. Castrate Resistant Prostate Cancer: Lessons learnt from a pilot study in the Palliative Care Research population. *International Journal of Palliative Nursing*, (2018), Feb 2;24(2):96-98. doi: 10.12968/ijpn.2018.24.2.96
22. **Hardy, J.**, Skerman, H., Glare, P., Philip, J., Hudson, P., Mitchell, G., Martin, P., Spruyt, O., Currow, D., **Yates, P.** A randomized open-label study of guideline-driven antiemetic therapy versus single agent antiemetic therapy in patients with advanced cancer and nausea not related to anticancer treatment. *BMC Cancer*, (2018), May 2;18(1):510. doi: 10.1186/s12885-018-4404-8. PMID:29720113
23. Alqabandi, N., Haywood, A., Kindl, K., Khan, S., Good, P., **Hardy, J.** Managing diabetes at the end of life – a retrospective chart review of two health providers in Queensland, Australia *Progress in Palliative Care* (in review)
24. 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* (epub) <https://doi.org/10.1177/0269216318801754>
25. 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* (submitted).

### Book Chapters / Letter publications:

1. **Yates, P.** Editorial. Design Thinking: can it enhance nursing research? *Cancer Nursing*, (2018), 41(4), 344-345.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speakers:

1. **Yates, P.** From research to bedside: how to decrease the gap. Taiwan Oncology Nursing Society and National Taiwan University Hospital Conference, Taiwan, 30<sup>th</sup> November 2018
2. **Yates, P.** Technology enabled interventions to promote self-management for cancer patients. Far Eastern Memorial Hospital Annual Nursing Conference, Taiwan, 30<sup>th</sup> November 2018
3. **Yates, P.** The evolving evidence base for cancer nursing: Key trends and their implications for practice. Southern China International Conference on Evidence-Based Nursing and Midwifery Practice 2018, Guangzhou, China, 19<sup>th</sup> November 2018
4. **Yates, P.** Nursing leadership in cancer care. Blood 2018, Brisbane, Australia, 23<sup>rd</sup> October 2018

### Invited Speakers: (cont):

5. **Yates, P.** Needs of survivors and health professionals. 2018 World Cancer Congress, Kuala Lumpur, Malaysia, 3<sup>rd</sup> October 2018
6. **Yates, P.** Presidential Address. International Conference on Cancer Nursing, Auckland, New Zealand, 25<sup>th</sup>-27<sup>th</sup> September 2018
7. **Yates, P.** Personalised health care: the role of cancer nurses. 2018 Chinese Conference on Oncology, Shenyang, China, 19<sup>th</sup> August 2018
8. **Yates, P.** ONS Spotlight on Award Winners (Distinguished Researcher). ONS 43<sup>rd</sup> Annual Congress, Washington, DC, USA, 19<sup>th</sup> May 2018
9. Delaforce, A., **Hardy, J.**, Duff, J., Munday, J. Blood 2018: 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, Brisbane, Australia, 21<sup>st</sup>-24<sup>th</sup> October 2018
10. Brimblecombe, C., Bressel, M., **Hardy, J.**, Chye, R., Spruyt, O. Pain prevalence and severity, and adequacy of analgesia, amongst palliative radiotherapy patients in Australia. ANZSPM Biannual Conference 2018, Sydney, Australia, 7<sup>th</sup>-9<sup>th</sup> September 2018
11. Cupples, G., Spitzer, M., Good, P., **Hardy, J.** Designing a trial of medicinal cannabis for palliative care in Queensland. ANZSPM Biannual Conference 2018, Sydney, Australia, 7<sup>th</sup>-9<sup>th</sup> September 2018
12. **Hardy, J.**, Bundock, D., Cross, J., Kindl, K., Gibbons, K., Good, P., Philip, J. Qtc prolongation in patients with advanced cancer. ANZSPM Biannual Conference 2018, Sydney, Australia, 7<sup>th</sup>-9<sup>th</sup> September 2018
13. **Hardy, J.**, Good, P. The place of medicinal cannabis in palliative care. Catholic Health Australia Research Symposium, Mater Hospital, Brisbane, Australia, 1<sup>st</sup> June 2018
14. Good, P., **Hardy, J.**, Skerman, H., **Yates, P.** A randomized, controlled, double blind study of oral methotrimeprazine versus oral haloperidol in patients with cancer and nausea not related to anticancer therapy (Nausea study 3). PaCCSC 9<sup>th</sup> Annual Research Forum, Sydney, Australia, 27<sup>th</sup> February 2018
15. **Hardy, J.**, Skerman, H., Martin, P., Phillip, J., Hudson, P., Currow, D., Mitchell, G., Glare, P., **Yates, P.** A randomised, controlled, double blind study of oral methotrimeprazine versus oral haloperidol in patients with cancer and nausea not related to anticancer therapy (Nausea study 3). IAPCON 2018, 25<sup>th</sup> Annual Conference of the Indian Association of Palliative Care, Aims, New Delhi, India, 23<sup>th</sup>-25<sup>th</sup> February 2018.

### Oral Presentations:

1. Tapsall, D., **Yates, P.** & Alexander, K. The relationship between structural and psychological empowerment and participation in continuing professional development in oncology nurses. International Conference on Cancer Nursing, Auckland, New Zealand, 25<sup>th</sup>-27<sup>th</sup> September 2018
2. Ash, K. & **Yates, P.** Palliative Care Curriculum for Undergraduates (PCC4U): building capacity in Australian new graduate nurses. International Conference on Cancer Nursing, Auckland, New Zealand, 25<sup>th</sup>-27<sup>th</sup> September 2018
3. **Yates, P.** Academic-service partnerships in nursing and midwifery: creating the future for health care. AQNML Nursing & Midwifery Leaders Conference 2018, Brisbane, Australia, 2<sup>nd</sup> August 2018
4. Alexander, K., Monterosso, L., **Yates, P.**, Miaskowski, C. & Larkin, D. New to Research. Pre-Congress Symposium, CNSA 21<sup>st</sup> Annual Congress, Brisbane, Australia, 21<sup>st</sup> June, 2018
5. **Yates, P.** & Grealish, L. Coming of age – reflections on the past to chart the future of CNSA. CNSA 21<sup>st</sup> Annual Congress, Brisbane, Australia, 23<sup>rd</sup> June 2018
6. **Yates, P.** Alternative trial design to traditional RCTs in primary care research. PC4 Scientific Symposium, Sydney, Australia, 25<sup>th</sup> May 2018
7. Ash, K. & **Yates, P.** Palliative Care Curriculum for Undergraduates (PCC4U): a decade on. PCNA 7<sup>th</sup> Biennial Conference, Brisbane, Australia, 20<sup>th</sup> & 21<sup>st</sup> May 2018
8. Northfield, S., Chan, R., Rosenberg, J. & **Yates, P.** Factors associated with patient access to specialist palliative care services in an acute cancer care setting. PCNA 7<sup>th</sup> Biennial Conference, Brisbane, Australia, 20<sup>th</sup> & 21<sup>st</sup> May 2018
9. Northfield, S., Chan, R., Rosenberg, J. & **Yates, P.** Identifying the factors that influence cancer nurses advocating for patient referrals to specialist palliative care services: a national survey. PCNA 7<sup>th</sup> Biennial Conference, Brisbane, Australia, 20<sup>th</sup> & 21<sup>st</sup> May 2018
10. Chan, R., Marx, W., Bradford, N., Gordon, L., Bonner, A., **Douglas, C.**, Schmaulkuhke, D. & **Yates, P.** Planning a nurse-led service in the ambulatory setting: what can we learn from the literature? MNHHS Nursing and Midwifery Conference, Brisbane, Australia, 1<sup>st</sup> March 2018
11. Hughes, J., **Yates, P.**, Spencer, L. & Alexander, K. The experience of care of patients presenting in pain to the emergency department. MNHHS Nursing and Midwifery Conference, Brisbane, Australia, 1<sup>st</sup> March 2018
12. **Hardy, J.** Palliative care research – the UQ experience. Palliative Care Queensland Annual Summit, Brisbane Exhibition and Convention Centre, Brisbane, Australia, 3<sup>rd</sup> December 2018
13. **Hardy, J.** The impact of novel therapies on the integration of palliative medicine and cancer care. Brisbane Cancer Conference, Brisbane Convention Centre, Brisbane, Australia, 29<sup>th</sup> November 2018
14. **Hardy, J.**, Skerman, H., Franzen, K., Good, P., **Yates, P.** A randomised, controlled, double blind study of oral methotrimeprazine versus oral haloperidol in patients with cancer and nausea not related to anticancer therapy. ANZSPM Biannual Conference 2018, Sydney, Australia, 7<sup>th</sup>-9<sup>th</sup> September 2018
15. **Hardy, J.** Current horizons in symptom pathophysiology and treatment – nausea. (Plenary) ANZSPM Biannual Conference 2018, Sydney, Australia, 7<sup>th</sup>-9<sup>th</sup> September 2018
16. **Hardy, J.**, Bundock, D., Cross, J., Kindl, K., Gibbons, K., Good, P., Philip, J. Qtc prolongation in patients with advanced cancer. ANZSPM Biannual Conference 2018, Sydney, Australia, 7<sup>th</sup>-9<sup>th</sup> September 2018

### Oral Presentations: (cont):

17. Brimblecombe, C., Bressel, M., **Hardy, J.**, Chye, R., Spruyt, O. Pain prevalence and severity, and adequacy of analgesia, amongst palliative radiotherapy patients in Australia. ANZSPM Biannual Conference 2018, Sydney, Australia, 7<sup>th</sup>-9<sup>th</sup> September 2018
18. **Hardy, J.**, Good, P. The place of medicinal cannabis in palliative care. Catholic Health Australia Research Symposium, Mater Hospital, Brisbane, Australia, 1<sup>st</sup> June 2018
19. Good, P., **Hardy, J.**, Skerman, H., **Yates, P.** A randomized, controlled, double blind study of oral methotrimeprazine versus oral haloperidol in patients with cancer and nausea not related to anticancer therapy (Nausea study 3). PaCCSC 9<sup>th</sup> Annual Research Forum, Sydney, Australia, 27<sup>th</sup> February 2018
20. 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 (PROMs). PaCCSC 9<sup>th</sup> Annual Research Forum, Sydney, Australia, 27<sup>th</sup> February 2018
21. **Hardy, J.**, Skerman, H., Martin, P., Phillip, J., Hudson, P., Currow, D., Mitchell, G., Glare, P., **Yates, P.** A randomised, controlled, double blind study of oral methotrimeprazine versus oral haloperidol in patients with cancer and nausea not related to anticancer therapy (Nausea study 3). IAPCON 2018, 25<sup>th</sup> Annual Conference of the Indian Association of Palliative Care, Aims, New Delhi, India, 23<sup>th</sup>-25<sup>th</sup> February 2018.

### Poster Presentations:

1. Northfield, S., **Button, E.**, Wyld, D., **Gavin, N.**, Nasato, G. & **Yates, P.** Models of care for reducing the use of emergency departments by adult cancer patients: a narrative review. CNSA 21<sup>st</sup> Annual Congress, Brisbane, Australia, 21<sup>st</sup>-23<sup>rd</sup> June 2018
2. Matthews, R., **Yates, P.** & Chan, R. Education and training for healthcare professionals to deliver end-of-life care in the acute care setting: a literature review. CNSA 21<sup>st</sup> Annual Congress, Brisbane, Australia, 21<sup>st</sup>-23<sup>rd</sup> June 2018
3. Chan, R., **Yates, P.** & Molasiotis, A. Cancer survivorship in 10 Asia Pacific Countries: what can we learn from a study of 1873 cancer survivors and 1501 oncology practitioners? ONS 43<sup>rd</sup> Annual Congress, Washington, DC, USA, 17<sup>th</sup>-20<sup>th</sup> May 2018
4. Tapsall, D., **Yates, P.** & Alexander, K. The relationship between structural and psychological empowerment and participation in continuing professional development by oncology nurses. ONS 43<sup>rd</sup> Annual Congress, Washington, DC, USA, 17<sup>th</sup>-20<sup>th</sup> May 2018
5. Huang, Y.-L., **Yates, P.** & Wu, C.-J. Social ecological influences on preferences for care provided at the end of life amongst Taiwanese city-dwelling adults: a social ecological model of preferences for end-of-life care. PCNA 7<sup>th</sup> Biennial Conference, Brisbane, Australia, 20<sup>th</sup> & 21<sup>st</sup> May 2018.

## Other Communications and Outputs:

### Published Abstracts:

Rosenberg, J., Chambers, S., **Yates, P.** Decision Assist – Palliative Aged Care Linkages Project. Seven strategies to promote linkages between aged care and palliative care: Results of a systematic literature review. *Palliative Medicine*, (2018), 32(15), 42

Mitchell, G., Decks, L., Rosenberg, J., Kelly, M., Carmont, S.A. & **Yates, P.** Understanding the general practitioner's clinical recognition of impending end of life and subsequent clinical practice: A qualitative study. *Palliative Medicine*, (2018), 32 (15), 212.

### Workshops/Other Presentations:

**Yates, P.** How does enhancing partnerships contribute to professional standards and practice? MNHHS Nursing and Midwifery Workshop, Brisbane, Australia, 17<sup>th</sup> October 2018

**Yates, P.** What is working for extending scope of practice for nursing? Queensland Health's "Improving Healthcare in Queensland through Innovative Service Delivery Models" Workshop, Brisbane, Australia, 27<sup>th</sup> June 2018

**Yates, P.** End of Life Care. ACN Policy Summit, Canberra, Australia, 20<sup>th</sup> April 2018

**Yates, P.** Palliative care service delivery. Parliamentary Friends End of Life Group Lunchbox at Parliament House, Canberra, Australia, 27<sup>th</sup> February 2018

**Yates, P.** Designing a clinical research project. Introduction to Clinical Research for Health Professionals, 2018 MNHHS Research Education Program, RBWH, Brisbane, Australia, 13<sup>th</sup> February 2018

**Hardy, J.** An evidence-based approach to pain management in patients with advanced cancer. Brisbane Pain Research: Multidisciplinary Perspectives and Therapeutics, Institute for Molecular Bioscience. University of Queensland, Brisbane, Australia, 7<sup>th</sup> December 2018

**Hardy, J.** Symptomatic treatment of dyspnoea – what works, what doesn't? Mater Thursday Morning Education Session, Mater Health Services, Brisbane, Australia, 13<sup>th</sup> September 2018

**Hardy, J.** Symptomatic treatment of dyspnoea – what works, what doesn't? Queensland Branch of the Thoracic Society of Australia & New Zealand Winter Meeting, Brisbane Convention Centre, Brisbane, Australia, 21<sup>st</sup> July 2018

**Hardy, J.**, Skerman, H., Martin, P., Phillip, J., Hudson, P., Currow, D., Mitchell, G., Glare, P., **Yates, P.** A randomised, controlled, double blind study of oral methotrimeprazine versus oral haloperidol in patients with cancer and nausea not related to anticancer therapy (Nausea study 3). Palliative Care Interest Group, Herston, Australia, 19<sup>th</sup> June 2018.

## Herston Imaging Research Facility



**Paul Thomas**  
**Director**  
 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. 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. 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.

HIRF is operated as a unit of RBWH, utilising 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 impact on clinical wait-list times. In 2018, HIRF undertook research imaging for more than 10 new and on-going commercial clinical trials by pharmaceutical companies.

Since opening in 2015 HIRF has seen considerable growth in the number of research projects and scan volumes as well as complexity and diversity of imaging projects. By the end of 2018 scan numbers were routinely more than 100 per month and over 50 research studies were actively recruiting. There are also many studies in the pre-start-up phase with commencement planned for 2019. 2018 saw the appointment of Associate Professor Katie McMahon as deputy director of HIRF. Katie brings great

expertise in MR imaging and physics and a strong track record in MR research to HIRF and she has provided valuable support to researchers seeking to undertake MR projects at HIRF. A further round of HIRF seed grants in 2018 resulted in four successful grants covering research projects in stroke, post traumatic dysarthria, mild traumatic brain injury, and cerebral hypoxia. These grants are designed to interest researchers new to imaging to initiate imaging research programmes. A further objective is to provide researchers with pilot data to facilitate external grant applications.

A new initiative in 2018 was to provide a dedicated officer to assist researchers with ethics and governance applications. This was very successful and greatly assisted busy clinicians to move their projects through the approval process and allowed more rapid project commencement. Significant improvements in IT capability during the year resulted in most researchers having electronic distribution of research images, considerably reducing the time required to access images. A new RIS/PACS has also speeded up turnaround times for safety reads on research images. 2018 was also marked by increased collaboration activity between HIRF and research groups, including the Jamieson Trauma Institute, CSIRO and the Biofabrication Facility.

This year HIRF has made significant contributions many projects that relate to neurocognition and neuropsychiatry that attempt to define and understand the causes of melancholic depression, the ageing process and dementia, Parkinson's disease and the effects of deep brain stimulation. These studies have resulted in publications in top-tier journals such as Nature Neuroscience and Nature Communications and the journal of the American Association of Physicists in Medicine.

### 2018 HIRF Scientific Advisory Committee

Name	Title	Role	Collaborative Partner
<b>A/Prof Paul Thomas</b>	Associate Professor	Director of HIRF	RBWH, HIRF and Dept of Nuclear Medicine
<b>A/Prof Katie McMahon</b>	Associate Professor	Deputy Director of HIRF	QUT, School of Clinical Sciences
<b>Ms Louise Campbell</b>		Operations Manager of HIRF	RBWH, HIRF and Dept of Nuclear Medicine
<b>Prof Michael Breakspear</b>	Professor	Programme Co-ordinator of Mental Health Research	QIMR-Berghofer
<b>Dr Lizbeth Kenny AO</b>	Professor	Senior Radiation Oncologist, Medical Director – Central Integrated Regional Cancer Service	UQ, School of Medicine, RBWH, Dept of Radiation Oncology
<b>Prof Greig de Zubicaray</b>	Professor	Deputy Director	QUT, Institute of Health and Biomedical Innovation
<b>Prof David Copland</b>	Professor	Senior Research Fellow – Speech Pathology and Language Neuroscience	UQCCR

## 2018 HIRF Scientific Advisory Committee (cont)

Name	Title	Role	Collaborative Partner
<b>Prof Pamela Rowntree</b>	Professor	Director of Academic Programmes	QUT, School of Clinical Sciences
<b>Prof Paul Cumming</b>	Professor	Senior Research Fellow	QUT, School of Psychology and Counselling
<b>Prof Graham Kerr</b>	Professor	Program Leader for Injury Prevention	QUT, Institute of Health and Biomedical Innovation
<b>Prof Alan Coulthard</b>	Professor	Senior Interventional Neuro-radiologist	UQ, School of Medicine, RBWH, Dept of Medical Imaging
<b>Prof Graham Galloway</b>	Professor	Director of Imaging Technology	UQ, Translational Research Institute
<b>Dr Thomas Gaass</b>	PhD	Senior Scientist MRI	Siemens Healthineers of Australia
<b>Dr Jurgen Fripp</b>	PhD	Senior Research Fellow	CSIRO, Australian e-Health Research Centre
<b>Dr Jye Smith</b>	PhD	Principal Medical Physicist	RBWH, Dept Nuclear Medicine
<b>Dr Marcus Gray</b>	PhD	Senior Research Fellow	UQ, Translational Research Institute
<b>Dr Konstantin Momot</b>	PhD	Senior Lecturer	QUT, Dept of Physics
<b>Dr Marita Prior</b>	PhD	Research Development	RBWH, Dept of Medical Imaging, HIRF

## 2018 Research Publications

### Journal Articles:

- Mosley PE, Smith D, Coyne T, Silburn P, Breakspear M, Perry A.** The site of stimulation moderates neuropsychiatric symptoms after subthalamic deep brain stimulation for Parkinson's disease. *NeuroImage: Clinical.* (2018) 18: 996-1006
- Gollo LL, Roberts JA, Cropley VL, Di Biase MA, Pantelis C, Zalesky A, Breakspear M.** Fragility and volatility of structural hubs in the human connectome. *Nature Neuroscience.* (2018) 21:1107-1116
- Jeganathan J, Perry A, Bassett DS, Roberts G, Mitchell PB, Breakspear M.** Fronto-limbic dysconnectivity leads to impaired brain network controllability in young people with bipolar disorder and those at high genetic risk. *NeuroImage: Clinical.* (2018) 19:71-81
- Cocchi L, Zalesky A, Nott Z, Whybird G, Fitzgerald PB, Breakspear M.** Transcranial magnetic stimulation in obsessive-compulsive disorder: A focus on network mechanisms and state dependence. *NeuroImage: Clinical.* (2018) 19:661-674
- Ren Y, Nguyen VT, Sonkusare S, Lv J, Pang R, Guo L, Eickhoff SB, Breakspear M, Guo C.** Effective connectivity of the anterior hippocampus predicts recollection confidence during natural memory retrieval. *Nature Communications.* (2018) 9:4875
- Cumming P, Burgher B, Patkar O, Breakspear M, Vasdev N, Thomas P, Liu G, Banati R.** Sifting through the surfeit of neuroinflammation tracers. *J Cerebral Blood Flow and Metabolism.* (2018) 38:204-224
- Hyett MP, Perry A, Breakspear M, Wen W, Parker GB.** White matter alterations in the internal capsule and psychomotor impairment in melancholic depression. *PLoS One.* (2018) doi.org/10.1371/journal.pone.0195672
- Lin HY, Cocchi L, Zalesky A, Lv J, Perry A, Tseng WYI, Kundu P, Breakspear M, Gau SSF.** Brain-behaviour patterns define a dimensional biotype in medication-naïve adults with attention-deficit hyperactivity disorder. *Psychological Medicine.* (2018) 48:2399-2408
- McLean B, Blakeman M, Carey L, Ward R, Novak I., Elliott C.** Discovering the sense of touch: protocol for a randomised controlled trial examining the efficacy of a somatosensory discrimination intervention for children with hemiplegic cerebral palsy. *BMC Pediatrics.* (2018). 18:252.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speakers:

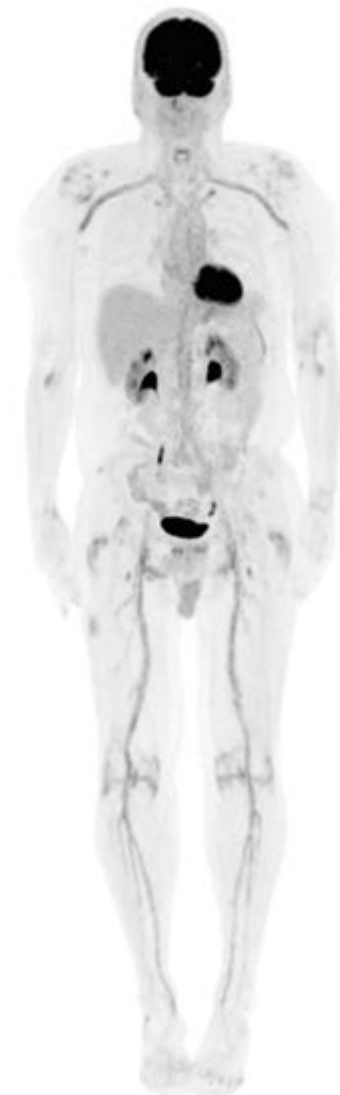
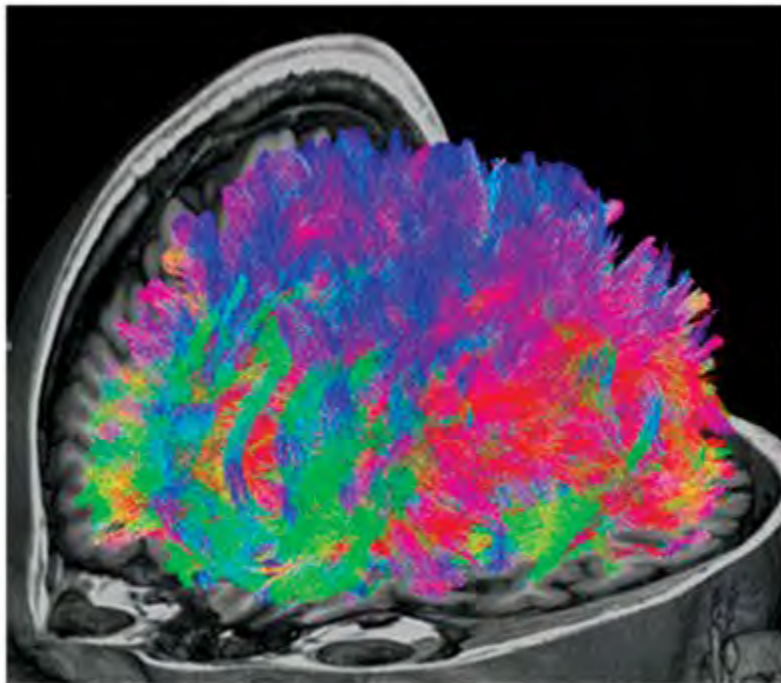
- McMahon KL.** 'HIRF Capabilities in Trauma'. 2018, Jameison Trauma Institute
- McMahon KL.** 'Markers of Language Recovery in Stroke'. 2018, QUT Clinical Sciences Research Seminar
- McMahon KL, Thomas P.** 'PET, MRI and Respiratory Research'. 2018, PCH Respiratory Grand Rounds
- Breakspear M.** 2018 Neuronal models of dynamic functional connectivity: Linking scales and data modalities, OHBM
- Thomas PA.** "Promising novel PET developments". Australian Lymphoma and Leukaemia Group Scientific Meeting Brisbane 2018
- Thomas PA.** "Imaging in the rapidly changing world of cancer therapeutics" Imaging @ Brisbane 2018, Brisbane
- Thomas PA.** "Theranostics: combining imaging diagnosis and therapy" Princess Alexandra Hospital Healthcare Symposium. 2018
- Thomas PA.** "Innovations in diagnostics/biomarkers" Jamieson Trauma Institute Intersections and Opportunities 2018.

**Oral Presentations:**

1. **Yang J.** 'Altered network connectivity during resting state in Parkinson's disease patients with mild cognitive impairment as a marker for dementia'. 2018, ACNS, Melbourne, Australia
2. **Guo, C.** 2018, Anterior hippocampal connectivity during natural memory retrieval predicts recall confidence. OHBM
3. **Saunus JM, Lim M, Puttick S, Kalita-de Croft P, Houston ZH, Jones ML, Latter MJ, Campbell LC, Thomas P, Jeffree RL, Rose SE, Mahler SM, Thurecht KJ, Scott AM, Lakhani SR.** Innovation in diagnosis and treatment of brain metastases using multifunctional nanomedicines. San Antonio Breast Cancer Symposium. 2018
4. **Gillman A, Smith J, Dowling J, Thomas P, Rose S, Dowson N.** Evaluation of techniques for data-driven PET-alone motion tracking World Federation of Nuclear Medicine and Biology Melbourne 2018
5. **McGuinness M, Ramsay S, Latter M, Thomas P, Bhatt M, Kyle S, Lee K, Pattison DA.** Variations in physiological radiopharmaceutical distribution between <sup>18</sup>F-PSMA-1007 and <sup>68</sup>Ga-PSMA-11 PET/CT. World Federation of Nuclear Medicine and Biology Melbourne 2018.

**Poster Presentations:**

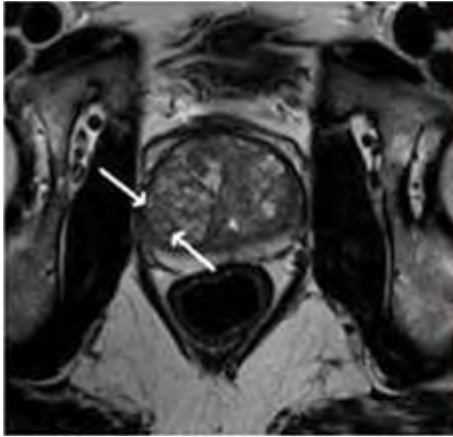
1. **Brownsett SLE, Ramajoo K, McMahon KL, Copland DA, Ong B, de Zubicaray GI.** Picture description versus picture naming-assessing language deficits. Aphasiology Symposium of Australia, Nov 28-29, Sunshine Coast 2018
2. **Gauvin H, Ramajoo K, Brownsett S, McMahon KL, de Zubicaray GI.** Testing embodied cognition with a large premotor cortex lesion – a single case study. Society for Neurobiology of Language, Quebec, Aug 16-19, 2018
3. **Gauvin H, McMahon KL, de Zubicaray GI.** Lexical selection and the elusive role of the left IFG: an fMRI study Society for Neurobiology of Language, Quebec, Aug 16-19, 2018
4. **Yang J, McMahon KL, Copland DA, Byrne GJ, Mitchell LK, O'Sullivan JD, Dissanayaka NNW.** 2018 Altered network connectivity during resting state in Parkinson's disease with mild cognitive impairment as a marker for dementia. Australia Dementia Forum. 4-5 June, Sydney, 2018
5. **Scott AP, Tey S, Thomas P, Pattison D, and Kennedy GA.** Targeted Molecular Imaging of Translocator Protein (TSPO) Using <sup>18</sup>FGE180-PET for the Diagnosis of Gastrointestinal Graft Versus host Disease (GI-GVHD). American Society of Hematology Annual Meeting San Diego 2018.



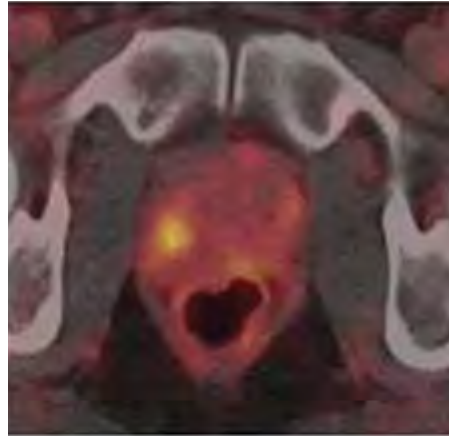
**Above:** Tracking the healthy white matter in the brain. The fibres are colour coded to indicate the direction they travel – Anterior-Posterior green, Left-Right red, Head-Foot blue

**Right:** Flurodeoxyglucose (FDG)- positron emission tomography (PET) image

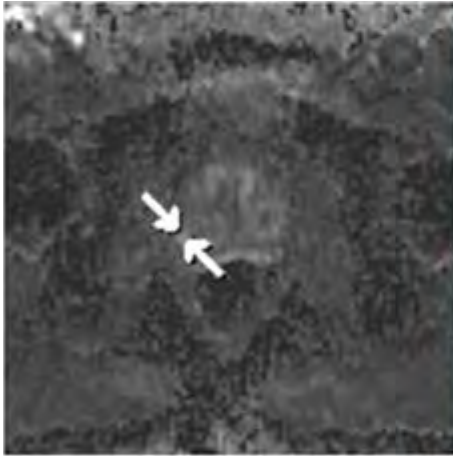
**MRI of the prostate:**  
*Ga-68 PMSA PET fused with the MRI image, showing a clear prostate cancer lesion (yellow)*



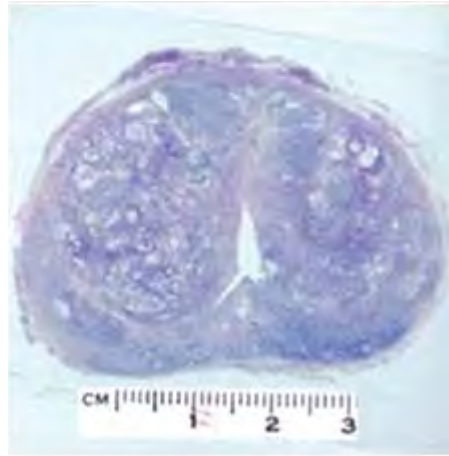
Prostate Cancer



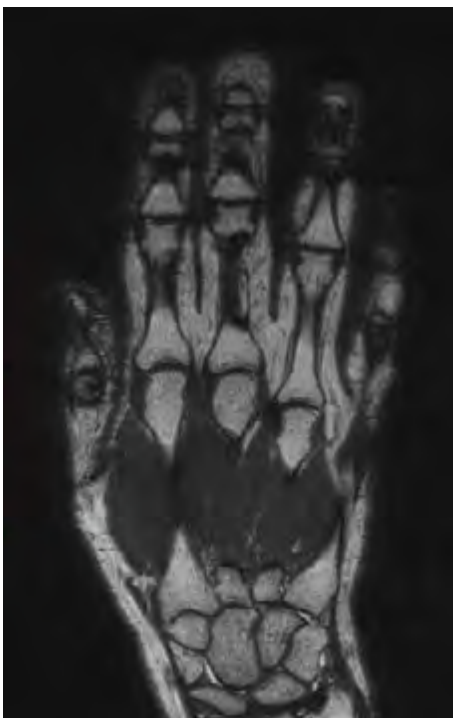
Histology of the prostate confirming cancer site



Diffusion MRI of the prostate



High resolution proton density SPACE image with magnetisation transfer contrast of a hand. Taken using a hand coil



Ga-68 PMSA PET image showing metastases of prostate cancer





## Jamieson Trauma Institute

The establishment of the Jamieson Trauma Institute (JTI) was first announced in November 2017, and funding agreements commenced in July 2018 with strong 5-year investment from Metro North HHS and the Motor Accident Insurance Commission (MAIC). A core team of staff have been recruited and importantly in August 2018, JTI welcomed Professor Michael Schuetz as the Director. The team includes senior research staff, rehabilitation chair, biostatistics, epidemiology and administrative staff. In addition, clinical representatives and honorary positions have been appointed with organisations including RBWH, Herston Imaging Research Facility, University of Queensland, Monash University, Royal Australian College of Surgeons, ADF UQ Military Medicine and Metro South HHS, developing collaborations with Queensland Brain Institute (UQ), Herston QUT Biofabrication Unit, rehabilitation services and research centres with plans to continue to grow collaborations and positions in the coming year.

The inaugural year has been highly productive with the establishment of governance structures, a Research Advisory Committee and External Advisory Committees to provide strategic guidance and accountability of invested funding. In 2018 JTI also established the Queensland Trauma and Burns Quality Assurance Committee (QTBOAC), a privileged committee to review opportunities for improvements in the management of patients with traumatic and burn injury in Queensland.

### JTI is developing key themes to focus the institutes research and direction, including:

- Quality and Data Analytics
- Injury Prevention and Epidemiology
- Clinical Trials
- Innovations, Diagnostics and Translation
- Education and Training
- Virtual Trauma Centre
- Rehabilitation and Outcome Measurement.

Jointly funded positions with AusHSI, QUT in Health Economics, and CSIRO have been established to commence in JTI in early 2019, to advance core research and support the advancement of the Queensland Trauma Data Warehouse development.

In 2018 the research team have been successful in grants and fellowship submissions including projects on opioid use following trauma and splenic trauma. In addition to numerous peer-reviewed research publications, JTI accepted their first PhD student enrolment and supported successful Clinical Fellowship applications. JTI hosted several visiting Fellows in 2018 with success in obtaining Visiting Fellow funding with QUT to host Prof Erwin Bottinger, Director of Digital Health from Hasso-Plattner Institute, Germany in 2019. A key research collaboration with CSDS, UQ, QUT and other partners is the Augmented/Virtual Reality project, to improve point of care support to remote clinicians by interactive Specialist Telepresence.

Multiple statewide data linkage studies have commenced including Opioid use post trauma; Outcomes from lower limb and pelvic fractures following land transport crashes; Injury Severity Measurement using ICD coding; Retrieval pathways following trauma. Events showcasing JTI research achievements occurred throughout 2018, culminating in the 'Intersections and Opportunities' event on 6<sup>th</sup> December 2018, at which the JTI website was also launched.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Adam Mahoney	PhD, UQ (2018 – current)	The spatial epidemiology of trauma in Queensland	<b>Michael Reade, Kirsten Vallmuur, Cate Cameron</b> , Kerrie Mengerson
Martha Druery	PhD, UQ (2014 – current)	Psychosocial outcomes post-major burn injuries in adults – a longitudinal exploratory study	<b>Jeff Lipman</b> , Peter Newcombe, <b>Cate Cameron</b>
Erin Pitt	PhD, GU (2013 – current)	Early childhood food consumption and dietary patterns: the influence of socio-economic and demographic factors and the food environment	Tracy Comans, <b>Cate Cameron</b> , 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	<b>Kirsten Vallmuur</b> , Ben Matthews
Kim Vuong	PhD, QUT (2015 – current)	Quads and Kids: understanding parents' knowledge, attitudes and beliefs about safety and risks	Angela Watson, Ioni Lewis, <b>Kirsten Vallmuur</b>
Caroline Gillespie	PhD, QUT (2015 – current)	Influencing Safety in Supply Chains: challenges and Opportunities for Businesses	<b>Kirsten Vallmuur</b> , Narelle Haworth, Darren Wishart

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Michael Schuetz</b>	Director/Chair of Trauma	Innovations, Diagnostics and Translation	QUT
<b>Kirsten Vallmuur</b>	Honorary Principal Research Fellow/MAIC Principal Research Fellow	Quality and Data Analytics	QUT
<b>Cate Cameron</b>	Principal Research Fellow/Adjunct Associate Professor	Injury Prevention and Epidemiology	QUT
<b>David Douglas</b>	Chair, Rehabilitation Medicine/Adjunct Associate Professor	Rehabilitation and Outcome Measurement	UQ
<b>Jacelle Warren</b>	Biostatistician	Quality and Data Analytics	
Michael Reade	Clinical Representative, Australian Defence Force/Professor of Military Medicine	Clinical Trials	UQ
<b>Carl Lisec</b>	Clinical Representative, Burns and Trauma/Senior Lecturer	Burns and Trauma	UQ
<b>Jason Brown</b>	Clinical Representative, Burns and Trauma	Burns and Trauma	
<b>Paul Thomas</b>	Clinical Representative, Diagnostics/Associate Professor	Innovations, Diagnostics and Translation	UQ
<b>Kevin Tetsworth</b>	Clinical Representative, Orthopaedics/Adjunct Associate Professor	Orthopaedic Trauma	UQ
Cliff Pollard	Honorary Clinical Representative/Adjunct Associate Professor	Virtual Trauma Centre (VTC): Augmented Reality and Virtual Reality in Trauma Care	UQ
Mark Midwinter	Honorary Clinical Representative/Professor of Clinical Anatomy	Virtual Trauma Centre (VTC): Augmented Reality and Virtual Reality in Trauma Care	UQ

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Cate Cameron</b>	Matthew Hope (PAH), <b>Andrew Mayo</b> , <b>Kevin Tetsworth</b> , <b>Cate Cameron</b> , <b>Jacelle Warren</b> , <b>Kirsten Vallmuur</b> , <b>Cliff Pollard</b>	The burden and cost of pelvic and lower extremity orthopaedic injuries from land transport crashes in Queensland
<b>Cate Cameron</b>	<b>Michael Muller</b> , <b>Michael Rudd</b> , <b>Jacelle Warren</b>	Epidemiology of burns patients admitted to the State-wide Adults Burns Service in Queensland: a 10-year review
<b>Cate Cameron</b>	Bill Loveday (MRQ); <b>Kirsten Vallmuur</b> , <b>Melanie Proper</b> , <b>Jacelle Warren</b> , <b>Cliff Pollard</b> ; Natalie Bradford, Nick Graves, Hannah Carter (QUT)	Prevalence and impact of opioid use pre- and post-trauma in Queensland: population-based data linkage study
<b>Kirsten Vallmuur</b>	Angela Watson (QUT); Paul Taylor (MAIC), <b>Cate Cameron</b> , <b>Jacelle Warren</b>	An examination of the quality of injury data and patterns, trends and burden of injury for informing establishment of a statewide trauma data warehouse
<b>Kirsten Vallmuur</b>	Angela Watson (QUT); Chris Uber (UQ); Belinda Gabbe (Monash Uni); James Harrison (Flinders Uni); Son Ngheim (Griffith Uni); <b>Cate Cameron</b> , <b>Jacelle Warren</b>	Evaluation of ICD-10-AM based injury severity estimation models
<b>Kirsten Vallmuur</b>	Angela Watson (QUT); Paul Taylor (MAIC), Michael Clacher (QLD Treasury); Sebastian Bielen (OIR); Andrew Currie (WorkCover), <b>Cate Cameron</b> , <b>Jacelle Warren</b>	Feasibility, requirements, and value of data linkage of motor vehicle accident compensation, workers compensation and health data in Queensland
<b>Cate Cameron</b>	<b>Michael Rudd</b> , <b>Cliff Pollard</b> , <b>Jacelle Warren</b> , <b>Kirsten Vallmuur</b> , <b>Olivia Zheng</b>	Evaluation of RBWH trauma service effectiveness
<b>Cate Cameron</b>	<b>Maura Desmond</b> , <b>Michael Rudd</b> , <b>Cliff Pollard</b> , Kerrienne Watt (JCU)	P.A.R.T.Y. Program Outcome Evaluation (2010-2018)
<b>Michael Schuetz</b>	Brett Droder (QUT)	Initial investigation into Checkpad MED and potential use for RBWH

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Robert Andrews, Moe Thandar Wynn, Arthur ter Hofstede (QUT); Stephen Rashford, Emma Bosley (QAS); Mark Elcock (RSQ)	<b>Kirsten Vallmuur</b>	Identifying pre-hospital retrieval processes for road trauma patients in Queensland
Patrick Biggins (UQ)	<b>Michael Reade, Kirsten Vallmuur, Cate Cameron, Jacelle Warren</b>	The effect of time to definitive neurosurgical treatment on patient morbidity and mortality in isolated traumatic brain injury
Deb Theodoros, Louise Cahill (UQ)	<b>Jacelle Warren, Cate Cameron, Kirsten Vallmuur</b>	Distribution and type of inpatient allied health services provided to patients following road traffic crashes across Queensland

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
Watson A, <b>Vallmuur K</b> , Siskind V, Sheehan M, Senserrick T	Jamieson Trauma Institute	Analysis of Queensland fatalities and serious injury crash characteristics and management by geographic region	MAIC	\$78,000	\$78,000 (2018)
<b>Vallmuur K</b> , Eley R, Roudenko A	Jamieson Trauma Institute	Understanding the patterns, circumstances and outcomes of power tool injuries presenting to the emergency department to inform a national safety campaign	IHBI Injury Prevention Program Seeding Grant	\$6,000	\$6,000 (2018)
Lystad R, Dear B, Johnstone M, Mitchell R, Braithwaite J, Wuthrich V, Amin J, <b>Cameron CM</b>	Jamieson Trauma Institute	Macquarie MINDS: Monitoring of Injury and psychosocial health outcomes, career trajectories and continuing education, LiveD experiences and Social connectedness	Macquarie University Seeding Grant	\$24,997	\$49,994 (2018-2019)

## 2018 Research Publications

### Journal Articles:

- Andrews R, Wynn MT, **Vallmuur K**, Hofstede AHM, Bosley E, Elcock M. Pre-hospital Retrieval and Transport of Road Trauma Patients in Queensland: a Process Mining Analysis. International Conference on Business Process Management. 2018
- Burgess J, Kimble R, Watt K, **Cameron CM**. Combining technology and research to prevent scald injuries: results from Cool Runnings randomised controlled trial. Journal of Medical Internet Research. 2018. <https://doi.org/10.2196/10361>
- Burgess J, Kimble R, Watt K, **Cameron CM**. Knowledge of childhood burn risks and burn first aid: Cool Runnings. Injury Prevention. 2018. <https://doi.org/10.1136/injuryprev-2017-042650>
- Cameron CM**, O'Leary P, Lakhani A, Osborne J, de Souza L, Hope K, Naimi MS, Khan H, Jawad QS, Majidi S. Violence Against Children in Afghanistan: Community Perspectives. Journal of Interpersonal Violence. 2018. <https://doi.org/10.1177/0886260518760610>
- Eley R, Catchpole J, **Vallmuur K**. Value of Emergency Department Triage Data for to Describe and Understand Patterns and Mechanisms of Cycling Injuries. Emergency Medicine Australasia. 2018. <https://doi.org/10.1111/1742-6723.13124>
- Judge C, Eley R, Miyakawa-Liu M, Brown N, McCosker L, Livesay G, Hughes J, **Vallmuur K**. The Characteristics of Accidental Injuries from Power Tools Treated at Two Emergency Departments in Queensland. Emergency Medicine Australasia. 2018
- Keijzers G, Sweeny A, Crilly J, Good N, **Cameron CM**, Mihala G, Scott R, Scuffham P. Parental-reported allergic disorders and Emergency Department presentations for allergy in the first five years of life: a longitudinal birth cohort. BMC Pediatrics. 2018. <https://doi.org/10.1186/S12887-018-1148-1>
- Keijzers G, Sweeny A, Crilly J, Good N, **Cameron CM**, Mihala G, Scott R, Thone J, Scuffham PA. Immunisation status of children presenting to the Emergency Department: linkage of a longitudinal birth cohort with national immunisation data. ANZJPH. 2018

### Journal Articles: (cont):

9. Kenardy J, Edmed SL, Shourie S, **Warren J**, Crothers A, Brown EA, Cameron CM, Heron-Delaney M. Changing patterns in the prevalence of Posttraumatic Stress Disorder, Major Depressive Episode and Generalized Anxiety Disorder over 24 months following a Road Traffic Crash: results from the UQ SuPPORT Study. *Journal of Affective Disorders*. 2018;236:172-179. <https://doi.org/10.1016/j.jad.2018.04.090>
10. Lystad RP, **Cameron CM**, Mitchell RJ. Excess mortality among adults hospitalised with traumatic brain injury in Australia: a population-based matched cohort study. *Journal of Head Trauma Rehabilitation*. 2018
11. Nanda G, **Vallmuur K**, Lehto M. Evaluation of Different Filtering Methods for Semi-automated Coding of Emergency Room Triage Injury Data. *IJSE Transactions on Healthcare Systems Engineering*. 2018
12. Pitt E, **Cameron CM**, Thornton L, Gallegos D, Filus A, Ng SK, Comans T. Dietary patterns of Australian children at 3 and 5 years of age and their changes over time: a latent class and latent transition analysis. *Appetite*. 2018;129:207-216. <https://doi.org/10.1016/j.appet.2018.07.008>
13. **Vallmuur K**, Lukaszyc C, Cathpoole J. Monitoring Injuries Associated with mandated children's products in Australia: what can the data tell us? *International Journal of Environmental Research and Public Health*. 2018. <https://doi.org/10.3390/ijerph15102077>
14. Werner AK, Watt K, **Cameron CM**, Vink S, Page A, Jagals P. Examination of child and adolescent hospital admission rates in Queensland, Australia, 1995-2011: a comparison of coal seam gas, coal mining, and rural areas. *Maternal and Child Health Journal*. 2018. <https://doi.org/10.1007/S10995-018-2511-4>
15. Fitzgerald MC, Curtis K, Cameron PA, Ford JE, Howard TS, Crozier JA, Fitzgerald A, Gruen RL, **Pollard C**. The Australian Trauma Registry. *Australian and New Zealand Journal of Surgery*. 2018. <https://doi.org/10.1111/ans.14940>.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Vallmuur K, Cameron C, Warren J, Pollard C**. Queensland Trauma Data Warehouse – Research Priorities and Progress, 2018 RACS Combined Tasmanian Annual Scientific Meeting & Trauma Symposium, Hobart, 9-10 November 2018
2. **Wendt R, Cameron C, Warren J, Vallmuur K, Pollard C, Schuetz M, Banks, M**. Jamieson Trauma Institute, 2018 RACS Combined Tasmanian Annual Scientific Meeting & Trauma Symposium, Hobart, 9-10 November 2018.

### Oral Presentations:

1. Santomauro C, McCurdie T, **Pollard C**, Shuker M: investigating the use of Interactive Telepresence Technology to Support Remote Clinicians Treating Patients with Traumatic Injuries, 2018 RACS Combined Tasmanian Annual Scientific Meeting & Trauma Symposium, Hobart, 9-10 November 2018
2. Lystad R, **Cameron C**, Mitchell R. Excess mortality among adults hospitalised with traumatic brain injury in Australia: a population-based matched cohort study, 13<sup>th</sup> World Conference on Injury Prevention and Safety Promotion (Safety 2018), Bangkok, 5 November 2018
3. Judge C, Eley RM, **Vallmuur K**, Livesay G, Miyakawa-Liu M, Boyde M, Hughes JA, Pollard C, Brown NJ. The characteristics and causes of accidental injuries from power tools in patients presenting to two Queensland emergency departments, International Conference for Emergency Nursing, Melbourne, 10 October 2018
4. Lystad R, **Cameron C**, Mitchell R. Excess mortality among adults hospitalised with traumatic brain injury in Australia: a population-based matched cohort study, Australian Neurotrauma Workshop, Adelaide, 8 October 2018
5. **Vallmuur K**. The Queensland Trauma Data Warehouse, Queensland Trauma Symposium 2018, 23-Feb-18.

### Poster Presentations:

1. **Warren J, Cameron C, Muller M**. Epidemiology of burns patients admitted to the State-wide Adults Burns Service in Queensland: a 10-year Review, ANZBA 2018 ASM, Brisbane, 16-19 October 2018
2. Druery M, Newcombe P, **Cameron C**, Lipman J. Rising to the Challenge of Long-term Follow up Research in Burns: reducing attrition, ANZBA 2018 ASM, Brisbane, 16-19 October 2018.

## Other Communications and Outputs:

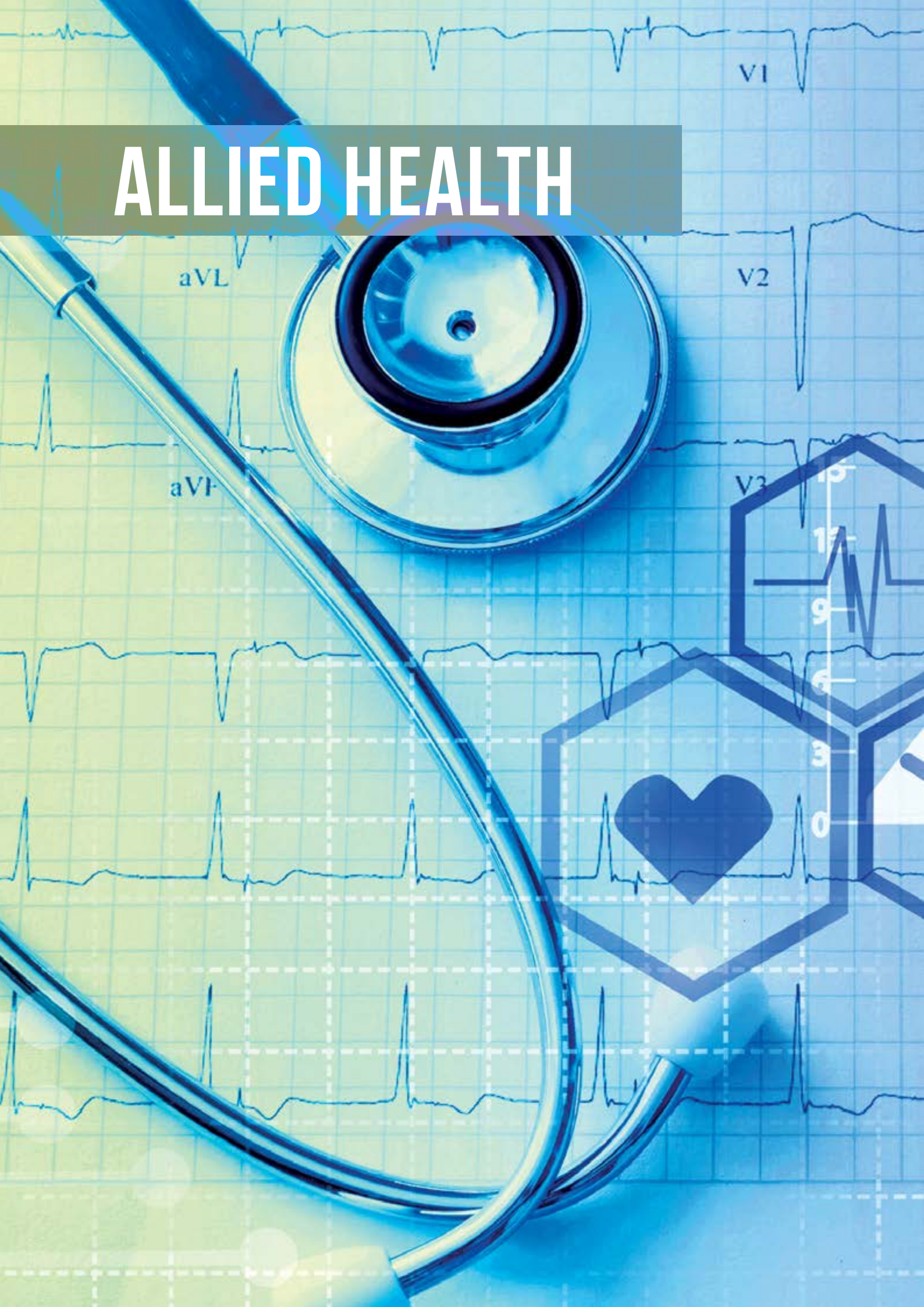
- JTI Showcase – 27 Mar 2018
- QBI/JTI/BDHP Brain Injury Workshop – 4 Sept 2018
- JTI Think Tank – 24 Sept 2018
- Grand Rounds/Seminars – 25 Sept; 7 Nov
- Traumatic Brain Injury Workshop – 7 Nov
- JTI Planning Day – 30 Nov 2018 – JTI Team and Clinicians
- JTI Intersections and Opportunities – showcasing JTI 2018 and beyond – 6 Dec 2018.

# Publications / Presentations Summary Table 2018

Research Group / Department	Publications		Presentations National and International	
	Journal Articles	Books and Chapters	Oral	Posters
<b>Allied Health Professionals</b>				
Centre for Allied Health Research	6	0	10	4
Nutrition and Dietetics	33	1	25	14
Occupational Therapy	9	0	9	1
Physiotherapy	23	1	8	5
Psychology	3	0	1	1
Rehabilitation Engineering, Orthotics and Prosthetics	0	0	4	0
Social Work	0	1	5	1
Speech Pathology and Audiology	8	0	7	2
<b>Cancer Care Services</b>				
Allied Health Professions	6	0	5	3
Cancer Nursing Professorial Precinct	9	0	21	12
Haematology and Bone Marrow Transplantation	15	0	24	5
Haemophilia Centre	4	0	1	0
Medical Oncology	48	0	49	60
Radiation Oncology	23	1	51	12
<b>Critical Care and Clinical Support Services</b>				
Emergency and Trauma Centre	33	0	15	16
Genetic Health Queensland	17	1	21	5
Hyperbaric Medicine Services	3	0	0	0
Intensive Care Services	124	5	43	4
Nursing & Midwifery Services – Prof Fiona Coyer	11	0	5	0
Professor Tess Craymond – Pain Centre	2	0	4	1
Skin Integrity	7	0	0	0
<b>Internal Medicine Services</b>				
Department of Cardiology	33	1	52	0
Department of Clinical Immunology and Allergy	1	0	0	0
Department of Clinical Pharmacology	2	0	3	5
Department of Endocrinology	31	1	11	0
Department of Gastroenterology and Hepatology	34	0	32	5
Department of Infectious Diseases	51	0	15	5
Internal Medicine and Aged Care	15	0	9	8
Kidney Health Service	25	3	50	22
Neurology – Epilepsy	19	0	0	0
Neurology – Motor Neurone Disease	5	0	2	2
Neurology – Stroke	5	0	18	0
Nuclear Medicine / Specialised PET Service	9	1	11	9
Palliative and Supportive Care	4	1	3	0

Research Group / Department	Publications		Presentations National and International	
	Journal Articles	Books and Chapters	Oral	Posters
<b>Internal Medicine Services (cont)</b>				
Pharmacy	61	0	32	37
Department of Rheumatology	9	0	0	0
Sexual Health Research	2	0	0	0
QLD State-wide Antimicrobial Stewardship	2	0	8	2
Department of Thoracic Medicine	12	0	3	6
<b>Medical Imaging</b>				
Medical Imaging	11	1	38	12
<b>Medical Services</b>				
Quality, Innovation and Patient Safety	0	0	2	2
<b>Mental Health Services</b>				
Metro North Mental Health Services	128	4	99	14
<b>Nursing and Midwifery Services</b>				
Nursing and Midwifery Research Centre	26	3	14	10
<b>RBWH Research Services</b>				
Herston Imaging Research Facility	9	0	13	5
Jamieson Trauma Institute	15	0	7	2
Centre for Palliative Care Research and Education	25	1	36	5
<b>Surgical and Perioperative Services</b>				
Department of Anaesthesia and Perioperative Medicine	46	3	34	35
Department of Ears, Nose and Throat	6	0	4	0
Department of General Surgery – Unit 2 Hepato-Biliary/Pancreatic	5	1	5	0
Department of General Surgery – Unit 3 Colorectal	13	2	10	3
Department of General Surgery – Unit 5 Acute Surgical Unit (ASU)	1	0	0	0
Department of Ophthalmology	2	0	2	1
Department of Orthopaedics	20	1	64	0
Department of Oral and Maxillofacial Surgery Unit	11	0	2	0
Department of Plastic and Reconstructive Surgery	0	0	0	8
Department of Vascular Surgery	7	0	4	0
Kenneth G Jamieson, Department of Neurosurgery	3	0	0	0
Professor Stuart Pegg Burns Centre	0	0	11	0
Trauma Service	1	0	6	5
<b>Women's and Newborn Services</b>				
Grantley Stable Neonatal Unit	21	0	5	2
Obstetrics and Gynaecology	32	0	20	28
Obstetric Medicine	18	0	12	22
Perinatal Research Centre	17	0	19	26
Qld Centre for Gynaecological Cancer	15	0	5	1

# ALLIED HEALTH



## Allied Health 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. Aligned to the RBWH vision of being a world class academic health centre, Allied Health is committed to the integration of research within clinical care. 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.

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. We have developed dedicated research capability across most disciplines providing 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 20 of our RBWH Allied Health Partitioners undertaking a research higher degree (RHD). Our experienced researchers are involved in the supervision of an additional 29 RHD students across multiple universities; many of these students undertaking vital research that contributes to enhanced service delivery and patient care. We had one clinician, Dr Peter Window, complete his PhD in 2018.

This investment has seen continued growth in a number of the Allied Health Research achievements. In 2018, AHP staff were successful in authoring 77 peer reviewed publications and attracting \$1.04M dollars in competitive grant funding. Additionally, staff presented over 82 presentations or posters at national and international conferences. Our staff were also recognised with 26 research awards, including the Health Services and Implementation Research Award (Physiotherapy Screening Clinic Research Team led by Maree Raymer) and Rising Star Award (Dr Nicole Andrews) in the 2018 MNHHS Research Excellence Awards, and Health Practitioner Researcher of the Year (Dr Adrienne Young) at the RBWH Research Symposium. We welcome Dr Young in her appointment as the AH Principal Research Fellow for 2019 and 2020, and would like to thank Dr Susan de Jersey for her valuable contribution in this role and leadership of the Allied Health research program in 2018.

In 2018 we commenced our research planning for the new Surgical Treatment and Rehabilitation Service (STaRS), and the primary partnership with the University of Queensland. We also appreciate and thank the contribution of all our university partners, 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 the Allied Health staff for their dedicated efforts and achievements in 2018.



## 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. A number of higher research degree students, often practicing clinicians are supervised.

In 2018, the CAHR staff established the RBWH Allied Health Quality and Research Advisory Group that aims to build capability and capacity for allied health quality improvement, research, evaluation and innovation within allied health staff and to increase communication and foster collaboration across allied health clinicians and across service lines. Some of the key achievements of this group included undertaking a baseline audit of time spent on research and understanding research capacity and culture of RBWH allied health staff. This has been used to develop a tailored strategy within each allied health team to build research capacity and address identified barriers. In addition, research resources and processes have been developed to streamline research and quality improvement documentation across allied health, increase awareness of existing software and equipment resources for research and provided a forum for peer review and feedback for clinician led quality improvement and research projects.

The CAHR agenda continues to grow in diversity and impact with a wide range of multidisciplinary health service collaborators and university partners.

### 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>
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	<b>Susan de Jersey</b> , Danielle Gallegos, Shelley Wilkinson
<b>Carrie-Anne Lewis</b>	PhD, UQ (2016-2021)	Micronutrient and protein energy malnutrition outcomes in a bariatric surgery outpatient clinic	Ingrid Hickman, <b>Susan de Jersey</b> , Emma Osland
Nina Meloncelli	PhD, QUT (2016-2019)	Management of gestational diabetes: exploring practices, evidence base and models of care among the multidisciplinary team	<b>Susan de Jersey</b> , Adrian Barnett

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University <i>(years)</i>
Angela Chang	Research Coordinator Honorary Senior Lecturer	Centre for Allied Health Research School of Health and Rehabilitation Sciences	2016 – current UQ (2018-2021)
Peter Buttrum	Adjunct Associate Professor	School of Health and Rehabilitation Sciences	UQ (2016 – current)
Susan de Jersey	Principal Research Fellow	Centre for Allied Health Research	2017-2019
Susan de Jersey	Visiting Research Fellow	Preventing and managing lifestyle chronic disease in women and children	Queensland University of Technology (2013 – current)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Angela Chang</b>	Anna Farrell, Marilyn Banks (Nutrition and Dietetics), <b>Peter Buttrum</b>	How much time do allied health clinicians spend undertaking research?
<b>Angela Chang</b>	<b>Susan de Jersey</b> , Anna Farrell (Speech Pathology), Jenny Strong (Occupational Therapy), Adrienne Young (Nutrition and Dietetics), Gai Harrison (Social Work), Jennifer Paratz (Physiotherapy), <b>Peter Buttrum</b> , Marilyn Banks (Research)	Understanding research capacity and outputs in allied health workforce at RBWH
<b>Susan de Jersey</b>	Leonie Callaway (UQ, WNBS), Lynda Ross (Griffith Uni), Taylor Guthrie (Nutrition and Dietetics), Jeanette Tyler (Women's and Newborn), Nickie Moreton, (Women's and Newborn), Karen New (UQ, Women's and Newborn), Janelle Laws (Women's and Newborn)	Evaluation of workforce training to support Healthy Pregnancy Healthy Baby
<b>Susan de Jersey</b>	Leonie Callaway (UQ, WNBS), Taylor Guthrie (Nutrition and Dietetics), Jeanette Tyler (Women's and Newborn), Nickie Moreton (Women's and Newborn), Karen New (UQ, Women's and Newborn)	Efficacy of a low intensity consumer held pregnancy weight monitoring tool to prevent excess gestational weight gain
<b>Susan de Jersey</b>	Elizabeth Eakin (UQ, SPH), Shelley Wilkinson (Mater), Tracy Comans (CAHR), Leonie Callaway (UQ, WNBS), Claire Gardiner (Nutrition and Dietetics), Taylor Guthrie (Nutrition and Dietetics), Hilary Jimmieson (Nutrition and Dietetics), <b>Angela Chang</b>	Implementation evaluation of a telephone-delivered dietetic model of care for overweight pregnant women
<b>Susan de Jersey</b>	Natasha Lorenzen, Taylor Guthrie (Nutrition and Dietetics)	Gestational Diabetes Service Nutrition Practice Guidelines and Outcomes clinical audit
<b>Susan de Jersey</b>	Kimberley Mallan (ACU), Lynne Daniels (QUT), Rebecca Byrne (QUT)	New Beginnings Healthy Mothers and Babies Study: long-term Follow-up

## 2018 Collaborative Research Activity involving RBWH Research Group/Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Alice Pender (Audiology)	Carla Rose (Audiology), <b>Angela Chang</b> , Tracy Comans (UQ)	Patient outcomes following cochlear implant surgery
Carla Rose (Audiology)	Alice Pender (Audiology), <b>Angela Chang</b> , Tracy Comans (UQ)	Using telehealth to manage patients following cochlear implant surgery
Carrie-Anne Lewis (Nutrition and Dietetics)	Ingrid Hickman (PAH), <b>Susan de Jersey</b> , Emma Osland, Siobhan Wallin, Lindsay Web (PAH), George Hopkins (Surgery), Blair Bowden (Surgery), Benjamin Dodd (Surgery), Viral Chikani (Endocrinology), Anthony Cheng (Surgery), Chung Kwun Won (Surgery), Kath Bradley (Surgery), Lara Maidment (Endocrinology)	Micronutrient and protein energy malnutrition outcomes in a weight loss surgery population
Claire Dux (Nutrition and Dietetics)	<b>Susan de Jersey</b> , Emma Osland, Sandra Heaydon (Surgery), Lindy Jeffree (Surgery)	Evaluation of the Transition Feeding Pathway on the Neurosurgery Ward
Genesta Nicolson (Psychology)	<b>Angela Chang</b>	Implementing an evidence-based multidisciplinary pre-medical group education day for non-urgent referrals to the Professor Tess Cramond Multidisciplinary Pain Centre
Helen Barrett (UQ, Mater Health Services)	Marloes Dekker (UQ), H David McIntyre (Mater and UQ), Michael d'Emden, Leonie Callaway, <b>Susan de Jersey</b>	Post prandial triglycerides in diabetes in pregnancy: a pilot study
Hilary Powlesland (Nutrition and Dietetics)	Clare Byrne, <b>Susan de Jersey</b>	Evaluation of the New Beginnings program
Jane Musial (Nutrition and Dietetics)	Mary Hannan-Jones (Nutrition and Dietetics), Adrienne Young (Nutrition and Dietetics), <b>Susan de Jersey</b> , Bonnie Lau, Robbie Mullins	Evaluation of combined QUT-RBWH diabetes clinic-patient and service outcomes
Kate Morgan (Nutrition and Dietetics)	Adrienne Young, <b>Susan de Jersey</b> , Belinda Mason	Evaluation of nutrition and dietetics services to in-centre haemodialysis patients

## 2018 Collaborative Research Activity involving RBWH Research Group/Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Maree Raymer (Physiotherapy)	Patrick Swete Kelly (Physiotherapy), Louise Wellington (Physiotherapy), <b>Angela Chang</b>	Consultation process to facilitate the development and trial of a workforce development pathway to support advanced musculoskeletal physiotherapy (AMP) roles
Maree Raymer (Physiotherapy)	<b>Nicole Moretto, Angela Chang</b> , Shaun O'Leary (Physiotherapy), Lachlan Standfield (Griffith University), Tracy Comans (UQ)	Implementing economic modelling to improve service planning in Specialist Orthopaedic and Neurosurgical Outpatient Services within Cairns and Hinterland, Gold Coast and West Moreton Hospital and Health Services (Background data collection)
Maree Raymer (Physiotherapy)	<b>Angela Chang</b> , Shaun O'Leary (Physiotherapy), <b>Nicole Moretto</b> , Tracy Comans (UQ), Sonya Osborne (AusHSI), Hannah Carter (AusHSI), Dean Blond (Gold Coast), Tania Cavanagh (Cairns and Hinterland), David Smith (West Moreton)	Implementing simulation modelling to improve service planning in Specialist Orthopaedic and Neurosurgical Outpatient services in the Cairns and Hinterland, Gold Coast and West Moreton Hospital and Health Services (Implementation evaluation)
Matthew Leong (Thoracic Medicine)	Michael Brown (Thoracic Medicine), Dinithi Samaratunga (Thoracic Medicine), <b>Angela Chang</b>	Encouraging Nasal/nasal pillow masks during initial titration reduces recommended CPAP pressures and improves titration outcomes
Michelle Palmer (MSHHS)	Helen Porteous (MSHHS), <b>Susan de Jersey</b>	Attendance rates and demographic descriptors of obese women referred to the dietitian for weight management advice during pregnancy
Michelle Stute (Allied Health, MNHHS)	<b>Peter Buttrum</b> , Merrilyn Banks (Research), Maree Raymer (Physiotherapy), Tracy Comans (UQ), Sonia Sam (Allied Health MNHHS), Nicole Moretto (Allied Health MNHHS), Marita Plunkett (Allied Health)	Allied Health Specialist Clinics Project
Nina Melloncelli (SCHHS, QUT)	<b>Susan de Jersey</b> , Adrian Barnett (QUT)	Examining the management of gestational diabetes mellitus
Nina Melloncelli (SCHHS, QUT)	<b>Susan de Jersey</b> , Adrian Barnett (QUT)	Evaluation of a dietitian-led model of care in low risk gestational diabetes pregnancies
Perry Judd (PT)	Paula Easton (Mackay Base Hospital), Michelle Cottrell (PT), <b>Angela Chang</b>	An audit of two methods of service delivery for Orthopaedic Physiotherapy Screening Clinic (OPSC) Assessments between RBWH and Mackay Hospital
Suzanne McGavin (Nuclear Medicine)	Toni Halligan (Medical Radiation Professionals), Travis Pearson (Nuclear Medicine), <b>Angela Chang</b>	Ultrasound guided radioisotope injections in Lymphoscintigraphy administered by Nuclear Medicine Scientists

## 2018 Research Awards and Achievements

Recipient	Award	Event
Maree Raymer (Physiotherapy), Shaun O'Leary (Physiotherapy), Tracy Comans (UQ), <b>Angela Chang, Nicole Moretto</b> , Lachlan Standfield (Griffith)	Health Services and Implementation Research Award	MNHHS 2018 Research Excellence Awards
<b>Susan de Jersey</b> , Jeanette Tyler (WNBS), Taylor Guthrie, Karen New (UQ), Lynne Beutow (WNBS), Clare Byrne, Hilary Powlesland, Marie Greco	Overall Customer Focus Award	2018 RBWH QuARRIES Award
<b>Susan de Jersey</b> , Taylor Guthrie	Best Allied Health Poster	Australasian Diabetes in Pregnancy Society Conference, 24-26 August 2018

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Susan de Jersey</b> , Elizabeth Eakin, Shelley Wilkinson, Tracey Comans, Leonie Callaway, Claire Gardiner	Dept of Nutrition and Dietetics, Obstetric Medicine, Centre for Allied Health Research	Implementation evaluation of a telephone-delivered dietetic model of care for overweight pregnant women	RBWH Foundation	\$32,520	\$39,024 (2017-2018)
Nina Meloncelli (SCHHS, QUT), <b>Susan de Jersey</b> , Adrian Barnett (QUT), Rachel Hayes (SCHHS), Elise Gilberston (SCHHS), Michelle Mack (SCHHS), Rebekah Shakhovskoy (SCHHS), Sophie Poulter (SCHHS)	Nutrition and Dietetics Researchers	Evaluation of a dietitian-led model of care in low risk gestational diabetes pregnancies	Health Practitioners Research Scheme Grant	\$14,818	\$29,636 (2018-2019)

## 2018 Research Publications

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### Journal Articles:

1. **De Jersey S**, Guthrie T, Tyler J, Ling WY, Powlesland H, Byrne C, et al. Evaluating the integration of a pregnancy weight gain chart into routine antenatal care: a mixed method study design. *Maternal and Child Nutrition*. 2018:e12750
2. **De Jersey SJ**, Tyler J, Guthrie T, New K. Supporting healthy weight gain and management in pregnancy; does a mandatory training education session improve knowledge and confidence of midwives? *Midwifery*. 2018. doi: 10.1016/j.midw.2018.06.025
3. Lewis C-A, **De Jersey S**, Hopkins G, Hickman I, Osland E. Does Bariatric Surgery Cause Vitamin A, B1, C or E Deficiency? A Systematic Review. *Obesity surgery*. 2018:1-18
4. Mallan KM, Daniels LA, Byrne R, **De Jersey SJ**. Comparing barriers to breastfeeding success in the first month for non-overweight and overweight women. *BMC Pregnancy and Childbirth*. 2018;18(1):461
5. Meloncelli N, Barnett A, Pelly F, **De Jersey S**. Diagnosis and management practices for gestational diabetes mellitus in Australia: cross-sectional survey of the multidisciplinary team. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 2018. doi: 10.1111/ajo.12816
6. Young AM, **De Jersey SJ**, Ellick J, Lewis C-A, Banks M. Comparison of Patient Food Intake, Satisfaction and Meal Quality Between Two Meal Service Styles in a Geriatric Inpatient Unit. *Journal of Nutrition in Gerontology and Geriatrics*. 2018:1-11.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. **De Jersey S**. Prevention of obesity in the reproductive years – opportunities abound. National Eating Disorders and Obesity Conference. Tweed Heads September 2018
2. **De Jersey S**. Searching for utopia: defined dietary prescription and medical nutrition therapy for gestational diabetes management. Australasian Diabetes in Pregnancy Society, Adelaide. August 2018.

### Oral Presentation:

1. Chui Lim S, Dux C, Jeffree R, Heaydon S, **De Jersey S**. Transition feeding protocol in the neurosurgery ward: a pre- and post-implementation evaluation of patients' nutrition outcomes, dietetic efficiency and nursing staff's knowledge, attitudes and practices. Dietitians Association of Australia. May 2018
2. **De Jersey S**, Guthrie T, Callaway L, Tyler J, New K. Successful changes to practice following a dietetic lead service wide implementation strategy supporting health weight gain in pregnancy. Dietitians Association of Australia. May 2018
3. Guthrie T, Byrne C, New K, Tyler J, **De Jersey S**. Women's perceptions of a pregnancy weight gain chart to support healthy weight gain in pregnancy. Dietitians Association of Australia. May 2018
4. Kukulies D, Gallegos D, **De Jersey S**, Tran CQ, Phan THT, Vo DT, Do, DNT, Hannan-Jones M. Excess gestational weight gain is an issue in Ho Chi Minh City, Viet Nam. The 7th Asian Congress of Dietetics. Hung Hom, Hong Kong, July 2018
5. Lewis, C. **De Jersey S**, Osland E, Musial J, Hopkins G, Hickman I. Considerations for micronutrient assessment in bariatric surgery. Australia and New Zealand Metabolic and Obesity Surgery Society Conference, Melbourne. September 2018
6. Miller N, Mallan K, Byrne R, **De Jersey S** and Daniels L. Like mother like child? Maternal Feeding Practices Mediate the Relationship Between Mother and Child Eating Behaviours. National Eating Disorders and Obesity Conference. Tweed Heads September 2018
7. Powlesland H, Yin Ling W, Tyler J, New K, **De Jersey S**. Staff attitudes and practices to support healthy pregnancy weight gain following the implementation of service-wide education and routine weight tracking. Dietitians Association of Australia. May 2018
8. Raymer M, Moretto N, Comans T, Knowles D, **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. 42<sup>nd</sup> World Hospital Congress, Brisbane. October 2018.

### Poster Presentation:

1. Barrett HL, Dekker Nitert M, **De Jersey SJ**, Callaway LK, D'Emden M, McIntyre HD. Maternal postprandial triglycerides following high and low fat meals in the home setting. American Diabetes Association's 78<sup>th</sup> Scientific Sessions, June 22-26, 2018 Orlando, Florida USA
2. **De Jersey S**, Guthrie T, Liow HS, Lorenzen N. Increased resources for GDM improved access to best practice dietetic care. Australasian Diabetes in Pregnancy Society, Adelaide. August 2018
3. Leong M, Brown M, Samaritunga D, **Chang AT**. Encouraging nasal / nasal pillow masks during initial titration reduces recommended CPAP levels and improves CPAP titration outcomes. Sleep DownUnder, Australasian Sleep Association Conference, Brisbane October 2018
4. Meloncelli N, Barnett, A, **De Jersey S**. A cross-sectional survey of gestational diabetes management in Queensland. Australasian Diabetes in Pregnancy Society Annual Scientific Meeting, Adelaide, August 2018.

## Other Communications and Outputs:

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Susan de Jersey      How to Treat: gestational diabetes mellitus. *Australian Doctor*, p17-24, June 22, 2018.

## Nutrition and Dietetics

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### Research vision:

Our research vision is to be leaders in nutrition and dietetic research, with the overall aim of providing excellent and evidence-based services for the RBWH community. This is achieved through developing capacity within the department to support all dietitians to engage in research and evaluation, and building networks with researchers across RBWH, Metro North HHS and academic partners.

We aim to improve the nutrition and health of our patients through knowledge generation and translation to ensure delivery of evidence-based nutrition care. Our research has led to implementation of programs to prevent and treat malnutrition and pressure injuries across Queensland hospitals; 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.

### Highlights of 2018:

#### **RBWH Nutrition and Dietetics department has had one of its strongest years in research and innovation yet:**

- 14 awards, including Highly Commended in the Health Services and Implementation and Complex Health Challenges categories at the MNHHS Research Excellence awards; four conference prizes and two RBWH QuARRIE awards
- 32 peer-reviewed publications (including 19 first author publication) and one invited book chapter
- 25 oral conference presentations at national and international conferences
- More than \$675,000 in competitive research grants and scholarships, with 85% of these grants having a RBWH dietitian named as Chief Investigator
- Clinician-researchers Angela Byrnes and Kylie Matthews each submitted their PhD theses for examination, with a further five RBWH clinical dietitians currently undertaking a PhD.



## 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>
<b>Abigail Marsh</b>	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	<b>Merrilyn Banks,</b> Graham Radford-Smith, Veronique Chachay
Alvin Wong	PhD, UQ (2016-2018) <i>Conferred 2018</i>	Cost effectiveness of nutrition support services	<b>Merrilyn Banks,</b> Judy Bauer
<b>Angela Byrnes</b>	PhD, UQ (2015-2018) <i>Thesis submitted</i>	Nutritional care and status of older surgical patients	Judy Bauer, <b>Adrienne Young,</b> <b>Merrilyn Banks,</b> Alison Mudge
<b>Carrie-Anne Lewis</b>	PhD, UQ (2016-2021)	Micronutrient and protein energy malnutrition outcomes in a bariatric surgery outpatient clinic	Ingrid Hickman, <b>Susan de Jersey,</b> <b>Emma Osland</b>
Claire Nelson	PhD, QUT (2014-2019)	Investigation of nutrition status of community adults with lower leg wounds	<b>Merrilyn Banks,</b> <b>Mary Hannan-Jones,</b> Kathleen Findlayson
<b>Emilie Croisier</b>	PhD, UQ (2018-2021)	Nutritional outcomes of gynaecology patients undergoing pelvic radiotherapy: understanding the patient experience and dietary recommendations for symptom management	Judy Bauer, <b>Teresa Brown</b>
Joanna McCormack	PhD, GU (2018-2022)	How are food service dietitians learning about environmental sustainability: a qualitative systematic protocol	Christy Noble, Lynda Ross, Andrea Bialocerkowski, <b>Denise Cruickshank</b>
<b>Joanne Hiatt</b>	PhD, UQ (2017-2023)	Nutrition throughout head and neck cancer treatment: patient experience and adherence, barriers and enablers to enteral feeding recommendations	<b>Merrilyn Banks,</b> <b>Teresa Brown,</b> Judy Bauer
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	<b>Susan de Jersey,</b> Danielle Gallegos, Shelley Wilkinson
<b>Kylie Matthews</b>	PhD, UQ (2015-2018) <i>Thesis submitted</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?	<b>Mary Hannan-Jones,</b> <b>Merrilyn Banks</b>
Nina Meloncelli	PhD, QUT (2016-2019)	Management of gestational diabetes: exploring practices, evidence base and models of care among the multidisciplinary team	<b>Susan de Jersey,</b> Adrian Barnett
Quoc Quong Tran	PhD, QUT (2014-2018) <i>Thesis submitted</i>	Nutritional status of patients in Vietnamese hospitals	Danielle Gallegos, <b>Merrilyn Banks,</b> <b>Mary Hannan-Jones</b>
<b>Sarah Andersen</b>	PhD, UQ (2015-2019)	Investigating nutrition support during allogeneic stem cell transplantation	Judy Bauer, <b>Merrilyn Banks,</b> Olivia Wright
Simone Faulkner	PhD, QUT (2018-2020)	Nutritional status in people with Motor Neurone Disease	Peter Collins, <b>Merrilyn Banks</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Adrienne Young	Research Coordinator, Adjunct Assoc Professor	Nutrition in older adults and hospital inpatients	Queensland University of Technology (2013 – current)
Lynda Ross	Visiting Fellow	Healthy Eating and Lifestyle Program (HELP) intervention evaluation and follow up	Griffith University (2014 – current)
Mary Hannan-Jones	Honorary Research Fellow	Improving quality of Food Services	Senior Lecturer, Queensland University of Technology (2014 – current)
Merrilyn Banks	Adjunct Assoc Professor	Efficacy and cost effectiveness of nutrition in healing pressure ulcers	Queensland University of Technology (2012 – current) University of Queensland (2012 – current)
Susan de Jersey	Research Coordinator, Visiting Research Fellow	Preventing and managing lifestyle chronic disease in women and children	Queensland University of Technology (2013 – current)
Teresa Brown	Research Coordinator, Associate Lecturer	Nutrition in cancer care	University of Queensland (2018 – current)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Abigail Marsh	<b>Jessica Kinneally</b> , Tayla Robertson (PAH), <b>Adrienne Young</b> , Graham Radford Smith (Gastroenterology), Anna McMahon (Gastroenterology), Karen Sewell (Gastroenterology), Larissa McKInnon (Gastroenterology)	Nutritional Status, Nutrition Impact Symptoms, and Food Avoidance Behaviours in Patients with Inflammatory Bowel Disease
Abigail Marsh	<b>Merrilyn Banks</b> , Graham Radford Smith (Gastroenterology), Veronique Chachay (UQ)	Cross sectional analysis of dietary intake of patients attending the RBWH IBD outpatient clinics: how does their diet compare to Mediterranean diet?
Adrienne Young	<b>Carrie-Anne Lewis</b> , <b>Merrilyn Banks</b> , Theresa Pen Yei Kwek (QUT), Ka Man Lau (QUT)	Evaluation of the impact of the Seven Day Nutrition Action Care plan on nutritional intake and care practices
Adrienne Young	<b>Merrilyn Banks</b> , Tayla Robertson (PAH), <b>Jo Hiatt</b> , <b>Kate Morgan</b> , Danielle Gallegos (QUT), <b>Angela Byrnes</b>	Nutritional care in hospital: what is the patient experience?
Adrienne Young	<b>Angela Byrnes</b> , <b>Carrie-Anne Lewis</b> , <b>Cindy Jennings</b> , Zoe Walsh (CISS)	Observation of mealtime care practices and nutritional intake for sub-acute older inpatients (2014-current)
Adrienne Young	<b>Claire Dux</b> , Gai Harrison (Social Work), <b>Maria Walls</b> , <b>Rachana Naidu</b> , <b>Raje Badwa</b> , <b>Jess Fry</b> , <b>Liliana Zapta</b> , <b>Carrie-Anne Lewis</b> , <b>Merrilyn Banks</b>	Evaluation of the value of dietetic assistant (DA) role from the DA, patient and staff perspective
Adrienne Young	Xuan Wang (QUT), <b>Cassie Hoole</b> , <b>Rebecca Fichera</b>	Patient involvement in dietetic care: description of current practice
Adrienne Young	Mikaela Wheeler (UQ), <b>Angela Byrnes</b> , Alison Mudge (IMS)	Co-designing a project to explore patient mealtime environments and experience
Adrienne Young	Xuan Wang (QUT), <b>Cassie Hoole</b> , <b>Rebecca Fichera</b>	Consumer engagement – patient expectations of the inpatient dietetic consultation
Ally di Bella	<b>Merrilyn Banks</b> , Tracy Comans (UQ), Ingrid Hickman (PAH), Donna Hickman (TPCH), <b>Adrienne Young</b>	Prevalence and impact of obesity in acute hospital setting
Ally di Bella	Winnie Soo Yii Tan (QUT), <b>Merrilyn Banks</b> , Tracy Comans (UQ), Ingrid Hickman (PAH), Donna Hickman (TPCH), <b>Adrienne Young</b>	Cost of obesity in the acute hospital setting
Amanda Watt	<b>Emma Osland</b> , Craig Harris (Surgery), David Taylor (Surgery), <b>Adrienne Young</b>	Examination of nutrition care and support practices for patients having pelvic exenteration surgery
Angela Byrnes	<b>Adrienne Young</b> , <b>Merrilyn Banks</b> , Alison Mudge (IMS), Judy Bauer (UQ)	Investigating the nutritional status and care of older (≥65 years) patients on two general surgical wards: a multiphase, action research study

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Angela Byrnes	<b>Amanda Watt, Siobhan Wallin, Adrienne Young</b>	ERAS in surgical wards: audit of current practice to inform improvement of perioperative nutrition care
Angela Byrnes	Mikeala Wheeler (UQ), <b>Adrienne Young, Amanda Watt</b> , Judy Bauer (UQ)	Exploring patient's experience of perioperative nutrition education and care when undergoing elective colorectal surgery
Carrie-Anne Lewis	Ingrid Hickman (PAH), <b>Susan de Jersey, Emma Osland, Siobhan Wallin</b> , Lindsay Web (PAH), George Hopkins (Surgery), Blair Bowden (Surgery), Benjamin Dodd (Surgery), Viral Chikani (Endocrinology), Anthony Cheng (Surgery), Chung Kwun Won (Surgery), Kath Bradley (Surgery), Lara Maidment (Endocrinology)	Micronutrient and protein energy malnutrition outcomes in a weight loss surgery population
Cassie Hoole	Ka Man Lau (QUT), <b>Adrienne Young, Clare Byrne, Claire Dux</b>	Evaluation of the impact of the Nutrition Monitoring and Action Form on nutritional intake and care practices
Christine Eadeh		Evaluation of Patient outcomes from the Dietitian First Gastroenterology Clinic
Cindy Jennings	<b>Adrienne Young</b>	Validity of the FIM in determining risk of malnutrition and nutritional decline during inpatient rehabilitation admission
Claire Blake	<b>Teresa Brown</b> 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	<b>Teresa Brown</b> , 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	<b>Merrilyn Banks</b> , Mark Appleyard (Gastroenterology)	Cost effectiveness of Dietitian-led PEG service
Claire Blake	<b>Teresa Brown</b>	Evaluation of pre-treatment model of care in patients with head and neck cancer
Claire Blake	<b>Elise Treleaven, Ally di Bella, Teresa Brown, Adrienne Young</b> , 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	<b>Susan de Jersey, Emma Osland</b> , Sandra Heaydon (Surgery), Lindy Jeffree (Surgery), ShuChui (Amanda) Lim (QUT)	Evaluation of the Transition Feeding Pathway on the Neurosurgery Ward
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 and Hospital Services
Emma Osland	<b>Carrie-Anne Lewis</b> , Jacobus Ungerer (Qld Path), Sandra Klingberg (Qld Path)	Audit of micronutrient requesting practices at the RBWH
Harriet Adsett	<b>Adrienne Young, Tenielle Hamlin</b>	Exploring patient perceptions and experiences of mealtimes and communal dining room in the GEM unit
Hilary Powlesland	<b>Clare Byrne, Susan de Jersey</b>	Evaluation of the New Beginnings program
Hilary Powlesland	<b>Belinda Mason, Adrienne Young</b> , Lynda Ross, Adrian Kark, Riley O'Donohue	New Group Model of Care for low salt dietary education for Chronic Kidney Disease patients
Jane Musial	<b>Mary Hannan-Jones, Adrienne Young, Susan de Jersey</b> , Bonnie Lau, Chelsea Allport, Robbie Mullins, <b>Andrea Cawte</b>	Evaluation of combined QUT-RBWH diabetes clinic – patient and service outcomes



## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Jen Ellick	<b>Christine Eadeh, Michaela Hatzirodos, Claire Dux, Merrilyn Banks, Adrienne Young</b>	Evaluation of the implementation of Delegate electronic patient meal management system
Joanne Hiatt	<b>Teresa Brown, Merrilyn Banks,</b> Judy Bauer (UQ)	Patient Experience of Nutrition Care across three treatment modalities for the management of head and neck cancer
Kate Morgan	<b>Adrienne Young, Susan de Jersey, Belinda Mason</b>	Evaluation of nutrition and dietetics services to in-centre haemodialysis patients
Lynda Ross	Paula MacDermott, Chris Chapman-Kiddell, Anita Pelecanos (QIMR), Graham Radford-Smith (Gastroenterology)	Is there any correlation between dietary patterns in Inflammatory Bowel Disorder and genetics pre-diagnosis?
Margot Leeson-Smith	<b>Adrienne Young,</b> 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
Robin Hay		Evaluation of Healthy Eating and Lifestyle Program (HELP) telehealth clinic
Samantha Olenski	<b>Adrienne Young,</b> Ingrid Hickman (PAH), Shelley Wilkinson (Mater)	Translating research into practice – a training needs assessment of Queensland dietitians
Sarah Andersen	<b>Merrilyn Banks,</b> Glen Kennedy (Cancer Care), <b>Teresa Brown,</b> Nicholas Weber (Cancer Care), Judy Bauer (UQ)	Does early proactive enteral nutrition improve outcomes post allogeneic stem cell transplantation – a randomized comparison to standard care
Sarah Andersen	<b>Merrilyn Banks,</b> Glen Kennedy (Cancer Care), <b>Teresa Brown,</b> Nicholas Weber (Cancer Care), Judy Bauer (UQ)	Investigating the effect of enteral and parenteral nutrition on the gastrointestinal microbiome post allogeneic transplantation
Sarah Andersen	<b>Merrilyn Banks,</b> Glen Kennedy (Cancer Care), <b>Teresa Brown,</b> Nicholas Weber (Cancer Care), Judy Bauer (UQ)	Staff perceptions, barriers and enablers to enteral feeding during allogeneic stem cell transplantation
Sarah Andersen	<b>Merrilyn Banks,</b> Glen Kennedy (Cancer Care), <b>Teresa Brown,</b> Nicholas Weber (Cancer Care), Judy Bauer (UQ)	Nutrition support during allogeneic transplantation in Australian adult bone marrow transplantation units
Sarah Andersen	Madison Jefferis (UQ), Cameron Curley (Cancer Care), <b>Teresa Brown,</b> Judy Bauer (UQ)	Investigating the effect of malnutrition on clinical outcomes post allogeneic stem cell transplantation
Siobhan Wallin	<b>Carrie-Anne Lewis, Adrienne Young,</b> Marzia Bell (QUT)	Pre-operative lifestyle intervention for patients undergoing bariatric surgery
Susan de Jersey	Leonie Callaway (UQ, WNBS), Lynda Ross (Griffith Uni), <b>Taylor Guthrie,</b> Jeanette Tyler (Women's and Newborn), Nickie Moreton (Women's and Newborn), Karen New (UQ, Women's and Newborn), Janelle Laws (Women's and Newborn)	Evaluation of workforce training to support Healthy Pregnancy Healthy Baby
Susan de Jersey	Leonie Callaway (UQ, WNBS), <b>Taylor Guthrie,</b> Jeanette Tyler (Women's and Newborn), Nickie Moreton (Women's and Newborn), Karen New (UQ, Women's and Newborn)	Efficacy of a low intensity consumer held pregnancy weight monitoring tool to prevent excess gestational weight gain
Susan de Jersey	Elizabeth Eakin (UQ, SPH), Shelley Wilkinson (Mater), Tracy Comans (CAHR), Leonie Callaway (UQ, WNBS), <b>Claire Gardiner, Hilary Powlesland, Taylor Guthrie,</b> Angela Chang (CAHR)	Implementation evaluation of a telephone-delivered dietetic model of care for overweight pregnant women
Susan de Jersey	Kimberley Mallan (ACU), Lynne Daniels (QUT), Rebecca Byrne (QUT)	New Beginnings Healthy Mothers and Babies Study: long-term Follow-up
Susan de Jersey	<b>Natasha Lorenzen, Taylor Guthrie</b>	Gestational Diabetes Service Nutrition Practice Guidelines and Outcomes clinical audit
Teresa Brown	Aaron Chan (UQ), <b>Kathleen Dwyer, Merrilyn Banks,</b> Brett Hughes (Cancer Care), Judy Bauer (UQ), Charles Lin (Cancer Care), Liz Kenny (Cancer Care), Jane Crombie (Speech Path), Ann-Louise Spurgin (Speech Path)	Revalidation of swallow and nutrition guidelines in tomotherapy

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Teresa Brown	Ray Chan (PAH), <b>Angela Byrnes</b> , <b>Rebecca Fichera</b> , Alex Molassiotis (Hong Kong), Patsy Yates (QUT), Gillian Nasato (Cancer Care), Elise Button (Cancer Care), Andrea Marshall (Griffith), Liz Isenring (Bond University), David Wyld (Cancer Care), Melissa Eastgate (Cancer Care), Nicole Gavin (Cancer Care)	A patient-family-centred intervention to promote nutrition in advanced cancer patients: a pilot randomised controlled trial
Teresa Brown	Louise Cooney (PAH), Louise Elvin-Walsh (PAH), <b>Eliza Kern</b> , <b>Suzie Ahern</b> , David Smith (QIMR), Liz Kenny (Cancer Care), Brett Hughes (Cancer Care), Sandro Porceddu (PAH), Ingrid Hickman (PAH), Bena Cartmill (PAH)	Comparison of nutrition and clinical outcomes in H&N cancer patients following reactive and proactive nutrition support approaches

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Alvin Wong (UQ)	<b>Merrilyn Banks</b> , Judy Bauer (UQ)	Cost effectiveness of nutrition support services
Alison Mudge (IMS)	<b>Merrilyn Banks</b> , Adrian Barnett (QUT), Irene Blackberry (Latrobe), Ann Chang (QUT), Nick Graves (QUT), Ruth Hubbard (UQ), Sharon Inouye (Harvard), Sue Kurrle (Uni of Sydney), Kwan Lim (Uni of Melbourne), Prue McRae (IMS), Nancye Peel (UQ), <b>Adrienne Young</b>	CHERISH Collaborative for Hospitalised Elders: reducing the Impact of Stays in Hospital
Alison Mudge (IMS)	Adrienne Young, Ruth Hubbard (UQ), Len Gray (UQ), Elizabeth Whiting (MNHHS), Elizabeth Beattie(QUT), Fred Graham (PAH), <b>Merrilyn Banks</b> , Prue McRae (IMS)	Older Person Friendly Hospital: understanding barriers and enablers for care in Brisbane hospitals
Angela T Chang (CAHR)	<b>Susan de Jersey</b> , Anna Farrell (Speech Pathology), Jenny Strong (Occupational Therapy), <b>Adrienne Young</b> , Gai Harrison (Social Work), Jennifer Paratz (Physiotherapy), Peter Buttrum (AHP), <b>Merrilyn Banks</b>	Understanding research capacity and outputs in allied health workforce at RBWH
Ashleigh Molenaar (CISS)	Zoe Davis (CISS), <b>Merrilyn Banks</b> , <b>Adrienne Young</b> , Sandra Capra (UQ), Olivia Wright (UQ)	Exploring obesity in the aged care setting
Claire Nelson (QUT)	<b>Merrilyn Banks</b> , Mary Hannan-Jones (QUT), Kathleen Findlayson	Nutritional status of community dwelling individuals with chronic leg wounds
Dylan Flaws (Mental Health)	Alison Mudge (IMS), Gerard Byrne (Mental Health), Prue McRae (IMS), Megan Nitz (Mental Health), Conor O'Launaigh (TPCH), Trevor Hollingsworth (Caboolture), <b>Adrienne Young</b>	Delirium in older psychiatry inpatients: protocol for an observational study
Helen Barrett (UQ, Mater Health Services)	Marloes Dekker (UQ), H David McIntyre (Mater and UQ), Michael d'Emden, Leonie Callaway, <b>Susan de Jersey</b>	Post prandial triglycerides in diabetes in pregnancy: a pilot study
Jack Bell (TPCH)	<b>Adrienne Young</b> , <b>Merrilyn Banks</b> , Tracy Comans (Centre for Allied Health, UQ), <b>Jan Hill</b>	The SIMPLE Approach: Systematised, Interdisciplinary Malnutrition Program Implementation and Evaluation
Judy Bauer (UQ)	Nathan Baldwin (UQ), Merran Findlay (Sydney), <b>Teresa Brown</b>	Evaluation of implementation, enablers and barriers for the Evidence-based guidelines for the nutritional management of adult patients with head and neck cancer
Judy Bauer (UQ)	<b>Teresa Brown</b> , <b>Merrilyn Banks</b> , Brett Hughes (Cancer Care), Charles Lin (Cancer care), Liz Kenny (Cancer Care), Louise Campbell (Qld PET Service)	Comparison of body composition methods in head and neck cancer patients undergoing chemoradiotherapy – PET-CT vs BIA
Justin A Ezekowitz (University of Alberta)	John Atherton (Cardiology), <b>Kate Morgan</b> , Lynda Ross (Griffith), <b>Belinda Mason</b>	SODIUM-HF (Study of Dietary Intervention Under 100 MMOL in Heart Failure)

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Katrina Ridout (QUT)	<b>Susan de Jersey</b> , Danielle Gallegos (QUT), Adrian Barnett (QUT)	Understanding and improving pregnant women's participation in government funded prenatal nutrition and lifestyle intervention programs
Leah Gramlich (University of Alberta), Merran Findlay (RPAH), Liz Isenring (Bond Uni), Judy Bauer (UQ)	<b>Merrilyn Banks, Joanne Hiatt, Siobhan Wallin</b>	International Audit of Nutrition Care in Patients with FORegut TuMors (INFORM)
Loris Pironi (Home Artificial Nutrition Group, ESPEN)	<b>Emma Osland</b>	International benchmarking of Home Parenteral Nutrition service provision and validation of ESPEN chronic intestinal failure classifications
Lynda Ross (Griffith)	<b>Robin Hay, Angela Byrnes</b> , Keanne Langston (Griffith)	Healthy Eating and Lifestyle Program (HELP) intervention evaluation and follow up
Melissa Eastgate (Cancer Care)	Shu Fen Lee (Cancer Care), David Wyld (Cancer Care), <b>Teresa Brown</b>	Patient perceptions of diet and cancer – survey of cancer care patients
Michelle Palmer (MSHHS)	Helen Porteous (MSHHS), <b>Susan de Jersey</b>	Attendance rates and demographic descriptors of obese women referred to the dietitian for weight management advice during pregnancy
Nerida Hart (QUT)	Mary Hannan-Jones (QUT), <b>Merrilyn Banks</b>	What makes a quality foodservice system?
Nicole Gavin (Cancer Care)	Glen Kennedy (Cancer Care), David Patterson (Infectious Diseases), Claire Rickard (Griffith Uni), <b>Sarah Andersen</b> , Elise Button (Cancer Care), Rebecca Lippiatt (Cancer Care)	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 (Cancer Care)	Glen Kennedy (Cancer Care), Claire Rickard (Griffith Uni), Patrick Harris (UQ), <b>Sarah Andersen</b> , Elise Button (Cancer Care), Rebecca Lippiatt (Cancer Care)	Improving central-line associated bloodstream infection diagnosis in malignant haematology patients with parenteral nutrition (Improving CLABSI Trial)
Nicole Kiss (Deakin University)	Anna Boltong (Cancer Council), Merran Findlay (RPA), Belinda Steer (Peter mac), Jenelle Loeliger (Peter Mac), <b>Teresa Brown</b> , Liz Isenring (Bond), Judy Bauer (UQ)	Australian cancer clinician's awareness, perceptions and practices regarding to cancer-related malnutrition and sarcopenia
Nina Melloncelli (SCHHS, QUT)	<b>Susan de Jersey</b> , Adrian Barnett (QUT)	Evaluation of a dietitian-led model of care in low risk gestational diabetes pregnancies
Nina Melloncelli (SCHHS, QUT)	<b>Susan de Jersey</b> , Adrian Barnett (QUT)	Examining the management of gestational diabetes mellitus
Priya Cherian (Radiology)	<b>Claire Blake</b> , Mark Appleyard (Gastro), Nigel Mott (DMI), David Smith (QIMR)	Radiologically inserted gastrostomy (RIG) an Interventional Radiology Procedure that promotes high value healthcare
Quoc Qong Tran (QUT)	Danielle Gallegos (QUT), <b>Merrilyn Banks</b> , Mary Hannan-Jones (QUT)	Nutritional status of patients in Vietnamese hospitals
Samantha Olenski (IMS)	Alison Mudge (IMS), <b>Adrienne Young</b> , Prue McRae (IMS), Elise Treleaven (IMS), Kimberley Mallan (ACU), Zoe Walsh (CISS), Jill Ross (CISS), Alanna Geary (Nursing and Midwifery)	Developing and validating a novel survey to identify barriers and enablers to improving nutrition care in acute and subacute inpatient settings
Shelley Roberts (Griffith)	Andrea Marshall (Griffith), <b>Merrilyn Banks</b> , Alan Spencer (GCUH), Zane Hopper (GCUH), <b>Adrienne Young</b> , Ruben Gonzales (Griffith), Wendy Chaboyer (Griffith)	Using technology to engage patients in their nutrition care: a pilot study

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Adrienne Young</b>	Outstanding Leadership in Research, Learning and Innovation	CAHRLI, 20 <sup>th</sup> June 2018
<b>Adrienne Young</b>	Health Practitioner Researcher of the Year	RBWH Research Symposium, 11-13 <sup>th</sup> September 2018
<b>Adrienne Young</b>	2019 Royal Alumni Research Encouragement Award	2019 RBWH and RBWH Foundation Grant Awards Ceremony
<b>Adrienne Young, Merrilyn Banks, Alison Mudge (IMS)</b>	Highly Commended, Complex Health Challenges	MNHHS Research Excellence Awards, 22 <sup>nd</sup> May 2018
<b>Carrie-Anne Lewis</b>	Jamieson Best Paper Award, Integrated Health	Australian and New Zealand Metabolic and Obesity Surgical Society, 6-7 September 2018
<b>Claire Blake</b>	Leadership in Education	CAHRLI, 20 <sup>th</sup> June 2018
<b>Hilary Powlesland</b>	Best New Presenter	AH-TRIP 'My Translation Rules' Research Translation Awards
Jack Bell (TPCH), <b>Adrienne Young, Merrilyn Banks, Jan Hill, Rhiannon Barnes, Tracy Comans</b>	Highly Commended, Health Services and Implementation	MNHHS Research Excellence Awards, 22 <sup>nd</sup> May 2018
<b>Jane Musial</b>	Winner – Fostering Innovation Award	2018 RBWH QuARRIES Award
<b>Kylie Matthews</b>	Dietitians Association of Australia External Conference Research Prize	Australia and New Zealand Academy for Eating Disorders, 2-4 August 2018
<b>Lynda Ross</b>	Excellence in Publication Award for Development and Evaluation of a Scored Sodium Questionnaire-Screening Form for Kidney Disease Patients	Menzies Health Institute Queensland, September 2018
Shu Fen Lee, Melissa Eastgate, David Wyld, <b>Teresa Brown</b>	Best poster	2 <sup>nd</sup> Victorian Cancer Survivorship Conference, 8-9 <sup>th</sup> February, Melbourne
<b>Susan de Jersey, Jeanette Tyler (WNBS), Taylor Guthrie, Karen New (UQ), Lynne Beutow (WNBS), Clare Byrne, Hilary Powlesland, Marie Greco</b>	Overall Customer Focus Award	2018 RBWH QuARRIES Award
<b>Susan de Jersey, Taylor Guthrie</b>	Best Allied Health Poster	Australasian Diabetes in Pregnancy Society Conference, 24-26 August 2018

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Abigail Marsh</b>	Nutrition and Dietetics	Changes in disease activity, patient-reported outcomes and microbiota in patients with inflammatory bowel disease in a randomised modified Mediterranean dietary intervention study	RBWH Scholarship	\$36,864	\$36,864 (2018)
<b>Adrienne Young</b> , Ingrid Hickman (PAH), Shelley Wilkinson (Mater)	Nutrition and Dietetics	Needs assessment of knowledge translation (KT) training and support needs of Queensland dietitians	DNSC	\$7,920	\$7,920 (2018)
<b>Adrienne Young, Merrilyn Banks, Jan Hill</b> , Jack Bell, Tracy Comans, Rhiannon Barnes	Nutrition and Dietetics	Malnutrition Models of Care	AusHSI	\$11,333	\$34,000 (2017-2018)
<b>Angela Byrnes</b>	Nutrition and Dietetics; Internal Medicine Research Unit	Investigating the nutritional status and care of older ( $\geq 65$ years) patients on two general surgical wards: a multiphase, Action Research study	RBWH Scholarship (top-up)	\$6,000	\$6,000 (2018)
<b>Carrie-Anne Lewis</b>	Nutrition and Dietetics	Micronutrient and protein energy malnutrition outcomes in a weight loss surgery population	RBWH Scholarship	\$36,864	\$36,864 (2018)
<b>Carrie-Anne Lewis</b> , Leonie Naumann (Physiotherapy)	Nutrition and Dietetics, Physiotherapy	Measuring body composition to determine prevalence of malnutrition and lymphoedema in allied health research studies	RBWH PPTF Research and Training Capital Funding Grant	\$21,053	\$21,053 (2018)
<b>Christine Eadeh, Claire Dux, Nerida – Hart</b>	Nutrition and Dietetics/ Patient Food Services	Improving access to meals outside of hours: a technology driven solution	CAHRLI	\$9,639	\$9,639 (2018)
<b>Claire Blake, Ally di Bella, Teresa Brown, Adrienne Young</b> , Jenni Leutenegger (Cancer Care), David Wyld (Cancer Care),	Nutrition and Dietetics; Cancer Care	Implementation of patient-led malnutrition screening in the cancer care ambulatory setting	RBWH Foundation Diamond Grant	\$20,000	\$40,000 (2018-2019)
<b>Jane Musial</b>	Nutrition and Dietetics	Implementation of insulin dose adjustment for dietitians	Diabetes Statewide Clinical network	\$33,265	\$33,265 (2017-2018)
Jill Campbell (Nursing and Midwifery), Judith Eddy (Womens), Andrea Garratt, Kerrie Coleman (Nursing and Midwifery), Maree Grier (Psychology), Cara Masterson (Physiotherapy), Fiona Coyer (QUT), Barbara Ikin (Women's and Newborns), <b>Damien McDermid</b> , Kathryn Hurree (Women's and Newborns), Anita Pelacanos (QIMR)	Nursing and Midwifery, Women's and Newborn, Allied health	A multidisciplinary pre-operative optimisation care bundle for women undergoing vulval surgery: a feasibility study	RBWH Foundation	\$39,998	\$39,998 (2018)
<b>Joanne Hiatt</b>	Nutrition and Dietetics	Nutrition throughout head and neck cancer treatment: Patient experience and adherence, barriers and enablers to enteral feeding recommendations	RBWH Scholarship	\$36,864	\$36,864 (2018)
<b>Margot Leeson-Smith, Adrienne Young</b> , Jack Bell (TPCH), Theresa Green (Nursing, QUT), Rebecca Moore (TPCH), Stacey O'Donnell (Caboolture), Chloe Jarvis (Redcliffe), Juliette Mahero (TPCH), Andrew Wong (Neurology)	Nutrition and Dietetics, Nursing, Neurology	Implementation and Evaluation of a Multi-site Acute Stroke Nutrition Care Pathway	Health Practitioners Research Scheme Grant	\$13,030	\$26,059 (2018-2019)
Nina Meloncelli (SCHHS, QUT), <b>Susan de Jersey</b> , Adrian Barnett (QUT), Rachel Hayes (SCHHS), Elise Gilberston (SCHHS), Michelle Mack (SCHHS), Rebekah Shakhovskoy (SCHHS), Sophie Poulter (SCHHS)	Nutrition and Dietetics Researchers	Evaluation of a dietitian-led model of care in low risk gestational diabetes pregnancies	Health Practitioners Research Scheme Grant	\$14,818	\$29,636 (2018-2019)

## 2018 Research Grants – Awarded (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
Ray Chan (Cancer Care), Alex Molassiotis (Hong Kong), Patsy Yates (QUT), Gillian Nasato (Cancer Care), <b>Teresa Brown</b> , Elise Button (Cancer Care), Andrea Marshall (Griffith), Liz Isenring (Bond University), David Wyld (Cancer Care), Melissa Eastgate (Cancer Care), Nicole Gavin (Cancer Care)	Cancer Care Services, Nutrition and Dietetics	A patient-family-centred intervention to promote nutrition in advanced cancer patients: a pilot randomised controlled trial	RBWH Foundation Diamond Care Grant	\$40,000	\$40,000 (2018)
Samantha Olenski (IMRU), Alison Mudge (IMRU), <b>Adrienne Young</b> , Prue McRae, Kimberley Mallan (ACU), Zoe Walsh (CISS), Jillan Ross (CISS), Alanna Geary (Nursing and Midwifery)	Internal Medicine Research Unit; Nutrition and Dietetics	Developing and validating a novel survey to identify barriers and enablers to improving nutrition care in acute and subacute inpatient settings	RBWH Foundation	\$32,000	\$32,000 (2018)
<b>Sarah Andersen</b>	Nutrition and Dietetics	Does early proactive enteral nutrition improve outcomes post allogeneic stem cell transplantation - A randomized comparison to standard care	RBWH Scholarship	\$36,864	\$36,864 (2018)
<b>Sarah Andersen</b>	Nutrition and Dietetics	Energy expenditure in patients undergoing allogeneic stem cell transplant: are we feeding them enough?	RBWH PPTF Research and Training Capital Funding Grant	\$39,167	\$39,167 (2018)
<b>Susan de Jersey</b> , Elizabeth Eakin, Shelley Wilkinson, Tracy Comans, Leonie Callaway, <b>Claire Gardiner</b>	Nutrition and Dietetics, Obstetric Medicine, Centre for Allied Health Research	Implementation evaluation of a telephone-delivered dietetic model of care for overweight pregnant women	RBWH Foundation	\$39,024	\$39,024 (2017-2018)

## 2018 Research Publications

### Journal Articles:

1. Agarwal E, Ferguson M, **Banks M**, Vivanti A, Batterham M, Bauer J, et al. Malnutrition, poor food intake, and adverse healthcare outcomes in non-critically ill obese acute care hospital patients. *Clinical Nutrition*. 2018. doi: 10.1016/j.clnu.2018.02.033
2. Bell JJ, **Young A**, Hill J, **Banks M**, Comans T, Barnes R, et al. Rationale and developmental methodology for the SIMPLE approach: A Systematised, Interdisciplinary Malnutrition Pathway for implementation and Evaluation in hospitals. *Nutrition and Dietetics*. 2018;75(2):226-34
3. **Byrnes A**, **Banks M**, Mudge A, **Young A**, Bauer J. Enhanced Recovery After Surgery as an auditing framework for identifying improvements to perioperative nutrition care of older surgical patients. *Eur J Clin Nutr*. 2018;72(6):913-6
4. **Byrnes A**, Mudge A, **Young A**, **Banks M**, Bauer J. Use of hand grip strength in nutrition risk screening of older patients admitted to general surgical wards. *Nutrition and Dietetics*. 2018. doi:10.1111/1747-0080.12422
5. **Byrnes A**, Worrall J, **Young A**, Mudge A, **Banks M**, Bauer J. Early post-operative diet upgrade in older patients may improve energy and protein intake but patients still eat poorly: an observational pilot study. *Journal of Human Nutrition and Dietetics*. 2018. doi: 10.1111/jhn.12572
6. **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. *European Journal of Clinical Nutrition*. 2018:1
7. **Byrnes A**, **Young A**, Mudge A, **Banks M**, Clark D, Bauer J. Prospective application of an implementation framework to improve postoperative nutrition care processes: Evaluation of a mixed methods implementation study. *Nutrition and Dietetics*. 2018;75(4):353-62
8. Catchpole EM, Thirunavukarasu CE, Varelias A, Schlebusch S, Olver S, Zomerdijk N, **Osland E**, Kennedy GA, Tey SK, Hill GR, Markey KA. Early Blood Stream Infection after BMT Is Associated with Cytokine Dysregulation and Poor Overall Survival. *Biology of blood and marrow transplantation: Journal of the American Society for Blood and Marrow Transplantation*. 2018. doi:10.1016/j.bbmt.2018.02.025
9. Cuong TQ, **Banks M**, Hannan-Jones M, Diep DTN, Gallegos D. (2018). Prevalence and associated risk factors of malnutrition among hospitalized adults in a multisite study in Ho Chi Minh city Viet Nam. *Asia Pacific Journal of Clinical Nutrition*. 2018;1-21. doi: 10.6133/apjcn.042018.07
10. **De Jersey S**, **Guthrie T**, Tyler J, Ling WY, **Powlesland H**, Byrne C, et al. Evaluating the integration of a pregnancy weight gain chart into routine antenatal care: a mixed method study design. *Maternal & Child Nutrition*. 2018:e12750

### Journal Articles (cont):

11. **De Jersey SJ**, Tyler J, **Guthrie T**, New K. Supporting healthy weight gain and management in pregnancy; Does a mandatory training education session improve knowledge and confidence of midwives? *Midwifery*. 2018. doi: 10.1016/j.midw.2018.06.025
12. **Di Bella A, Blake C, Young A**, Pelecanos A, **Brown T**. Reliability of Patient-Led Screening with the Malnutrition Screening Tool: agreement between Patient and Health Care Professional Scores in the Cancer Care Ambulatory Setting. *Journal of the Academy of Nutrition and Dietetics*. 2018;118(6):1065-71
13. **Lewis C-A, de Jersey S**, Hopkins G, Hickman I, **Osland E**. Does Bariatric Surgery Cause Vitamin A, B1, C or E Deficiency? A Systematic Review. *Obesity surgery*. 2018:1-18
14. Mallan KM, Daniels LA, Byrne R, **De Jersey SJ**. Comparing barriers to breastfeeding success in the first month for non-overweight and overweight women. *BMC Pregnancy and Childbirth*. 2018;18(1):461
15. **Matthews K**, Hill J, Jeffrey S, Patterson S, Davis A, Ward W, et al. A Higher-Calorie Refeeding Protocol Does Not Increase Adverse Outcomes in Adult Patients with Eating Disorders. *J Acad Nutr Diet*. 2018. doi: 10.1016/j.jand.2018.01.023
16. **Matthews KL**, Palmer MA, Capra SM. Dietitians' opinions regarding refeeding syndrome, clinical guidelines and extended scope of practice. *Nutrition and Dietetics*. 2018. doi:10.1111/1747-0080.12429
17. **Matthews KL**, Palmer MA, Capra SM. The accuracy and consistency of nutrition care process terminology use in cases of refeeding syndrome. *Nutrition and Dietetics*. 2018;75(3):331-6
18. Meloncelli N, Barnett A, Pelly F, **De Jersey S**. Diagnosis and management practices for gestational diabetes mellitus in Australia: Cross-sectional survey of the multidisciplinary team. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 2018. doi: 10.1111/ajo.12816
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. *Supportive care in cancer: official journal of the Multinational Association of Supportive Care in Cancer*. 2018. doi:10.1007/s00520-018-4352-5
20. Moroney LB, Helios J, Ward EC, Crombie J, Pelecanos A, Burns CL, Spurgin AL, **Blake C**, Kenny L, Chua B, Hughes BGM. Helical intensity-modulated radiotherapy with concurrent chemotherapy for oropharyngeal squamous cell carcinoma: a prospective investigation of acute swallowing and toxicity patterns. *Head Neck*. 2018. doi: 10.1002/hed.25182
21. **Osland E**, Memo B, Memon MA. Pharmaconutrition administration on outcomes of elective oncological surgery for gastrointestinal malignancies: Is timing everything? A review of published meta-analyses until the end of 2016. *Translational Gastroenterology and Hepatology*. 2018. doi: 10.21037/tgh.2018.07.12
22. **Osland E**, Memon MA. Laparoscopic Roux-en-Y gastric bypass or vertical sleeve gastrectomy: a weighty decision. *Annals of Translational Medicine*. 2018. doi: 10.21037/atm.2018.10.43
23. Pironi L, Konrad D, Brandt C, Joly F, Wanten G, Agostini F, et al. Clinical classification of adult patients with chronic intestinal failure due to benign disease: an international multicenter cross-sectional survey. *Clinical nutrition (Edinburgh, Scotland)*. 2018;37(2):728-38
24. Sioson MS, Martindale R, Abayadeera A, Abouchaleh N, Aditiansingh D, Bhurayanontachai R, Chiou WC, Higashibepu N, Mat Nor MB, **Osland E**, Palo JE, Ramakrishnan N, Shalabi M, Tam LN, Ern Tan J J. Nutrition therapy for critically ill patients across the Asia-Pacific and Middle East regions: a consensus statement. *Clinical Nutrition ESPEN*. 2018;24:156-64
25. Tran QC, **Banks M**, Hannan-Jones M, Diep DTN, Gallegos D. Prevalence and associated risk factors of malnutrition among hospitalized adults in a multisite study in Ho Chi Minh city Viet Nam. *Asia Pacific Journal of Clinical Nutrition*. 2018:1-21
26. Tran QC, **Banks M**, Hannan-Jones M, Do TND, Gallegos D. Validity of four nutritional screening tools against subjective global assessment for inpatient adults in a low-middle income country in Asia. *Eur J Clin Nutr*. 2018. doi: 10.1038/s41430-018-0217-8
27. Wong A, **Banks M**, Bauer J. A Survey of Home Enteral Nutrition Practices and Reimbursement in the Asia Pacific Region. *Nutrients*. 2018;10(2):214
28. Wong A, Goh G, **Banks MD**, Bauer JD. Economic Evaluation of Nutrition Support in the Prevention and Treatment of Pressure Ulcers in Acute and Chronic Care Settings: a Systematic Review. *Journal of Parenteral and Enteral Nutrition*. 2018. doi: 10.1002/jpen.1431
29. **Young A**, Treleaven E, Farrell A. Nutrition, Mealtimes: Recipes for success. *Journal of Clinical Practice in Speech-Language Pathology*. 2018;20(3):177-9
30. **Young AM, Banks MD**, Mudge AM. Improving nutrition care and intake for older hospital patients through system-level dietary and mealtime interventions. *Clinical Nutrition ESPEN*. 2018;24:140-7
31. **Young AM, de Jersey SJ, Ellick J, Lewis C-A, Banks M**. Comparison of Patient Food Intake, Satisfaction and Meal Quality Between Two Meal Service Styles in a Geriatric Inpatient Unit. *Journal of Nutrition in Gerontology and Geriatrics*. 2018:1-11
32. **Young AM**, Keller HH, Barnes R, Bell JJ. Clinicians as novice facilitators: a SIMPLE case study. *Journal of Health Organization and Management*. 2018. doi:10.1108/JHOM-03-2018-0071
33. **Young AM**, Mudge AM, **Banks MD**, Rogers L, Demedio K, Isenring E. Improving nutritional discharge planning and follow up in older medical inpatients: Hospital to Home Outreach for Malnourished Elders. *Nutrition and Dietetics*. 2018;75:283-90.

### Book Chapters/ Letters:

1. **Young A**. Institutional interventions to prevent and treat undernutrition. In: Hickson M SS, Whelan K, editor. *Advanced Nutrition and Dietetics in Nutrition Support*. London: John Wiley and Sons; 2018.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. **Andersen S.** Investigating Enteral Nutrition During Allogenic Stem Cell Transplantation. Australasian Society of Parenteral and Enteral Nutrition, Sydney, December 2018
2. **De Jersey S.** Prevention of obesity in the reproductive years- opportunities abound. National Eating Disorders and Obesity Conference. Tweed Heads September 2018
3. **De Jersey S.** Searching for utopia: defined dietary prescription and medical nutrition therapy for gestational diabetes management. Australasian Diabetes in Pregnancy Society, Adelaide. August 2018.

### Oral Presentations:

1. Bell M, **Lewis CA, Wallin S, Young A.** Bariatric surgery patients' view on pre-operative lifestyle education. Dietitians Association of Australia. May 2018
2. Chuin Lim S, **Dux C,** Jeffree R, Heaydon S, **De Jersey S.** Transition feeding protocol in the neurosurgery ward: a pre- and post-implementation evaluation of patients' nutrition outcomes, dietetic efficiency and nursing staff's knowledge, attitudes and practices. Dietitians Association of Australia. May 2018
3. **Cruickshank D.** Allergen Management for Foodservice – Development of a Best Practice Guideline. Dietitians Association of Australia. May 2018
4. **De Jersey S, Guthrie T,** Callaway L, Tyler J, New K. Successful changes to practice following a dietetic lead service wide implementation strategy supporting health weight gain in pregnancy. Dietitians Association of Australia. May 2018
5. **Di Bella A, Banks M,** Gane E, Hickling D, Hickman I, Comans T. Hidden in plain sight: the potential cost of unrecognised obesity prevalence in Queensland hospitals. Dietitians Association of Australia. May 2018
6. **Guthrie T, Byrne C,** New K, Tyler J, De Jersey S. Women's perceptions of a pregnancy weight gain chart to support healthy weight gain in pregnancy. Dietitians Association of Australia. May 2018
7. Hill J, **Young A, Banks M,** Barnes R, Bell J. Impact of electronic medical records on nutrition care practices. Dietitians Association of Australia. May 2018
8. Hollis G, **Dux C,** Hickling D, Powlesland A. The Ebbs & Flows of ICU: challenges in nourishing the critically ill patient. Dietitians Association of Australia. May 2018
9. Kukulies D, Gallegos D, **De Jersey S,** Tran CQ, Phan THT, Vo DT, Do, DNT, Hannan-Jones M. Excess gestational weight gain is an issue in Ho Chi Minh City, Viet Nam. The 7<sup>th</sup> Asian Congress of Dietetics. Hung Hom, Hong Kong, July 2018
10. Langston K, **Ross L.** Healthy Eating and Lifestyle Program (HELP): effective for all BMI classes. Dietitians Association of Australia. May 2018
11. **Lewis C, De Jersey S, Osland E, Musial J,** Hopkins G, Hickman I. Considerations for micronutrient assessment in bariatric surgery. Australia and New Zealand Metabolic and Obesity Surgery Society Conference, Melbourne. September 2018
12. **Marsh A, Kinneally J, Young A.** Dietary advice obtainment in IBD patients – who do they trust? Dietitians Association of Australia. May 2018
13. **Matthews K,** Hill J, Jeffrey S, Patterson S, Davis A, Ward W, Palmer M, Capra S. A higher energy refeeding protocol does not increase adverse outcomes in adult patients with eating disorders. Dietitians Association of Australia. May 2018
14. **Matthews K,** Hill J, Jeffrey S, Patterson S, Davis A, Ward W, Palmer M, Capra S. Medically compromised, extremely underweight adult patients with eating disorders can be safely refeed using a higher energy feeding protocol. Australia and New Zealand Academy for Eating Disorders National Conference, Melbourne. August 2018
15. Meloncelli N, Barnett A, Pelly F, **De Jersey SJ.** Task and role perceptions of GDM Management as reported by multidisciplinary team members in Australia. Dietitians Association of Australia. May 2018
16. Miller N, Mallan K, Byrne R, **De Jersey S** and Daniels L. Like mother like child? Maternal Feeding Practices Mediate the Relationship Between Mother and Child Eating Behaviours. National Eating Disorders and Obesity Conference. Tweed Heads September 2018
17. O'Donnell S, Patel B, **Young A, Banks M,** Hill J, Barnes R, Comans T, Keller H, Bell J. Malnutrition management in the acute care setting: a description of current practice in six Queensland hospitals Dietitians Association of Australia. May 2018
18. Patel B, O'Donnell S, **Young A, Banks M,** Hill J, Barnes R, Comans T, Keller H, Bell J. Acute malnutrition care in Queensland hospitals: The patient perspective. Dietitians Association of Australia. May 2018
19. **Powlesland H,** Yin Ling W, Tyler J, New K, **De Jersey S.** Staff attitudes and practices to support healthy pregnancy weight gain following the implementation of service-wide education and routine weight tracking. Dietitians Association of Australia. May 2018
20. **Treleaven E,** Mudge A, McRae P, Lee-Steere K, Cahin M, Finnigan S. Delirium Day: cognitive impairment and the carer experience in a tertiary hospital. Australasian Delirium Association 'Declared' Conference, Melbourne. September 2018
21. **Young A, Banks M,** Pei Yen Kwek T, Mudge A. Improving nutritional intake and care in hospital: a ten-year journey of quality improvement and research in practice. Dietitians Association of Australia. May 2018
22. **Young A,** Bell J, Comans T, Hill J, Barnes R, Keller H, Banks M. Better nutritional care for hospital inpatients: from volume to value through The SIMPLE Approach. World Hospital Congress, Brisbane November 2018.



## Poster Presentations:

1. **Andersen S**, Weber N, Kennedy G, **Brown T**, **Banks M**, Bauer J. Investigating tolerance and clinical outcomes of early enteral nutrition versus parenteral nutrition support during allogeneic transplantation. European Society for Blood and Marrow Transplantation, Lisbon, Portugal. March 2018
2. Barrett HL, Dekker Nitert M, **De Jersey SJ**, Callaway LK, D'Emden M, McIntyre HD. Maternal postprandial triglycerides following high and low fat meals in the home setting. American Diabetes Association's 78<sup>th</sup> Scientific Sessions, June 22-26, 2018 Orlando, Florida USA
3. **Byrnes A**, **Young A**, Mudge A, **Banks M**, Bauer J. Exploring practice gaps to improve PERIoperative Nutrition CarE (Experience Study): A qualitative study to identify barriers to implementation of evidence-based practice guidelines. Dietitians Association of Australia. May 018
4. Chapman-Kiddell C, **Ross L**, MacDermott P, Hanigan K, Pelacanos A, Radford-Smith G. Dietary patterns and the development of Crohn's disease (CD). Dietitians Association of Australia. May 2018
5. **Cruickshank D**, Juffs P. Comparing IDDSI to current clinically accepted testing methods. Dietitians Association of Australia. May 2018
6. **De Jersey S**, **Guthrie T**, Liow HS, **Lorenzen N**. Increased resources for GDM improved access to best practice dietetic care. Australasian Diabetes in Pregnancy Society, Adelaide. August 2018
7. **Hatzirodos M**, **Ellison N**, **Eadeh C**, **Dux C**. Restoring dignity and quality to texture modified diets through moulded meals. Dietitians Association of Australia. May 2018
8. Lee SF, Eastgate M, Wyld D, **Brown T**. Dietary patterns and attitudes in cancer survivors. 2<sup>nd</sup> Victorian Cancer Survivorship Conference, February 2018
9. MacDermott P, **Young A**. When acute and chronic illness collide – improving dietetic referrals for acute renal inpatients. Dietitians Association of Australia. May 2018
10. Meloncelli N, Barnett, A, **De Jersey S**. A cross-sectional survey of gestational diabetes management in Queensland. Australasian Diabetes in Pregnancy Society Annual Scientific Meeting, Adelaide, August 2018
11. **Morgan K**, **Young A**. Perceptions of patients on haemodialysis: satisfaction with dietetic services and barriers to engagement. Dietitians Association of Australia. May 2018
12. Worrall J, **Byrnes A**, **Banks M**, Mudge A, **Young A**, Bauer J. Postoperative oral intake of older ( $\geq 65$  years) general surgical patients and factors associated with inadequate intake on postoperative day 2. Dietitians Association of Australia. May 2018
13. **Young A**, **Banks M**, Kwek T, Mudge A. Improving nutritional intake and care for older inpatients: a ten-year journey of quality improvement and research in practice. Annual Scientific Meeting of the American Geriatrics Society, May 2018
14. **Young A**, Mudge A, McRae P, Gray L, Beattie E, Graham F, Whiting L, **Banks M**, Hubbard R. Toward the Older Person Friendly Hospital: barriers and enablers within the Australian context. Annual Scientific Meeting of the American Geriatrics Society, May 2018.

## Other Communications and Outputs:

Adrienne Young	Is there a SIMPLE solution to hospital malnutrition? The Health Advocate p40-41, October 2018
Adrienne Young	Older people in hospital are having their cake and eating it too: a 10-year journey to improve nutrition at the Royal Brisbane and Women's Hospital. The Australian Hospital Healthcare Bulletin p56-7, Winter 2018
Susan de Jersey	How to Treat: gestational diabetes mellitus. Australian Doctor, p17-24, June 22, 2018
Angela Byrnes.	Implementation and process evaluating using an implementation framework. Allied Health Translating Research into Practice website <a href="https://www.tri.edu.au/online-pd-suite">https://www.tri.edu.au/online-pd-suite</a>
Joanne Hiatt.	Development and Implementation of a Nurse Led Enteral Feeding Protocol. Allied Health Translating Research into Practice website <a href="https://www.tri.edu.au/online-pd-suite">https://www.tri.edu.au/online-pd-suite</a>
Susan de Jersey	Supporting health pregnancy weight gain. Allied Health Translating Research into Practice website <a href="https://www.tri.edu.au/online-pd-suite">https://www.tri.edu.au/online-pd-suite</a> .

## Occupational Therapy

Functional independence, occupational performance and patient centred practice are core concepts of Occupational Therapy (OT) used daily to improve our patients' care, their hospital journey and health outcomes. OT services at RBWH strive to apply research evidence in practice every day to meet best care, maximise outcomes and help our patients' return to their life roles.

2018 was an exciting year for RBWH OT with growth in research activity and outcomes that have enhanced occupational performance and participation of our patients' daily lives. Our research activity and related benefits have extended across multiple areas of the hospital's clinical services including trauma, burns, orthopaedics, hands, neurology, chronic pain and rehabilitation services.



Research themes and concepts explored in 2018 have been broad ranging and include community participation and re-engagement, application of treatments to new diagnostic cohorts and use of technology enhanced modalities to improve occupational performance and OT care delivery. These themes are demonstrated in research topics such as the effectiveness of electrical stimulation to improve hand function of people with Friedreich's Ataxia neurological disorder, virtual reality to reduce pain during burn wound dressing changes and mobile technology apps to assist people with chronic pain to better self-manage their daily activities.

Expanding on foundations of previous years, building of our research capacity continues to be a key achievement. In 2018, the vision for best practice evidence "provided at the bedside" has translated to:

- increased successful competitive grant funding
- national and international presence of Occupational Therapy research
- increased research collaborations, strengthened partner links and new research partners
- increased uptake of research engagement across novice and experienced clinicians and
- meaningful impacts on patient care.

### Highlights of 2018:

- 2018 Metro North Research Excellence Rising Star Award to Dr Nicole Andrews
- commencement of 6 OT staff in their research higher degree studies
- increasing trend in application successes – 12 new grants awarded
- 35% growth in successful grant funding – \$164 130
- six national conference presentations in burns scar management, outcome measurements, pressure therapy and e-stim use in Friedreich Ataxia
- four international conference presentations with three as invited guest speakers:
  - Nicole Andrews            Boston, USA            Overactivity in pain
  - Nicole Andrews            Sydney, Australia    Activity pacing using a mobile health platform
  - Andrea McKittrick        New Delhi, India       Burns remedial make-up
  - Andrea McKittrick        Sydney, Australia    Critical care neuropathy.
- new collaboration with Herston Biofabrication Institute.

Going forward, we continue to work towards our research investment translating in Occupational Therapy practice to benefit our patients' care helping reach their goals and re-engage with life beyond 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>
<b>Andrea Mc Kittrick</b>	Doctor of Philosophy UQ (2018-2023)	Outcome measures for hand burn injuries	Louise Gustaffson, <b>Jenny Strong</b>
Cate Sinclair	PhD UQ (2015-2018)	Pain management for children and adolescents attending a tertiary pain centre	Pamela Meredith, <b>Jenny Strong</b>
<b>Erin Molloy</b>	Master of Philosophy UQ (2018-2020)	Sensory sensitivity and adherence with compression garments after burn injuries	<b>Jenny Strong</b> , Pam Meredith, <b>Paul Gray</b>
Genevieve O'Donoghue	PhD CQU (2018-2020)	Couples, attachment and chronic pain	Pamela Meredith, <b>Jenny Strong</b> , <b>Nicole Andrews</b>
Grace Brandjerporn	PhD UQ (2016-2019)	Pre-natal and perinatal attachment and child development	Pamela Meredith, <b>Jenny Strong</b>
<b>Nicole Coghlan</b>	Masters of Philosophy UQ (2015-2018)	Patient experiences of wearing compression garments post burn injury	<b>Jenny Strong</b> , Jodie Copley, Tammy Aplin, <b>Sue Laracy</b>
<b>Sarah O'Reilly</b>	Master of Philosophy UQ (2018-2020)	The efficacy of stretch tapes in reducing hypertrophic scarring after burn injury	<b>Jenny Strong</b> , Jenny Ziviani
<b>Shannon Scarff</b>	Master of Philosophy UQ (2018-2020)	The Multiple Errands Test	Jenny Fleming
Stephanie Power	PhD UQ (2014-2018)	The language of pain in the birthing room; A cross cultural perspective	Fiona Bogossian, Roly Sussex, <b>Jenny Strong</b>



## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Nicole Andrews	Postdoctoral Research Fellow RBWH Postdoctoral Research Fellow	RECOVER Injury Research Centre Towards understanding how much activity is too much for individuals with chronic pain	The University of Queensland (2018-2019)
Jenny Strong	Emeritus Professor Adjunct Professor	School of Health and Rehabilitation Sciences School of Health, Medical and Applied Sciences	The University of Queensland (2016 ongoing) Central Queensland University (2017 onwards)
Michelle Donovan	Honorary Associate lecturer	School of Health and Rehabilitation Sciences	The University of Queensland (2017-2020)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
Andrea Mc Kittrick	<b>Sue Laracy, Jenny Strong,</b> Michael Rudd (Burns)	Royal Brisbane and Women's Hospital Occupational Therapy auditing framework for identifying improvements to acute adult burns care
Andrea Mc Kittrick	<b>Amber Jones, Sue Laracy, Jenny Strong,</b> Andre Baeur (Psychology)	"Scar Wars" – the effective use of cinemagraphic remedial make up by Occupational Therapy to conceal disfiguring scars
Celeste Glasgow	<b>Sue Laracy, Cherie Aceto</b>	What is the most effective orthosis for improving PIP joint extension following hand trauma? A RCT
Celeste Glasgow	<b>Sue Laracy, Kristin Kirwan</b>	Occupational Therapy Hand Unit Consumer engagement project
Celeste Glasgow	<b>Sue Laracy,</b> Kathy Green (Logan), Ruth Cox (QE2), Leo Ross (QE 2)	Evaluation of the Primary Contact Occupational Therapy Hand (PCOTH) Clinical Outcomes; non-carpal tunnel syndrome (CTS) diagnoses
Erin Molloy	<b>Jenny Strong,</b> Pamela Meredith (Central Queensland University), Paul Gray (Pain Centre)	Is sensory sensitivity a factor in non-adherence in compression garment wear post burn?
Erin Molloy	<b>Amber Jones, Sue Laracy, Jenny Strong,</b> Paul Gray, (Pain Centre)	The use of Immersive Virtual Reality in Occupational Therapy during burn wound care procedures
Kaitlyn Spalding	<b>Kristin Kirwan,</b> Angela Chang (CAHR)	Positioning of the lower limb for the prevention and management of pressure injuries: a review of current practice
Kristin Kirwan	John Fraser (TPCH), Chris Anstey (TPCH)	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	Marlien Varnfield (CSIRO), David Ireland (CSIRO)	Towards understanding how much is too much for individuals with chronic pain
Nicole Andrews	<b>Belinda Long, Jenny Strong, Sue Laracy</b>	Evaluation of occupational therapy interventions within the orthopaedic physiotherapy screening clinic
Nicole Andrews	Olivia Zheng (Trauma Service), Jodie Ross, (Trauma Service), Venerina Johnston (UQ), Elise Gane (UQ), Esther Smits (UQ), Charlotte Brakenridge (UQ), Paul Gray, (Professor Tess Cramond Multidisciplinary Pain Centre), Michael Rudd (Trauma Service)	An investigation of the prevalence, impact, and management of chronic pain post trauma at a tertiary public hospital
Nicole Coghlan	<b>Jenny Strong,</b> Jodie Copley (UQ), Tammy Aplin (UQ), <b>Sue Laracy</b>	Patient experiences of wearing compression garments post burn injury
Robyn Scheer	<b>Nicole Andrews, Erin Molloy</b>	The effect of limb position on leg circumference measurements in patients diagnosed with lower limb lymphoedema
Robyn Scheer		The Lymphoedema Arm Measurement Study – Winter vs Summer
Sue Laracy	Cate Fitzgerald (QHealth), Merryl Turpin (UQ), <b>Beverley Lewis</b>	Supporting the transition to practice of new graduate occupational therapist using a clinical education framework
Sue Laracy	<b>Kristin Kirwan,</b> Angela Chang (CAHR), <b>Jenny Strong</b>	Acute surgical business case 7-day service review
Tennille Rowland	<b>Giovanna Tornatore, Beverley Lewis,</b> Sue Laracy, Simon Finnigan (UQCCR)	Occupational therapy stroke audit: measuring compliance of occupational therapy practice with evidence-based guidelines

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Charlotte Brakenridge (UQ), Venerina Johnston (UQ), Esther Smits (UQ), Elise Gane (UQ)	<b>Nicole Andrews</b>	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)	<b>Nicole Andrews</b>	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)	<b>Nicole Andrews</b>	Recovery following a road traffic crash – a Delphi study
Jessica Thackeray (UQ), Sophie Bowen (UQ), Cory Poll (UQ), Pamela Meredith (CQU)	<b>Jenny Strong, Nicole Andrews</b>	“Can Sensory- and Attachment-Informed approaches be used to modify perceptions of pain?”
Kirsten Cook (SCUH)	Simon Finnigan (UQCCR), <b>Sue Laracy</b>	Evaluation of the Primary Contact Occupational Therapy Hands Pathway in the Treatment of Carpal Tunnel Syndrome; State-wide
Louise Burgess (Bournemouth University, UK), Thomas Wainwright (Bournemouth University, UK)	<b>Nicole Andrews</b>	What is the evidence for occupational therapy interventions in general surgical pathways and do they have a role in ERAS pathways? A systematic review
Louise Corben (MCRI), Martin Delatycki (MCRI)	<b>Tennille Rowland, Jenny Strong, John O’Sullivan (Neurology), Sue Laracy</b>	Does functional electrical stimulation improve hand function and daily participation of individuals with Friedreich ataxia?
Lynn DeBar (Kaiser Permanente Centre for Health Research, Portland, USA), Meghan Mayhew, (Kaiser Permanente Centre for Health Research, Portland, USA)	<b>Nicole Andrews</b>	PPACT Administrative Supplement for Research on Sleep Disturbances and Impact on Chronic Pain
Shanithi Kanagarajah (Geriatrics, RBWH)	<b>Sue Laracy, Kana Appadurai (Geriatrics) Kathleen Richter (Nursing), Gisela Brittain</b>	Hospital Wide clinician led audit of patients requiring sub-acute care in a large tertiary hospital

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Nicole Andrews</b>	Rising Star Award	2018 Metro North Research Excellence Awards, 22 May 2018

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Andrea Mc Kittrick, Amber Jones,</b> Andre Bauer (Psychology)	OT/Psychology	Scar Wars” – the effective use of cinemagraphic remedial make up to conceal disfiguring scars	CAHRLI Innovation Challenge 2017-2018	\$10,000	\$10,000 (2018)
<b>Celeste Glasgow</b>	OT	What is the most effective orthosis for improving functional outcomes for individuals with extension deficits of their proximal interphalangeal joint following hand trauma?	Occupational Therapy Australia Research Foundation	\$4,000	\$4,000 (2018)
<b>Erin Molloy, Jenny Strong,</b> Pam Meredith (UQ)	OT	Is sensory sensitivity a factor in non-compliance with compression garments post-burn?	RBWH Foundation	\$24,464	\$24,464 (2018)
<b>Erin Molloy,</b> Paul Gray (Pain Management), <b>Amber Jones</b>	OT/Pain	Immersive virtual reality in immersive wound care	CAHRLI Innovation Challenge 2017-2018	\$2,000	\$2,000 (2018)

## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups / Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Giovanna Tornatore</b>	OT	Increasing Occupational Therapy intervention frequency and intensity of practice and patient engagement (FIPE) in stroke rehabilitation	CAHRLI pre-PhD/Pre-MPhil Scholarship Program	\$13,943	\$13,943 (2017-2018)
<b>Kristin Kirwan</b>	OT, ICU	Determining the pressure relieving properties of selected commercial and custom-made products to reduce the incidence of pressure injury development on the head	The Prince Charles Hospital Foundation	\$6,000	\$ 9,616 (2016-2018)
<b>Nicole Andrews</b> , Marlien Varnfield (CSIRO), David Ireland (CSIRO)	Occupational Therapy, OPSC, and the Professor Tess Cramond Multidisciplinary Pain Centre	The development and implementation of a mobile health platform to support activity pacing implementation in chronic pain	Metro North LINK funding scheme	\$7,137	\$60 000 (2017-2018)
Nicole Andrews, Marlien Varnfield (CSIRO), David Ireland (CSIRO)	Occupational Therapy, OPSC, and the Professor Tess Cramond Multidisciplinary Pain Centre	The development and implementation of a mobile health platform to support activity pacing implementation in chronic pain	RBWH Foundation Postdoctoral Fellowship	\$50,000	\$50,000 (2018)
Ruth Cox (QE2), <b>Sue Laracy</b> , Kathy Green (Ipswich), Leo Ross(QE2)	OT	Evaluation of the Primary Contact Occupational Therapy Hand (PCOTH) Clinic Clinical Outcomes – non Carpal Tunnel Syndrome (CTS) Diagnoses	Professional Innovators and Leaders in Occupational Therapy	\$25,000	\$25,000 (2017-2018)
<b>Sarah O'Reilly</b>	OT	The efficacy of stretch tape in reducing hypertrophic scarring after burn injury	CAHRLI pre-PhD/Pre-MPhil Scholarship Program	\$10,959	\$10,959 (2018)
<b>Tennille Rowland</b> , Louise Corben (Murdoch Children Research Institute MCRI), <b>Jenny Strong</b> , John O'Sullivan (Neurology), Martin Delatycki (MCRI), Sue Laracy	OT / Neurology	Does functional electrical stimulation improve hand function and daily participation of individuals with Friedreich ataxia?	RBWH Foundation	\$16,627	\$16,627 (2017-2018)

## 2018 Research Publications

### Journal Articles:

- Andrews NE, Strong J**, Meredith PJ, & Brandjerporn GS. Approach to activity engagement and differences in activity participation in chronic pain: a five-day observational study, Australian Occupational Therapy Journal. 2018; doi:10.1111/1440-1630.12516
- Bagraith K, **Strong J**, Meredith P & McPhail S. What do clinicians consider when assessing chronic low back pain? A content analysis of multidisciplinary pain centre team assessments of functioning, disability, and health, PAIN, 2018, Publish ahead of Print, doi: 10.1097/j.pain.0000000000001285
- Kornhaber R, Visentin D, Thapa DK, West S, **McKittrick A**, Haik J & Cleary M. Cosmetic camouflage improves quality of life among patients with skin disfigurement: a systematic review. Body Image. 2018;27:98-108. Doi.org/10.1016/j.bodyim.2018.08.004
- Meredith PJ & **Strong J**. Attachment and chronic illness, Current Opinions in Psychology. 2019, <https://doi.org/10.1016/j.copsyc.2018.04.018>
- Power S, Bogossian FE, Sussex R, & **Strong, J**. Examining the nexus of labour pain and culture using an applied social science framework. Examinando el nexo del dolor de parto y la cultura usando un marco de ciencia social aplicada revista Horizonte de Enfermería. 2018;28 (2):53-78
- Richards G, Lukka L, Haslam C, Smith M, Moore B, O'Callaghan J & **Strong J**. Effects of long-term opioid analgesics on cognitive performance and plasma cytokine concentrations in patients with chronic low back pain: a cross-sectional pilot study, Pain Reports. 2018, 3(4):e669 July DOI:10.1097/PR9.0000000000000669
- Sinclair C, Meredith & **Strong J**. Case formulation in persistent pain in children and adolescents: The application of the non-linear dynamic systems perspective. British Journal of Occupational Therapy, 2018; DOI: 10.1177/0308022618802722

### Journal Articles: (cont)

8. Sinclair C, Meredith & **Strong J**. Sensory modulation: an important piece of the disability puzzle for adolescents with persistent pain, *Clinical Journal of Pain*, 2018 DOI:10.1097/AJP.0000000000000663
9. Tsai S, Crawford E & **Strong J**. Seeking virtual social support through blogging: a content analysis of published blog posts written by people with chronic pain *Digital Health*, 2018 <https://doi.org/10.1177/2055207618772669>.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Andrews N**. Overactivity in chronic pain: myth or reality? 17<sup>th</sup> World Congress on Pain, September 2018
2. **Andrews N**. The development and implementation of a mobile health platform to support activity pacing in chronic pain. Australian Pain Society 38<sup>th</sup> and New Zealand Pain Society Conjoint Annual Scientific Meeting, April 2018
3. **McKittrick A**. Critical Care Polyneuropathy in the Burns Population: an Overview, Mental Health and Critical Care Health (MaCCH) Symposium – Sydney October 2018.

### Oral Presentations:

1. **Donovan M**, Tyack Z, Paratz J, Muller M. Interim pressure garment therapy: investigating low level pressure therapy for burns donor site support and scar reduction. Australian New Zealand Burns Association, Brisbane October 2018
2. **Healing K, Lowrie D**. Exploring the Impact of Drought on the Occupational Experiences of Livestock Farmers: a Narrative Inquiry. SARRAH National Rural and Remote Allied Health Conference, September 2018
3. **McKittrick A**, Gustafsson L, **Strong J**. A systematic review to investigate outcome tools currently used for patients who have sustained hand burn injuries and to map the psychometric properties of the outcome measures identified from the literature across the ICF, Australian New Zealand Burns Association, Brisbane October 2018
4. **McKittrick A, Jones A, Laracy S, Strong J**. The Effective use of Cinemagraphic Remedial Make Up by Occupational Therapy to Conceal Disfiguring Scars, ISBI New Delhi, December 2018
5. **Rowland TJ**, O'Sullivan JD, Delatycki MB, **Strong J**, Corbin LA. Electrical stimulation to improve upper limb function in people with Friedreich Ataxia. 13<sup>th</sup> Annual Friedreich Ataxia Scientific Symposium, Melbourne, 25 October 2018
6. Tyack Z, Thynne A, **McKittrick A**, Darton A, Clayton N, Kwiet J, Edmondson R, Perrett T. The Australian New Zealand Burn Association rehabilitation course: an overview of the development process and pilot course, Australian New Zealand Burns Association, Brisbane October 2018.

### Poster Presentations:

1. **Molloy E**, Gray P, **Jones A, Strong J, Laracy S**. Immersive Virtual Reality in Occupational Therapy practice as a non-opioid analgesic during burn wound-care procedures, Australian New Zealand Burns Association, Brisbane October 2018.



## Physiotherapy

The Physiotherapy research program continued to be driven by the diverse range of services delivered to both inpatients and outpatients of the RBWH who often have physical impairments underlying their movement disorders. The Department encourages wide participation in research and quality improvement with the aim of enhancing clinical outcomes for clients though maximising the effectiveness and efficiency of physiotherapy services.

### Clinical benefits of research:

The Physiotherapy department research program has a strong clinical focus, ensuring the effective translation of research into clinical practice for immediate benefit to clients.

### Research highlights for 2018 include:

- A focus on incorporating technology to increase access to services and improve outcomes to a wide variety of clients with musculoskeletal conditions, burn injury and balance and mobility disorders using telehealth, mobile applications and 3-Dimensional motion analysis
- Continued research into advanced and extended scope of practice roles in primary contact musculoskeletal and vestibular physiotherapy clinics and medicines prescribing by emergency physiotherapy practitioners
- A wide variety of clinical research studies such as cutting edge critical care and burn injury projects.

### Research Collaborations:

- The Physiotherapy Department continues to form strong research collaborations including continuation of existing Conjoint Research Fellow positions with Griffith University (Assoc Prof Jenny Paratz) and University of Queensland (Dr Shaun O'Leary). Furthermore, relationships and research collaborations have been newly formed with RECOVER Injury Research Centre and Queensland University of Technology.

### Achievements:

2018 was another successful year for the Department of Physiotherapy with 23 peer reviewed publications, 13 national and international conference presentations and close to \$200,000 in competitive grant funding. Five staff were currently completing research higher degrees with one staff member successfully attaining a PhD in 2018. The Orthopaedic Physiotherapy Screening Clinic research team led by Maree Raymer and Dr Shaun O'Leary received the Health Service Implementation Award at the Metro North 2018 Excellence in Research Awards, while the Spinal Physiotherapy Screening Clinic and Multidisciplinary Service was awarded the Allied Health Service Line Award at the 2018 QuARRIE awards.

2018 also saw the inaugural round of grants distributed through the Physiotherapy Research Fund with four grants totalling \$50,000 awarded in a competitive peer reviewed research funding program. This funding program coincided with the implementation of a Research Coordinator role within the Physiotherapy Department jointly held by Dr Peter Window and Michelle Cottrell with the aim of involving a wider cross section of staff and clinical specialties in research and quality improvement.





## Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Alan Wan	PhD UQ (2016-2019)	Movement Evoked Pain Sensitivity in Chronic Spinal Pain	<b>Shaun O'Leary</b> , Michael Sullivan, Michelle Sterling
Deokhoon Jun	PhD UQ (2013-2018) Conferred January 2018	A longitudinal study of risk factors for neck pain in office workers	<b>Shaun O'Leary</b> , Venerina Johnston, Steven McPhail
<b>Ian Parker</b>	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 (2016-2018) Conferred Dec 2018	Haemodynamic measurement in mobility post cardiac surgery	<b>Jennifer Paratz</b> , James Walsh
Judith Bellapart	PhD UQ (2013-2017)	Cerebral microcirculation in head injury: an ovine model	John Fraser, <b>Jennifer Paratz</b> , Rob Boots
<b>Julie Adsett</b>	PhD, Griffith (2013-2019)	Safety and efficacy of aquatic exercise in stable heart failure	Norm Morris, Allison Mudge, <b>Jennifer Paratz</b>
Khalid Jaber	MPhil UQ (2015-2017) Conferred July 2018	Pain sensory and psychological predictors of response to total knee replacement	<b>Shaun O'Leary</b> , Michael McAuliffe, Michelle Sterling
Lauren O'Connor	PhD, Griffith (2015-2018)	The effect of the Passy Muir valve on postural retraining	<b>Jennifer Paratz</b> , Norm Morris
<b>Mark Cruickshank</b>	PhD QUT (2017-2023)	An Evaluation of Physiotherapy Prescribing in the Emergency Department	Lisa Nissen, Greg Kyle
Maureen Peasy	MPhil, Griffith (2015-2019)	Physical activity in COPD	<b>Jennifer Paratz</b> , Norm Morris
<b>Michelle Cottrell</b>	PhD, UQ 2015-2019)	Evaluating the impact of a telerehabilitation model of care in an orthopaedic physiotherapy-led screening clinic & multidisciplinary service	Trevor Russell, <b>Shaun O'Leary</b> , Anne J Hill, Tracy Comans
Michelle McGrath	MPhil, QUT (2014-2018) Conferred July 2018	"The use of 3-dimensional motion analysis to determine whether quantitative criteria can be found for the Prechtl's Qualitative Assessment Method of General Movement (GMsA) classifications of <i>writhing</i> and <i>fidgiting</i> in the normative infant population"	Ian Turner, <b>Robyn Grote</b> , Joe Young, Mark Pearcy
Olivia Galea	PhD UQ (2015-2018)	The role of cervical musculoskeletal impairment in concussion	<b>Shaun O'Leary</b> , Julia Trelevan
Orlando Flores	PhD UQ (2014-2018)	Metabolism in Burns	<b>Jennifer Paratz</b> , Kellie Stockton, <b>Zephanie Tyack</b>
<b>Peter Window</b>	PhD UQ (2013-2018) Conferred March 2018	2D motion analysis measurements in low back pain	Shaun O'Leary, Kylie Tucker, Paul Hodges, Trevor Russell
Rebecca Hardy	MPhil (2017-2019)	Physical activity post heart-lung transplantation	Norm Morris, <b>Jennifer Paratz</b>
Rebecca Kelly	MPhil, Griffith (2015-2019)	Factors predicting daily physical activity post heart transplantation	<b>Jennifer Paratz</b> , Norm Morris

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Jennifer Paratz	Conjoint Principal Research Fellow	Multiple projects in the area of ICU and Burns	Griffith University (2014-2019)
Michelle Cottrell	RBWH Physiotherapy Research Coordinator		N/A
Peter Window	RBWH Physiotherapy Research Coordinator		N/A
Robyn Grote	Principal Research Fellow Qld Motion Analysis Centre, RBWH	Projects in 3-dimensional motion analysis in newborns, and patients with severe burns, investigation of the use of 3D motion capture and virtual reality as a treatment for patients with trauma.	University of Queensland (2010 – current)
	Adjunct Professor, Faculty of Health, QUT	Cost-effective analysis of the use of 3-dimensional gait analysis in the treatment of severe burns.	Queensland University of Technology (2016 – current)
	Honorary Senior Fellow, UQ Centre for Clinical Research	The development of a hypertonicity register for patients in S-E Qld	
Shaun O'Leary	Conjoint Fellow	Multiple projects in the area of Musculoskeletal Physiotherapy and supervision of Honours, Masters and PHD students	University of Queensland (2016 – 2018)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Anita Plaza	<b>Jennifer Paratz, Michelle Cottrell</b>	Telehealth for the delivery of Physiotherapy exercise programs following burn injury
Emilie Amiss	<b>Merinda Rhodes, Michelle Cottrell</b>	Evaluation of a stepping strategy mobile application in cardiopulmonary rehabilitation: a prospective cohort study
Hildegard Reul Hirche	<b>Jennifer Paratz, Sonia Sam</b>	Risk factors in lymphoedema
Ian Parker	Gretta Palmer (PAH), Leia Barnes (Logan), Tamsin Smith (GCUH).	An evaluation of the Allied Health Specialist Clinics – Vestibular Rehabilitation Services
Jennifer Paratz	Jason Roberts (UQ, Pharmacy), Michael Muller (Surgery), Kellie Stockton (LCCH), Rob Boots (Thoracic Medicine), Orlando Flores (UQ Medicine)	Beta blocker therapy in burns: an RCT
Jennifer Paratz	Jonny Younger (Cardiology), Sanjoy Paul (QIMR), Kellie Stockton (LCCH)	Cardiovascular disease in burn survivors
Jennifer Paratz	Kellie Stockton (LCCH), Rob Boots (Thoracic Medicine)	Exercise testing in the chronic critically ill
Jennifer Paratz	Michael Muller (Surgery), <b>Anita Plaza</b> , Kellie Stockton (LCCH), Jonny Younger (Cardiology), Orlando Flores (UQ, Medicine)	IMPACT – improving physical and psychological outcomes in burns: an RCT
Jennifer Paratz	Rob Boots (Thoracic Medicine), Justin Kenardy (UQ CONROD), Fiona Coyer (RBWH & QUT Nursing), <b>Peter Thomas</b> , Tracy Comans (CAHR), Jack Iwashyna (University of Michigan), Ignacio Martin-Loaches (University of Dublin), Carol Hodgson (Monash University), Bernadette Bissett (Canberra University)	Improving the outcome of sepsis: RCT
Jennifer Paratz	Rob Boots (Thoracic Medicine), Michael Muller (Surgery), Rajeev Hegde (ICU)	Inhalation and right heart failure in burns
Jennifer Paratz	Geetha Kayambu (National University Hospital, Singapore), Rob Boots (Thoracic Medicine)	i-perform – early rehabilitation in sepsis
Jennifer Paratz	<b>Peter Thomas</b> , Alice Jones, George Ntoumenopolous (SUT), Antonio Torres (University of Barcelona), Gianluigi (University of Barcelona)	Location and identification of secretion retention in ICU patients
Jennifer Paratz	Michael Muller (Surgery), Rob Boots (Thoracic Medicine)	Microcirculation as an endpoint to burn resuscitation
Jennifer Paratz	Jonny Younger (Cardiology), Sanjoy Paul (QIMR), Kellie Stockton (LCCH)	Mortality in burns survivors
Jennifer Paratz	Tim O'Donovan (RBWH)	Neurodevelopmental outcomes in infants following HIE
Jennifer Paratz	<b>Peter Thomas</b> , Kellie Stockton (LCCH)	Saline installation in respiratory therapy in ICU, a crossover study
Joanna Hargreaves	<b>Peter Thomas</b> , Garry Kirwan(QEII)	Development of a clinical educator survey tool for determining clinical placement quality – validity and reliability testing of the CPQS-E tool
Leonie Naumann	<b>Jennifer Paratz, Michelle Cottrell, Hildegard Reul Hirche</b> , Tracy Comans (UQ), Anna Finnane (UQ), Trevor Russell (UQ)	Pilot study of education and monitoring for early lymphoedema detection being delivered by telehealth to patients after breast cancer surgery
Mahender Samanti	<b>Matthew Grundy, Catherine Chong, Michelle Cottrell</b>	Evaluation of hand splinting service to the management of hand injuries presenting to the RBWH Emergency and Trauma Centre
Mahender Samtani	<b>Jennifer Paratz, Shaun O'Leary</b>	Management of Back Pain in DEM: an RCT
Maree Raymer	Tracy Comans (UQ), <b>Shaun O'Leary, Louise Mitchell, Peter Window</b>	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 and MDS) and Orthopaedic Screening in Primary Care (OSIP)
Maree Raymer	<b>Patrick Swete Kelly, Tina Souvlis</b> , Angela Chang (CAHR)	Development and Implementation of a workforce development pathway to support advanced musculoskeletal physiotherapy (AMP) roles (Survey phase)

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Maree Raymer	<b>Patrick Swete Kelly, Tina Souvlis, Louise Wellington,</b> Angela Chang (CAHR)	Development and Implementation of a workforce development pathway to support advanced musculoskeletal physiotherapy (AMP) roles (Consultation Phase)
Maree Raymer	<b>Nicole Moretto, Angela Chang, Shaun O'Leary,</b> Lachlan Standfield (Griffith University), Tracy Comans (UQ)	Implementing economic modelling to improve service planning in Specialist Orthopaedic and Neurosurgical Outpatient Services within Cairns and Hinterland, Gold Coast and West Moreton Hospital and Health Services (Background data collection)
Maree Raymer	Angela Chang (CAHR), <b>Shaun O'Leary, Nicole Moretto,</b> Tracy Comans (UQ), Sonya Osborne (AusHSI), Hannah Carter (AusHSI), Dean Blond (Gold Coast), Tania Cavanagh (Cairns and Hinterland), David Smith (West Moreton)	Implementing simulation modelling to improve service planning in Specialist Orthopaedic and Neurosurgical Outpatient services in the Cairns and Hinterland, Gold Coast and West Moreton Hospital and Health Services (Implementation evaluation)
Mark Cruickshank	<b>Maree Raymer,</b> Deborah Lenaghan (GCUH), Darryn Marks (GCUH), <b>Sonia Sam,</b> 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)
Michelle Cottrell	<b>Shaun O'Leary, Maree Raymer,</b> Anne J Hill (UQ), Trevor Russell (UQ)	Evaluation of clinician's knowledge, acceptance and satisfaction of an innovative telehealth model of care for the multidisciplinary management of patients with chronic musculoskeletal conditions
Michelle Cottrell	<b>Perry Judd, Mark Cruickshank, Maree Raymer, Shaun O'Leary,</b> Anne Hill (UQ), Tracy Comans (UQ), Trevor Russell (UQ)	Spinal Physiotherapy Screening Clinic (SPSC) Telehealth Clinic: an evaluation of the first 2 years of service
Michelle Cottrell	<b>Shaun O'Leary, Maree Raymer,</b> Anne J Hill (UQ), Tracy Comans (UQ), <b>Mark Cruickshank, Perry Judd, Patrick Swete Kelly,</b> Trevor Russell (UQ)	Telerehabilitation in the multidisciplinary management of patients with chronic musculoskeletal conditions: a prospective cohort study
Michelle McGrath	<b>James Wood, Estelle Corr</b>	Can Three-Dimensional Motion Analysis and Fuzzy entropy detect movement differences in General Movement Assessment Categories in the normative infant population?
Michelle McGrath	<b>James Wood, Estelle Corr</b>	The use of 3-dimensional gait analysis and its efficacy on the adult population – a Systematic review
Perry Judd	Paula Easton (Mackay Base Hospital), <b>Michelle Cottrell,</b> Angela Chang (Centre for Allied Health Research)	Delivery of Orthopaedic Physiotherapy Screening Clinic (OPSC) Assessments from RBWH to Mackay Hospital via Telehealth
Peter Thomas		Physiotherapy management of chest trauma
Peter Thomas	<b>Jennifer Paratz</b>	Ventilator Hyperinflation in ventilated patients
Raj Singh	Suzanne Kuys (ACU), <b>Jennifer Paratz</b>	Circuit training in GEMS patients an RCT
Robyn Grote	<b>Michelle McGrath, Heidi White,</b> Bharat Phani Vaikuntam (UQ)	Cost-effective analysis of the use of 3-dimensional gait analysis in the treatment of severe burns  The development of a hypertonicity register for patients in S-E Qld
Sally Yin	<b>Jennifer Paratz</b>	Risk Factors for Readmission to the GEMS ward
Shaun O'Leary	Stephen McPhail (PAH), Pim Kuipers (PAH), Megan Dalton	Do clinicians have the necessary skills to facilitate optimal utilisation of health services by patients with chronic musculoskeletal disorders?
Shaun O'Leary	Stephen McPhail (PAH), Tracy Comans (CAHR), <b>Maree Raymer,</b> Asad Khan (UQ)	Optimising patient selection and resource utilization for the non-surgical management of common orthopaedic conditions
Shaun O'Leary	Gwendolyn Jull (UQ), Stephen McPhail (PAH), <b>Glen Volker,</b> Peter Tonks (PAH)	Physical Therapy for Neck Pain – are we moving in the right direction?

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Alan Wan (UQ)	<b>Shaun O'Leary</b>	Movement evoked pain sensitivity in chronic spinal pain
Boden I (Launceston General Hospital)	<b>Nanette Paxman, Peter Thomas</b> , multiple national and international co-investigators (CHESTY Collaborative)	CHESTY (CHEST infection prevalence after surgery): international multicentre observational trial
De Looze J (Internal Medicine Services – IMS)	Mary Fenn, Charles Denaro (IMS), Keshwar Baboolal (IMS), Peter Buttrum (Allied Health), <b>Peter Thomas</b> , Robyn Fox (Centre for Clinical Nursing), Thea-Grace Collier (CMORE), Alison Mudge (IMS), Jeffrey Lipman (ICU), John Gowardman (ICU)	Patients of concern at the RBWH – a prospective cohort study to define patient outcomes and risk of clinical deterioration
Deokhoon Jun (UQ)	<b>Shaun O'Leary</b>	A longitudinal study of risk factors for neck pain in office workers
Elise Gane (UQ)	<b>Shaun O'Leary</b>	Identifying risk factors for poor functional recovery of the neck and shoulder after neck dissection surgery in patients with head and neck cancer
Fiona Coyer (Critical Care)	Jessica Ingleman (QUT), Anthony Holley (ICU), <b>Peter Thomas</b> , Greg McNamara (ICU), Chris Edwards (QUT)	Extreme II – critically ill patient tissue reperfusion in two body positions and varied timed periods of load. RBWH
Helen Edwards (Caboolture Hospital)	Janelle Greitschus (QEII), Jenny Nucifora (GCUH), <b>Sonia Sam</b> , Susanne Keys (ACU)	Effectiveness of a Gynaecology Physiotherapy Screening Clinic (GPSC) in improving health outcomes and access to care for women on gynaecology outpatient waiting lists
Jane Nikles (RECOVER, UQ)	Michele Sterling (UQ), Robyn Tate (Uni of Sydney), Michael Perdices (RNSH), Geoff Mitchell (UQ), Chris Freeman (UQ), James McGree (QUT), Gerben Keijzers (Griffith & Bond University), Meng-Wong Taing (UQ), Tim Ballard (UQ), <b>Mark Cruickshank, Sally Byrne</b>	Personalised treatments for acute Whiplash Injuries: a pilot study
Karyn Heineger (CNC, RBWH TMS)	<b>Nanette Paxman</b> , Kathy Hocking, Prof Fiona Coyer	Identifying <b>CON</b> tributing factorS to tracheostomy stoma breakdown; a retrospective <b>TRA</b> cheostomy pressure Injury audit in an adult Intensive care unit
Kerina Denny (Gold Coast University Hospital)	<b>Jennifer Paratz</b> , David Paterson (Infectious Diseases), Jeff Lipman (ICU), Carl Pretorious (pathology), Joel Dulhunty (ICU)	Biomarker for Sepsis to Thwart Antibiotic Overuse in the Intensive Care Unit
Khalid Jaber (UQ)	<b>Shaun O'Leary</b>	Pain sensory and psychological predictors of response to total knee replacement
Leia Barnes, Renee de Maria (Logan Hospital)	<b>Ian Parker</b> , Tamsin Smith (GCUH)	Balance confidence compared across vestibular conditions
Matthew Linnane (TPCH)	Amanda Corley (TPCH), Amy Spooner (Centre for Clinical Nursing), <b>Peter Thomas</b> , Lawrence Caruana (TPCH), Oystein Tronstadt (TPCH), James Walsh (TPCH), John Fraser (TPCH)	A comparison of the effects of manual hyperinflation and ventilator hyperinflation on restoring end-expiratory lung volume after airway suctioning
Michael Muller (Burns)	<b>Jennifer Paratz</b> , David Reutens (UQ), Hana Burianova (UQ), Joel Dulhunty (ICU)	Burn prevention, an advertising campaign utilizing functional MRI
Michelle Stute (MNHHS)	Peter Buttrum (Allied Health), Merrillyn Banks (Nutrition and Dietetics), <b>Maree Raymer</b> , Tracey Comans (UQ), Sonia Sam (Allied Health), Nicole Moretto (Allied Health), Marita Bhagwat (Allied Health)	Allied Health Specialist Clinics Project
Olivia Galea (UQ)	<b>Shaun O'Leary</b>	The role of cervical musculoskeletal impairment in concussion
Rohan Grimley (SCUH)	<b>Brita Hughes</b>	Building efficient and equitable pathways to and through rehab in stroke (BEEPRS)
Sabrina Hernandez (The Alfred Hospital)	<b>Peter Thomas</b> , Hodgson C (The Alfred Hospital)	Mobilisation of patients in the acute setting following aneurysmal subarachnoid haemorrhage – a survey of current practice
Sandy Brauer (UQ, SHRS)	<b>Jennifer Paratz</b>	IMproving Physical Activity with Treadmill training following stroke: the stroke-IMPACT trial

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Sue Berney (Austin Hospital),	<b>Jennifer Paratz</b> , Linda Denehy (University of Melbourne), Dale Needham (John Hopkins University, USA), Ramona Hopkins (Brigham Young University)	Estim cycle early rehabilitation in ICU: RCT
Venerina Johnston (UQ)	<b>Shaun O'Leary</b>	A workplace-based exercise intervention to prevent and reduce the economic and personal burden of non-specific neck pain in the office personnel
Xiaoqi Chen (UQ)	<b>Shaun O'Leary</b>	Prevention and reduction of neck pain in office workers and the effect of a workplace-based intervention
Yaheli Bet-Or (UQ)	<b>Shaun O'Leary</b>	Is there a difference in scapular kinematics between healthy controls and people with chronic neck pain?

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Maree Raymer, Shaun O'Leary</b> , Tracy Comans (UQ), Angela Chang (CAHR), <b>Nicole Moretto</b> , Lachlan Standfield (Griffith)	Health Services and Implementation Research Award	MNHHS 2018 Excellence in Research Awards
<b>Mark Cruickshank</b> , Joel Dunstan, Tania Cavanagh, <b>Sonia Sam</b> .	Best Poster Award	Cairns Hinterland HHS Research and Quality Symposium 2018
<b>Michelle Cottrell, Perry Judd and the SPSC &amp; MDS Telehealth Clinic</b>	Allied Health Service Line Award	RBWH 2018 QuARRIES Awards

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups / Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Emilie Amiss</b>	Physiotherapy Dept, RBWH	Evaluation of a stepping strategy mobile application in cardiopulmonary rehabilitation: a prospective cohort study	QPACT (Queensland Policy and Advisory Committee for new Technology)	\$20,367	\$40,734 (2018-2019)
<b>Julie Adsett</b>			Completion Assistance Post-Graduate Research Scholarship (CAPS)	\$5,250	\$5,250 (2018)
<b>Leonie Naumann</b> , Carrie-Anne Lewis (Nutrition and Dietetics)	Physiotherapy, Nutrition and Dietetics	Measuring body composition to determine prevalence of malnutrition and lymphoedema in allied health research studies	Private Practice Trust Fund Equipment Grants	\$21,053	\$21,053 (2018)
<b>Leonie Naumann, Jennifer Paratz, Hildegard Reul-Hirche, Michelle Cottrell</b> , Clare Burns, Anna Finnane, Tracy Comans, Trevor Russell	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	\$14,965	\$29,929 (2018-2019)
<b>Mark Cruickshank, Maree Raymer</b> , Deborah Lenaghan, Darryn Marks, <b>Sonia Sam</b> , Tania Cavanagh, Lisa Nissen, Mark Nelson, Dean Blond, Rod Ellem, Cherie Hearn, Nicole Bellet	RBWH Physiotherapy	Physiotherapy Defined Scope of Practice (Prescribing) Trial	Allied Health Professionals Office of Queensland (AHPOQ)	\$40,542	\$81,084 (2017-2018)
<b>Michelle Cottrell</b>	Physiotherapy	RBWH Foundation Scholarship (topup)	RBWH Foundation	\$8,000	\$8,000 (2018)

## 2018 Research Grants – Awarded (cont)

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Michelle Cottrell, Shaun O'Leary, Maree Raymer, Anne J Hill, Tracy Comans, Mark Cruickshank, Perry Judd, Patrick Swete Kelly, Trevor Russell</b>	RBWH Physiotherapy and University of Queensland	Telerehabilitation in the multidisciplinary management of patients with chronic musculoskeletal conditions: a prospective cohort study	Health Practitioner Research Scheme	\$8,714	\$17,427 (2017-2018)
<b>Nanette Paxman</b>	<b>Katie Acland</b> QCRPN Tracheostomy Project Team members (state-wide)	State-wide Tracheostomy Survey	DOPSQ Funding Round 2018-19	\$500	\$5,000 (2018-2019)
<b>Nanette Paxman, Peter Thomas</b>	Physiotherapy Dept, RBWH	CHESTY – Chest infection prevalence after surgery	RBWH Physiotherapy Dept. Funding Round 2018	\$5,000	\$5,000 (2018-2019)
<b>Peter Thomas,</b>	Physiotherapy Dept, RBWH	Physiotherapy Management of Chest Trauma	RBWH Physiotherapy Dept. Funding Round 2018	\$10,500	\$15,730 (2018-2019)
<b>Raj Singh</b>	<b>Suzanne Kuys (ACU), Jennifer Paratz</b>	Circuit training in GEMS patients: a RCT	RBWH Foundation Research Grant 2018	\$35,000	\$39,387 (2018)
<b>Sally Yin, Jennifer Paratz</b>	Physiotherapy Dept, RBWH	Analysing risk factors for readmission to the Geriatric Evaluation and Management (GEM) ward	RBWH Physiotherapy Dept. Funding Round 2018	\$2,124	\$4,284 (2018-2019)



## 2018 Research Publications

### Journal Articles:

1. Bellapart J, Cuthbertson K, Dunster K, Diab S, Platts DG, Raffel OC, Gabrielian L, Barnett A, **Paratz J**, Boots R, Fraser JF. Cerebral Microcirculation and Histological Mapping After Severe Head Injury: A Contusion and Acceleration Experimental Model. *Front Neurol*. 2018 May 7;9:277. doi: 10.3389/fneur.2018.00277. eCollection 2018
2. Bellapart J, Cuthbertson K, Dunster K, Diab S, Platts DG, Raffel C, Gabrielian L, Barnett A, **Paratz J**, Boots R, Fraser JF. The effects of normovolemic anemia and blood transfusion on cerebral microcirculation after severe head injury. *Intensive Care Med Exp*. 2018 Nov 8;6(1):46
3. Boyd J, **Paratz J**, Tronstad O, Caruana L, McCormack P, Walsh J. When is it safe to exercise mechanically ventilated patients in the intensive care unit? An evaluation of consensus recommendations in a cardiothoracic setting. *Heart Lung*. 2018;47(2):81-86
4. Brauer SG, Kuys SS, **Paratz JD**, Ada L. Improving physical activity after stroke via treadmill training and self management (IMPACT): A protocol for a randomised controlled trial. *BMC Neurol*. 2018;18(1):13. doi: 10.1186/s12883-018-1015-6
5. **Cottrell M**, Hill AJ, **O'Leary S**, **Raymer M**, Russell T. Clinicians' perspectives of a novel home-based multidisciplinary telehealth service for patients with chronic spinal pain. *International Journal of Telerehabilitation*. 2018;10(2) [Epub ahead of print]; doi: 10.5195/ijt.2018.6249
6. **Cottrell M**, **O'Leary SP**, **Swete Kelly P**, Elwell B, **Hess S**, **Litchfield M**, McLoughlin I, **Tweedy R**, **Raymer ME**, Hill AJ, Russell TG. Agreement between telehealth and in-person assessment of patients with chronic musculoskeletal conditions presenting to an advanced-practice physiotherapy screening clinic. *Musculoskeletal Science and Practice*. 2018 ;38:99-105
7. Flores O, Tyack Z, Stockton K, Ware R, **Paratz JD**. Exercise training for improving outcomes post-burns: a systematic review and meta-analysis. *Clin Rehabil*. 2018 Jan 1:269215517751586. doi: 10.1177/0269215517751586. [Epub ahead of print]
8. Galea O, **Cottrell MA**, Treleaven JM, **O'Leary SP**. Sensorimotor and Physiological Indicators of Impairment in Mild Traumatic Brain Injury: A Meta-Analysis. *Neurorehabilitation and Neural Repair*. 32(2):115-128. doi: 10.1177/1545969ga318760728
9. Gane EM, McPhail SM, Hatton AL, Panizza BJ, **O'Leary SP**. The relationship between physical impairments, quality of life and disability of the neck and upper limb in patients following neck dissection. *Journal of Cancer Survivorship*, 2018 (published online). DOI: 10.1007/s11764-018-0697-5
10. Gane EM, Steele ML, Janda M, Ward LC, **Reul-Hirche H**, Carter J, Quinn M, Obermair A, Hayes SC. The Prevalence, Incidence, and Quality-of-Life Impact of Lymphedema After Treatment for Vulvar or Vaginal Cancer. *Rehabilitation Oncology*. 2018;36(1):48-55. DOI: 10.1097/01.REO.0000000000000102
11. Hernandez S, **Thomas P**, Udy A, Hodgson C (2018): Early mobilisation of patients in the acute hospital setting following aneurysmal subarachnoid haemorrhage – a survey of current physiotherapy practice. *The New Zealand Journal of Physiotherapy* 46(3): 113-132. doi:10.15619/NZJP/46.3.04
12. Jaber K, **O'Leary S**, Pedler A, Sterling M, McAuliffe M. Evidence of generalized mechanical hyperalgesia in patients with advanced knee osteoarthritis undergoing total knee arthroplasty. *The Knee*. 25(3):459-465. DOI: 10.1016/j.knee
13. Jun D, Johnston V, Kim JM, **O'Leary S**. Cross-cultural adaptation and validation of the Depression, Anxiety and Stress Scale – 21 (DASS-21) in the Korean working population. *Work* 2018;59(1):93-102. doi: 10.3233/WOR-172661
14. Kelly RL, Walsh JR, **Paratz JD**, Yerkovich ST, McKenzie SC, Morris NR. Quadriceps Muscle Strength and Body Mass Index are Associated with Estimates of Physical Activity Postheart Transplantation. *Transplantation*. 2018 Oct 17. doi: 10.1097/TP.0000000000002488. [Epub ahead of print]
15. Kuys SS, Ada L, **Paratz J**, Brauer SG. Steps, duration and intensity of usual walking practice during subacute rehabilitation after stroke: An observational study. *Braz J Phys Ther*. 2018 Jun 15. pii: S1413-3555(17)30710-4
16. Linnane M, Tronstad O, Spooner A, Corley A, Barnett A, Walsh J, Caruana L, **Thomas P**. A comparison of the effects of manual hyperinflation and ventilator hyperinflation on restoring end-expiratory lung volume after endotracheal suctioning: a pilot physiologic study. *Journal of Critical Care*. doi: 10.1016/j.jcrc.2018.10.015
17. Mudge A, Denaro C, Scott A, Meyers D, **Adsett J**, Mullins R, Suna J, Atherton J, Marwick T. Addition of supervised exercise training to a post-hospital disease management program for patients recently hospitalized with acute heart failure: the EJECTION-HF randomized phase 4 trial. *JACC HF*. 2018; 6(2): 143-52
18. **O' Leary S**, Cush AM, Yang WNW, Taanevig C, Jiahui ET, McPhail SM. Is perceived force an accurate method of regulating exercise load for the neck? *Physiotherapy Theory and Practice*. 2018 Mar 30:1-6. doi: 10.1080/09593985.2018.1455250
19. **O'Leary S**, **Cottrell M**, **Raymer M**, Smith D, Khan A. General health factors may be a barrier to effective non-surgical multidisciplinary rehabilitation of common orthopaedic conditions in tertiary care settings. *BMC Musculoskeletal Conditions*. 2018. 19:348. DOI: 10.1186/s12891-018-2265-6
20. **Parker I**, Hartel G, **Paratz J**, Low Choy N, Rahmann A. A Systematic Review of the Reported Proportions of Diagnoses for Dizziness and Vertigo. *Otology and Neurology*. 2018; Epub of print. DOI: 10.1097/MAO.0000000000002044]
21. 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. Normative Interlimb Impedance Ratios: Implications for early diagnosis of uni- and bilateral, upper- and lower-limb lymphoedema. *Lymphatic Research and Biology*; 2018 [ Epub ahead of print]. DOI: 10.1089/lrb.2017.0082
22. Wan AK, Rainville P, **O'Leary S**, Elphinston R, Sterling M, Lariviere C, Sullivan MJL. Validation of an Index of Sensitivity to Movement Evoked Pain in Patients with Whiplash Injuries. *PAIN Reports*. 2018;3(4):e661. DOI: 10.1097/PR9. 0000000000000661
23. Xiaoqi C, **O'Leary S**, Johnston V. Modifiable individual and work-related factors associated with neck pain in 740 office workers: Results of a cross-sectional study. *Brazilian Journal of Physical Therapy*. [Epub ahead of print 2018]. doi: 10.1016/j.bjpt.2018.03.003.

### Book Publication:

1. Jull G, Falla D, Treleavan J, **O'Leary S**. Management of Neck Pain Disorders: A research informed approach. London: Elsevier, 2018.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Naumann L**, Sheer R. Lymphoedema Workshop. Cancer Nurse Society of Australia Breast Care Symposium. Brisbane, Australia; 21<sup>st</sup> June 2018
2. **Naumann L**. Australasian Lymphology Association Update. British Lymphology Society conference; Staffordshire, England; 1-2 October, 2018
1. **Naumann L**. Challenges and achievements in physiotherapy in oncology. International Conference on Physical Therapy in Oncology. Amsterdam, Netherlands; 5<sup>th</sup> June 2018
2. **O'Leary S**. Is there a best exercise for neck pain? Invited speaker – Danish Headache Centre, Copenhagen, Denmark, 7<sup>th</sup> February, 2018
3. **Thomas P**. My Top 5 ICU Safety Concerns – Physiotherapist. ANZICS Safety and Quality Conference, Melbourne 2018.

### Oral Presentations:

1. **McGrath M**, Turner I, Xie H, Pearcy M, **Grote R**, Colditz P Can Three-Dimensional Motion Analysis and Fuzzy entropy detect movement differences in General Movement Assessment Categories in the normative infant population? 11<sup>th</sup> Australasian Biomechanics Conference 2018, Auckland, Dec 3 2018
2. **Parker I**. A systematic review of the reported proportions of diagnoses for dizziness and Vertigo. Neuro-Ontological Society Australia. Wellington, New Zealand: 22<sup>nd</sup> November, 2018
3. **Parker I**. Vestibular Rehabilitation as an alternative pathway to traditional medical models of care. Neuro-Ontological Society Australia. Wellington, New Zealand: 22<sup>nd</sup> November, 2018.

### Poster Presentations:

1. **Adsett J**, Hickey A, Foreman R. Heart Education Assessment Rehabilitation Toolkit (HEART) Online: 5 years on. ACRA. Brisbane 2018
2. **Adsett J**, Hickey A, Foreman R. Heart Education Assessment Rehabilitation Toolkit (HEART) Online: 5 years on. CSANZ. Brisbane 2018
3. **McGrath M**, Turner I, Xie H, Pearcy M, **Grote R**, Colditz P Can Three-Dimensional Motion Analysis and Fuzzy entropy detect movement differences in General Movement Assessment Categories in the normative infant population? World Congress of Biomechanics Dublin July 9 2018
4. **Sharpe C**, **Plaza A**. A review of weekend physiotherapy services for patients with burn injuries. Australian and New Zealand Burns Association (ANZBA) Conference. Brisbane:16-19<sup>th</sup> October, 2018
5. **Thomas P**, Clement P, Dhanani J, Francis M, Gowardman J, Karamujic N, Oddy D, Townsend S, Vann A. Where are the notes? Factors affecting the integration of an intensive care clinical information system's records into a hospital's medical record. ANZICS Safety and Quality Conference, Melbourne 2018.

## Other Communications and Outputs:

**Cottrell M**: Using telehealth to improve access to AMP services. InMotion magazine, Australian Physiotherapy, Association; April 2018

**Cruickshank M**: Moving Towards Physiotherapy Prescribing. Intouch Magazine, Australian Physiotherapy Association; Issue 1, 2018

**Stewart M and Swete Kelly P**: Taking a tailored education approach. Intouch Magazine, Australian Physiotherapy Association; Issue 4, October 2018.



## Psychology

In 2018, psychology within RBWH was re-established as a department in its own right. This has facilitated a greater focus on psychology based clinical research, evaluation, dissemination and integration within psychology services.

### Highlights have included:

- Mapping of research areas within the department to key psychology research academics across QUT, UQ and Griffith University. This has resulted in the establishment of key partnerships and collaborations with UQ and Griffith Universities, along with adjunct staff appointments within the School of psychology at UQ and QUT.
- Ethics approval of collaborative research programs:
  - Neuropsychological model of care for stroke patients undergoing a clot retrieval study
  - Investigation of the impact of anxiety and depression on inpatient care and outcomes of hospitalised geriatric patients
  - Assessment and diagnosis of Gender Dysphoria in the context of the initiation of gender affirming hormone treatment
  - Social-cognitive functioning among patients with epilepsy
  - The effects of temporal lobectomy on electrical brain potential in response to emotional stimuli
  - Collaborative publications in telehealth (Griffith University), neuropsychology (UQ) and oncology (National Research Consortium).

This year also saw successful departmental research funding applications through the *RBWH Capital Funding for Research and Training Equipment* grant round (Project: Wellbeing to your Door: the implementation of a mobile psychoeducation support service for staff and consumers) and the *CAHRLI Innovation/Translation Challenge* (Project: Enhancing Neuropsychological and Cognitive Rehabilitation Using Innovative Digital Resources in a Public Hospital Subacute Rehabilitation Service). Our UQ and Griffith research collaborations also resulted in success project funding through the *Research Project Enhancement Scheme* (Griffith University) (Project: an Investigation of the Physiological Markers of Process in Face-to-Face and Videoconference Psychotherapy) and the UQ Research Committee Second Seed Funding Scheme (UQ) (Project: the Effects of Temporal Lobectomy on Electrical Brain Potentials in Response to Emotional Stimuli).

It is envisaged that 2019 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 (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Stephanie Lawton</b>	PhD, Central Queensland University (2016-2024)	The dark side of imagination	Kevin Ronin, Robin Alter
Jenna Scambler	DPsych (Clin and Neuro), University of Queensland (2017-2021)	The effects of Temporal Lobectomy on Electrical Brain Potentials in Response to Emotional Stimuli	Alan Pegna, <b>Kate Thompson</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Ada Lo</b>	Adjunct Senior Lecturer	School of Psychology	University of Queensland (2018 – current)
<b>Angela White</b>	Adjunct Industry Fellow Clinical Consultant Adjunct Assoc. Prof.	School of Psychology	Queensland University of Technology (2018 – current) University of Queensland (2011 – current) University of Queensland (2018 – current)
<b>Drew Craker</b>	Adjunct Senior Lecturer	School of Psychology	University of Queensland (2018 – current)
<b>Elisabeth Hamernik</b>	Honorary Fellow	School of Psychology	University of Queensland (2008 – current)
<b>Kate Thompson</b>	Adjunct Senior Lecturer	School of Psychology	University of Queensland (2018 – current)
<b>Mala McHale</b>	Adjunct Senior Lecturer	School of Psychology	University of Queensland (2013 – current)
<b>Maree Grier</b>	Adjunct Lecturer	School of Psychology	University of Queensland (2018 – current)
<b>Rosemary Argall</b>	Adjunct Associate	School of Psychology	University of Queensland (2016 – current)
<b>Stephanie Lawton</b>	Adjunct Fellow	UQ Centre for Clinical Research	University of Queensland (2018 – current)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Ada Lo</b>	Claire Muller (Neurology), Meghan Osbourne (Neurology), <b>Kate Thompson, Elisabeth Hamernik, Angela White</b>	Neuropsychological model of care for stroke patients undergoing clot retrieval
<b>Elisabeth Hamernik</b>	<b>Andrew Craker, Mala McHale, Maree Grier, Amanda Fairclough, Amanda Francis, Christina Beckham, Desdemona Chung, Riley O'Donohue, Claire Jensen, Susan Elis, Scott Ruddell, Anna Salzgeber</b>	Clinical utility of the DSM-5 cross-cutting measure in a medical setting
<b>Elisabeth Hanson and Elisabeth Hamernik</b>	<b>Rachel Costa, Sally Price</b>	Assessment and diagnosis of Gender Dysphoria in the context of the initiation of gender affirming hormone treatment
<b>Genesta Nicolson</b>	<b>Angela White, Angela Chang (CAHR)</b>	A stitch in time: evaluation of the impact and efficacy of an MDT psychoeducation workshop for non-urgent referrals on the PTCMPC waitlist
<b>Scott Ruddell</b>	<b>Angela White, Bonnie Clough (GU), Leanne Casey (GU), Perry Judd (Physio), Michelle Cottrell (Physio), Mala McHale Andrew Craker, Elisabeth Hamernik, Kelly Stone</b>	Uptake, treatment expectations and outcomes of telepsychology within an orthopedic Screening Clinic
<b>Vanessa Whitehead and Rosemary Argall</b>	<b>Angela White, Nancy Pachana (UQ)</b>	Investigation of the impact of anxiety and depression on inpatient care and outcomes of hospitalised geriatric patients

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Blum (UQCCR), J Scott (UQCCR), G Robison (UQCCR), D Gillis (UQCCR), G McKeon (UQCCR), A Ryan (UQCCR) M Connell (UQCCR)	<b>Donna Spooner (Psychology)</b>	Anti-NMDA-receptor encephalitis: an Australian case series examining patterns and predictors of cognitive outcomes
David Kavanaagh, Heidi Sturk, Samantha Wild (QUT)	<b>Angela White</b>	Australian Health Professional Referral Rates to Digital Mental Health services and programs: aa cross sectional study
David Kavanagh, Ross Young, Jane Shakespear-Finch, Stoyan Stoyaanov, Madhavan Mani, Oksana Zalenko (QUT), Catherine Quinn, Leanne Hides (UQ)	<b>Angela White</b>	Evaluation of the PTSD Coach Australia App by serving and ex-serving Defence members and by Clinicians
Haryana Dhillion (University of Sydney), Joanne Shaw (University of Sydney), David Kissane (Monash University), Danette Langbecker (University of Queensland) Kim Hobbs (Westmead Hospital), Laura Kirsten (Nepean Cancer Care Centre), Lisa Beatty (Flinders Centre for Innovation in Cancer), Lisa Vaccaro (University of Sydney) Carrie Lethborg (St Vincent's Hospital, Melbourne)	<b>Maree Grier</b>	Adjustment Working Group for the PoCoG Transforming Psychosocial Care of Patients in Australia: Implementation of a Comprehensive Training and Service Delivery Program
Hilary Jimmieson (Nutrition and Dietetics)	<b>Riley O'Donohue</b>	Quality improvement project: Development and provision of salt education group for individuals with chronic kidney disease
Jenna Scambler (UQ), Alan Pegna (UQ)	<b>Kate Thompson</b>	The effects of temporal lobectomy on electrical brain potential in response to emotional stimuli
Louise Cullen (DEM), Carol Jeffreys (DEM), Caitlin Lock (DEM), Emily Brownhill (DEM)	<b>Andrew Craker</b>	Wellness training for nurses in the Emergency Department
Maryam Ziaei (UQ), David Reutens (UQ and RBWH Neurology)	<b>Kate Thompson</b>	Social-cognitive functioning among patients with epilepsy
Tim Donovan (GSNU), Barbara Lingwood (UQCCR), Yvonne Eiby (UQCCR), Gill Lack (GSNU), Ian Wright (Uni Woollongong), Paul Colditz (UQCCR), Katie Foxcroft (Perinatal Research Centre)	<b>Stephanie Lawton</b>	<b>Preterm Early Adiposity and Childhood Outcome (PEACH Study)</b>

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
Allan Pegna (UQ), <b>Kate Thompson</b>	RBWH Psychology / UQ Psychology Department	The Effects of Temporal Lobectomy on Electrical Brain Potentials in Response to Emotional Stimuli	UQ Research Committee Second Seed Funding Scheme for 2018	\$6,880	\$6,880 (2018)
<b>Andrew Craker, &amp; Angela White</b>	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)
Bonnie Clough (Griffith University), <b>Angela White, Scott Ruddell,</b> Leanne Casey (Griffith University)	Psychology	An Investigation of the Physiological Markers of Process in Face-to-Face and Videoconference Psychotherapy	Research Project Enhancement Scheme, Griffith University	\$4,200	\$4,200 (2018)
Maryam Ziaei (UQ), <b>Kate Thompson,</b> David C. Reutens (UQ and Neurology)	Psychology and neurology	Social-cognitive functioning among patients with epilepsy	RBWH Hospital Foundation	\$29,970	\$59,940 (2017-2018)



## 2018 Research Publications

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### Journal Articles

1. Clough B, **Ruddell S**, Cassey L, **White A**. (2018). Your Therapist is Calling: using Videoconferencing Technologies to deliver Psychotherapy. *InPsych*, 40(5). The Bulletin of the Australian Psychological Society Ltd
2. Pender MP, Csurhes PA, Smith C, Douglas NL, Neller MA, Matthews KK, Beagley L, Rehan S, Crooks P, Hopkins TJ, Blum S, Green KA, Ioannides ZA, Swayne A, Aftab BT, Hooper KD, Burrows SR, **Thompson KM**, Coulthard A & Khanna R (2018) Epstein-Barr virus-specific T cell therapy for progressive multiple sclerosis. *JCI insight*, 3(22):e124714. <https://doi.org/10.1172/jci.insight.124714>
3. Pinsker D, **Lo A**, Haslam C, Pachana N & Pinsker H. (2018). Hit or Miss? Diagnostic contributions of neuropsychological assessment in patients with suspected dementia. *International Journal of Clinical Neurosciences and Mental Health*, 5 (2).

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

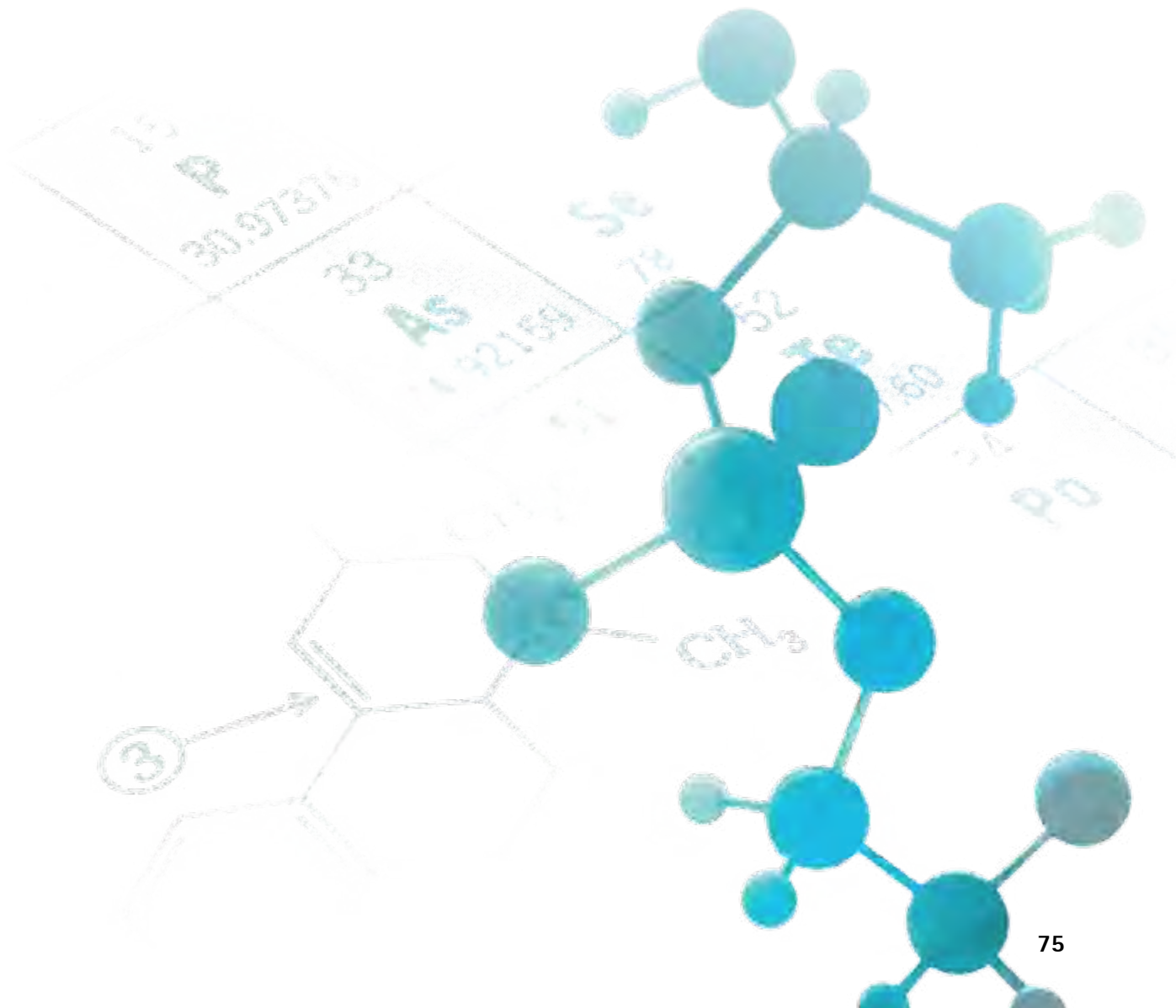
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### Oral Presentations:

1. Dhillon HM, Vaccaro L, Langbecker D, Beatty L, **Grier M**, Hobbs K, Kirsten L, Kissane D & Shaw J. (2018). Prevalence and management of adjustment disorder in cancer patients, In: 20<sup>th</sup> World Congress of Psycho-Oncology, Hong Kong, (137-137). 29 October – 2 November 2018. Oxford, United Kingdom: John Wiley & Sons.

### Poster Presentations:

1. Scambler J, **Thompson K**, Pegna A. The Effects of Temporal Lobectomy on Electrical Brain Potentials in Response to Emotional Stimuli. Accepted poster for presentation at the Australiasian Society for Social and Affective Neuroscience conference in Brisbane, Australia June 2018.



## Rehabilitation Engineering, Orthotics and Prosthetics

In 2018, the Orthotics and Prosthetics and Rehabilitation Engineering teams have continued to explore a wide range of research collaboration opportunities.

The Rehabilitation Engineering team now have strong links for research with both the Queensland University of Technology and James Cook University with undergraduate students from QUT working closely with staff on projects for both universities. Two key elements of the research work in 2018 for this team were the development of a cyclic testing rig to improve the design of custom cushions and exploring opportunities in 3D imaging and advanced manufacturing. The Rehabilitation Engineering team was well represented at the 2<sup>nd</sup> Australia Assistive Technology Conference in Melbourne in November with involvement in a total of four presentations related to these key areas of interest.



The Orthotic and Prosthetic team have developed increasing links with the Sunshine Coast University to add to the existing educational links with LaTrobe University and Queensland University of Technology. Projects starting in 2018 included preliminary work on new techniques for total contact facial orthoses fabrication and new methods to produce foot orthotics. The O&P staff have been working with the universities to build a research component into all future student placements to help stimulate research and evidence based practice.

It is hoped that these collaborations will produce significant research outcomes over the coming years with a focus on the management of skin integrity issues and advanced fabrication techniques.

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Peter Slattery	Adjunct Associate Professor	Faculty of Science and Engineering	Queensland University of Technology (2012 – current)

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Shailendra Maharaj (LCCH)	Peter Slattery	Tele-Rehabilitation Engineering
Gunther Paul (James Cook University)	Peter Slattery	Seating cushion design simulation

### 2018 Conference Presentations – Invited Speaker, Oral and Poster

#### Oral Presentations:

1. Brown I, Hobbs D, Morris K, Rose A, **Slattery P**, Contoyannis W, Karthik P, “The role of Rehabilitation Engineering in Australian AT service delivery”, Australia Assistive Technology Conference 2018 (AATC), Melbourne Convention and Exhibition Centre, Melbourne 14-16 November 2018
2. **Mason O, Slattery P**, “Rehabilitation Engineering Centre - How are we helping?”, Australia Assistive Technology Conference 2018 (AATC), Melbourne Convention and Exhibition Centre, Melbourne 14-16 November 2018
3. **Slattery P, Mason O**, Woodruff M, **Collins M, Bateman A**, Liu A, “Advanced Imaging and Manufacture in Custom Assistive Devices”, Australia Assistive Technology Conference 2018 (AATC), Melbourne Convention and Exhibition Centre, Melbourne 14-16 November 2018
4. **Slattery P**, Paul G, **Condon J**, Veivers J, “Evidence into Practice – Designing Better Custom Cushions”, Australia Assistive Technology Conference 2018 (AATC), Melbourne Convention and Exhibition Centre, Melbourne 14-16 November 2018.

## Social Work

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The Social Work Department is committed to conducting research that addresses the psychosocial needs of patients and their families and mitigates social disadvantage. To this end, in 2018 we commenced work on an elder abuse project in recognition that hospitals are important sites for the identification of vulnerable older people. The project is a collaboration with social work researchers from the University of Queensland and aims to investigate how hospital staff currently assess and respond to elder abuse, with a view to developing an integrated model of care that is responsive to the needs of both older people and their carers. This initiative is timely given that the Australian Government recently rolled out a National Elder Abuse Research Agenda.

Domestic and family violence continues to be a key focus of the Department's work, with ongoing efforts to build an evidence base on effective interventions to ensure the safety and welfare of victims. Social workers in the Emergency and Trauma Centre participated in a multi-site investigation of screening practices used in hospital emergency departments which aims to improve detection of domestic violence. The development of a comprehensive data base to ascertain trends and patterns in domestic and family violence presentations complements this work.

Another initiative is the trial of a staff debriefing tool in the Emergency and Trauma Centre. Notably, this project aligns with Metro North's Values in Action with a specific focus on staff wellbeing. Future work will focus on evaluating the debriefing model and the receptiveness of clinicians to using the debriefing tool.

We continue to focus our efforts on building the research capacity of staff through mentoring and encouraging clinicians to showcase their work. In 2018, two of our staff presented at the Australian and New Zealand Social Work and Welfare Education and Research Conference in Adelaide. We also collaborated with social work colleagues from the University of Queensland to present a paper at the Joint World Conference on Social Work, Education and Social Development in Dublin. This paper reported on the pilot of a psychosocial acuity scale at RBWH which assists clinicians to identify clinical areas of high, medium and low psychosocial acuity and align resources to need. The study, the first of its kind in Australia, has since attracted interest from other hospital social work departments both locally and overseas.



## 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 (2017-2018)	The housing pathways of Bangladeshi immigrants during the process of settling in Australia	<b>Gai Harrison</b> , Jill Wilson

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University <i>(years)</i>
<b>Angela O'Malia</b>	Adjunct Senior Lecturer	School of Nursing, Midwifery and Social Work	UQ (3 yrs) 2016-2018
<b>Gai Harrison</b>	Honorary Senior Lecturer	School of Nursing, Midwifery and Social Work	UQ (3 yrs) 2016-2018

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Angela O'Malia, Gai Harrison</b>	Karen Healy (UQ), Jill Wilson (UQ), John Drayton (UQ), Maree Peterson (UQ), Robyne LeBrocq (UQ)	Piloting a psychosocial acuity scale in social work at RBWH
<b>James Ready</b>	Alex Markwell (ETC)	Staff Debriefing in the Emergency and Trauma Centre: using Debriefing as a tool to promote wellbeing, reflection and learning
<b>Martha Druery</b>	Peter Newcombe (UQ), Cate Cameron (Griffith University), Jeffrey Lipman (UQ)	Quality of Life outcomes post-major burn injuries in adults – a longitudinal exploratory study
<b>Vanessa Walker</b>	<b>Erin Vaughan, Gai Harrison</b>	Evaluation of the <b>Sexual Assault Response Team (SART)</b> Service

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

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

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Martha Druery</b> , Peter Newcombe (UQ), Cate Cameron (Griffith University), Jeffrey Lipman (UQ)	UQ, Griffith University, Social Work	Quality of Life outcomes post-major burn injuries in adults – a longitudinal exploratory study	Professor Stuart Pegg Adult Burns Centre, RBWH, Living Allowance Stipend	\$10,000	\$10,000 (2018)



## 2018 Research Publications

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### Book Chapters / Letter Publications:

1. **Harrison, G.** Transnational social workers and the Australian labour market. In: Bartley, A, Beddoe, L, editors. Transnational social work: opportunities and challenges of a global profession. Bristol: Policy Press; 2018.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. **Druery M.** Towards a Scarless World: psychosocial management to optimise quality of life. Australian and New Zealand Burns Association Annual Scientific Meeting, October 2018.

### Oral Presentations:

1. **Druery M.** The Trials and Tribulations of Peer-led Burns Support Initiatives in Australia: are we ‘throwing the baby out with the bath water’? Australian and New Zealand Burns Association Annual Scientific Meeting, October 2018
2. **Fox S.** Working with grief and loss: Disrupting theory to make way for skills development. ANZSWWER, September 2018
3. **O’Malia A, Harrison, G,** Le Brocq R, Healy, K, Petersen, M. Aligning resources to need in health care social work: Piloting the psychosocial acuity scale at the Royal Brisbane & Women’s Hospital. The Joint World Conference on Social Work, Education and Social Development 2018. Dublin
4. **Webber P.** Moving beyond a structured approach to professional development for new graduates: implementing a bottom up approach to learning. Australian New Zealand Social Work and Welfare Education and Research (ANZSWWER), September 2018.

### Poster Presentations:

1. **Druery M.** Rising to the challenge of long-term follow up research in burns: reducing attrition. Australian and New Zealand Burns Association Annual Scientific Meeting, October 2018.





## Speech Pathology and Audiology

The Speech Pathology and Audiology Department research program has continued to flourish in 2018. The research program is diverse and spans across a range of services provided by the Speech Pathology and Audiology Department. The Speech Pathology research program encompasses the 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.

In essence, the research program aims to embed research into core clinical services and ensure translation of research into practice. We have continued to grow our collaborative partnerships in 2018 with ongoing successful partnerships with UQCCR Language Neuroscience Group and UQ School of Health and Rehabilitation Sciences. Furthermore, we have developed new collaborations with RECOVER Injury Research Group, UQ and QUT.



**Key Outcomes and Achievements:** The department had a successful research year with an increase in participation of clinicians publishing peer reviewed papers and presenting at conferences. Furthermore, there has been an increase in the number of clinicians undertaking research high degrees as well as Speech Pathology and Audiology clinicians preparing for enrolment in research higher degrees. An outstanding achievement was the international recognition of Dr Clare Burns' pioneering telepractice research by the international Dysphagia Research Society (DRS). The DRS awarded Dr Burns the National Foundation of Swallowing Disorders Award at their annual scientific meeting in Baltimore, USA. In addition, Dr Burns and the Speech Pathology Led Telehealth Team were awarded a Highly Commended in the field of Health Service and Implementation Research at the MNHHS Research Excellence Awards. Another research award included Laura Moroney (PhD Candidate) winning the CAHRLI New Researcher Award at the CAHRLI Symposium.

A further outstanding achievement included Dr Clare Burns being awarded an inaugural Metro North Clinician Research Fellowship to further develop research in speech pathology telepractice services. The success of Dr Burns' research has led to telepractice being embedded within the Speech

Pathology Department and this new program of research will expand into other telepractice models of care and other patient groups who experience dysphagia.

The Speech Pathology and Audiology Department have a clear vision to build a research program which translates into benefits for our consumers and we are committed to researching new models of service provision and clinical innovation. We look forward to continuing to progress our research vision in 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>
<b>Georgia Thomas</b>	PhD, UQ (2014-2019)	Language Outcomes in patients with Brain Tumours	Dave Copland, Katie McMahon
<b>Laura Moroney</b>	PhD, UQ (2015-2019)	Dysphagia and related toxicities in head and neck patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy	Liz Ward, <b>Jane Crombie</b> , <b>Clare Burns</b>
<b>Leisa Turkington</b>	PhD, UQ (2013-2019)	Neurogenic dysphagia and sensory enhancement strategies	Liz Ward, <b>Anna Farrell</b>
<b>Sarah Wilson</b>	MPhil, UQ (2018-2022)	Assessment of dysphagia following laryngectomy	Bena Cartmill, <b>Clare Burns</b>
<b>Shana Taubert</b>	PhD, UQ (2016-2020)	Videofluoroscopic Swallow Studies: education and training approaches	Liz Ward, <b>Clare Burns</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Alice Pender	Honorary Associate Lecturer	Audiology, School of Health and Rehabilitation Sciences	University of Queensland (2016-2019)
Anna Farrell	Honorary Lecturer Research Coordinator	Speech Pathology, School of Health and Rehabilitation Sciences Speech Pathology Department, RBWH	University of Queensland (2017-2020)
Bonnie Cheng	Honorary Research Position in Speech Pathology, RBWH	Predicting and Promoting Sub-acute Aphasia Recovery	University of Queensland (2018-2019)
Carla Rose	Honorary Associate Lecturer, Audiology, UQ	Audiology, School of Health and Rehabilitation Sciences	University of Queensland (2018-2020)
Clare Burns	Honorary Lecturer	Speech Pathology, School of Health and Rehabilitation Sciences	University of Queensland (2017-2020)
Ellie Minchell	Honorary Research Position in Speech Pathology, RBWH	Predicting and Promoting Sub-acute Aphasia Recovery	University of Queensland (2018-2019)
Jane Watts	Honorary Research Position in Speech Pathology, RBWH	Predicting and Promoting Sub-acute Aphasia Recovery	University of Queensland (2018-2019)
Lisa Anemaat	Honorary Research Position in Speech Pathology, RBWH	Predicting and Promoting Sub-acute Aphasia Recovery	University of Queensland (2018-2019)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Lead Researchers	Collaborative Researchers	Research Project Title
Alexia Rohde	Linda Worrall (UQ), Erin Godecke (Edith Cowan), Robyn O'Halloran (La Trobe), <b>Anna Farrell</b> , <b>Penni Burfein</b> , Andrew Wong (Stroke), Genevieve Skinner (Stroke)	Evidence-based identification of aphasia using a rational clinical examination approach
Alice Pender	<b>Carla Rose</b> , Angela Chang (Centre for Allied Health Research), Tracy Comans (UQ)	Patient outcomes following cochlear implant surgery
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
Belinda Lehn, Sarah Wilson	<b>Clare Burns</b> , <b>Ann-Louise Spurgin</b> , Robert Hodge (ENT), Martin Batstone (MaxFacs)	Evaluation of speech and swallowing outcomes following total laryngectomy and pharyngolaryngectomy
Carla Rose	<b>Lynell Bassett</b> , Sharon Kelly (ENT)	Evaluation of the First Contact Audiology Clinics
Clare Burns	Liz Ward (CFAR; UQ), Annie Hill (UQ), <b>Lynell Bassett</b> , 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), 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
Laura Moroney	Liz Ward (CFAHR), <b>Jane Crombie</b> , <b>Jennifer Helios</b> , <b>Clare Burns</b> , <b>Ann-Louise Spurgin</b> , Liz Kenny (CC), Brett Hughes(CC), Claire Blake (Nutrition and Dietetics)	Dysphagia and related toxicities in head and neck patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy
Laura Moroney	<b>Jennifer Helios</b> , Liz Ward (CFAHR; UQ), <b>Jane Crombie</b> , Anita Pelecanos (QIMR), <b>Clare Burns</b> , <b>Ann-Louise Spurgin</b> , Claire Blake, Liz Kenny, Ben Chua, Brett Hughes, Tracy Comans (UQ)	Implementation of the Head and Neck Cancer Low Risk Speech Pathology Pathway

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group / Department Lead Researchers	Collaborative Researchers	Research Project Title
Leisa Turkington	Liz Ward (CFHAR; UQ), <b>Anna Farrell</b>	Neurogenic dysphagia and sensory enhancement strategies
Lynell Bassett	<b>Jennifer Helios</b>	Evaluation of the First Contact Dysphagia Clinic
Lynell Bassett, Sonia Baker	Rob Boots (Medical-Tracheostomy Management Team), Nanette Paxman (Physiotherapy), Karyn Heineger (Nursing)	Evaluation of the Tracheostomy Management Team (TMT)
Sarah Heaton	<b>Anna Farrell, Lynell Bassett</b>	Implementation of the Dysphagia Screening Tool
Sarah Heaton, Anna Farrell	Anna Rumbach (UQ) and Katrina Webster (Ipswich Hospital)	Dysphagia outcomes in Subarachnoid Haemorrhage
Shana Taubert	<b>Clare Burns</b>	Video fluoroscopic 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

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Alicja Malicka (UQ), Anita Burgess (UQ Audiology masters Student)	<b>Carla Rose, Alice Pender</b>	Evaluating the impact of joint Audiology-ENT clinical pathways on outpatient services and efficiencies: a quality assurance project
David Copland (UQ), Tracy Roxbury (UQ), Katie McMahon (UQ), Greig de Zubicaray (QUT), Marcus Meinzer (UQ)	<b>Penni Burfein, Anna Farrell, Andrew Wong</b> (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)	<b>Anna Farrell</b>	Be Clear Online: an intensive speech treatment for adults with non-progressive dysarthria
Georgia Thomas (UQ), David Copland (UQ)	<b>Nadia Borgna, Sarah Heaton, Anna Farrell, Lindy Jefree</b> (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 (Physiotherapy), Jennifer Paratz (Physiotherapy), Hildegard Reul-Hirche (Physiotherapy), Michelle Cottrell (Physiotherapy), Anna Finnane (UQ), Tracy Comans (UQ), Trevor Russell (UQ)	<b>Clare Burns</b>	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)	<b>Penni Burfein, Anna Farrell</b>	Can a new, intensive model of aphasia rehabilitation achieve better outcomes than usual care?
Salma Charania (TPCH), Anna Rumbach (UQ), Petrea Cornwell (Griffith University & TPCH), Rebecca Nund (UQ)	<b>Anna Farrell, Robert Henderson</b> (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 & QUT), Bernd Ploderer (QUT), Tara Hormann (RBWH)	<b>Anna Farrell</b>	An image-based tablet app to support communication of daily activity scheduling between patients with post-stroke aphasia, family and hospital staff

## 2018 Research Awards and Achievements

Recipient	Award	Event
Clare Burns	The National Foundation of Swallowing Disorders Award	Dysphagia Research Society, Annual Scientific Meeting, 17 <sup>th</sup> March 2018
Clare Burns	Research Translation Award	Queensland Health Speech Pathology Advisory Committee Annual Awards September 2018
Clare Burns and Speech Pathology Led Telehealth Team	Highly Commended – Health Service and Implementation Research	MNHHS Research Excellence Awards, 22 <sup>nd</sup> May 2018
Laura Moroney	CAHRLI New Researcher Award	CAHRLI Symposium, 20 <sup>th</sup> June 2018

## 2018 Research Grants – Awarded

Investigators ( <i>RBWH staff in bold</i> )	RBWH Research Groups / Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Alice Pender</b>	Audiology	Hearing loss and ear-related issues in adult Indigenous Australians	MNHHS Allied Health Pre-PhD/Pre-MPhil Scholarship	\$10,532	\$10,532 (2018)
<b>Clare Burns</b>	Speech Pathology and Cancer Care	Implementation and evaluation of a telehealth service providing specialist speech pathology and nutrition and dietetics intervention for patients with head and neck cancer	Post-Doctoral Fellowship Grant – RBWH Research Foundation	\$40,000	\$80,000 (2017-2018)
Damien McDermid, Adrienne Young, Jack Bell, Therese Green, Rebecca Moore, <b>Anna Farrell</b> , Chloe Jarvis, Juliette Mahero, Andrew Wong	Nutrition and Dietetics, Stroke, Speech Pathology	Implementation and Evaluation of a Multi-site Acute Stroke Nutrition Care Pathway	HP Research Scheme	\$26,059	\$26,059 (2018)
<b>Laura Moroney</b>	Speech Pathology and Cancer Care	Dysphagia outcomes in head and neck cancer patients undergoing tomotherapy	RBWH Foundation PhD Scholarship	\$36,864	\$36,864 (2018)
<b>Leisa Turkington</b>	Speech Pathology	Neurogenic dysphagia and sensory enhancement strategies	RBWH Foundation PhD Scholarship	\$36,864	\$36,864 (2018)
Leonie Naumann, Jennifer Paratz, Hildegard Reul-Hirche, Michelle Cottrell, <b>Clare Burns</b> , Anna Finnane, Tracy Comans, Trevor Russell	Physiotherapy, Speech Pathology	A telehealth model for education and monitoring of early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: a pilot cohort study	HP Research Scheme	\$29,929	\$29,929 (2018)
<b>Nadia de Silva</b>	Speech Pathology	Development of a validated intra-operative language protocol for patients with brain tumours undergoing awake craniotomy	CAHLRI Pre-PhD/Pre-MPhil Scholarship	\$10,532	\$10,532 (2018)
<b>Penni Burfein</b>	Speech Pathology	Return to work for younger stroke survivors with aphasia in the Australian context	CAHLRI Pre-PhD/Pre-MPhil Scholarship	\$13,077	\$13,077 (2018)
<b>Shana Taubert</b>	Speech Pathology	Enhancing practice in videofluoroscopic swallow study assessment	RBWH Foundation PhD Scholarship	\$36,864	\$36,864 (2018)

## 2018 Research Publications

### Journal Articles:

- Bhagwat M**, Hewetson R, Jones L, Hill A, Nunn J, Tosh R, & Cahill L. Comparison of Paired and Single Clinical Placement Models: a Time-Use Analysis. *International Journal of Language & Communication Disorders*, (2018), 53(3), 468-479
- Burns C** & Wall L. Using telepractice to support the management of Head and Neck Cancer: key considerations for speech-language pathology service planning, establishment, and evaluation. *Perspectives of the ASHA Special Interest Groups*, (2018) 2(13), 139-146. doi:10.1044/persp2.SIG13.139
- Dunn K**, & Rumbach A. Incidence and risk factors for dysphagia following non-traumatic subarachnoid haemorrhage: a retrospective cohort study. *Dysphagia*, (2018), doi.org/10.1007/s00455-018-9934-3
- Moroney L, Helios J, Ward E, Crombie J, Blake C**, Pelecanos A, Chua B, Kenny L. Helical IMRT with concurrent chemotherapy for oropharyngeal SCC: a Prospective investigation of acute swallowing and toxicity patterns. *Head and Neck*, (2018) 40(9):1955-1966. doi: 10.1002/hed.25182
- Moroney LB, Helios J, Ward EC, Crombie J**, Pelecanos A, **Burns CL, Spurgin A-L, Blake C**, Chua B, Kenny L & 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*, (2018), doi.org/10.1007/s00520-018-4352-5
- Rohde A**, Worrall L, O'Halloran R, Godecke E, **Farrell A**. Diagnosis of aphasia in stroke populations: a systematic review of language tests. *PLoS ONE*, (2018) 13(3): e0194143. doi.org/10.371/journal.pone.0194143
- Twomey K, **Lehn B**, Vasani, S. Management of leaking tracheoesophageal puncture with hyaluronic acid injection. *Head and Neck*, (2018). 1-4DOI: 10.1002/hed.25162
- Young A, Treleaven E, & **Farrell A**. Nutrition, Mealtimes: recipes for success. *Journal of Clinical Practice in Speech-Language Pathology*, (2018), 20(3), 177-179.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Oral Presentations:

1. **Burns C**, Ward E, Cowie B, Saxon R, Gray A, Baker L, Bignell S, Winter N, Rusch R. – service outcomes, costs, consumer engagement and implementation issues associated with establishment of telehealth service for clinical assessment of dysphagia in 5 sites. Speech Pathology Australia Conference, Adelaide, 29<sup>th</sup> May 2018
2. **Burns C**, Ward E, Cowie B, Saxon R, Gray A, Baker L, Bignell S, Winter N, Rusch R. An evaluation of service outcomes, costs and consumer engagement following implementation of telepractice services for clinical assessment of dysphagia. Dysphagia Research Society Annual Scientific Meeting, Baltimore USA, March 2018
3. **Collins A, Burns C**, Ward E, Comans T, Blake C, Kenny L, Greenup P, Best D. Home based telehealth service for swallowing and nutritional management following head and neck cancer treatment. Speech Pathology Australia, Adelaide, 29<sup>th</sup> May 2018
4. **Dignam J**, Rodriguez A, O'Brien K, **Burfein P, Farrell A**, McKinnon E, Copland D. (2018). Probe naming performance as a predictor of anomia treatment success. Aphasiology Symposium of Australasia, Sunshine Coast, 28<sup>th</sup> November 2018
5. **Farrell A**, Rumbach A, Nund R, Scarinci N, Verner-Wren S, Hutchinson N, Henderson R, McCombe P. (2018). The lived experience of MND: Caregiver perspectives of the impact of communication and mealtime-related problems. Speech Pathology Australia Conference, Adelaide, 29<sup>th</sup> May 2018
6. Roxbury T, McMahon K, **Wong A, Farrell A, Burfein P, Taubert S**, O'Brien K, Read S, Coulthard A, Copland D. Neurophysiological markers of language recover in sub-acute stroke. An fMRI study. Aphasiology Symposium of Australasia, Sunshine Coast, 28<sup>th</sup> November 2018
7. **Turkington L**, Ward E, **Farrell A**. Impact of carbonation on neurogenic dysphagia. Smart Strokes, Sydney, 7<sup>th</sup> August 2018.

### Poster Presentations:

1. Ward E, **Burns C**, Cowie B, Saxon R, Gray A, Baker L, Bignell S, Turvey J, Rusch R. Evaluation of the implementation of telepractice services for the clinical assessment of adult swallowing disorders. Dysphagia Research Society Annual Scientific Meeting, Baltimore, USA, March 2018
2. **Whitty S, Farrell A, Gallagher J**, Wong A. Swallow and communication outcomes following Endovascular clot retrieval for acute stroke. Speech Pathology Australia Conference, Adelaide 30<sup>th</sup> May 2018.

### Other Communications and Outputs:

- Clare Burns      Video of Dr Burn's telehealth research featured in new CRE Telehealth video  
<https://cretelehealth.centre.uq.edu.au/what-is-telehealth>
- Clare Burns      Invited speaker to deliver international webinar to American Association of Veterans Affairs Speech Language Pathologist with Prof Liz Ward (CFAHR, UQ). Implementing telepractice in the care pathway for patients with head and neck cancer. 10<sup>th</sup> December 2018.



# CANCER CARE SERVICES



## Cancer Care Services



**A/Prof. Glen Kennedy**  
**Executive Director**  
Cancer Care Service 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.

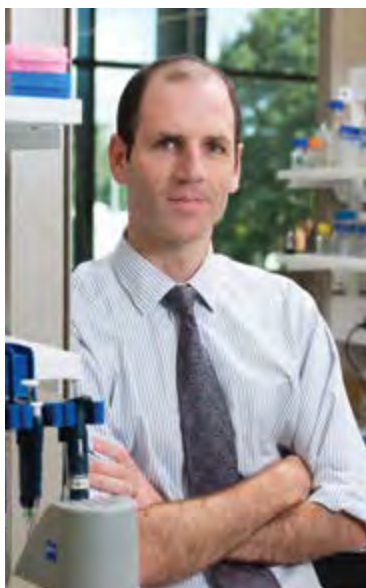
2018 represented another year of fantastic achievement in research for Cancer Care. The annual CCS Research Retreat brought together investigators from CCS and senior hospital and district executives to enable planning to ensure that research remains at the forefront of our service both now and into the future. Initiatives in tele-trials, HIRF collaborations and multi-disciplinary care trials were highlights for our unit during the year.

A special mention and congratulations to Prof Geoff Hill, who commenced the Director of Hematopoietic Stem Cell Transplantation at the Fred Hutch / Seattle Cancer Care Alliance in July 2018. He was also awarded the Jose Carreras / E. Donnall Thomas Endowed Chair for Cancer Research. His appointment to such a prestigious position is a great achievement for one of our colleagues and staff.

Other research highlights for the year are detailed in our separate departmental reports. Of note, Dr Siok Tey was awarded a MNHHS Research Fellowship for 2019, related to her ongoing work in cellular therapies for haematological disorders. Her work will continue to be supported through a successful New Technology Grant to commence in 2019.

We look forward to 2019 to continue to strive to further 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



**A/Prof. Steven Lane**  
**Director of Clinical Research**  
 Clinical Haematologist  
 Cancer Care Services RBWH

RBWH Cancer Care Services has one of the largest and most active clinical research departments on the Herston Campus. We offer a large range of clinical trials encompassing haematology and bone marrow transplant, medical oncology, radiation oncology and non-malignant diseases such as haemophilia and blood clotting disorders. We have world leading nursing and allied health research operating in parallel, enriching our overall program and providing wholistic care for our patients.

The research division continues to perform at a very high level. Stand out achievements in 2018 include chief investigator funding for NHMRC and MRFF grants, the successful application for a Queensland Genomics Health Alliance Implementation grant to sequence blood cancers and a number of philanthropic/RBWH foundation grants. Special mention should also be made of Dr Siok Tey and Dr Clare Burns, who were among the 5 recipients of the inaugural round of Metro North Research Fellowships. RBWH CCS has led publications in major international journals such as Science, Blood, The Journal of Clinical Investigation, Nature Reviews in Clinical Oncology and Clinical Cancer Research, and our clinicians have co-authored papers in the New England Journal of Medicine and contributed to international practice guidelines. Numerous presentations at national and international conferences are also noted. The volume and quality of research contributions from Cancer Care has been outstanding and I congratulate all involved in this effort. In particular, I would like to mention the work of our clinical trial coordinators who keep the research program running smoothly behind the scenes. We value your efforts, patience and organisation.

Finally, I note the extraordinary contribution by Professor Geoff Hill, Director of Research RBWH CCS for the last 3 years. He has been recruited to the Fred Hutchinson Cancer Research Centre in Seattle as Full Member, and as the Director of Hematopoietic Stem Cell Transplantation for the Seattle Cancer Care Alliance. This is an outstanding recognition of Professor Hill's leading work in BMT over the last 20+ years and will provide pathways for future clinical collaborations and trainees. Geoff has been an amazing mentor and guiding light to many, including myself. On a personal note, I would like to thank him for his leadership, wisdom and humour, and wish him good luck on the journey ahead.

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



## Haematology and Bone Marrow Transplant



**Dr Cameron Curley**

**A/Deputy Director**

Clinical Haematology and BMT  
Cancer Care Services RBWH

During 2018, the department of Haematology/BMT continued to pursue a comprehensive approach to clinical research at the RBWH and across Metro North. Disease stream leads and clinics continued to be developed with the establishment of Myeloma and Lymphoma clinical trials clinics to drive recruitment, efficiency and expertise in local investigator initiated and collaborative national and international trials for patients diagnosed with Myeloma and Lymphoma.

### Major funding grants attained in 2018 include:

- NHMRC grant 2019-2021 (\$900k)
- QLD Genomics Health Alliance Implementation Grant 2019-2020 (\$800k)
- RBWH Foundation Diamond Grant 2018-2019 (\$40k).

There have been a number of notable publications, poster and oral presentations at national and international meetings during this year particularly in the areas of Novel approaches to Haploidentical allogeneic stem cell transplantation (HSCT), Graft Versus Host Disease, relapsed disease post HSCT, prediction of mortality post allogeneic BMT, impacts of mutations in AML, unique insights into the biology of graft versus leukemia effects post BMT, genetic mechanisms underlying chemo-resistance in acute leukaemia and the journey of the HSCT donor.

Notable collaborations in 2018 included a number of trials with the Australia Leukaemia and Lymphoma Group, QIMR Berghofer, UQCCR, Herston Imaging Research Facility and the department of Dietetics.

### 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>
<b>Ashleigh Scott</b>	MPhil, UQ (2017-2019)	Targeting translocator protein to improve diagnostic accuracy in gastrointestinal graft versus host disease	<b>Glen Kennedy, Siok-Keen Tey</b>
<b>Andrea Henden</b>	PhD, UQ (2014-2018) <i>Submitted</i>	Interferon in bone marrow transplantation	<b>Geoff Hill</b>
<b>Nienke Zomerdiijk</b>	PhD, UQ (2015-2019)	The psychosocial impact of donating haematopoietic stem cells on adult related donors	<b>Jane Turner, Geoff Hill</b>
Rebecca Austin	PhD, UQ <i>Submitted</i>	Immune responses in leukaemia	<b>Steven Lane</b>
Victoria Ling	PhD, UQ	Chemotherapy resistance in leukaemia	<b>Steven Lane</b>
William Godfrey	Hons, UQ	Chemotherapy resistance in leukaemia	<b>Steven Lane</b>
Simone Minnie	PhD, UQ (2015-2018)	Immunotherapy of myeloma	<b>Geoff Hill</b>
Andrew Wilkinson	PhD, UQ (2015-2019)	Understanding IL-6 signalling in GVHD	<b>Geoff Hill</b>
Paulo Martins	PhD, UQ (2015-2018)	The immunological mechanisms of CMV reactivation after BMT	<b>Geoff Hill</b>
<b>Kate Markey</b>	MPH (Monash 2016-2018)	Clinical Research Methods	N/A

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Steven Lane</b>	<p><u>2017-19</u> Treasurer, Haematology Society of Australia and New Zealand</p> <p><u>2017-22</u> Councilor, Haematology Society of Australia and New Zealand</p> <p><u>2018-</u> Metro North Research Committee</p> <p><u>2018-</u> Head of Cancer Program, QIMR Berghofer Medical Research Institute</p> <p><u>2018-</u> Head, Cancer Theme, Brisbane Diamantina Health Partners</p> <p><u>2018-</u> RBWH Research Committee member</p> <p><u>2015 – 2018</u> RBWH Haematology Research Coordinator</p>		
<b>Andrea Henden</b>	<u>2013-</u> Senior Lecturer		The University of Queensland, Faculty of Medicine
<b>Geoff Hill</b>	Senior Clinical Research Fellowship		Queensland Health
<b>Geoff Hill</b>	Honorary Practitioner Research Fellow Level 2, Laboratory Head, Principal Research Fellow		NHMRC
<b>Kate Markey</b>	Junior Research Fellow	Post BMT microbiome and infectious diagnostics	Queensland Health
<b>Robyn Western</b>	Manager, Clinical Trials Unit	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Carolyn Little</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Jessica Kelly</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Kate Stark</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Katie Matthews</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Tricia Pusztai</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Kiara Mason</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Madonna Fuery</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Michelle deBock</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Renee Campbell</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Sinead Harvey</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Angela Wotherspoon</b>	Clinical Trial Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Nicola Quirk</b>	Senior Administration Officer	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Nienke Zomerdijk</b>	Research Coordinator	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health
<b>Sharon Milne</b>	Senior Administration Officer	Clinical Trials Unit Haematology/Bone Marrow Transplant	Queensland Health

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Andrea Henden	Geoff Hill, Glen Kennedy, 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)
Ashleigh Scott	Glen Kennedy, Siok Tey, Paul Thomas, David Pattison	Pilot study of <sup>18</sup> FGE-180-PET to assess acute gastrointestinal graft <i>versus</i> host disease
Ashleigh Scott	Leo Francis	Histological features and anti-TSPO immunohistochemistry (anti-TSPO IHC) in acute gastrointestinal graft <i>versus</i> host disease (GI-GVHD)
Cameron Curley	Haem Staff	JNJ AML 2002 – clinical trial of DACOGEN (Decitabine) Plus JNJ-56022473 (Anti CD123) Versus DACOGEN (Decitabine) Alone in Patients with AML
Cameron Curley	Haem Staff	Celgene MDS-006 FUSION – clinical trial in CC-486 (Oral Azacitidine) Alone in Combination With Durvalumab (MEDI4736) in Subjects With Myelodysplastic Syndromes
Geoff Hill	Haem Staff	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)
Geoff Hill	Haem Staff	IL-17 – observational study of IL-17-related cytokines in stem cell transplantation
Geoff Hill	Haem Staff	TREG Apheresis – developing a method to generate regulatory T cells from healthy donors
Geoff Hill	Haem Staff	IR Auto – observational study of immune reconstitution in patients undergoing autologous stem cell transplantation
Geoff Hill	Haem Staff	IR Allo – Observational study of immune reconstitution following stem cell transplantation
Glen Kennedy	Haem Staff	Janssen VCAT – clinical trial of Bortezomib Consolidation (With Thalidomide and Prednisolone) Vs Thalidomide and Prednisolone Alone in Previously Untreated Subjects With Multiple Myeloma
Glen Kennedy	Haem Staff	ALLG AML M16 – clinical trial of Sorafenib in Combination with Intensive Chemotherapy for Previously Untreated Adult FLT3-ITD Positive AML
Glen Kennedy	Haem Staff	ALLG AML NBCR M18 – National Blood Cancer Registry
Glen Kennedy	Haem Staff	Amgen Onyx Endeavor – clinical trial of Carfilzomib Plus Dexamethasone vs Bortezomib Plus Dexamethasone in Patients with Relapsed Multiple Myeloma
Glen Kennedy	Haem Staff	Celgene IDHENTIFY – clinical trial of Orally Administered AG-221 Versus Conventional Care Regimens in Subjects with Isocitrate Dehydrogenase 2 Mutation Positive Acute Myeloid Leukemia
Glen Kennedy	Haem Staff	Sabrina – clinical trial of rituximab subcutaneous in combination with CHOP or CVP versus rituximab IV in combination with CHOP or CVP in follicular lymphoma
Jason Butler	Haem Staff	Acerta Ace-ly308 ECHO – clinical trial of Bendamustine and Rituximab alone Versus in Combination with Acalabrutinib in Mantle Cell Lymphoma
Jason Butler	Haem Staff	ALLG ALL NHL 29 – clinical trial of Ibrutinib, Rituximab and mini-CHOP therapy in very elderly patients with newly diagnosed DLBCL
Jason Butler	Haem Staff	Amgen Candor 275 – clinical trial of Carfilzomib, Dexamethasone, and Daratumumab to Carfilzomib and Dexamethasone for the Treatment of Patients With Relapsed or Refractory Multiple Myeloma
Jason Butler	Haem Staff	Novartis REACH 2 – clinical trial of ruxolitinib vs. best available therapy in patients with corticosteroid-resistant acute graft vs. host disease after allogeneic stem cell transplantation
Kirk Morris	Haem Staff	Pomalidomide – "Real world" review of efficacy and safety of pomalidomide in Australian patients with relapsed refractory myeloma
Nick Weber	Paul Thomas, Samuel Kyle, Glen Kennedy, Kirk Morris, Simon Gray	Pilot study of <sup>68</sup> Ga-Pentixafor positron emission tomography (PET) imaging in multiple myeloma
Nicholas Weber	Haem Staff	AMaRC Janssen – clinical trial of bortezomib, cyclophosphamide and dexamethasone induction (VCD) compared with VCD and daratumumab induction followed by aratumumab maintenance (VCDD) for the initial treatment of transplant ineligible patients with multiple myeloma

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Nicholas Weber	Haem Staff	Beta-lactam PK/PD in febrile neutopenia (Patient population: patients undergoing intensive chemotherapy with anticipated duration of neutropenia >7 days)
Nicholas Weber	Haem Staff	Tolerability of early enteral feeding during allogeneic haematopoietic progenitor cell transplantation: a randomized comparison with 'standard' parenteral nutritional support
Nienke Zomerdijk	Jane Turner, Geoff Hill, David Gottlieb	The psychosocial impact of HSC donation on adult related donors
Nienke Zomerdijk	Jane Turner, Geoff Hill, David Gottlieb	Evaluation of a psycho-educational resource to support adults who are donating stem cells to a family member
Simon Durrant	Haem Staff	Abbvie M14-031 BELLINI – clinical trial of Bortezomib and Dexamethasone in Combination with Either Venetoclax or Placebo in Subjects with Relapsed or Refractory Multiple Myeloma
Simon Durrant	Haem Staff	Gilead SIMPLIFY – clinical trial of Momelotinib vs Ruxolitinib in Subjects with Primary Myelofibrosis (PMF) or Post-Polycythemia Vera or Post-Essential Thrombocythemia Myelofibrosis (Post-PV/ET MF)
Simon Durrant	Haem Staff	Pfizer Ski Extension B1871040 – ICON – Bosutiib treatment extension study for patients with chronic myeloid leukemia
Simon Durrant	Haem Staff	Novartis Response – clinical trial of JAK inhibitor INC424 tablets verSus bEst available care in Polycythemia
Simon Durrant	Haem Staff	Novartis Response 2 – clinical trial of ruxolitinib versus best available therapy in patients with polycythemia vera
Simon Durrant	Haem Staff	HELIOS CMV – clinical trial of a Therapeutic Vaccine, ASP0113, in Cytomegalovirus (CMV)-Seropositive Recipients Undergoing Allogeneic, Hematopoietic Cell Transplant (HCT)
Simon Durrant	Haem Staff	Gilead NIAGRA 119 – clinical trial of Idelalisib (GS-1101) in Combination with Ofatumumab for Previously Treated Chronic Lymphocytic Leukemia
Simon Durrant	Haem Staff	Comfort Rollover – clinical trial of patients who have completed a prior global Novartis or Incyte sponsored ruxolitinib (INC424) study and are judged by the investigator to benefit from continued treatment
Simon Durrant	Haem Staff	ROBIN BDM3502 – clinical trial of Bendamustine compared to physician's choice in the treatment of NonHodgkin's Lymphoma
Simon Durrant	Haem Staff	Amgen Blincyto 292 Verdi – clinical trial comparing Blinatumomab to Standard of Care
Simon Durrant	Haem Staff	Novartis Harmony – clinical trial of Ruxolitinib (INC424) and BKM120 in patients with Myelofibrosis
Steven Lane	Haem Staff	APML5 – clinical trial of oral arsenic in AML
Steven Lane	Haem Staff	AML M21: Sorafenib and azacitidine in AML
Steven Lane	Haem Staff	AML genomic analysis

## 2018 Research Awards and Achievements

Recipient	Award	Event
Ashleigh Scott	RBWH Research Postgraduate Scholarship 2018 (\$40,000)	To perform research activities in 2018
Ashleigh Scott	RBWH Research Postgraduate Scholarship 2019 (\$44,000)	To perform research activities in 2019
Nienke Zomerdijk	UQ Faculty of Medicine Travel Scholarship (\$1,600)	To support research activities in 2018
Nienke Zomerdijk	UQ HDR Candidate Development Award (\$4,000)	To support research activities in 2018
Nienke Zomerdijk	Best Oral Presentation	UQ Clinical and Public Health Symposium

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Ashleigh Scott</b>	Haematology/BMT	Pilot study of <sup>18</sup> FGE-180-PET to assess acute gastrointestinal graft versus host disease	RBWH Foundation Diamond Care Grants	\$20,000	\$40,000 (2017-2018)
<b>Ashleigh Scott</b>	Haematology/BMT	Histological features and anti-TSPO immunohistochemistry (anti-TSPO IHC) in acute gastrointestinal graft versus host disease (GI-GVHD)	Pathology Queensland Study, Education and Research Committee	\$1,494	\$2978.16 (2017-2018)
<b>Ashleigh Scott</b>	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	\$20,000	\$40,000 (2018-2019)
<b>Geoff Hill</b>	Director of Research – CCS RBWH	Immunological therapies for cancer, chronic infection and autoimmunity	NHMRC Program grant: APP1071822	\$359,506	\$1,797,530 (2015-2019)
<b>Geoff Hill</b>	Director of Research – CCS RBWH		NHMRC senior Principal Research Fellowship	\$187,780	\$938,900 (2016-2020)
<b>Nienke Zomerdijk</b>	Haematology/BMT	The psychosocial impact of donating haematopoietic stem cells on adult related donors	Australian Postgraduate Award	\$26,000	\$78,000 (2015-2018)
<b>Nienke Zomerdijk</b>	Haematology/BMT	The psychosocial impact of donating haematopoietic stem cells on adult related donors	RBWH Foundation Diamond Cancer Care Grant	\$2,500	\$5,000 (2017-2018)
<b>Nienke Zomerdijk</b>	Haematology/BMT	The psychosocial impact of donating haematopoietic stem cells on adult related donors	RBWH Foundation Top Up Scholarship	\$8,000	\$16,000 (2017-2018)
<b>Siok Tey</b>	Haematology/BMT	The interplay between IL-6 and GVHD on anti-viral and anti-leukemic immunity	NHMRC Project Grant	\$163,125	\$489,376 (2016-2018)
<b>Steven Lane</b>	Haematology/BMT	Targeting Leukaemia Stem cells through inhibition of telomerase	NHMRC Project Grant	\$219,000	\$657,000 (2016-2018)
<b>Steven Lane</b>	Haematology/BMT	The evolution of acute myeloid leukaemia through the in-situ transformation of haematopoietic stem cells	NHMRC Project Grant	\$215,667	\$647,000 (2016-2018)
<b>Steven Lane</b>	Haematology/BMT	Deciphering the overlapping roles of SSB1 and SSB2 in the regulation of haematopoiesis and intestinal homeostasis	NHMRC Project Grant	\$239,750	\$959,000 (2015-2018)
<b>Steven Lane</b>	Haematology/BMT	Genetic modelling of MPN progression	Cancer Australia	\$100,000	\$200,000 over 2 years
<b>Steven Lane</b>	Haematology/BMT	Understanding Chemoresistance in AML	CSL Centenary Fellowship	\$250,000	\$1.25m over 5 years

## 2018 Research Publications

### Journal Articles:

- Zhang, P., Raju, J., Ullah, A., Au, R., Varelias, A., Gartlan, K., Olver, S. D., Samson, L. D., Sturgeon, E., **Zomerdijk, N.**, **Avery, J.**, Gargett, T., Brown, M. P., Coin, L., Ganesamoorthy, D., **Hutchins, C.**, **Pratt, G.**, Kennedy, GA., Morton, AJ., Curley, C., Hill, G.R., & Tey, S.K. Phase I trial of iCasp9 T cells in adult stem cell transplant demonstrates massive clonotypic proliferative potential and long-term persistence of transgenic T cells. *Clinical Cancer Research*. *Accepted 4 December 2018*
- Forsyth, CJ., Chan, W., Cook, NC., **Lane, SW.**, Burbury, KL., Perkins, AC., Grigg, AP., & Ross, DM. Recommendations for the use of pegylated interferon-alpha in the treatment of classical myeloproliferative neoplasms. *Internal Medicine Journal*. *Published online 8 November 2018*. doi: 10.1111/imj.14154
- Jacquelin, S., Straube, J., Cooper, L., Vu, T., Song, A., Bywater, M., Baxter, E., Heidecker, M., Wackrow, B., Porter, A., Ling, V., Green, J., Austin, R., Kazakoff, S., Waddell, N., Hesson, LB., Pimanda, JE., Stegelmann, F., Bullinger, L., Döhner, K., Rampal, RK., Heckl, D., **Hill, GR.**, & **Lane, SW.** Jak2V617F and Dnmt3a loss cooperate to induce myelofibrosis through activated enhancer-driven inflammation. *Blood*. *Published online 26 October 2018*. doi: 10.1182/blood-2018-04-846220

### Journal Articles: (cont):

- Zomerdijk, N., Turner, JM., & Hill, GR.** Adult-related haematopoietic stem cell donor experiences and the provision of information and psychosocial support: A systematic literature review. *European Journal of Cancer Care. Published online 2 October 2018.* doi: 10.1111/ecc.12932
- Scott, A., Weber, N.,** Tiley, C., Taylor, K., Taper, J., Harrison, S., Chan, K.L., Stark, R., Lee, C., **Morris, K.,** Ho, P.J., Dodds, A., Ramanathan, S., Ramakrishna, R., Watson, AM., Auguston, B., Kwok, F., Quach, H., Warburton, P., Rowlings P., & Mollee, P. Real world Australian experience of pomalidomide for relapsed/refractory myeloma. *Leukemia and Lymphoma. Published online 3 June 2018.* doi: 10.1080/10428194.2017.1387911
- Bradford, NK., Henney, R., Walker, R., Walpole, E., **Kennedy, GA.,** Nicholls, W., Pinkerton, R. Queensland Youth Cancer Service: a Partnership Model to Facilitate Access to Quality Care for Young People Diagnosed with Cancer. *Journal of adolescent and young adult oncology. Published online 1 June 2018.* doi: 10.1089/jayao.2017.0080
- Varelias, A., Bunting, MD., Ormerod, KL., Koyama, M., Olver, SD., Straube, J., Kuns, RD., Robb, RJ., **Henden, AS.,** Cooper, L., Lachner, N., Gartlan, KH., Lantz, O., Kjer-Nielsen, L., Mak, JYW., Fairlie, DP., Clouston, AD., McCluskey, J., Rossjohn, J., **Lane, SW.,** Hugenoltz, P., & **Hill, GR.** Recipient Mucosal-Associated Invariant T Cells control GVHD within the colon. *The Journal of Clinical Investigation. Published online 9 April 2018.* doi: 10.1172/JCI91646
- Barge, L., Pahn, G., & **Weber, N.** Transient immune-mediated agranulocytosis following *Mycoplasma pneumoniae* infection. *BMJ Case Reports. Published online 1 April 2018.* doi: 10.1136/bcr-2018-224537
- Li, XY., Das, I., Lepletier, A., Addala, V., Bald, T., Stannard, K., Barkauskas, D., Liu, J., Aguilera, AR., Takeda, K., Braun, M., Nakamura, K., Jacquelin, S., **Lane, SW.,** Teng, MW., Dougall, WC., & Smyth, MJ. CD155 loss enhances tumor suppression via combined host and tumor-intrinsic mechanisms. *Journal of Clinical Investigation. Published online 16 March 2018.* doi: 10.1172/JCI98769
- Markey, KA.,** Kuns, RD., Browne, DJ., Gartlan, KH., Robb, RJ., Martins, JP., **Henden, AS.,** Minnie, SA., Cheong, M., Koyama, M., Smyth, MJ., Steptoe, RJ., Belz, GT., Degli-Esposti, MA., **Lane, SW., & Hill, GR.** Flt-3L expansion of recipients CD8a+ dendritic cells deletes alloreactive donor T cells and represents an alternative to post-transplant cyclophosphamide for the prevention of GVHD. *Clinical Cancer Research. Published online 13 March 2018.* doi: 10.1158/1078-0432.CCR-17-2148
- Markey, KA.,** Gartlan, KH., Kuns, RD., **Lane, SW., & Hill, GR.** Conventional dendritic cells are required for the cross-presentation of leukemia-specific antigen in a model of AML relapse post-BMT. *Bone Marrow Transplantation. Published online 13 March 2018.* doi: 10.1038/s41409-018-0148-y
- Markey, KA.,** Gartlan, KH., Kuns, RD., **Lane, SW., & Hill, GR.** Conventional dendritic cells are required for the cross-presentation of leukemia-specific antigen in a model of AML relapse post-BMT. *Bone Marrow Transplantation. Published online 13 March 2018.* doi: 10.1038/s41409-018-0148-y
- Straube, J., Ling, YV., **Hill, GR., & Lane, SW.** The impact of age, NPM1mut and FLT3ITD allelic ratio in patients with acute myeloid leukemia. *Blood. Published online 8 March 2018.* doi: 10.1182/blood-2017-09-807438
- Catchpoole, EM., Thirunavukarasu, CE., Varelias, A., Schlebusch, S., Olver, S., **Zomerdijk, N.,** Osland, E., **Kennedy, GA., Tey, SK., Hill, GR., & Markey, KA.,** Early Blood Stream Infection after BMT is Associated with Cytokine Dysregulation and Poor Overall Survival. *Biology of Blood and Bone Marrow Transplantation. Published online 5 March 2018.* doi: 10.1016/j.bbmt.2018.02.025
- Scott, AP., Tey, SK., Butler, J., & Kennedy, GA.** Diagnostic utility of endoscopy and biopsy in suspected acute gastrointestinal graft versus host disease (GI-GVHD) following haematopoietic progenitor cell transplantation (HPCT). *Biology of Blood and Marrow Transplantation. Published online 2 February 2018.* doi: 10.1016/j.bbmt.2018.01.034.

### 2018 Conference Presentations – Invited Speaker, Oral and Poster

#### Invited Speaker:

- Lane SW.** Genome editing to model the progression of blood cancers. Pathology Update: the annual scientific meeting of the Royal College of Pathologists of Australasia. March 2018, Sydney
- Lane SW.** In vivo modeling of disease progression in MPN. Cure Cancer Australia Annual Scientific Meeting. May 2018, Sydney
- Lane SW.** Kanga News Dinner. Cure Cancer Australia. May 2018, Sydney
- Lane SW.** Genome editing to model the progression of blood cancers. Pathology Update: the annual scientific meeting of the Royal College of Pathologists of Australasia, June 2018. Sydney
- Henden A.** A Phase I/II study of Pegylated-Interferon 2-alpha for relapsed haematological malignancy after allogeneic progenitor cell transplantation. Blood Annual Scientific Meeting, October 2018, Brisbane
- Tate C, Scott AP.** Outcomes of severe aplastic anaemia post allogeneic stem cell transplant. Blood Annual Scientific Meeting, October 2018, Brisbane
- Thirunavukarasu CE, Scott AP.** Predictors of mortality in true positive versus discordant gastrointestinal graft versus host disease (GI-GVHD). Blood Annual Scientific Meeting, October 2018, Brisbane
- Admojo, L, Scott AP,** et al. A retrospective analysis of pralatrexate efficacy and tolerability in Australia. Blood Annual Scientific Meeting, October 2018, Brisbane
- Zomerdijk N.** Adult related stem cell donor care – experiences and perceptions of related donors and transplant nurses. Blood Annual Scientific Meeting, October 2018, Brisbane.

### Oral Presentations:

1. Vu T, . **Lane SW**. Overexpression of the transcription factor Cdx2 in haematopoietic stem cells predisposes to haematologic malignancies. Travel Award. Congress of European Hematology Association. June 2018, Stockholm, Sweden
2. Vu T, **Lane SW**. Overexpression of the transcription factor Cdx2 in haematopoietic stem cells predisposes to haematologic malignancies. European Hematology Association. June 2018, Stockholm, Sweden
3. Vu T, **Lane SW**. Overexpression of the transcription factor Cdx2 in haematopoietic stem cells predisposes to haematologic malignancies. International Society of Experimental Hematology, August 2018, Los Angeles
4. Austin R... **Lane SW**. Oncogenic-Drivers Dictate Immune Responses to Control Disease Progression in Acute Myeloid Leukaemia. ASH Annual Meeting, December 2018, San Diego
5. Curtis DJ... **Lane SW**. Small-Molecule Inhibition of PRMT5 Induces Translational Stress and p53 in JAK2V617F Mutant Myeloproliferative Neoplasms. ASH Annual Meeting, December 2018, San Diego
6. **Lane SW**. Leukaemia Foundation – Current Challenges in the management of MPN, September 2018, Brisbane
7. **Henden A**. Improving graft versus leukaemia with Interferon Alpha. 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018, Brisbane
8. **Butler J**. Improving patient outcomes: Novel agents for Chronic Lymphocytic Leukaemia (CLL) and Follicular Lymphoma (FL). Zydelig Nurses Meeting, August 2018, Brisbane
9. **Pusztai, T**. Practical patient management – Novel agents for CLL and FL. Zydelig Nurses Meeting, August 2018, Brisbane
10. **Scott AP, Tey SK, Pattison D, Kennedy GA**. Clinical Allogeneic Transplantation: Acute and Chronic GVHD, Immune Reconstitution. ASH Annual Meeting, December 2018, San Diego
11. **Yuan Y, Scott AP**. Real-World Efficacy of Anti-Fungal Prophylaxis in Patients Treated for Acute Gastrointestinal Graft-Versus-host Disease (GI-GVHD). ASH Annual Meeting, December 2018, San Diego
12. **Scott AP, Tey SK, Pattison D, Kennedy GA**. Targeted Molecular Imaging of Translocator Protein (TSPO) Using <sup>18</sup>FGE180-PET for the Diagnosis of Gastrointestinal Graft Versus host Disease (GI-GVHD). ASH Annual Meeting, December 2018, San Diego
13. **Tate C**. Outcomes in severe aplastic anaemia post allogeneic stem cell transplant. RBWH Cancer Care Research Retreat, November 2018, Brisbane
14. **Zomerdijk N**. Being a stem cell donor for a chronically ill-family member: adult donors' experiences and unmet needs. The University of Queensland Clinical and Public Health Symposium, November 2018, Brisbane
15. **Lane SW**. Convenor: Blood\_2018 (National conference of the Haematology Society of Australia and New Zealand, Thrombosis Haemostasis Society of Australia and New Zealand, Bone Marrow Transplant Society of Aust NZ, Australian and New Zealand Society of Blood Transfusion). October 2018, Brisbane.

### Poster Presentations:

1. **Henden A** et al, A Phase I/II Study of Pegylated-Interferon-2Alpha For Relapsed Haematological Malignancy After Allogeneic Haematopoietic Progenitor Cell Transplantation. European Hematology Association. June 2018, Stockholm, Sweden
2. Nair AP, **Hill GR**, Ritchie D, **Butler J**, Spencer A, Wang TY, Muirhead J, Mason K, Reynolds J, Curtis D. Regression Tree-based model for predicting Non-relapse mortality in AML patients Allo-transplanted in first remission. EBMT annual Scientific Meeting. March 2018, Lisbon, Portugal
3. **Ling VY... Tey SK, Lane SW**. Identification of Genetic Pathways Controlling Resistance to Standard Combination Chemotherapy in Acute Myeloid Leukemia. ASH Annual Meeting, December 2018, San Diego
4. **Zomerdijk N**. Predictors of negative psychosocial outcomes among adult related stem cell donors – an Australian Multicenter study. The 20<sup>th</sup> World Congress of Psycho-Oncology and Psychosocial Academy, November 2018, Hong Kong
5. **Zomerdijk N**. Adult related stem cell donor experiences – qualitative results from an Australian Multicenter study. The 20<sup>th</sup> World Congress of Psycho-Oncology and Psychosocial Academy, November 2018, Hong Kong.

## Cancer Care Nursing Professorial Precinct



**Michael Smith**  
Acting Nursing Director  
Cancer Care Services RBWH

Aims of the research group: the Cancer Care Nursing Professorial Precinct is a strategic collaboration between nurses in Cancer Care Services, Royal Brisbane and Women's Hospital and academics in the School of Nursing, Queensland University of Technology (QUT). Led by Professor Patsy Yates, the Precinct aims 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. There is a thriving culture of research that delivers continuous service improvement and evidence-based care.

**Outcomes for 2018:** the key areas of the Precinct's research programme have continued into 2018. This has included service delivery improvement, vascular access device management, prevention of blood stream infections, managing treatment toxicities, survivorship care and palliative care. Ongoing projects have included further growth of the vascular access devices registry, providing pro-active palliative care for people at risk of dying and research into current models of care. One of the key strengths of the Precinct is the number of high quality trials conducted investigating best practice management of vascular access devices. All research conducted in the Precinct is patient-centred and seeks to directly improve the care of patients. The broad body of work conducted will lead to improved outcomes for people living with, and beyond treatment for cancer through personalised healthcare interventions and health service innovation at a local and international level. Locally, the Evidence-Based Practice program has enabled excellence in delivery of nursing care across clinical areas. International impact continues with the ongoing dissemination of research through publications and conference presentations.

Research activities have been funded by a range of sources including the National Health and Medical Research Council, The RBWH Foundation, professional bodies (such as the Cancer Nursing Society of Australia), academic institutions and industry partners. Cancer Care Services has a strong culture of nurses pursuing post-graduate study and research higher degrees. In 2018, several nurses completed such studies and were awarded competitive scholarships. Three nurses completed higher degree research qualifications. Other highlights include members of the Precinct receiving four awards.

The key strength of the Cancer Nursing Professorial Precinct lies in the team's ability to collaborate widely. In 2018, RBWH cancer nurses worked with academic institutions including QUT, Griffith University, University of Southern Queensland, and University of Queensland. Collaborations also occurred with Princess Alexandra Hospital and Gold Coast University Hospital. These collaborations have continued to enhance the quality and impact of the research conducted in Cancer Care Services at the RBWH.

### 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>
<b>Sarah Northfield</b>	Master of Applied Science (Research), QUT (2014-2018)	The palliative care referral decision-making process in the acute cancer setting: Nurses' advocacy behaviours and the factors influencing these behaviours	<b>Patsy Yates, Raymond Chan,</b> John Rosenberg
<b>Julie Flynn</b>	PhD, Griffith University (2015-2018)	Decontamination of central venous catheter needleless connectors	<b>Claire Rickard, Samantha Keogh,</b> Li Zhang, Amanda Ullman
<b>Nicole Gavin</b>	PhD, Griffith University (2012-2018)	The saFety of pArenteral nutrition regarding miCrobial growth and vascular catheTer-related infection (The FACT Study)	<b>Claire Rickard, David MacMillan,</b> <b>Samantha Keogh</b>
<b>Rae Blades</b>	Master of Applied Science (Research), QUT (2016-2019)	A cost-effectiveness analysis of a silicone gel (StrataXRT®) for prophylaxis and management of Radiation Induced Skin Injury in head and neck cancer patients	<b>Patsy Yates, Raymond Chan,</b> <b>Steven McPhail</b>
<b>Therese Hayes</b>	Master of Applied Science (Research), QUT (2016-2019)	Unmet care needs in elderly patients with a haematological malignancy	Raymond Chan, <b>Patsy Yates,</b>
<b>Robyn Matthews</b>	Master of Applied Science (Research) QUT (2016-2019)	End-of-life care education and training essentials of health professionals in the acute care setting	Raymond Chan, <b>Patsy Yates,</b> <b>Elise Button</b>



### Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Justine Leach</b>	Master of Applied Science (Research), QUT (2016-2019)	Nurse-led Clinics in Cancer Care Services	Raymond Chan, <b>Patsy Yates</b>
<b>Natasha Roberts</b>	PhD, QUT (2016-2019)	Patient Reported Outcomes in the Medical Oncology Setting (iPROMOs)	Monika Janda, Kimberly Alexander, <b>David Wyld</b>
Alison Bowers	PhD, QUT (2016-2019)	Models of care and care needs for Queensland Children Hospice	<b>Patsy Yates, Raymond Chan</b>
Leanne Stone	PhD, QUT (2014-2019)	Comparing the nature of nursing practice in Australian Magnet and non-Magnet hospitals	<b>Fiona Coyer, Raymond Chan, Alexandra McCarthy</b>
Hanan Al Yami	PhD, UQ (2016-2018)	Attributes of Quality End-of-Life Care for Advanced Cancer Patients in Critical Care Units in Saudi Arabia	Karen New, Judith McMurray, <b>Raymond Chan</b>
Tai-Rae Downer	MPhil, QUT (2017-2019)	Identifying patterns of care in Geriatric Oncology patients through health service usage and costs	Louise Gordon, <b>Raymond Chan, Patsy Yates</b>

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Nicole Gavin</b>	Co-joint nurse researcher QUT and RBWH Cancer Care Services	School of Nursing	Queensland University of Technology (2017 – current)
<b>Elise Button</b>	Co-joint nurse researcher QUT and RBWH Cancer Care Services	School of Nursing	Queensland University of Technology (2017 – current)
<b>Raymond Chan</b>	NHMRC Health Professional Research Fellowship	Development and evaluation of a tailored fatigue self-management behavioural intervention for patients with advanced cancer	Queensland University of Technology (2014-2018)
<b>Patsy Yates</b>	Head, School of Nursing, QUT, Professorial Precinct Lead	School of Nursing	Queensland University of Technology (ongoing)

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Nicole Gavin</b>	<b>Nicole Gavin, Gillian Nasato, Nicole Marsh, Emily Larsen, Sarah Northfield, Glen Kennedy, David Wyld, Michael Smith, Krispin Hajkowicz (ID), Trent Atkinson (DMI), Barbara Hewer (VASE), Fiona Coyer (QUT), Alison Alexander, Patsy Yates, Peter Mollee (PAH)</b>	Central Venous Access Device Registry
<b>Nicole Gavin</b>	<b>Nicole Gavin, Gillian Nasato, Sarah Northfield, Shelley Kulperger (MN Consumer Engagement), Mirko Guaralda (QUT), Glen Kennedy, David Wyld, Elise Button, Michael Smith, Krispin Hajkowicz (ID), Graham Steel (EDMS), Trish Hurst (IC), Janelle Zillmann (IC), Bridget Heinemann (Comms), Alison Alexander, Jared Donovan (QUT), Glenda Caldwell (QUT), Markus Rittenbruch (QUT), Cynthia Cliff (QUT), Kaye Petherick (QUT)</b>	Collaborative Engagement Strategy Study: Hand Hygiene
<b>Nicole Gavin</b>	<b>Nicole Gavin, Amanda Ullman (GU), Tricia Kleidon (LCCH), Nicole March (CCN), Emily Larsen, Jill Campbell (Skin Integrity), Claire Rickard (GU)</b>	Estimating the prevalence of impaired skin surrounding devices: The EPISODE Study
<b>Nicole Gavin</b>	<b>Nicole Gavin, Amanda Ullman (GU), Tricia Kleidon (LCCH), Claire Rickard (GU), Li Zhang (GU), Emily Larsen</b>	Peripherally Inserted Central Catheter Outcomes Polyurethane versus Endexo: the PICCOMPARE Trial
<b>Nicole Gavin</b>	<b>Claire Rickard, Nicole Gavin, David MacMillan, Samantha Keogh, Gillian Ray-Barruel</b>	The safety of parenteral nutrition regarding microbial growth and vascular catheter-related infection (The FACT Study)

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Nicole Gavin	Nicole Gavin, Elise Button, Rebecca Lippiatt, Emily Russell, Nicole Marsh, Emily Larsen, Julie Flynn, Glen Kennedy, David Wyld, Michael Smith, Alison Alexander, Amanda Sutherland, Jennifer O'Brien, Danielle Johanson, Kieren Barker, Tracy Glynn, David Williams, Therese Hayes, Jenni Leutenegger, Rae Blades, Barbara Hewer, Catriona Booker	Improving vascular access care in cancer care services
Julie Flynn	Claire Rickard, Samantha Keogh, Li Zhang, Amanda Ullman	Decontamination of central venous catheter needleless connectors
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
Sarah Northfield	Patsy Yates, Raymond Chan, John Rosenberg	The palliative care referral decision-making process in the acute cancer setting: nurses' advocacy behaviours and the factors influencing these behaviours
Therese Hayes	Raymond Chan, Patsy Yates	Unmet care needs in elderly patients with a haematological malignancy
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
Mary-Ellen Yarker	Carol Windsor, Jennifer Fox	The role of the oncology nurse in the decision-making process of the oncology patient
Elise Button	Elise Button, Nicole Gavin, Jason Butler, Raymond Chan, Patsy Yates	The Patient And Carer's well-being, values and preferences, living with life-threatening illness (The PACE Study)
Elise Button	Elise Button, Sarah Northfield, Nicole Gavin, Glen Kennedy, David Wyld, Gillian Nasato, Jeffrey Rowland, Rhonda Mead, Darshit Thaker, Danielle Johanson, Justine Leach, Shelley Kulperger, Carey-Ann Tanner, Gary Powell, Patsy Yates, Ray Chan, Geoff Mitchell	The Rainy-Day Care bundle: a pilot
Brighid Scanlon	Jo Durham	'Understanding barriers to health access in populations experiencing displacement'
Raymond Chan	Patsy Yates, Jane Turner, Brett Hughes, Raymond Chan	Development and evaluation of a tailored fatigue self-management behavioural intervention for patients with advanced cancer
Raymond Chan	Louisa Gordon, Adrienne Hudson, Natalie Bradford, Aaron Conway, Patsy Yates, Cherie Franks, Robyn Henderson, Richard Lakeman, Trisha Johnson, Tim Moffitt	Queensland Nurse Navigator Program Evaluation Pilot Study
Raymond Chan	Natalie Bradford, Patsy Yates, Ann Boner, Wolf Marx, Iint Douglas	Nurse-led models of care where the nurse takes a primary care role: a systematic review
Raymond Chan	Glen Kennedy, Patsy Yates, Jane Turner, Elise Button, Anthony Smith	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)
Elise Button	Elise Button, Nicole Gavin, Jason Butler, Raymond Chan, Patsy Yates	The Patient And Carer's well-being, values and preferences, living with life-threatening illness (The PACE Study)
Elise Button	Elise Button, Sarah Northfield, Nicole Gavin, Glen Kennedy, David Wyld, Gillian Nasato, Jeffrey Rowland, Rhonda Mead, Darshit Thaker, Danielle Johanson, Justine Leach, Shelley Kulperger, Carey-Ann Tanner, Gary Powell, Patsy Yates, Ray Chan, Geoff Mitchell	The Rainy-Day Care bundle: a pilot

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Emily Larsen, Nicole Marsh, Nicole Gavin, Julie Flynn, Joan Webster (Griffith University)	Nicole Gavin, Julie Flynn	<b>C</b> Ancer <b>ca</b> RE: The <b>ris</b> K factors of <b>v</b> Enous access <b>failu</b> Re (CARE <b>Ta</b> KER Study)
Glen Kennedy, Patsy Yates, Jane Turner, Anthony Smith	Elise Button	A Multi-Centre Randomised Controlled Trial of a Nurse-led Survivorship Intervention for <b>E</b> mpoweri <b>NG</b> <b>p</b> Atients with <b>Hod</b> Gkin's and Non-Hodgkin's Lymphoma after <b>tr</b> Eatment: (The ENGAGE Trial)
Yates, P (Project Lead), Ash K (QUT) & Cancer Australia - collaborative lead researchers.	Northfield S – Service line researcher	The psychosexual care of women affected by gynaecological cancers: An e-learning resource for healthcare professionals (redevelopment and content update of modules)
Dr Carol Douglas	Sarah Northfield	The <b>C</b> are <b>O</b> f the <b>D</b> ying <b>E</b> valuation (CODE) Project: a survey of bereaved persons in an Australian acute care setting
Kathy Hurree	Elise Button, Nicole Gavin	Educating patients – their way: a co-design approach to develop patient education videos regarding medication administration and supportive cares
Kaye Petherick, Judith McLean, Lowanna Dunn, Deborah Anderson, Cynthia Cliff, Marisha McAuliffe (QUT)	Alison Alexander, Gillian Nasato, Michael Smith, Glen Kennedy (Cancer Care Services)	Cancer Care Information Portal for Cancer Patients in Brisbane's Metro North Area
Claire Rickard, Peter Mollee, Geoffrey Playford, Li Zhang, Sam Keogh, Andrew Hallahan, Evan Alexandrou (Griffith University)	Raymond Chan, Nicole Gavin, Emily Larsen (Cancer Care Services)	<b>P</b> eripherally <b>I</b> n <b>S</b> erted <b>C</b> entral catheter dressing and <b>S</b> ecurement in cancer patients: the PISCES Trial. Protocol for a 2x2 factorial, superiority randomised controlled trial
Bonnie Clough, Sonj March, Leanne Casey, Rachel Phillips R, & Michael Ireland. (University of Southern Queensland and Ipswich Hospital)	Raymond Chan (Cancer Care Services)	Psychosocial Interventions for Managing Occupational Stress and Burnout among Medical Doctors: a Systematic Review
Alexandre Chan (National University of Singapore)	Raymond Chan (Cancer Care Services)	A culturally adapted, multidisciplinary psychoeducation program for early-stage breast cancer survivors in Asia: a randomized, controlled trial
Elaine Barros Ferreira, Christiane Inocência Vasques, Rafael Gadia, Eliete Neves Silva Guerra, Luis André Mezzomo, Graziela De Luca Canto, Paula Elaine Diniz dos Reis (University of BrasiliaBrasiliaBrazil)	Raymond Chan (Cancer Care Services)	Topical interventions to prevent acute radiation dermatitis in head and neck cancer: a systematic review and meta-analysis
Natalie Bradford, Rachel Edwards (Children's Health Queensland)	Raymond Chan (Cancer Care Services)	Heparin versus 0.9% sodium chloride intermittent flushes for CVC in children and infants: a systematic review and meta-analysis
Tewodros Eyob, Terence Ng, Alexandre Chan (National University of Singapore)	Raymond Chan (Cancer Care Services)	Impact of chemotherapy on cancer-related fatigue and cytokines in 1312 patients: a systematic review of quantitative studies
Laisa Teleni, Alexandre Chan, Liz Isenring, Ian Vela, Warrick Inder, Debra Anderson, Alexandra McCarthy. (Bond University, National University of Singapore, and PA Hospital)	Raymond Chan (Cancer Care Services)	Dietary and exercise interventions on the quality of life, menopausal-like symptoms and metabolic risk factors in men undergoing androgen deprivation therapy for prostate cancer: a systematic review of quantitative studies

## 2018 Research Awards and Achievements

Recipient	Award	Event
Gavin NC	Best poster	Intravenous Nursing New Zealand
Gavin NC	Best Research Paper	Cancer Nurses' Society of Australia
Gavin NC	Winner Consumer Focus Project	QuARRIES
Button E	Third place	eHealth Hackathon

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Gavin NC</b> , Curtis K, Fuller F, Jansens W	Cancer Care Services	Revision of Cancer Nurses' Society of Australia Vascular Access Device Guidelines	Cancer Nurses' Society of Australia Special Project Funding 2018	\$27,467.52	\$27,467.52 (2018)
Hurree K, <b>Button E</b> , Nakagaki M, <b>Gavin NC</b> , Adcock K, Whitfield K, Douglas C, Smith M, Wyld D, Kennedy G	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	\$41,315.50	\$82,631 (2018-2019)
<b>Elise Button, Nicole Gavin, Jason Butler, Raymond Chan, Patsy Yates</b>	Cancer Care Services	The <b>Patient And Carer's</b> well-being, values and preferences, living with life-threatening illness (The PACE Study)	RBWH Foundation Susan Suduk OneDay To Conquer Cancer Diamond Care Grants 2017	\$20,000	\$40,000 (2017-2018)
<b>Raymond Chan</b> , Alex Molassiotis, <b>Patsy Yates, Gillian Nasato, Teresa Brown, Elise Button</b> , Andrea Marshall, I Isenring, <b>David Wyld, Melissa Eastgate, Nicole Gavin</b>	Cancer Care Services	A Patient-family-Centered intervention to promote Nutrition In Advanced Cancer patients	RBWH Foundation Susan Suduk OneDay To Conquer Cancer Diamond Care Grants 2017	\$20,000	\$40,000 (2017-2018)
<b>David Wyld, Matthew Burge, Raymond Chan</b> , Jane Turner, <b>Patsy Yates</b> , Rachel Neale, Vanessa Beesley	Cancer Care Services	Towards improved support of patients with pancreatic cancer and their families	RBWH Foundation Susan Suduk OneDay To Conquer Cancer Diamond Care Grants 2017	\$20,000	\$40,000 (2017-2018)
<b>Patsy Yates, Raymond Chan, David Wyld</b>	Cancer Nursing Professorial Precinct; Cancer Care Services	A sequential multiple assignment randomized trial (SMART) of nursing interventions to reduce pain associated with chemotherapy induced peripheral neuropathy	NHMRC	\$237,418	\$713,418 (2017-2020)
<b>Elise Button, Sarah Northfield, Nicole Gavin, Glen Kennedy, David Wyld, Gillian Nasato</b> , Jeffrey Rowland, Rhonda Mead, <b>Darshit Thaker, Danielle Johanson, Justine Leach</b> , Shelley Kulperger, Carey-Ann Tanner, <b>Gary Powell, Patsy Yates, Ray Chan</b> , Geoff Mitchell	Cancer Care Services	The Rainy-Day Care bundle: a pilot	State-wide End of Life Strategy SEED funding	\$60,000	\$120,000 (2017-2018)
<b>Rae Blades</b>	Cancer Care Services	A cost-effectiveness analysis of a silicone gel (StrataXRT®) for prophylaxis and management of Radiation Induced Skin Injury in head and neck cancer patients	RBWH Foundation	\$36,863.96	\$36,863.96 (2018)

## 2018 Research Publications

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### Journal Articles:

1. **Button E, Gavin NC, Chan R, Chambers S, Butler J, Yates P.** (2018) Clinical indicators that identify risk of deteriorating and dying in people with a haematological malignancy: a case-control study with multivariable analysis. *J Palliative Medicine.* 21(12): 1729-1740.
2. Tuffaha H, Marsh N, Brynes J, Webster J, **Gavin NC, Cooke M & Rickard C** (2018) Cost of vascular access devices in public hospitals in Queensland. *Australian Health Review.* <https://doi.org/10.1071/AH18102>
3. Takashima M, **Gavin NC, Larsen EN, Northfield S, Mihala G, Corley A, Ziegenfuss M, Rickard CM.** (2018). Building a central vascular access device registry in an adult intensive care unit: feasibility study. *Vascular Access,* 2018, 4(1) 1-9
4. **Gavin NC, McMillan D, Keogh S, Choudhury MA, Ray-Barruel G, Rickard C** (2018) Effect of delaying replacement of parenteral nutrition intravenous administration sets: preclinical experiments and a dynamic laboratory model of microbial colonization. *Journal of Parenteral and Enteral Nutrition* 42(7) 987-997 doi:10.1002/jpen.1039
5. **Gavin NC, Button E, Castillo MI, Ray-Barruel G, Keogh S, McMillan D & Rickard C.** (2018) Does a dedicated lumen for parenteral nutrition administration reduce the risk of catheter-related blood stream infections? A systematic literature review. *Journal of Infusion Nursing* 41(2) 122-130 DOI: 10.1097/NAN.0000000000000270
6. **Gavin NC, McMillan D, Keogh S, Choudhury MA, Ray-Barruel G & Rickard CM.** (2018) Pre-clinical laboratory experiments and a dynamic laboratory model to investigate the effect of hang time of intravenous administration sets for the delivery of parenteral nutrition containing intravenous fat emulsions on the risk of fluid colonisation. *Journal of Parenteral and Enteral Nutrition.* DOI: 10.1002/jpen.1039
7. **Webster, J., Northfield, S., Larsen, E. N., Marsh, N., Rickard, C. M., & Chan, R. J.** (2018). Insertion site assessment of peripherally inserted central catheters: inter-observer agreement between nurses and inpatients. *The Journal of Vascular Access.* DOI: 10.1177/1129729818757965
8. **Flynn, J., Slater, K., Cooke, M., & Rickard, C. M.** (2018). Needleless connector decontamination: to use, or not to use, chlorhexidine? *American journal of infection control.*

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Oral Presentations:

1. **Button, E.** The Rainy-Day Care projects. State-wide Strategy for Care at the End of Life Forum, March 2018
2. **Flynn, J.** Decontamination of the needleless connector: an in vitro study. Rotorua, New Zealand
3. **Button E.** When do people with a haematological malignancy first show signs of risk of deteriorating and dying? International Conference on Cancer Nursing, Auckland. September 2018
4. **Gavin NC & Barrie JM.** Co-designed and situated consumer engagement: the hand hygiene InstaBooth project. Health Consumers Queensland. June 2018
5. **Northfield S, Chan RJ, Rosenberg J, Yates P.** Factors associated with patient access to specialist palliative care services in an acute cancer setting. Palliative Care Nurses Australia (PCNA) conference. May 2018
6. **Northfield S, Chan RJ, Rosenberg J, Yates P.** Identifying the factors that influence cancer nurses advocating for patient referrals to specialist palliative care services: a national survey. Palliative Care Nurses Australia (PCNA) conference. May 2018
7. Coyne E, **Northfield S,** Ash K, Brown-West L, Miles C, Munton K, Barratt C. A review of literature to provide evidence for best practice administering chemotherapy to enable optimum patient outcomes and nurse safety. (Oral presentation – Coyne E). CNSA 21<sup>st</sup> Annual Congress, Brisbane
8. **Gavin NC, Northfield S,** Larsen E, Mihala G, Marsh N, Ray-Barruel G, Rickard CM. Central venous access device Registry: Improving outcomes for patients diagnosed with cancer. (Oral presentation – Gavin NC). CNSA 21<sup>st</sup> Annual Congress, Brisbane
9. **Button E, Gavin NC, Chan R, Connell S, Butler J, Yates P.** Clinical indicators that identify risk of deteriorating and dying in people with a haematological malignancy. CNSA 21<sup>st</sup> Annual Congress, Brisbane
10. **Bates B, Button E, Wyld D, Nasato G, Fennelly E, Northfield S, Yates P, Gavin N, Leutenegger J, Smith M.** RBWH Cancer Care Services Model of Care: Working to Reduce Avoidable Emergency Presentations and Hospitalisation. CNSA 21<sup>st</sup> Annual Congress, Brisbane
11. **Roberts N, Janda M, Alexander K, Wyld D.** Facilitators and Barriers to Implementing Patient Reports Outcome Measures (PROMs) in Routine Oncology Nursing Care. CNSA 21<sup>st</sup> Annual Congress, Brisbane
12. **Gavin NC, Northfield S, Somerville M, Lippiatt R, Larsen E, Marsh N, Rickard C.** Central venous access device Registry: Improving outcomes for patients diagnosed with cancer. CNSA 21<sup>st</sup> Annual Congress, Brisbane
13. Rickard C, Marsh N, Larsen E, Runnegar N, **Gavin NC, Mihala G, Playford G, Webster J.** Administration sets/infusion tubing: how often should they be replaced to prevent infection? CNSA 21<sup>st</sup> Annual Congress, Brisbane
14. **Gavin NC, Kulperger S, Nasato G, Northfield S, Lippiatt R, Guaralda M, Carolli L, Barrie JM, Colquhoun J & Wharton C.** Hands up for hand hygiene in cancer care. Royal Brisbane and Women's Hospital QuARRIES 2018
15. **Gavin NC, Kulperger S, Nasato G, Northfield S, Lippiatt R, Guaralda M, Carolli L, Barrie JM, Colquhoun J & Wharton C.** Hands up for hand hygiene in cancer care. Royal Brisbane and Women's Hospital Symposium 2018
16. **Gavin NC, Northfield S, Somerville M, Lippiatt R, Larsen E, Marsh N & Rickard C.** CVAD Registry: improving outcomes for patients diagnosed with cancer. International Conference on Cancer Nursing, Auckland. September 2018
17. **Button E.** When do people with a haematological malignancy first show signs of risk of deteriorating and dying? International Conference on Cancer Nursing, Auckland. September 2018

### Oral Presentations: (cont):

18. Coyne E, **Northfield S**, Ash K, Brown-West L, Barratt C, Miles C, Munton K. Building evidence to inform position statement development: integrative review of chemotherapy education and safety standards. International Conference on Cancer Nursing, Auckland, September 2018
19. **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. Cancer Care Services Research Retreat, Brisbane
20. Rickard C, Marsh N, Larsen E, Runnegar N, **Gavin NC**, Mihala G, Playford G, Webster J. Administration sets/infusion tubing: how often should they be replaced to prevent infection? CNSA 21<sup>st</sup> Annual Congress, Brisbane
21. Rickard C, Marsh N, Larsen E, Runnegar N, **Gavin NC**, Mihala G, Playford G, Webster J. Administration sets/infusion tubing: how often should they be replaced to prevent infection? CNSA 21<sup>st</sup> Annual Congress, Brisbane.

### Poster Presentations:

1. **Gavin NC, Northfield S**, Larsen E, Mihala G, **Marsh N, Ray-Barruel G, Rickard CM**. CVAD Registry: improving outcomes for cancer care patients. IntraVenous Nursing New Zealand (IVNNZ), March 2018
2. **Northfield S**, Chan RJ, Rosenberg J, **Yates P**. Factors that influence palliative care referrals for hospitalised patients with advanced cancer: an integrative review. Royal Brisbane and Women's Hospital Symposium 2018
3. **Fernandes J, Gavin NC & Button E**. Urokinase versus alteplase for the management of occluded central venous access devices: a systematic review. Royal Brisbane and Women's Hospital Symposium 2018
4. **Wong L & Gavin NC**. Does a clinical sepsis pathway improve outcomes in cancer patients? A systematic review. Royal Brisbane and Women's Hospital Symposium 2018
5. **Percival V & Gavin NC**. Post-dural puncture headache following lumbar puncture and intrathecal chemotherapy, how long should patients remain recumbent? A systematic review. Royal Brisbane and Women's Hospital Symposium 2018
6. **Barker K, Sutherland A**. Two Person Medication Administration Compliance. CNSA 21<sup>st</sup> Annual Congress, Brisbane
7. **Northfield S**, Button E, Wyld D, Gavin N, Nasato G, Yates P. Models of care for reducing the use of emergency departments by adult cancer patients: a narrative review. Cancer Care Services Research Retreat, Brisbane
8. **Matthews R**, Yates P, Chan R. Education and training for healthcare professionals to deliver end-of-life care in the acute care setting: A literature review. CNSA 21<sup>st</sup> Annual Congress, Brisbane
9. **Turner T**, Button E, Gavin NC, Dyer I, Leutenegger J. How should we manage oncology infusion related reactions? A clinical guideline reviews. CNSA 21<sup>st</sup> Annual Congress, Brisbane
10. Fernandes J, **Gavin NC**, Button. Urokinase versus alteplase for the management of occluded Central Venous Access Devices: a systematic review. CNSA 21<sup>st</sup> Annual Congress, Brisbane
11. **McCurry T**, Wallace A, Leonard S, Lear V. Working in partnership to meet the demands and challenges of a shared Clinical Nurse Consultant/Cancer Care Coordinator role. CNSA 21<sup>st</sup> Annual Congress, Brisbane
12. **Scanlon B**, A literature review on the efficacy of increasing the tobacco excise within Australia. CNSA 21<sup>st</sup> Annual Congress, Brisbane.

## Medical Oncology



**A/Prof 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, TPCH and Caboolture. The unit continued to expand its research portfolio in 2018, with progress in a number of different areas. Below are a few selected highlights from the department in 2018.

Offering individuals with cancer access to new therapies as part of a clinical trial is recognised as an essential part of any academic oncology unit. The MO department has a very active clinical trials program which continues to be recognised for its conduct of high quality clinical research, which is a credit to all involved. 2018 was a very busy year, with 121 studies active in 2018. 267 new patients were recruited to studies in 2018, with 591 patients in total on study at some point in 2018.

A highlight in this area include the national MONNARCC Study in metastatic colorectal cancer commencing recruitment this year, with Dr Matthew Burge as the national chief investigator – a concept he developed and he now leads for the Australasian Gastrointestinal Trials Group. And this year A/Prof Brett Hughes and Dr Elizabeth Ahern, in conjunction with Prof Mark Smyth at QIMR have developed and obtained funding to conduct an innovative project evaluating anti-PD1 checkpoint inhibition combined with RANKL blockade in operable NSCLC. This project, led by RBWH, will be conducted at RBWH, TPCH and two other Qld sites, and has a major translational component which will be undertaken by Prof. Smyth at QIMR.

Departmental staff continue to increase the number of collaborative research projects they undertake with external partners – including HIRF, QUT, The University of Queensland and multiple groups within QIMR, as well as researchers from a variety of other institutions both locally, national and internationally as demonstrated in the collaborative project list below.

The number of conference presentations and publications from the department continues to grow each year. Highlights include several publications in high impact journals in 2018, as well as oral presentations by several departmental staff at both national and international meetings.

With a focus over the last few years on encouraging trainees in Medical Oncology to undertake higher degrees, it is exciting to see two recent RBWH medical oncology fellows – Elizabeth Ahern and Rahul Ladwa nearing completion of their PhD and MPhil respectively. In addition, Natasha Roberts, a Medical Oncology research nurse coordinator, will also complete her PhD in early 2019. We congratulate them and look forward to each of them developing their own research programs in oncology in Brisbane in the coming years.

### 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	<b>Zarnie Lwin</b> , Fiona Naumann, Mark Pinkham, Elizabeth Pinkham, Gabriel Siqueira Trajano
<b>Dr Elizabeth Ahern</b>	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, <b>David Wyld</b>
<b>Natasha Roberts</b>	PhD QUT 2016-2019	Patient Reported Outcomes in a Medical Oncology Setting	Monika Janda, Kim Alexander, <b>David Wyld</b>
Dr Rahul Ladwa	MPhil UQ 2017-	Predictors of dosimetry and response to peptide receptor radionuclide therapy	<b>David Wyld</b> , Stephen Rose, Nicholas Dowson
<b>Dr Darshit Thaker</b>	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	<b>David Wyld</b> , <b>Sunil Lakhani</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Dr Anna Kuchel	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
Andrea Junghans	Clinical Trial Coordinator	Clinical Trials Unit Medical Oncology	Queensland Health
Leah Hingston	Clinical Trial Coordinator	Clinical Trials Unit Medical Oncology	Queensland Health
Jenna Peckston	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
Jennifer Lonton	Research Development Officer	Clinical Trials Unit Medical Oncology	Queensland Health
Danni Church	Research Administration Officer	Clinical Trials Unit Medical Oncology	Queensland Health
Denise Flynn	Research Administration Officer	Clinical Trials Unit Medical Oncology	Queensland Health

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	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	<b>Patient Report Outcomes (PROs)</b> 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	Cultural biographies, medical knowledges: a sociological study at the intersection of cancer and culture
Matthew Burge	Euan Walpole	Prospective evaluation of FOLFIRINOX for metastatic or locally advanced Pancreatic Cancer
Melissa Eastgate	<b>David Wyld, Darshit Thaker, Monica Dumbrava,</b> Teresa Brown	Dietary patterns and preferences/attitudes of cancer patients regarding sources of information about the diet during cancer treatment
David Wyld	<b>Rahul Ladwa,</b> Paul Klages, <b>Monica Dumbrava,</b> Timothy Kalas	Dose intensity in adjuvant chemotherapy in women over 65 with breast cancer
Melissa Eastgate	Lindy Jeffree, <b>Kelly McGrath, Shu Fen Lee</b>	Audit of outcomes of melanoma patients undergoing neurosurgery
Rahul Ladwa	<b>David Wyld, Matthew Burge,</b> David Pattison	Assessing response to Peptide Receptor Radionuclide Therapy in Neuroendocrine Tumours: case series of pseudoprogression
Aneta Suder, Andrew Schmidt	<b>Brett Hughes, Zarnie Lwin, Michael Allen</b>	Exploring the rate of hospital admissions due to immune therapy toxicities in two tertiary cancer centres
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, <b>David Wyld, Melissa Eastgate,</b> Stephen Rose, Nick O'Rourke, Davis Cavallucci Richard Bryant	Imaging the CXCR-4 Chemokine receptor with a novel PET tracer in pancreatic cancer



## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Matthew Burge	Paul Thomas, Andrew Stevenson, <b>David Wyld</b> (CCS), <b>Melissa Eastgate</b> , Stephen Rose, David Clark, Craig Harris, Damien Petersen, David Taylor, Carina Chow, Paul Tesar, <b>Michelle Grogan</b>	A pilot study of CXCR-4 PET scanning in operable rectal cancer
David Wyld	<b>Matthew Burge</b> , <b>Raymond Chan</b> , Jane Turner, Patsy Yates, <b>Melissa Eastgate</b> , Rachael Neale, Vanessa Beesley	PREPARES: Patients and Relatives affected by Pancreatic cancer: Referral, Education and Support feasibility trial
Matthew Burge	<b>Melissa Eastgate</b> , <b>David Wyld</b> , <b>Shu Lee</b>	Analysis of prospectively collected pancreatic cancer patients given folfrinox at RBWH
David Wyld	Julie Moore, Mark Wan	Neuroendocrine Tumours: Epidemiologic trends in Queensland
Brett Hughes	<b>Elizabeth Ahern</b> , Bill Dougall, Mark Smyth	Pre-operative evaluation of anti-PD1 checkpoint inhibition (Nivolumab) with RANKL blockade (Denosumab) in patients with operable stage I-III NSCLC
Natasha Roberts (Cancer Care Services/Queensland University of Technology)	Monika Janda, Kim Alexander, <b>David Wyld</b>	Patient Reported Outcomes in the Medical Oncology Setting (iPROMOS)
Melissa Eastgate	<b>Anna Kuchel</b> , <b>David Wyld</b>	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	<b>Anna Kuchel</b>	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	Medical Oncology, Radiation Oncology, Haematology Cancer Care Services, RBWH	Poster Project: a study to describe oncology patient perceptions of research
Natasha Roberts (Cancer Care Services/Queensland University of Technology)	Medical Oncology, Cancer Care Services, RBWH	Poster Project: a pilot study to describe medical oncology patient perceptions of research
Melissa Eastgate	Geoffrey Bryant, <b>Mathew Burge</b> , <b>Darshit Thaker</b> , <b>David Wyld</b>	Colorectal cancer patient reported outcomes: putting theory into practice
Brett Hughes (Cancer Care Services), Elizabeth Ahern (Cancer Care Services/Queensland Institute of Medical Research Berghofer),	Martin Batstone, Mark Smyth and Bill Dougall	Expression of novel immune markers in mucosal head and neck squamous cell carcinoma (HNSCC) specimens
Melissa Eastgate, Elizabeth Ahern (Cancer Care Services/Queensland Institute of Medical Research Berghofer) Anna Kuchel	Ailin Lepetier, Jason Madore, Mark Smyth	Multiplex immunofluorescence assessment of melanoma biopsies and response to immunotherapy
Brett Hughes, Elizabeth Ahern (Cancer Care Services/Queensland Institute of Medical Research Berghofer)	Martin Batstone, Mark Smyth and Bill Dougall	Immune Biomarker Evaluation in Oral Mucosal Squamous Cell Carcinoma: a prospective tissue collection
Clare Senko	<b>Brett Hughes</b> , <b>Zarnie Lwin</b>	Evaluating the prognostic significance of significant weight loss in patients with stage III non-small cell lung cancer undergoing definitive chemoradiation

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
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

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	INTEGRATE II A Randomised Phase III Double Blind Placebo Controlled Study of regorafenib in Refractory Advanced Gastroesophageal Cancer
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	ctDNA in Pancreatic Cancer
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	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 (Cancer Care Services)	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
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	GAP: Phase II study of pre-operative Gemcitabine and Abraxane for resectable Pancreas cancer
Walter and Eliza Hall Institute	Matthew Burge (Cancer Care Services)	DYNAMIC: Circulating Tumour DNA Analysis Informing Adjuvant Chemotherapy in Stage II Colon Cancer
Walter and Eliza Hall Institute	Matthew Burge (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	AGITG SCOT Trial: Short Course Oncology Therapy – a Study of Adjuvant Chemotherapy in Colorectal Cancer
Australasian Gastrointestinal Trials Group/European Organization for Research and Treatment of Cancer	Matthew Burge (Cancer Care Services)	PETACC6 – preoperative chemoradiotherapy and postoperative chemotherapy with capecitabine and oxaliplatin vs. capecitabine alone in locally advanced rectal cancer
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	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)

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Australasian Gastrointestinal Trials Group/ Walter and Eliza Hall Institute	Matthew Burge (Cancer Care Services)	DYNAMIC-III: Circulating Tumour DNA Analysis Informing Adjuvant Chemotherapy in Stage III Colon Cancer: A Multicentre Phase II/III Randomised Controlled Study (AGITG, WEHI)
Australia New Zealand Gynaecological Oncology Group	Jeffrey Goh (Cancer Care Services)	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 Epithelial Ovarian, Fallopian Tube, or Primary Peritoneal Cancer
Australia New Zealand Gynaecological Oncology Group	Alison Hadley (Cancer Care Services)	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 (Cancer Care Services)	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
Australia New Zealand Gynaecological Oncology Group	Jeff Goh (Cancer Care Services)	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 (Cancer Care Services)	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 Gynaecological Oncology Group	Jeff Goh (Cancer Care Services)	OVAR 16 – a Phase III study to evaluate the efficacy and safety of Pazopanib monotherapy versus placebo in women who have not progressed after first line chemotherapy for epithelial ovarian, fallopian tube or primary peritoneal cancer
Australia New Zealand Urogenital and Prostate Cancer Trials Group	David Wyld (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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	Zarnie Lwin (Cancer Care Services)	INTELLANCE 2 - ABT-414 alone or ABT-414 plus temozolomide versus lomustine or temozolomide for recurrent glioblastoma: a randomized phase II study of the EORTC Brain Tumor Group
Cooperative Trials Group for Neuro-oncology	Po-Ling Inglis (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	TEXT: a Phase III Trial Evaluating the Role of Exemestane plus GnRH analogue as Adjuvant Therapy for premenopausal women with endocrine responsive breast cancer

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Australia New Zealand Breast Cancer Trials Group/Breast International Group	Michelle Nottage (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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
Australia New Zealand Breast Cancer Trials Group/Breast International Group	Michelle Nottage (Cancer Care Services)	A phase III study to evaluate Letrozole as adjuvant endocrine therapy for postmenopausal women with receptor (ER and/or PgR) positive tumours (BIG-1-98)
Walter and Eliza Hall Institute	Matthew Burge (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	UNISO – 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 (Cancer Care Services)	TheraP: a randomised phase 2 trial of 177 Lu-PSMA617 theranostic versus cabazitaxel in men with progressive metastatic castration resistant prostate cancer
Australia New Zealand Urogenital and Prostate Cancer Trials Group	Natasha Roberts (Cancer Care Services)	The Patient Experience of Participating in a Clinical Trial
Cooperative Trials Group for Neuro-oncology	Zarnie Lwin (Cancer Care Services)	NUTMEG: a Randomized Phase II Study of Nivolumab and TeMozolomide vs Temozolomide in newly diagnosed Elderly Glioblastoma
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	LIBERATE – phase II study evaluating liquid biopsies to profile metastatic colorectal cancer
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	PIT STUDY: an open label Phase IB/II, non-randomised, dose-escalating, safety, tolerability and pharmacokinetic study of first line Panitumumab, Irinotecan, Trifluridine/tipiracil in RAS wild type patients with metastatic colorectal cancer
Australasian Gastrointestinal Trials Group	Matthew Burge (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	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 (Cancer Care Services)	iPRIME: a phase II study of durvalumab and tremilumumab 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 (Cancer Care Services)	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
Australian Lung Cancer Trials Group	Brett Hughes (Cancer Care Services)	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 (Cancer Care Services)	STIMULI: small cell lung carcinoma trial with nivolumab and Ipilimumab 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)

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Melbourne Health	Alison Hadley (Cancer Care Services)	NOMINATOR: GENOMIC MATCHING TREATMENT FOR RARE CANCERS Feasibility of performing genomic testing of rare cancers to match the cancer to treatment
QIMR Berghofer Medical Research Institute Bryan Day (QIMR),	Po Ling Inglis (Cancer Care Services) Rosalind Jeffree (Neurosurgery)	Novel Therapies for Brain Cancer
Rebecca Mercieca-Bebber (University of Sydney)	Natasha Roberts (Cancer Care Services/ Queensland University of Technology)	Quality of life end-points in clinical trials
Quan Tran, (Cancer Care Services, The Prince Charles Hospital)	Brett Hughes, Zarnie Lwin (Cancer Care Services), David Smith, Andrew Schmidt (The Prince Charles Hospital)	Identifying perceived barriers to physical activity in patients with lung cancer at two Brisbane-based institutions
Andrew Schmidt (Cancer Care Services, The Prince Charles Hospital)	Brett Hughes, Zarnie Lwin, Michael Allen (Cancer Care Services)	Exploring the rate of hospital admissions due to immune therapy toxicities in two tertiary cancer centres
Kate Roberts (Princess Alexandra Hospital), Ken O'Byrne (Queensland University of Technology),	Brett Hughes, Zarnie Lwin (Cancer Care Services)	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
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, Rahul Ladwa (Cancer Care Services), Peter Garcia, David Pattison, Kevin Lee, Samuel Kyle, Nicholas Dowson, Jye Smith (Nuclear Medicine), Steven Goodman, Stephen Rose	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)
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
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

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
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 Miaskowski, Raymond Chan, Alexandra McCarthy, Steven McPhail, Helen Skerman	A <b>Sequential Multiple Assignment Randomised Trial</b> (SMART) of nursing interventions to reduce pain associated with chemotherapy induced peripheral neuropathy

## 2018 Research Awards and Achievements

Recipient	Award	Event
Brett Hughes	Best oral presentation	CCS Research Retreat 8 November 2018
David Wyld	Best of the best gastrointestinal abstract	COSA 45 <sup>th</sup> Annual Scientific Meeting 13-15 November 2018
Zarnie Lwin	2018 Most Outstanding Poster Presentation	Cooperative Trials Group for Neuro-Oncology 11 <sup>th</sup> Annual Scientific Meeting 7-9 October 2018 Brisbane.

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Patsy Yates</b> , Kimberly Alexander, Christine Miaskowski, Raymond Chan, Alexandra McCarthy, Steven McPhail, <b>David Wyld</b> , 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	\$178,355	\$713,418.20 (2017-2020)
Alex Broom, Emma Kirby, Renata Kokanovic; Jonathan Adams; <b>Zarnie Lwin; David Wyld</b> ; Eng-Siew Koh; Paul de Souza; Lisa Woodland	Medical Oncology	Cultural Biographies, Medical Knowledges: a sociological study	Australian Research Council Linkage Grant	\$342,320	\$210,000 [ARC contribution] + [\$816,962 cash/ in-kind partner contributions] (2016-2018)
<b>Benjamin Chua</b> , Bryan Day, Stephen Rose, <b>Paul Thomas</b> , <b>Rosalind Jeffrey</b> , Yi Chieh Lim, <b>Po-Ling Inglis</b> , <b>Z Lwin</b> , <b>Jacqui Keller</b>	Medical Oncology, Radiation Oncology	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	Herston Imaging Research Facility Seed Funding	\$66,498	\$66,498 (2018)
<b>Matthew Burge</b> , <b>Paul Thomas</b> , <b>David Wyld</b> , Stephen Rose, <b>Melissa Eastgate</b> , Nick O'Rourke David Cavalluchi, Richard Bryant	Medical Oncology	A study to look at a new way of detecting the spread of pancreas cancer	Herston Imaging Research Facility Seed Funding	\$58,014	\$58,014 (2018)
<b>Matthew Burge</b> , <b>Paul Thomas</b> , <b>David Wyld</b> , Stephen Rose, <b>Melissa Eastgate</b> , <b>Nick O'Rourke</b> , David Cavalluchi, Richard Bryant	Medical Oncology	A Pilot Study of CXCR-4 PET scanning in operable rectal cancer	Herston Imaging Research Facility Seed Funding	\$23,760	\$23,760 (2018)
<b>Matthew Burge</b>	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	\$33,333	\$100,000 (2017-2019)

## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Medical Oncology Clinical Trials Unit</b>	Medical Oncology	Clinical Trials Data Management Grant	Queensland Cancer Fund	\$54,000	\$54,000 (2018)
<b>Melissa Eastgate, David Wyld, Matthew Burge, Vicki Whitehall</b>	Medical Oncology	Genomic landscape of BRAF mutant colorectal cancers	RBWH Diamond Cancer Care Grant 2017	\$18,000	\$36,000 (2017-2018)
<b>David Wyld, Matthew Burge, Ray Chan, Jane Turner, Rachael Neale, Vanessa Beesley, Patsy Yates</b>	Medical Oncology	PREPARES: patients and relatives affected by pancreatic cancer: referral, Education and Support Feasibility trial	RBWH Diamond Cancer Care Grant 2017	\$19,618	\$39,236 (2017-2018)
<b>Matthew Burge, Wyld D, Eastgate M, Ahern E, Whitehall V, Dougall B, Smyth B, Teng M</b>	Medical Oncology, QIMR	Mapping immune infiltrates in colorectal cancer	RBWH Diamond Cancer Care Grant 2017	\$19,320	\$38,640 (2017-2018)
<b>Chan R, Molassiotis A, Yates P, Nasato G, Brown T, Button E, Marshall A, Isenring L, Wyld D, Eastgate M, Gavin N</b>	Medical Oncology	A Patient-family-Centered intervention to promote Nutrition In advanced Cancer patients: a pilot randomised controlled trial	RBWH Diamond Cancer Care Grant 2017	\$20,000	\$40,000 (2017-2018)
<b>Manoj Bhatt (Nuc Med), David Wyld (CCS), Matthew Burge (CCS), Rahul Ladwa (CCS), Peter Garcia (Nuc Med), David Pattison (Nuc Med), Kevin Lee (Nuc Med), Samuel Kyle, Nicholas Dowson, Jye Smith (Nuc Med), Steven Goodman, Stephen Rose</b>	Nuclear Medicine, Medical Oncology, Herston Imaging Research Facility	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)	Herston Imaging Research Facility Seed Funding	\$19,250	\$38,500 (2017-2018)
<b>David Wyld (CCS), Gillian Nasato (CCS)</b>	Medical Oncology	RBWH neuroendocrine tumour Nurse Coordinator	Ipsen Pty Ltd Aust	\$22,500	\$45,000 (2017-2018)
<b>Brett Hughes, Elizabeth Ahern, Bill Dougall, Mark Smyth</b>	Medical Oncology	Pre-operative evaluation of anti-PD1 checkpoint inhibition (Nivolumab) with RANKL blockade (Denosumab) in patients with operable stage I-III NSCLC	Amgen	\$470,185	\$940,370 (697,000 US\$) (2018-2019)
<b>Natasha Roberts (CCS/QUT)</b>	Medical Oncology	Patient Reported Outcomes in a Medical Oncology Setting	Royal Brisbane and Women's Hospital Scholarship	\$36,864	\$36,863.96 (2018)
<b>Geoff Bryant, Melissa Eastgate, David Wyld, Matt Burge</b>	Medical Oncology	Structured symptom reporting for patients with colorectal cancer undergoing chemotherapy	Metro North Hospital and Health Service SEED Grant	\$63,385	\$126,770 (2018 – 2019)
<b>Andrew Scott, Anna Nowak, Hui Ganet, Zarnie Lwin et al</b>	Medical Oncology	The role of FET-PET in glioblastoma	2018 Medical Research Future Fund Grant	\$1,520,000	\$1,520,000 (2018)

## 2018 Research Publications

### Journal Articles

- Ahern E, Harjunpää H, O'Donnell JS, Allen S, Dougall WC, Teng MWL, Smyth MJ.** RANKL blockade improves efficacy of PD1-PD-L1 blockade or dual PD1-PD-L1 and CTLA4 blockade in mouse models of cancer. *Oncoimmunology* [Internet]. 2018 Feb 14;7(6): e1431088. doi: 10.1080/2162402X.2018.1431088. eCollection 2018
- Ahern E, Smyth MJ, Dougall WC, Teng MWL.** Roles of the RANKL-RANK axis in antitumour immunity – implications for therapy. *Nat Rev Clin Oncol.* 2018 Nov;15(11):676-693
- Beesley VL, Burge M, Dumbava M, Callum J, Neale RE, Wyld DK.** Perceptions of care and patient-reported outcomes in people living with neuroendocrine tumours. *Support Care Cancer.* 2018 Sep 26(9), 3153-3161
- Blagden SP, Hamilton AL, Mileshkin L, Wong S, Michael A, Hall M, Goh JC, Lisyanskaya AS, DeSilvio M, Frangou E, Stronach EA, Gopalakrishna P, Meniawy TM, Gabra H.** Phase IB Dose-Escalation and Expansion Study of AKT kinase inhibitor Afuresertib with Carboplatin and Paclitaxel in Recurrent Platinum-Resistant Ovarian Cancer. *Clin Cancer Res.* [Internet] 2018 Dec 18. doi: 10.1158/1078-0432.CCR-18-2277

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5. Broom A, Kenny K, Kirby E, **Lwin Z**. The collective/affective practice of cancer survivorship. *Br J Sociol*. [Internet] 2018 Nov 8. Doi: 10.1111/1468-4446.12616
6. Brown T, Banks M, **Hughes BGM**, Lin C, Kenny L, Bauer J. Comparison of nutritional and clinical outcomes in patients with head and neck cancer undergoing chemoradiotherapy utilising proactive versus reactive nutrition support approaches. *J Acad Nutr Diet*. 2018; 118 (4): 627-636
7. **Burge M**, Semira C, Lee B, Lee M, Kosmider S, Wong R, Shapiro J, Ma B, Dean AP, Zimet AS, Steel SA, Lok SW, Torres J, Eastgate M, Wong HL, Gibbs P. Previous Bevacizumab and Efficacy of Later Anti-Epidermal Growth Factor Receptor Antibodies in Metastatic Colorectal Cancer: results from a Large International Registry. *Clin Colorectal Cancer*, 2018 Sep 01; 17(3): 593-599
8. Dumbrava MI, Burmeister EA, **Wyld D**, Goldstein D, O'Connell DL, Beesley VL, Gooden HM, Janda M, Jordan SJ, Merrett ND, Payne ME, Waterhouse MA, Neale RE. Chemotherapy in patients with unresected pancreatic cancer in Australia: a population-based study of uptake and survival. *Asia Pac J Clin Oncol*. 2018 Aug;14(4): 326-336
9. Friedlander M, Shannon C, **Goh J**, Scott C, Mileshekin L. Practical considerations for clinicians for transitioning patients on maintenance therapy with olaparib capsules to the tablet formulation of olaparib. *Asia Pac J Clin Oncol*. 2018 Dec;14(6):459-464
10. Gibson AF, Broom A, Kirby E, **Wyld DK, Lwin Z**. '... My biggest worry now is how my husband is going to cope': women's relational experiences of cancer 'care' during illness. *Journal of Gender Studies*. 2018; 27 (8): 901-913
11. Harjunpää H, Blake SJ, **Ahern E**, Allen S, Liu J, Yan J, Lutzky V, Takeda K, Aguilera AR, Guillerey C, Mittal D, Li XY, Dougall WC, Smyth MJ, Teng MWL. Deficiency of host CD96 and PD-1 or TIGIT enhances tumor immunity without significantly compromising immune homeostasis. *Oncoimmunology*. [Internet] 2018 Mar 26;7(7): e1445949. Doi: 10.1080/2162402X.2018.1445949. eCollection 2018
12. Hill AG, Findlay MP, **Burge ME**, Jackson C, Alfonso PG, Samuel L, Ganju V, Karthaus M, Amatu A, Jeffery M, Di Bartolomeo M, Bridgewater J, Coveler AL, Hidalgo M, Kapp AV, Sufan RI, McCall BB, Hanley WD, Penuel EM, Pirzkall A, Taberero T. Phase II study of the dual EGFR/HER3 inhibitor duligotuzumab (MEHD7945A) versus cetuximab in combination with FOLFIRI in second line RAS wild-type metastatic colorectal cancer. *Clin Cancer Res*. 2018 May; 24(10):2276-2284
13. Kawamata F, Patch AM, Nones K, Bond C, McKeone D, Pearson SA, Homma S, Liu C, Fennell L, Dumenil T, Hartel G, Kobayasi N, Yokoo H, Fukai M, Nishihara H, Kamiyama T, **Burge ME**, Karapetis CS, Taketomi A, Leggett B, Waddell N, Whitehall V. Copy number profiles of paired primary and metastatic colorectal cancers. *Oncotarget*. 2017 Dec 15;9(3):3394-3405. doi: 10.18632/oncotarget.23277. eCollection 2018 Jan 9
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15. Kondrashova O, Topp M, Nestic K, Lieschke E, Ho GY, Harrell MI, Zapparoli GV, **Hadley A**, Holian R, Boehm E, Heong V, Sanij E, Pearson RB, Krais JJ, Johnson N, McNally O, Ananda S, Alsop K, Hutt KJ, Kaufmann SH, Lin KK, Harding TC, Traficante N, Australian Ovarian Cancer Study (AOCS), 33ultice A, McNeish IA, Bowtell DD, Swisher EM, Dobrovic A, Wakefield MJ, Scott CL. Methylation of all BRCA1 copies predicts response to the PARP inhibitor rucaparib in ovarian carcinoma. *Nat Commun*. 2018 Sep 28;9(1):3970
16. Ladwa R, Hong HW, **Wyld D**, Pattison DA, **Burge M**. Tumor Cystic Necrosis Following Peptide Receptor Radionuclide Therapy in Neuroendocrine Tumors. *Clinical Nuclear Medicine*. 2018 Mar 1; 43(3):186-187
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## Journal Articles (cont):

45. Motzer RJ, Tannir NM, McDermott DF, Arén Frontera O, Melichar B, Choueiri TK, Plimack ER, Barthélémy P, Porta C, George S, Powles T, Donskov F, Neiman V, Kollmannsberger CK, Salman P, Gurney H, Hawkins R, Ravaud A, Grimm MO, Bracarda S, Barrios CH, Tomita Y, Castellano D, Rini BI, Chen AC, Mekan S, McHenry MB, Wind-Rotolo M, Doan J, Sharma P, Hammers HJ, Escudier B, for the CheckMate 214 Investigators\*. Nivolumab plus Ipilimumab versus Sunitinib in Advanced Renal-Cell Carcinoma. *N Engl J Med* 2018Apr 5; 378:1277-1290 DOI: 10.1056/NEJMoa1712126 (**Goh J**)
46. Slamon DJ, Neven P, Chia S, Fasching PA, De Laurentiis M, Im SA, Petrakova K, Bianchi GV, Esteva FJ, Martín M, Nusch A, Sonke GS, De la Cruz-Merino L, Beck JT, Pivrot X, Vidam G, Wang Y, Rodriguez Lorenc K, Miller M, Taran T, Jerusalem G. Phase III Randomized Study of Ribociclib and Fulvestrant in Hormone Receptor-Positive, Human Epidermal Growth Factor Receptor 2-Negative Advanced Breast Cancer: MONALEESA-3. *Journal of Clinical Oncology*. 2018 Aug; 36(24):2465-2472. JCO2018789909. doi: 10.1200/JCO.2018.78.9909 (**Inglis P**)
47. Socinski MA, Jotte RM, Cappuzzo F, Orlandi F, Stroyakovskiy D, Nogami N, Rodríguez-Abreu D, Moro-Sibilot D, Thomas CA, Barlesi F, Finley G, Kelsch C, Lee A, Coleman S, Deng Y, Shen Y, Kowanetz M, Lopez-Chavez A, Sandler A, Reck M; Impower150 Study Group. Atezolizumab for First-Line Treatment of Metastatic Nonsquamous NSCLC. *N Engl J Med*. 2018 Jun 14;378(24):2288-2301. (**Hughes B**)
48. Tabernero J, Hoff PM, Shen L, Ohtsu A, Shah MA, Cheng K, Song C, Wu H, Eng-Wong J, Kim K, Kang YK. Pertuzumab plus trastuzumab and chemotherapy for HER2-positive metastatic gastric or gastro-oesophageal junction cancer (JACOB): final analysis of a double-blind, randomised, placebo-controlled phase 3 study. *Lancet Oncol*. 2018 Oct;19(10):1372-1384 (**Burge M**).

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Ahern E**. Pre-operative PD1 checkpoint blockade and RANKL inhibition in Non-Small Cell Lung Cancer (POPCORN) – Metro North Research Retreat 2018. Brisbane, Australia
2. **Ahern E**. Pre-operative PD1 checkpoint blockade and RANKL inhibition in Non-Small Cell Lung Cancer (POPCORN) – Brisbane Diamantina Health Partners Cancer Theme Seminar – Lung Cancers 2018. Brisbane, Australia
3. **Hughes B**. Advances in systemic therapy of head and neck cancer. Brisbane Cancer Care Conference 2018. Brisbane, Australia
4. **Lwin Z**. Palliative care in the context of cultural and linguistic diversity: the role of the interpreter. Society of Neuro-oncology Annual Scientific Meeting 2018. New Orleans, USA
5. **Lwin Z**. Role of biomarkers in new WHO classification of glioma. COGNO Consumer Advisory Panel Workshop. Co-operative Trials Group of Neuro-oncology Annual Scientific Meeting 2018, Brisbane, Australia
6. **Lwin Z**. Cardio-oncology: the Oncologist's perspective. Cardiac Society of Australia-New Zealand Annual Scientific Meeting 2018. Brisbane, Australia
7. **Lwin Z**. The changing landscape of cancer survivorship. Cancer Care Services, RBWH Cancer Research Monthly Forum 2018. Brisbane
8. **Lwin Z**. Travelling with Cancer. Grand rounds, Royal Brisbane and Women's Hospital. 2018 Brisbane, Australia
9. **Lwin Z**. Travel advice for cancer patients South East Queensland Oncology Group meeting. 2018. Brisbane, Australia
10. **Lwin Z**. The role of the informal carer in glioma. Asian Society of Neuro Oncology Annual Scientific Meeting, Beijing, China Oct 2018
11. **Wyld D**. Epidemiology – ENETS Meets East and West – Asian Pacific Perspective. European Neuroendocrine Tumour Society 15<sup>th</sup> Annual Conference 2018. Barcelona, Spain.

### Oral Presentations:

1. **Al-Saig H**. Adjuvant endocrine therapy in breast cancer. General Practitioner Education evening 2018. Brisbane Australia
2. **Al-Saig H**. Post European Society for Medical Oncology Congress update. South East Queensland Oncology Group Meeting 2018. Brisbane, Australia
3. **Burge M**. Circulating tumor DNA analysis informing adjuvant chemotherapy in stage III colon cancer: a multicenter phase II/III randomized controlled study (DYNAMIC-III). Brisbane Cancer Care Conference 2018. Brisbane, Australia
4. **Burge M**. Enhancing immunotherapy in colorectal cancer: an RBWH study. Brisbane Cancer Care Conference 2018. Brisbane, Australia
5. Burtness B, Harrington K, Greil R, Soulières D, Tahara M, de Castro G, Psyrris A, Basté Rotllan N, Neupane P, Bratland A, Fuehrer T, **Hughes BGM**, Mesia R, Ngamphaiboon N, Rordorf T, 15 Ishak WZW, Roy A, Cheng J, Jin F, Rischin D. KEYNOTE-048: Phase 3 study of first-line pembrolizumab (P) for recurrent/ metastatic head and neck squamous cell carcinoma (R/M HNSCC). European Society for Medical Oncology Congress 2018. Munich, Germany
6. **Bryant G**. Creating intelligence from patient experience: just a Qlik away? Health Services Research Association of Australia and New Zealand Pros and Cons of PROMs and PREMs conference 2018 (November). Sydney
7. **Campbell JS**. Capacity Building of Gynae Trial Sites. Australia New Zealand Gynaecological Oncology Group Annual Scientific Meeting 2018. Brisbane, Australia
8. Cayce E, **Inglis P**, **Kuchel A**, Stephens S. Keep the pineal gland operating and you will never grow old. Cooperative Trials Group for Neuro-Oncology 11<sup>th</sup> Annual Scientific Meeting 2018. Brisbane, Australia
9. Chan R, Bradford N, Walker R, Henney R, **Inglis P**. Improving Clinical practice for fertility preservation. 2<sup>nd</sup> Victorian Cancer Survivorship Conference 2018. Melbourne, Australia
10. **Cubitt A**. Clinical Trials History & Infrastructure. Where Have We Come From? Where Are We Going? Brisbane Cancer Care Conference 2018. Brisbane, Australia
11. de Bono J, **Goh J**, Ojamaa K, Gross-Gouil M, Piulats J, Drake Charles G, Hoimes CJ., Wu H, Qiu P, Poehlein C, Antonarakis ES. Keynote-199: Pembrolizumab For Post-Docetaxel Metastatic Castration-Resistant Prostate Cancer (mCRPC). American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
12. **Eastgate M**, Trends in outcomes of resected intracranial metastatic melanoma across the pre and post era of modern systemic therapies. 27<sup>th</sup> Annual RBWH Healthcare Symposium 2018. Brisbane, Australia

### Oral Presentations: (cont):

13. 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 B**, 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. The Society for Immunotherapy of Cancer Conference 2018. Washington, USA
14. **Goh J**. Management of gBRCA/HRD mutation associated high-grade serous ovarian cancer. 27<sup>th</sup> Annual RBWH Healthcare Symposium 2018. Brisbane, Australia
15. **Goh J**. Genito-Urinary and Gynaecology. Brisbane Cancer Care Conference 2018. Brisbane, Australia
16. **Goh J**. Advances & trials in renal cell cancer care. Brisbane Cancer Care Conference 2018. Brisbane, Australia
17. **Goh J**. Advances and trials in Prostate Cancer therapy. Brisbane Cancer Care Conference 2018. Brisbane, Australia
18. **Hughes B**. HREC/QRBW/43659 – POPCORN: Pre-surgical evaluation of anti-PD1 with Denosumab in patients with operable stage 1-3A NSCLC. Cancer Care Services Research Retreat 2018. Brisbane, Australia
19. **Hughes B**. Head and neck cancer. Brisbane Cancer Care Conference 2018. Brisbane, Australia
20. **Hughes BGM**, Nowak AK, Grosso F, Steele N, Novello S, Popat S, Greillier L, John T, Leighl NB, Reck M, Pavlakis N, Sørensen JB, Planchard D, Ceresoli GL, Mazières J, Socinski M, Salnikov A, Kitzing T, Braunger J, Pietzko K, Scagliotti GV. Nintedanib+pemetrexed/cisplatin in malignant pleural mesothelioma (MPM): phase II biomarker data from the LUME-Meso study. Australian Lung Cancer Conference 2018. Sydney, Australia
21. **Hughes BGM**, Vansteenkiste J, Reungwetwattana T, Nakagawa K, Cho BC, Cobo Dols M, Cho EK, Bertolini A, Bohnet S, Zhou C, Lee KH, Nogami N, Okamoto I, Leighl N, Hodge R, McKeown A, Brown AP, Rukazenkov Y, Ramalingam SS. Central Nervous System (CNS) response to osimertinib vs standard of care (SoC) EGFR-TKI as first-line therapy in patients with EGFR-TKI sensitising mutation (EGFRm)-positive advanced non-small cell lung cancer (NSCLC): data from the phase III FLAURA study. Australian Lung Cancer Conference 2018. Sydney, Australia
22. Khasraw M, McDonald K, Yip S, Verhaak R, Heimberger A, Hall M, Barnes E, Hovey E, Ellingson B, **Lwin Z**. Nivolumab and Temozolomide (TMZ) vs TMZ alone in newly diagnosed elderly patients (pts) with Glioblastoma (GBM) (NUTMEG) (2018) Co-operative Trials Group of Neuro-oncology Annual Scientific Meeting 2018. Brisbane, Australia
23. Kok PS, Stockler MR, Lesterhuis WJ, **Hughes BGM**, Brown C, Kao SCH, Karikios D, John T, Pavlakis N, O'Byrne K, Yip S, Lam WS, Briscoe K, Karapetis CS, Nowak A. DREAM - A phase 2 trial of DuRvalumab with first line chEMotherApy in Mesothelioma: Final result. Clinical Oncology Society of Australia Annual Scientific Meeting 2008. Perth, Australia
24. Moore J, Dunn N, Tran T, **Wyld D**. Is survival improving for patients diagnosed with small intestinal neuroendocrine tumours in Queensland? Clinical Oncology Society of Australia Annual Scientific Meeting 2018. Perth, Australia
25. Nowak A, Kok PS, Lesterhuis WJ, **Hughes BGM**, Brown C, Kao SCH, Karikios D, John T, Pavlakis N, O'Byrne K, Yip S, Lam WS, Briscoe K, Karapetis CS, Stockler MR. DREAM - A phase 2 trial of DuRvalumab with first line chEMotherApy in Mesothelioma: Final result. The International Association for the Study of Lung Cancer World Conference on Lung Cancer 2018. Toronto, Canada
26. Nowak AK, Lesterhuis WJ, **Hughes BGM**, Brown C, Kok PS, O'Byrne k, John T, Pavlakis N, Kao SCH, Yip S, Lam WS, Karikios D, Langford A, Stockler M. DREAM: A Phase II study of DuRvalumab with first line chEMotherApy in Mesothelioma: First Results. American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
27. Nowak AK, Lesterhuis WJ, **Hughes BGM**, Brown C, Yeung A, Kok PS, Yip S, Lam WS, Kao S, Karikios D, John T, Pavlakis N, Stockler M on behalf of ALTG (Australasian Lung Cancer Trials Group). DREAM - A phase 2 trial of DuRvalumab with first line chEMotherApy in Mesothelioma with a safety run in. International Mesothelioma Interest Group 2018. Ottawa, Canada
28. Oza A, Coleman RL, Lorusso D, Aghajanian C, Oaknin A, Dean A, Colombo N, Weberpals JI, Clamp A, Scambia G, Leary A, Holloway RW, Gancedo MA, Fong PC, **Goh JC**, O'Malley DM, Banerjee S, Goble S, Cameron T, Ledermann JA. Effect of Prior Bevacizumab Therapy in Patients with Platinum-Sensitive Recurrent Ovarian Carcinoma in the Phase 3 Study ARIEL3. International Gynecologic Cancer Society 17<sup>th</sup> Biennial Meeting 2018. Kyoto, Japan
29. Pavlakis N, Novello S, Nowak AK, Grosso F, Steele N, Popat S, Greillier L, John T, Leighl NB, Reck M, Sorensen JB, Planchard D, Ceresoli GL, **Hughes BGM**, Mazières J, Socinski M, von Wangenheim U, Barrueco J, Morsli N, Scagliotti GV. Overall survival (OS) and forced vital capacity (FVC) results from the LUME-Meso study of nintedanib+pemetrexed/cisplatin (PEM/CIS) vs placebo+PEM/CIS in chemo-naïve patients with malignant pleural mesothelioma (MPM). Australian Lung Cancer Conference 2018. Sydney, Australia
30. Puztai T, **Cubitt A**, Keller J. How do we measure activity? Cancer Care Services Research Retreat 2018. Brisbane, Australia
31. **Roberts N**. Early insights into implementing patient reported outcomes measures (PROMs) into a busy healthcare setting 27<sup>th</sup> Annual RBWH Healthcare Symposium 2018. Brisbane, Australia
32. **Roberts N**. Using Patient Reported Outcome Measures in Routine Patient Care. Blood Congress 2018. Brisbane, Australia
33. Shaw AT, Lee SH, Ramalingam SS, Bauer TM, Boyer MJ, Costa EC, Felip E, Han JY, Hida T, **Hughes BGM**, Kim SW, Nishio M, Seto T, Ezeh PI, Chakrabarti D, Wang J, Chang A, Fumagalli L, Solomon BJ. Avelumab (anti-PD-L1) in combination with crizotinib or lorlatinib in patients with previously treated advanced NSCLC: phase 1b data from the JAVELIN Lung 101 trial. American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
34. **Suder A**. Overview of bladder cancer. Brisbane Cancer Care Conference 2018. Brisbane, Australia
35. Tran Q, Schmidt A, **Lwin Z**, **Hughes BGM**. Identifying barriers to physical activity in patients with lung cancer: an Australian pilot study. European Society for Medical Oncology Congress 2018 Munich, Germany
36. **Wyld D**, **Burge M**, Dumbra M, Callum J, Neale R, Beesley V. How the rare see their care: Perceptions of care and patient reported outcomes in people living with neuroendocrine tumours. 2<sup>nd</sup> Victorian Cancer Survivorship Conference 2018. Melbourne, Australia
37. **Wyld D**, **Burge M**, Dumbra M, Callum J, Neale R, Beesley V. Perceptions of care and patient-reported outcomes in people living with neuroendocrine tumours. Asia Pacific Neuroendocrine Tumour Society Annual Meeting 2018. Melbourne, Australia
38. **Wyld D**, **Wyld M**, Moore J, Tran N. Neuroendocrine neoplasms in the paediatric, adolescent and young adult population in Queensland, Australia. Australian Gastro Intestinal Trials Group Annual Scientific Meeting 2018. Brisbane, Australia.

## Poster Presentations:

1. Le DT, Kavan P, Kim TW, **Burge ME**, Van Cutsem E, Hara H, McKay Boland P, Van Laethem J, Geva R, Taniguchi H, Crocenzi TS, Sharma M, Atreya CE, Diaz LA, Liang LW, Marinello P, Dai T, O'Neil BH. KEYNOTE-164: Pembrolizumab for patients with advanced microsatellite instability high (MSI-H) colorectal cancer. *Journal of Clinical Oncology*. 2018 May 20; 36, no.15\_suppl. DOI: 10.1200/JCO.2018.36.15\_suppl.3514 **Poster and Discussion**
2. Aghajanian C, Coleman RL, Oza AM, Lorusso D, Oaknin A, Dean AP, Colombo N, Weberpals JI, Clamp AR, Scambia G, Leary A, Holloway RW, Fong PCC, **Goh J**, O'Malley DM, Banerjee SN, Wride K, Cameron T, Ledermann JA. Evaluation of Rucaparib in Platinum-Sensitive Recurrent Ovarian Carcinoma (rOC) in Patients With or Without Residual Bulky Disease at Baseline in the ARIEL3 Study. Abstract 5537. American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
3. **Ahern E.** et al, An observational study of concomitant immunotherapies and denosumab in patients with advanced melanoma or lung cancer. Medical Oncology Group of Australia Annual Scientific Meeting 2018. Adelaide, Australia
4. Allen MJ, Schmidt A, **Lwin Z, Hughes BGM.** Hospital admissions due to immune-oncology therapy associated toxicity: A retrospective analysis at two tertiary oncology centres. American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
5. Banerjee SN, Tang M, O'Connell R, Clamp AR, Lord R, Mullassery VM, Hall M, Gourley C, Bonaventura T, **Goh J**, Sykes P, Grant PT, McNally O, Sjoquist K, Alexander L, Carty K, Paul J, Edmondson RJ, Friedlander M. PARAGON – a phase 2 study of Anastrozole (An) in patients with estrogen receptor (ER) and/ progesterone receptor (PR) positive recurrent/metastatic granulosa cell tumors/sex-cord stromal tumors (GCT) of the ovary – ANZGOG 0903. American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
6. Barnett C, Sommerville R, Lin C, **Hughes B**, Taheri T. CXCR4 and PD-1 Expression in Head and Neck Cancer with Perineural Spread. 28<sup>th</sup> Annual Meeting North American Skull Base Society 2018. Orlando, USA
7. Bryant G, **Eastgate M, Wyld D, Burge M, Thaker D**, Busato M. Colorectal cancer patient reported outcomes: putting theory into practice. Clinical Oncology Society of Australia Annual Scientific Meeting 2018. Perth, Australia
8. **Bryant G, Wyld D, Burge M, Thaker D, Busato M & Eastgate M.** Colorectal cancer patient-reported outcomes: putting theory into practice. Clinical Oncology Society of Australia 2018 Annual Scientific Meeting. Perth, Australia
9. **Bryant G, Thaker D, Wyld D, Leach J, Wheatley H & Garth V.** Implementing a highly accessible model of screening and assessment in geriatric oncology: our experience. Clinical Oncology Society of Australia 2018 Annual Scientific Meeting. Perth, Australia
10. Bryant G, **Thaker D, Wyld D**, Leach J, Wheatley H, Garth V. Implementing a highly accessible model of screening and assessment in geriatric oncology: Our experience. Clinical Oncology Society of Australia Annual Scientific Meeting 2018, Perth, Australia.
11. Dulfkar A, **Lwin Z**, Pinkham E, Foo J, Hides J, Pinkham M, Naumann F. 'Active Patients' Tailored Exercise as Intervention in People with Glioma. Princess Alexandra Hospital Symposium 2018. Brisbane, Australia
12. Dulfkar A, **Lwin Z**, Pinkham E, Foo J, Hides J, Pinkham M, Naumann F. Feasibility of an Individualised Exercise Intervention During and After Treatment in Patients with Glioma: A Case Report Translational Research Institute Symposium 2018. Brisbane, Australia
13. Dulfkar A, Koh E-S, **Lwin Z**, Hovey E, Dhillion H, Arundell J, Pinkham E, Foo J, Hides J, Pinkham M, Naumann F. Baseline functional status in post-operative glioma patients prior to adjuvant radiation: relevance to participation in a supervised exercise programme. Co-operative Trials Group of Neuro-oncology Annual Scientific Meeting 2018. Brisbane, Australia
14. **Eastgate MA**, Atkinson V, Khattak MA, Roy AC, Haydon AM, Mueller C, Dunkelmann T, Brignone C, Triebel F. Pushing the accelerator and releasing the brake: A phase I dose escalation study evaluating a LAG-3 fusion protein (eftilagimod alpha), together with pembrolizumab in unresectable or metastatic melanoma. American Society of Clinical Oncology 2018. Chicago, USA
15. **Eastgate M, Wyld D, Dumbrava M**, Brown T. Dietary patterns and preferences/attitudes of cancer patients regarding sources of information about the diet during cancer treatment. 27<sup>th</sup> Annual RBWH Healthcare Symposium 2018 Brisbane, Australia
16. Fingrut W, Yelamanchili R, Thawer A, Chan D, **Wyld D**, Singh S, Lo D. Ontario oncologists' perspectives on addressing potential barriers in the management of patients with neuroendocrine tumours. North American Neuroendocrine Tumour Society Annual Multidisciplinary NET Disease Symposium 2018. Seattle, USA
17. **Goh JC**, Baron-Hay S, Bonaventura T, Buck M, Dean A, Friedlander M, Gao B, Mileskin L, Oehler MK, Steer C, Nguyen V, Goble S, Grechko N, Monk BJ, Kristeleit RS. ATHENA (GOG-3020/ENGOT-ov45): a Randomised, Double-Blind, Placebo-Controlled, Phase 3 Study of Rucaparib + Nivolumab Following Front-Line Platinum-Based Chemotherapy in Ovarian Cancer. Clinical Oncology Society of Australia Annual Scientific Meeting 2018. Perth, Australia
18. Goodman S, Patford S, Ladwa R, Smith J, **Wyld D**, Pattison DA. Validation of Abbreviated <sup>177</sup>Lu-DOTATATE Renal and Lesional Dosimetry Protocol using Quantitative SPECT. 12<sup>th</sup> Congress of the World Federation of Nuclear Medicine and Biology 2018. Melbourne, Australia
19. Grosso F, Nowak AK, Steele N, Novello S, Popat S, Greillier L, John T, Leigh NB, Reck M, Pavlakis N, Sorensen JB, Planchard D, Ceresoli GL, **Hughes BGM**, Mazieres J, Socinski M, Salnikov A, Kitzing T, Braunger J, Pietzko K, Scagliotti GV. Nintedanib + pemetrexed/cisplatin in malignant pleural mesothelioma: Phase II biomarker data from the LUME-Meso study International Mesothelioma Interest Group 2018. Ottawa Canada
20. Guccione L, Murray A, Gough K, Michael M, Khasraw M, Price T, Pavlakis N, **Wyld D**, Ransom D, Kong G, Leyden S, Leyden D, Rogers M, Schofield P. Living with a rare and complex cancer diagnosis: Describing the experiences, information and supportive care needs, psychosocial status and characteristics of patients with newly diagnosed Neuroendocrine Tumours. Asia Pacific Neuroendocrine Tumour Society Annual Meeting 2018. Melbourne, Australia
21. **Hughes BGM**, Mersiades A, Livingstone A, Jurkovic H, O'Connor J, Stockler M, Badillo F, Leigh N. BR-34 – a randomized trial of durvalumab and tremelimumab plus or minus +/- platinum-based chemotherapy in patients with high-risk, metastatic (stage IV) squamous or non-squamous non-small cell lung cancer (NSCLC). Australian Lung Cancer Conference 2018. Sydney, Australia
22. Itchins M, Alexander M, John T, Kao S, **Hughes BGM**, Lee A, Hayes SA, Harvie R, Howell VM, Clarke SJ, Millward M, Solomon B, Pavlakis N. Retrospective combined cohort analysis of the pattern of care and survival in advanced ROS1 rearranged non-small cell lung cancer (NSCLC). The Australian experience. World Conference on Lung Cancer 2018. Toronto, Canada
23. Itchins M, Alexander M, John T, Kao S, **Hughes BGM**, Clarke S, Millward M, Solomon B, Pavlakis N. Retrospective combined cohort analysis of the pattern of care and survival in advanced ROS1 rearranged non-small cell lung cancer (NSCLC). The Australian experience. Australian Lung Cancer Conference 2018. Sydney, Australia

### Poster Presentations (cont):

24. Khasraw M, McDonald K, Yip S, Verhaak R, Heimberger A, Hall M, Barnes E, Hovey E, Ellingson B, **Lwin Z**. Nivolumab and Temozolomide (TMZ) vs TMZ alone in newly diagnosed elderly patients (pts) with Glioblastoma (GBM) (NUTMEG). Society of Neurooncology Annual Scientific Meeting 2018, New Orleans, USA
25. Khasraw M, McDonald K, Yip S, Verhaak R, Heimberger A, Hall M, Barnes E, Hovey E, Ellingson B, **Lwin Z**. Nivolumab and Temozolomide (TMZ) vs TMZ alone in newly diagnosed elderly patients (pts) with Glioblastoma (GBM) (NUTMEG). Clinical Oncology Society of Australia Annual Scientific Meeting 2018. Perth, Australia
26. Khasraw M, McDonald K, Yip S, Verhaak R, Heimberger A, Hall M, Barnes E, Hovey E, Ellingson B, **Lwin Z**. Nivolumab and Temozolomide (TMZ) vs TMZ alone in newly diagnosed elderly patients (pts) with Glioblastoma (GBM) (NUTMEG): Trial in progress European Association of Neurooncology 2018. Stockholm, Sweden
27. Khasraw M, McDonald KL, Rosenthal M, **Lwin Z**, Ashley DM, Wheeler H, Barnes E, Koh E-S, Foote MC, Buckland M, Swanson R, Hall M, Yip S, Oostendorp M, Simes J. A randomized phase 2 trial of veliparib and radiotherapy and temozolomide in patients with unmethylated MGMT glioblastoma: Feasibility and safety outcomes (the VERTU study). American Society of Clinical Oncology 2018. Chicago, USA
28. Kisiel N, Ladwa R, Smith J, Lee K, Ramsay S, Bhatt M, Nocher S, **Burge M, Wyld D**, Pattison D. Renal function influences renal absorbed dosimetry, haematologic toxicity and early withdrawal from 177Lu-DOTATATE treatment. Asia Pacific Neuroendocrine Tumour Society Annual Meeting 2018. Melbourne, Australia
29. **Kuchel A**, McGrath K, **Wyld D, Burge M, Eastgate M**. Use of adjuvant chemotherapy and outcomes after preoperative long course chemoradiation in rectal cancer – a 2 year Royal Brisbane experience. Australian Gastro-Intestinal Trials Group Annual Scientific Meeting 2018. Brisbane, Australia
30. Kulkarni S, Laurie S, Goss G, Perrone F, **Hughes BGM**, Stockler M, Blais A, Zibdawi L, Vera-Badillo FE, Leighl NB. BR-34 Clinical Trial in progress- A randomized trial of durvalumab and tremelimumab +/- platinum-based chemotherapy in patients with high-risk, metastatic (stage IV) squamous or non-squamous non-small cell lung cancer (NSCLC). World Conference on Lung Cancer 2018. Toronto, Canada
31. Lee K, Debowski M, Goodman S, Bhatt M, Ramsay S, Pattison D, Francis L, **Wyld D**. Renal tubular injury presenting after 177Lu-DOTATATE peptide receptor radionuclide therapy with high renal dosimetry. Asia Pacific Neuroendocrine Tumour Society Annual Meeting 2018. Melbourne, Australia
32. **Lee SF**, Jeffree R, **Eastgate M**. Trends in outcomes of resected intracranial metastatic melanoma across the pre- and post-era of modern systemic therapies. Co-operative Trials Group of Neuro-oncology Annual Scientific Meeting 2018. Brisbane, Australia
33. **Lee, S, Wyld D, Eastgate M, Cubitt A, Hingston L, Burge M**. Prospective evaluation of modified FOLFIRINOX for metastatic or locally advanced pancreatic cancer. Australian Gastro-Intestinal Trials Group Annual Scientific Meeting 2018. Brisbane, Australia
34. **Lee SF, Wyld D, Eastgate M**, Brown T. Dietary patterns and attitudes in cancer survivors. 2<sup>nd</sup> Victorian Cancer Survivorship Conference 2018. Melbourne, Australia
35. **Lee S, Wyld D, Brown T, Eastgate MA**. Dietary patterns and attitudes in cancer patients. American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
36. Liede A, Hernandez RK, Wade SW, Bo R, **Ahern E**, et al. An observational study of concomitant immunotherapies and denosumab in patients with advanced melanoma or lung cancer. American Society of Clinical Oncology Annual Meeting 2018. Chicago, USA
37. **Lwin Z**, Kirby E. I'm the handbrake.... the role of informal carers in glioma. Co-operative Trials Group of Neuro-oncology Annual Scientific Meeting 2018. Brisbane, Australia
38. McGahan W, Waterhouse M, O'Connell D, Merrett N, **Wyld D**, Goldstein D, Neale RE. The use of serum CA19-9 to guide selective uptake of staging laparoscopy in patients with pancreatic cancer. Royal Australasian College of Surgeons Annual Scientific Congress 2018. Sydney, Australia
39. Michael M, Pook DW, Ganju V, Link E, Toner GC, Hicks RJ, Matera A, Thompson M, Cullinane C, Campbell I, **Burge M**, Karapetis CS. The utility of genomics and functional imaging to predict Sunitinib PK and PD: The Predict SU study. American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
40. Moor RJ, Roberts KE, Mason R, Gunawan B, Feng S, Hong JH, Von Itzstein M, **Hughes BGM, Lwin Z**, Jain VK, Bigby KJ, Azer MWF, Sanmugarajah J, O'Byrne JJ. Immune-related adverse events and nivolumab outcomes in non-small cell lung cancer patients: A multi-institutional, retrospective cohort study. American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
41. O'Byrne K, Mauti L, Rivalland G, Klingbiel D, Kao S, Schmid, Nowak A, Gautschi, **Hughes B**, Bartnick T, Pavlakis N, Bouchaab H, Rothschild S, Russell P, Savic-Prince, Thapa B, Pless M, von Moos R, Metaxas Y, John T. Real world outcomes for patients treated with pembrolizumab (pembro) for relapsed malignant pleural mesothelioma (MPM). International Mesothelioma Interest Group 2018. Ottawa, Canada
42. Pavlakis N, Grosso F, Steele N, Nowak AK, Novello S, Popat S, Greillier L, Reck M, John T, Taylor P, Leighl NB, Ceresoli GL, Sorensen JB, Planchard D, **Hughes BGM**, Mazières J, Socinski M, Buchner H, Barrueco J, Scagliotti GV. Association between progression-free survival (PFS) rate (PFSR) and overall survival (OS) in LUME-Meso, a study of nintedanib (N) + pemetrexed/cisplatin (PEM/CIS) vs placebo (P) + PEM/CIS in chemo-naïve patients (pts) with malignant pleural mesothelioma (MPM). American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
43. Popat S, Grosso F, Steele N, Nowak AK, Novello S, Greillier L, Reck M, John T, Taylor P, Leighl NB, Ceresoli GL, Sorensen JB, Pavlakis N, Planchard D, **Hughes BGM**, Mazieres J, Socinski M, von Wangenheim U, Barrueco J, Norsli N, Scagliotti GV. Tumor burden (TB), treatment exposure (TE) and adverse events (AEs) in the combination and monotherapy phases of LUME-Meso, a study of nintedanib (N)/placebo (P) + pemetrexed/cisplatin (PEM/CIS) followed by maintenance with N or P in chemo-naïve patients (pts) with malignant pleural mesothelioma (MPM). American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
44. Popat S, Novello S, Nowak AK, Grosso F, Steele N, Greillier L, John T, Leighl NB, Reck M, Pavlakis N, Sorensen JB, Planchard D, Ceresoli GL, **Hughes BGM**, Mazieres J, Socinski M, von Wangenheim U, Barrueco J, Norsli N, Scagliotti GV. Phase II LUME-Meso study of first-line nintedanib + chemo in malignant pleural mesothelioma: additional efficacy analyses. International Mesothelioma Interest Group 2018 Ottawa, Canada
45. Ratnayake G, Shanker M, Roberts K, Mason R, **Hughes B, Lwin Z**, Jain V, Vagenas D, O'Byrne K, Chua B. Prior or Concurrent Radiotherapy and Nivolumab Immunotherapy in Non-Small Cell Lung Cancer. European Society for Medical Oncology Congress 2018. Munich, Germany

### Poster Presentations (cont):

46. Rischin D, Migden MR, Chang A, Chung CH, Dunn L, Guminski A, Hauschild A, Hernandez-Aya L, **Hughes BGM**, Lewis KD, Lim AML, Modi B, Schadendorf D, Schmultz C, Booth J, Li S, Mohan KK, Stankevich E, Lowy I, Fury MG. Primary analysis of phase 2 results for cemiplimab, a human monoclonal anti-PD-1, in patients with metastatic cutaneous squamous cell carcinoma (mCSCC). American Society of Clinical Oncology 2018 Annual Conference, Chicago, USA
47. **Roberts NA**, Janda M, Alexander K, **Wyld D**. Describing patient Reported Outcomes measures (PROMs) Knowledge for the Multi-Disciplinary Team. 20<sup>th</sup> World Congress of Psycho-Oncology 2018. Hong Kong
48. **Roberts NA**, Janda M, Alexander K, **Wyld D**. Describing patient Reported Outcomes measures (PROMs) Knowledge for the Multi-Disciplinary Team. Cancer Care Services Research Retreat 2018. Brisbane, Australia
49. Sjoquist KM, Mileschkin LR, Ananda S, Shannon CM, Bowtell D, Yip S, Espinoza D, **Goh J**, Harrison ML, Plebanski M, GebSKI V, Stockler MR, Livingstone K, Tang M, Friedlander M. REZOLVE (ANZGOG-1101): a phase 2 trial of intraperitoneal (IP) bevacizumab (bev) for recurrent ascites in advanced, chemotherapy-resistant, epithelial ovarian cancer (CR-EOC). American Society of Clinical Oncology Annual Conference 2018. Chicago, USA
50. Socinski M, Rittmeyer A, Shapovalov D, Orlandi F, McCleod M, Soo R, Palmero R, Kozuki T, Migliorino MR, Koynov K, Berard H, **Hughes BGM**, Lin R, Graupner V, Sun SW, Kowanetz M, Hoang T, Lin W, Jotte R. Overall survival analysis of a randomized phase III study of atezolizumab + carboplatin + paclitaxel or nab-paclitaxel vs carboplatin + nab-paclitaxel in 1L advanced squamous NSCLC (IMpower131). European Society for Medical Oncology Congress 2018. Munich, Germany
51. Van der Zwan W, **Wyld D**, Brabander T, Teunissen J, Kam B, MacFarlane D, Krenning E, Kwekkeboom D, de Herder W.A Randomized Controlled Study Comparing treatment of Gastro-Entero-Pancreatic Neuroendocrine Tumours (GEPNET) with 177Lu-DOTATATE Alone and in Combination with Capecitabine. European Neuroendocrine Tumour Society 15<sup>th</sup> Annual Conference 2018. Barcelona, Spain.
52. van Haeringen B, **Burge M**, **Wyld D**. Metastatic colorectal carcinoma: Prognostic clinical, pathological and molecular biomarkers and elucidating associations of high neutrophil: lymphocyte ratio. Australasian Gastro-Intestinal Trials Group Annual Scientific Meeting 2018 Brisbane, Australia
53. Wan MH, Moore J, **Wyld DK**. Neuroendocrine Neoplasm Trends Over 32 Years in Queensland, Australia. Princess Margaret Cancer Conference. Accelerating Precision Medicine 2018. Toronto, Canada
54. **Wyld D**, **Burge M**, **Dumbrava M**, **Callum J**, Neale R, Beesley V. How the Rare See Their Care: Perceptions of Care and Patient Reported Outcomes in People Living with Neuroendocrine Tumors. 2<sup>nd</sup> Victorian Cancer Survivorship Conference 2018. Melbourne, Australia
55. **Wyld D**, **Burge M**, **Dumbrava M**, **Callum J**, Neale R, Beesley V. How the Rare See Their Care: Perceptions of Care and Patient Reported Outcomes in People Living with Neuroendocrine Tumors. (Abstract 1980). European Neuroendocrine Tumour Society 15<sup>th</sup> Annual Conference 2018. Barcelona, Spain
56. **Wyld D**, Moore J, Parker K, Pattison S, Cockcroft R, Tran N, Lawrence B. Neuroendocrine neoplasms in the paediatric adolescent and young adult population in New Zealand and Queensland Australia. Asia Pacific Neuroendocrine Tumour Society Annual Meeting 2018. Melbourne, Australia
57. **Wyld D**, Moore J, Tran N, Wyld M. Neuroendocrine Neoplasms in the Paediatric, Adolescent and Young Adult Population in Queensland, Australia. The Australasian Gastro-Intestinal Trials Group Annual Scientific Meeting 2018. Brisbane, Australia
58. **Wyld D**, Wan M, Moore J. Neuroendocrine neoplasm trends over 32 years in Queensland, Australia. Asia Pacific Neuroendocrine Tumour Society Annual Meeting 2018. Melbourne, Australia
59. Yelamanchili R, Thawer A, Chan D, Lo D, Singh S, Fingrut W, **Wyld D**. Insights into the practice patterns, challenges and the role of a shared care model in the management of neuroendocrine (NET) patients in the community. North American Neuroendocrine Tumour Society Annual Multidisciplinary NET Disease Symposium 2018. Seattle, USA
60. **You K**, Lau H, **Paxton Hall F**, **Eastgate M**, **Wyld D**, **Burge M**. Surgery with curative intent in metastatic colorectal cancer: Real world practice in Queensland, Australia. Australasian Gastro-Intestinal Trials Group Annual Scientific Meeting 2018. Brisbane, Australia.

### Other Communications and Outputs:

#### Journal Abstracts:

1. Lee B, Lipton LR, Cohen J, Tie J, Javed AA, Li L, Goldstein D, Cooray P, Nagrial A, **Burge ME**, Tebbutt NC, Nikfarjam M, Harris M, Lennon AM, Wolfgang CL, Tomasetti C, Papadopoulos N, Kinzler KW, Vogelstein B, Gibbs P. Circulating tumor DNA as a prognostic biomarker in early stage pancreatic cancer. *J Clin Oncol* 36, 2018 (suppl; abstr e16206)
2. Wong WT, Broom A, Kirby E, **Lwin Z**. What lies beneath? Experiencing emotions and caring in oncology. *Health (London)*. 2018 Sep 24;1363459318800168. doi: 10.1177/1363459318800168. [Epub ahead of print].

#### Press Programme:

1. Tran Q, Schmidt A, **Lwin Z**, **Hughes B**. Identifying barriers to physical activity in patients with lung cancer: an Australian pilot study European Society of Medical Oncology ASM, ESMO Press Programme. Munich, Germany; 19-23 October 2018.

#### Research Exhibition Event:

1. Broom A, **Lwin Z**, Kirby E, Kenny K, Plage S, Oliffe J, Parker R, **Wyld D**, Yates P. Photo Exhibition RBWH Picturing Cancer Survivorship” A collection of photographs from the ‘changing landscapes of survivorship’ study. Brisbane 5–31 Nov 2018.

## Radiation Oncology



**Assoc. Prof Graeme Dickie**  
**Director Radiation Oncology**  
 Cancer Care Services RBWH

The culture of inter-disciplinary collaboration and technology to advance research remains strong for radiation oncology in 2018. 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 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 through the Herston Imaging and Research Facility and several projects are progressing through the implementation phase. Radiation Oncology

has also been successful in obtaining grants through the Herston Biofabrication Institute to expand 3-D printing in the field of radiation oncology 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.

### Supervised Post-Graduate Research Students

<b>Name</b> <i>(RBWH staff in bold)</i>	<b>Current Studies</b> <i>(e.g. PhD, Masters etc.)</i> <b>University</b> <i>(duration)</i>	<b>Research Project Title</b>	<b>Supervisors</b> <i>(RBWH staff in bold)</i>
Trent Aland	PhD, QUT (2013-2019)	Quality assurance of complex radiotherapy treatments	<b>Tanya Kairn</b> , Jamie Trapp
Diana Binny	PhD, QUT (2015-2019)	Optimizing patient plan deliveries by characterizing treatment planning systems in radiotherapy	<b>Scott Crowe</b> , <b>Tanya Kairn</b> , Jamie Trapp
<b>Rae Blades</b>	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, <b>Ray Chan</b> , Steven McPhail
Georgia Brown	MSc, QUT (2017-2018)	Dosimetric impact of gating of modulated breast radiotherapy using an optical surface monitoring system	<b>Scott Crowe</b> , <b>Tanya Kairn</b> , <b>Steven Sylvander</b>
Athreya Sherma Buddhavarapu	MSc, QUT (2018)	Characterising the performance of the PerFraction patient-specific QA system	<b>Scott Crowe</b> , Francis Gibbons
Naasiha Cassim	MSc, QUT (2017-2018)	Dosimetric plan quality for treatments of multiple brain metastases	<b>Scott Crowe</b> , <b>Tanya Kairn</b> , Mark West, Yurissa Ikeda
<b>Orrie Dancewicz</b>	PhD, QUT (2014-2018)	Development and verification of a novel 3D dosimetry technique for tomotherapy	<b>Scott Crowe</b> , Jamie Trapp, Tim Markwell
<b>Jemma Devereaux</b>	Masters, QUT (2017)	DIBH (Deep Inspiration Breath Hold)-BREaST Trial. Breath Hold Respiratory Endurance and Spirometry Training	Lisa Nissin, Cathy Hargrave, Julie Burbery, <b>Gregory Rattray</b>

## Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Joanna Kapeleris	PhD QUT (2018-2020)	Circulating tumour cells	Chamindie Punyadeera, <b>Lizbeth Kenny</b>
Dr Timothy Liu	MPhil	Oral Squamous Cell Carcinoma with intermediate risk factors	Martin Batstone, <b>Benjamin Chua</b>
Johnny Morales	PhD, QUT (2011-2018)	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, Lindy Jeffree
<b>Samuel Peet</b>	PhD, QUT (2016-2020)	Out-of-field dose in contemporary radiation therapy	<b>Scott Crowe, Tanya Kairn,</b> Jamie Trapp
James Rijken	PhD, QUT (2017-2022)	Dosimetric accuracy for SABR spine radiotherapy treatments	<b>Scott Crowe, Tanya Kairn,</b> Jamie Trapp, Konstantin Momot
Sanphat Sangudsup	PhD, QUT (2018-2020)	Dosimetric impact of interplay effects on FFF VMAT by gel measurements	<b>Scott Crowe,</b> Jamie Trapp, Andrew Fielding
Emma Whittle	MSc, QUT (2017-2018)	Measurement of tissue-phantom ratios in small radiotherapy fields	<b>Scott Crowe, Tanya Kairn,</b> Shadi Khoei, Emma Spelleken
<b>Liting Yu</b>	PhD, QUT (2017-2022)	Developing new methods of dose evaluation for VMAT patient specific plans	<b>Scott Crowe,</b> Jamie Trapp, <b>Tanya Kairn,</b> Christian Langton

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Scott Crowe</b>	Adjunct Associate Professor	School of Chemistry, Physics and Mechanical Engineering	QUT (2015 – current)
<b>Allison Dry</b>	RT R&D Co-ordinator	Radiation Therapy	Queensland Health
<b>Jennifer Edmunds</b>	Clinical Trial Co-ordinator	Radiation Oncology	Queensland Health
<b>Catriona Hargrave</b>	State-wide RT Research Fellow. Joint appointment with QUT (School of Clinical Sciences, Faculty of Health)	Radiation Oncology / Radiation Therapy	QUT
<b>Tanya Kairn</b>	Adjunct Associate Professor	School of Chemistry, Physics & Mechanical Engineering	QUT (2013 – current)
<b>Jacqui Keller</b>	Manager, Clinical Trials	Radiation Oncology	Queensland Health
<b>Trang Le</b>	Clinical Trial Co-ordinator	Radiation Oncology	Queensland Health
<b>Rob McDowall</b>	Radiation Therapist Consultant	Radiation Oncology / Radiation Therapy	Queensland Health
<b>Charmaine Micklewright</b>	Research Assistant	Radiation Oncology	Queensland Health
<b>Michelle Ralston</b>	Advanced Radiation Therapist	Radiation Oncology / Radiation Therapy	Queensland Health
<b>Lee Tripcony</b>	Principal Scientist Statistics	Radiation Oncology / Statistics	Queensland Health
<b>Christopher Walsh</b>	RT R&D Co-ordinator	Radiation Therapy	Queensland Health

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Rae Blades / Ray Chan</b>	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
<b>Dr Philip Chan</b>	<b>Paul Thomas (HIRF), Robyn Cheuk, Michelle Grogan, Graeme Dickie</b>	Prognostic Value of Assessing Hypoxia in Tumours Using <sup>18</sup> F-MISO PET During a Course of Radiation Therapy – Proof of Concept Study
<b>Dr Ben Chua</b>	<b>Zarnie Lwin, Bryan Day (QIMR)</b>	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



## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Dr Ben Chua	Tristan Shaw	Diagnostic performance of 18-fludeoxyglucose positron emission tomography (FDG-PET) in evaluation of glioma
Jemma Devereaux	Jemma Blyth, Elena Blyth, Gregory Rattray, Catriona Hargrave, Lisa Nissin, Julie Burbery	DIBH (Deep Inspiration Breath Hold)-BREAST Trial. Breath Hold Respiratory Endurance & Spirometry Training
Graeme Dickie	Philip Chan, Rachael Wilks	Pulse Dose Rate Brachytherapy for cervix cancer, Royal Brisbane and Women's Hospital review
Tanya Grant (SPP)	Catriona Hargrave, Jemma Blyth, Allison Dry, Gene Blow (RBWH Cultural Capability Officer), Judy Graham (Ca. Council Qld, Gold Coast), Anna Gordon (Ca. Council Qld. Greater Brisbane)	Improving access to Culturally Safe Care in Radiotherapy for Indigenous Patients
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
Dr Lindy Jeffree (RBWH)	Michael Fay (NMH), Jennifer Martin (UON), Paul Thomas (HIRF), Stephen Rose (CSIRO), Nicholas Dowson (CSIRO)	Evaluation of the role of valproate in the treatment of high grade glioma
Tanya Kairn	Scott Crowe, Craig Lancaster, Rachael Wilks, Nancy Yu	Review of optically stimulated luminescence dosimeter measurements from total skin electron radiotherapy treatments
Tanya Kairn	Scott Crowe, Rachael Wilks, Liting Yu, Craig Lancaster	Retrospective review of optically stimulated luminescence dosimeters from total skin electron radiotherapy treatments
Liz Kenny	Sarju Vasani (RBWH)	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	Ben Chua, Liz 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
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
Alexander Livingstone	Darren Cassidy, Kirby Francis	Developing a Monte Carlo quality assurance check system for radiotherapy
Jasmine Meaghan (SPP), Dr. Catherine Bettington, Rob McDowall,	Dr Cathy Hargrave, Allison Dry, Jemma 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
Candice Milewski	Scott Crowe, Rachael Wilks, Tanya Kairn	Evaluation of metal artefact reduction algorithms for radiotherapy
Kane Miller (SPP), Rob McDowall, Michael Gray	Dr Cathy Hargrave, Allison Dry	Literature review and potential dosimetric impacts of metal artefact reduction methods for radiation therapy CT planning scans
Anthony Pagidas, Adrian Celati	Jemma Blyth, Michelle Grogan, Allison Dry, Catriona Hargrave	Retrospective Evaluation of breast seroma changes during radiation therapy & the dosimetric benefits of performing a repeat CT scan
Samuel Peet	Alex Livingstone, Kirby Francis	Dashboard web system for radiation oncology process recording
Kate Stewart	Molly Mee (QUT), Marika Lathouras, Helen Truong, Dr Catriona Hargrave	Evaluation of a Deformable Image Registration Quality Assurance Tool for Head and Neck patients in the MIM Maestro software
Kate Stewart	Tsz-Wun Pinky Tiu, Vickie Lightfoot, Catriona Hargrave	Comparison of Deformable and Rigid Image Registration of PETCT for Head and Neck patients in the MIM Maestro System
Steven Sylvander	Scott Crowe, Kirby Francis, Orrie Danciewicz (Nuc. Med), Tanya Kairn, Timothy Markwell (Mater Centre), Jamie Trapp (QUT)	Applications of 3D printing in radiation oncology medical physics
Helen Truong (SPP), Christopher Walsh, Richelle Hopkinson	Dr Cathy Hargrave, Allison Dry	Retrospective analysis of Catalyst reference image and radiographically defined radiotherapy treatment isocentres
Liting Yu	Scott Crowe, Tanya Kairn, Kirby Francis	Novel quality assurance metrics for radiotherapy dose verification measurements

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Prof Stephen Ackland, (Calvary Mater Newcastle Hospital)	<b>Mathew Burge</b> (CCS MO), <b>Graeme Dickie</b> (CCS DRO)	A randomised, placebo-controlled phase II trial of simvastatin in addition to standard chemotherapy and radiation in preoperative treatment for rectal cancer (SPAR)
Prof Sherene Loi (PMCC)	<b>Robyn Cheuk</b> (CCS DRO) <b>Michelle Grogan</b> (CCS DRO)	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 (University of Liverpool)	<b>Catherine Bettington</b> (CCS DRO)	ROAM – TROG 15.02 Radiation versus Observation following surgical resection of Atypical Meningioma: a randomised controlled trial
Dr Arjun Sahgal (CCTG)	<b>Ben Chua</b> (CCS DRO)	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
Jamie Trapp (QUT)	<b>Scott Crowe</b> (CCS DRO) <b>Tanya Kairn</b> (CCS DRO)	Development of three-dimensional gel dosimetry solutions for radiation therapy
Jamie Trapp (QUT)	<b>Scott Crowe</b> (CCS DRO) <b>Tanya Kairn</b> (CCS DRO)	Investigation of issues surrounding small field dosimetry in radiation therapy
Jamie Trapp (QUT)	<b>Scott Crowe</b> (CCS DRO) <b>Tanya Kairn</b> (CCS DRO)	Evaluating dosimetry near non-water equivalent implants and prostheses
Vincent Grégoire (EORTC)	<b>Liz Kenny</b> (CCS DRO)	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 (PMCC)	<b>Liz Kenny</b> (CCS DRO)	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 (QUT)	<b>Liz Kenny</b> (CCS DRO)	SPLIT 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
Prof Rajiv Khanna (QIMR)	<b>Liz Kenny</b> (CCS DRO)	P2191 Development of an Adoptive T Cell Therapy for HPV-Associated Malignancies
Chamindie Punyadeera (QUT)	<b>Liz Kenny</b> (CCS DRO)	JNJ Saliva Study Developing an Oral Rinse Method to Detect Human Papillomavirus
David Pryor	<b>Charles Lin</b> (CCS DRO)	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	<b>Charles Lin</b> (CCS DRO)	TROG 15.03 Focal Ablative STereotactic RADiosurgery for Cancers of the Kidney – a Phase II Clinical Trial (FASTRACK II)
Shankar Siva	<b>Catherine Bettington</b> (CCS DRO)	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 (NHMRC)	<b>Philip Chan</b> (CCS DRO)	ENZARAD Randomised phase 3 trial of enzalutamide in androgen deprivation therapy with radiation therapy for high risk, clinically localised, prostate cancer
Kumar Gogna (RO Mater)	<b>Catherine Bettington</b> (CCS DRO)	SPLIT COURSE A single arm, prospective Phase II study of Split-Course Pelvic Radiotherapy for Locally Progressive, Castrate Resistant Prostate Cancer
Margot Lehman (PAH)	<b>Philip Chan</b> (CCS DRO)	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 (SGH)	<b>Robyn Cheuk</b> (CCS DRO)	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 (PMCC)	<b>Liz Kenny</b> (CCS DRO)	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. Mileschkin (PMCC)	<b>Robyn Cheuk</b> (CCS DRO)	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 (Auckland City Hospital)	<b>Charles Lin</b> (CCS DRO)	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

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Michael Poulsen (RO Mater)	<b>Graeme Dickie (CCS DRO)</b>	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 (PMCC)	<b>Roger Allison (CCS DRO)</b>	TROG 06.01 Primary chemotherapy with Temozolomide vs. Radiotherapy in patients with Low Grade Gliomas after stratification for genetic 1P loss: a phase III Study
Australasian Lung Cancer Trials Group	<b>Brett Hughes (CCS), Phillip Chan (CCS)</b>	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

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Rae Blades</b>	Scholarship	2018 Research Postgraduate Scholarship – RBWH Foundation
<b>Tanya Grant</b>	Best SPP Paper: improving access to Culturally Safe Care in Radiotherapy for Indigenous Patients	ASMIRT Queensland RT Weekend MEETS Country AIR conference, 'Technology in the Tropics', 20-21 Oct 2018, Townsville

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Chamindie Punyadeera, <b>Liz Kenny</b> , Jean Paul Thiery, Brett Hughes, Majid Warkiani, Arutha Kulasinghe	CCS DRO, DMO	Circulating tumour cells: clinical applications in head and neck cancers	Cancer Australia	\$199,919	\$599,756 (2018-2020)
<b>A/Prof Scott Crowe (CI), Dr. Graeme Dickie, Dr. Philip Chan, Dr. Catherine Bettington, Lee Heseltine, Steven Sylvander, A/Prof Tanya Kairn</b>	CCS DRO	Improving radiation oncology via the application of 3D printing	MNHHS Program (Clinical / Resarch) for the Herston Biofabrication Institute	\$158,000	\$474,500 (2018-2021)
Chamindie Punyadeera, <b>Liz Kenny</b> , 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	\$119,994	\$239,988 (2018-2020)
<b>Charles Lin</b>	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	\$52,750	\$211,000.15 (2017-2021)
Marina Reeves, Sandra Hayes, Wendy Denmark-Wahnefried, Jennifer Muller, Elizabeth Eakin, <b>Liz Kenny</b> , 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	\$99,918	\$197,179 (2017-2018)
Chamindie Punyadeera, <b>Liz Kenny</b> , Ken O'Byrne, Erik Thompson, Steve Mattarollo, Arutha Kulasinghe	CCS DRO	Circulating Tumour Cells as Biomarkers to Identify Head and Neck Cancer Patients For PD1 Therapy	Translational Research Unit (TR) Spore Grant	\$40,000	\$80,000 (2017-2018)
<b>Steven Sylvander</b>	CCS DRO (Medical Physics)	Catalyst optical surface monitoring system	New Technology Grant	\$22,000	\$72,000 (2017-2018)
<b>Graeme Dickie</b>	CCS DRO	QCOG Cancer Clinical Trial Data Manager Grant	Queensland Clinical Oncology Group	\$68,000	\$68,000 (2018)

## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Benjamin Chua</b> , Bryan Day, Stephen Rose, <b>Paul Thomas</b> , <b>Lindy Jeffrey</b> , Yi-Chieh Lim, <b>Po-ling Inglis</b> , <b>Zarnie Lwin</b> , <b>Jacqui Keller</b>	Radiation Oncology	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	\$0	\$66,498 (2017-2019)
<b>Lizbeth Kenny</b>	Radiation Oncology	CXCR4 PET for nodal staging of resectable mucosal head and neck squamous cell carcinoma (HNSCC)	HIRF seed research funding	\$28,008.75	\$56,017.50 (2017-2019)
<b>Samuel Peet</b>	CCS DRO (Medical Physics)	Out-of-field dose in contemporary radiation therapy	RBWH Foundation	\$36,864	\$36,864 (2018)
<b>Nancy Yu</b>	CCS DRO (Medical Physics)	Developing new methods of dose evaluation for VMAT patient specific plans	RBWH Foundation	\$36,864	\$36,864 (2018)

## 2018 Research Publications

### Journal Articles:

- Binny D, **Kairn T**, Lancaster CM, **Trapp JV**, **Crowe SB**. Photon Optimizer (PO) versus Progressive Resolution Optimizer (PRO): a conformality and complexity based comparison for Intensity Modulated Arc Therapy plans. *Med Dosim* 2018; 43;3:267-275. doi: 10.1016/j.meddos.2017.10.003
- Binny D, **Lancaster CM**, Byrne M, **Kairn T**, Trapp JV, **Crowe SB**. Tomotherapy treatment site specific planning using statistical process control. *Physica Medica* 2018; 53;32-39. doi: 10.1016/j.ejmp.2018.08.003
- Boase NRB, Smith S, Masters K-S, Hosokawa K, **Crowe S**, Trapp J. Xylenol orange functionalised polymers to overcome diffusion in Fricke gel radiation dosimeters. *Reactive and Functional Polymers* 2018;132;81-88. doi: 10.1016/j.reactfunctpolym.2018.09.011
- Chamunyonga C, Burbery J, Caldwell P, Rutledge P, Fielding A, **Crowe S**. Utilising the Virtual Environment for Radiotherapy Training system to support undergraduate teaching of IMRT, VMAT, DCAT treatment planning, and QA Concepts, *Journal of Medical Imaging and Radiation Sciences* 49(1): 31-38, 2018
- Crowe SB**, Pross Z, Nilsson S, **Dawes J**, **Kairn T**, **Lancaster CM**. Characterisation of the radiological properties of a brachytherapy moulding material. *Australas. Phys. Eng. Sci. Med.* 2018 Sep; 41;3:731-737. doi: 10.1007/s13246-018-0673-4
- Denham JW, Joseph D, Lamb DS, Spry NA, Duchesne G, Matthews J, Atkinson C, Tai KH, Christie D, **Kenny L**, Turner S, Gogna NK, Diamond T, Delahunt B, Oldmeadow C, Attia J, Steigler A. Short-term androgen suppression and radiotherapy versus intermediate-term androgen suppression and radiotherapy, with or without zoledronic acid, in men with locally advanced prostate cancer (TROG 03.04 RADAR): 10-year results from a randomised, phase 3, factorial trial. *Lancet Oncol.* 2018 Dec 19. pii: S1470-2045(18)30757-5. doi: 10.1016/S1470-2045(18)30757-5. [Epub ahead of print]
- Diaz ME, Debowski M, Hukins C, Fielding D, Fong KM, **Bettington CS**. Non-small cell lung cancer brain metastasis screening in the era of positron emission tomography-CT staging: Current practice and outcomes. *J Med Imaging Radiat Oncol.* 2018 Jun;62(3):383-388. doi: 10.1111/1754-9485.12732. Epub 10 May 2018
- Kapeleris J, Kulasinghe A, Warkiani ME, Vela I, **Kenny L**, O'Byrne K, Punyadeera C. The Prognostic Role of Circulating Tumor Cells (CTCs) in Lung Cancer. *Front Oncol.* 2018 Aug 14;8:311. doi: 10.3389/fonc.2018.00311
- Kulasinghe A, Kapeleris J, Kimberley R, Mattarollo SR, Thompson EW, Thiery JP, **Kenny L**, O'Byrne K, Punyadeera C. The prognostic significance of circulating tumor cells in head and neck and non-small-cell lung cancer. *Cancer Med.* 2018 Dec;7(12):5910-5919. doi: 10.1002/cam4.1832. Epub 2018 Nov 22
- Kulasinghe A, Schmidt H, Perry C, Whitfield B, **Kenny L**, Nelson C, Warkiani ME, Punyadeera C. A Collective Route to Head and Neck Cancer Metastasis. *Sci Rep.* 2018 Jan 15;8(1):746. doi: 10.1038/s41598-017-19117-9
- Lim Y, Fukuma N, Totsika M, **Kenny L**, Morrison M, Punyadeera C. The Performance of an Oral Microbiome Biomarker Panel in Predicting Oral Cavity and Oropharyngeal Cancers. *Front Cell Infect Microbiol.* 2018 Aug 3;8:267. doi: 10.3389/fcimb.2018.00267
- Liu T, **Chua B**, Batstone M. Post-Operative Radiotherapy for Oral SCC with Histologic Risk Factors: Are We Over-Treating?, *J Oral Maxillofac Surg.* 2018 Jul;76(7):1565-1570. doi: 10.1016/j.joms.2018.01.014. Epub 2018 Jan 31
- Moroney LB, Helios J, Ward EC, Crombie J, Pelecanos A, Burns CL, Spurgin AL, Blake C, **Kenny L**, **Chua B**, Hughes BGM. Helical IMRT with concurrent chemotherapy for oropharyngeal SCC: A prospective investigation of acute swallowing and toxicity patterns. *Head Neck.* 2018 Sep;40(9):1955-1966. doi: 10.1002/hed.25182. Epub 2018 May 13
- Nair S, Tang KD, **Kenny L**, Punyadeera C. Salivary exosomes as potential biomarkers in cancer. *Oral Oncol.* 2018 Sep;84:31-40. doi: 10.1016/j.oraloncology.2018.07.001. Epub 2018 Jul 13
- Porceddu SV, Bressel M, Poulsen MG, Stoneley A, Veness MJ, **Kenny L**, Wratten C, Corry J, Cooper S, Fogarty GB, Collins M, Collins MK, Macann AMJ, Milross CG, Penniment MG, Liu HY, King MT, Panizza BJ, Rischin D. Postoperative Concurrent Chemoradiotherapy Versus Postoperative Radiotherapy in High-Risk Cutaneous Squamous Cell Carcinoma of the Head and Neck: the Randomized Phase III TROG 05.01 Trial. *J Clin Oncol.* 2018 May 1;36(13):1275-1283. doi: 10.1200/JCO.2017.77.0941. Epub 2018 Mar 14

### Journal Articles (cont):

16. Poulsen M, Macfarlane D, Veness M, Estall V, Hruby G, Kumar M, Pullar A, **Tripcony L**, Rischin D. Prospective analysis of the utility of 18-FDG PET in Merkel cell carcinoma of the skin: a Trans Tasman Radiation Oncology Group Study, TROG 09:03. *J Med Imaging Radiat Oncol.* 2018 Jun;62(3):412-419. doi: 10.1111/1754-9485.12705. Epub 2018 Feb 5
17. Rijken J, Jordan B, **Crowe S**, **Kairn T**, Trapp J. Improving accuracy for stereotactic ablative radiotherapy treatments of spinal metastases. *J App Clin Med Phys* 2018 Sep; 19;5:453-462. doi: 10.1002/acm2.12395
18. Rijken J, **Kairn T**, **Crowe S**, Muñoz L, Trapp J. A simple method to account for skin dose enhancement during treatment planning of VMAT treatments of patients in contact with immobilisation equipment. *J App Clin Med Phys* 2018; 19;4:239-245. doi: 10.1002/acm2.12394
19. Schmidt H, Kulasinghe A, Allcock RJN, Tan LY, Mokany E, **Kenny L**, Punyadeera C. A Pilot Study to Non-Invasively Track PIK3CA Mutation in Head and Neck Cancer. *Diagnostics (Basel).* 2018 Nov 29;8(4)
20. Shanker M, **Chua B**, **Bettington C**, Foote M, Pinkham M. Re-irradiation for recurrent high-grade gliomas: a systematic review and analysis of treatment technique with respect to survival and risk of radionecrosis. *Neuro-Oncology Practice*, doi: 10.1093, 14 June 2018
21. Spelleken E, **Crowe SB**, Sutherland B, Challens C, **Kairn T**, Accuracy and efficiency of published film dosimetry techniques using a flat-bed scanner and EBT3 film, *Australasian Physical and Engineering Sciences in Medicine* 41(1): 117-128, 2018
22. Tang KD, **Kenny L**, Frazer IH, Punyadeera C. High-risk human papillomavirus detection in oropharyngeal cancers: comparison of saliva sampling methods. *Head Neck.* 2018 Dec 23. doi: 10.1002/hed.25578. [Epub ahead of print]
23. Vasani SS, Youssef D, **Lin C**, Wellham A, Hodge R. Defining the low-risk salvage laryngectomy – a single-center retrospective analysis of pharyngocutaneous fistula. *Laryngoscope Investig Otolaryngol.* 2018 Mar 23;3(2):115-120. doi: 10.1002/lio2.144. eCollection 2018 Apr.

### Book Chapters / Letters:

1. **Kairn T**. Patient rotation during linac-based photon and electron radiotherapy. *J Med Imag Radiat Oncol.* 2018 Aug; 62;4:548-552. doi: 10.1111/1754-9485.12757.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Kairn T**. Sharing clinical medical physics work via the scientific literature. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October, 2018
2. **Kairn T**. The pros, cons, implications and future exploration needed in novel patient rotation systems for radiation therapy. Australian MR in Radiotherapy Meeting, Wollongong, Australia, November 2018
3. **Kenny L**. Radiation Oncology and Interventional Oncology: a Marriage Made in Heaven. Radiological Society of North America (RSNA), Chicago. November 2018
4. **Kenny L**. Interventional Oncology. Royal Australian and New Zealand College of Radiologists (RANZCR). Canberra, Australia. October 2018
5. **Kenny L**. Oration at UQ School of Medicine, Brisbane, Australia. December 2018
6. **Kenny L**. The impact of quality assurance on cancer outcomes: why IASIOS is necessary Cardiovascular and Interventional Radiological Society of Europe (CIRSE). Lisbon, Portugal. September 2018
7. **Kenny, L**. IO or SBRT: When and where. European Congress of Interventional Oncology (ECIO) Vienna, Austria, April 2018
8. **Kenny, L**. SABR, Conventional Radiotherapy or nothing at all – which choice when. European Congress of Interventional Oncology (ECIO) Vienna, Austria, April 2018
9. **Kenny L**. Quality Assurance in Interventional Oncology: It's not just about the kit". Asian Pacific Congress of Cardiovascular and Interventional Oncology. Auckland New Zealand. 10 March 2018.

### Oral Presentations:

1. Binny D, **Lancaster CM**, Byrne M, **Kairn T**, Trapp JV, **Crowe JB**. Investigating effects of planned MLC distribution on tomotherapy delivery using Statistical Process Control. Accuray Symposium, Brisbane Australia, May 2018
2. Binny D, **Lancaster CM**, **Kairn T**, Trapp JV, **Crowe JB**. Radiotherapy quality assurance using statistical process control. World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018
3. **Chua B**, Dowthwaite S, Panizza B, O'neill J, Porceddu S, Jackson J. Primary trans-oral surgery and risk adapted radiotherapy for early tonsillar SCC. ANZHNCISMR Joint Meeting to be held in Melbourne, Australia, 26-28 July 2018
4. **Crowe S**. The performance of metal artefact reduction algorithms, in comparison to Megavoltage CT imaging. Accuray Symposium, Brisbane Australia, May 2018
5. **Crowe SB**, **Dick A**, **Livingstone A**, **Kairn T**, **Sylvander SR**. Observations made while commissioning a Womed T300 superficial unit using ACPSEM working group recommendations. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October 2018
6. **Crowe SB**, Sylvander S, Kairn T. Radiotherapy dose measurements using a fluorescing quinine solution. World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018
7. **Crowe SB**. Whittle E, Jones C, Kairn T. Measurement of tissue-maximum ratio and percentage depth-dose profiles in small fields. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October 2018
8. **Devereaux J**. Inspiring Spirometry – The Royal Experience. CEC Breast Seminar, Spirometer PAH Russell Strong Auditorium, 24 March 2018
9. **Devereaux J**. Inspiring Spirometry – The Royal DIBH Experience. RBWH Symposium, RBWH Education Centre, 10-13 September 2018.
10. **Dickie G**. How do you assess an optimal plan? Accuray Symposium, Brisbane Australia, May 2018
11. **Dry A**. TSETS: Total Skin Electron Therapy: RBWH Experience, Qld. Continuing Education Committee (CEC), Russell Strong Auditorium, PAH, 21 July 2018

### Oral Presentations: (cont):

12. **Dry A.** Preparing for Interviews: Expectations. Qld. Early Careers Seminar, Des O'Callaghan Auditorium, Mater, Raymond Terrace, 28 July 2018
13. **Dry A.** Overview of Radiation Therapy with Breast Case Study: psych-social implications. Qld Cancer Council, Gregory Terrace, 5 September 2018
14. **Dry A.** Overview of Radiotherapy. CIRCS Supporting the Cancer Patient with their oral health forum, Brisbane Australia, June 2018
15. **Grant T (SPP).** Improving access to Culturally Safe Care in Radiotherapy for Indigenous Patients: Where Are We Now? ASMIRT Queensland RT Weekend MEETS Country AIR conference, Technology in the Tropics, Townsville, 20-21 October 2018
16. **Grant T (SPP).** Improving access to Culturally Safe Care in Radiotherapy for Indigenous Patients: Where Are We Now? Qld Continuing Education Committee (CEC), Grab Your Soapbox. Princess Alexandra Hospital, 10 November 2018
17. **Grant T, Nguyen H.** Generating the abscopal effect with Radiation Therapy and checkpoint inhibitor immunotherapy. ASMIRT, Canberra, 15 March 2018
18. **Kairn T, Crowe SB, Peet SC.** Linac leakage dose received by patients treated using non-coplanar radiotherapy beams. World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018
19. **Kairn T.** Suitability of vendor-recommended small field output factors in a post-TRS-483 world. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October 2018
20. **Kairn T, Yu L, Wilks R, Lancaster C, Crowe SB.** In vivo measurements of skin dose from total skin electron therapy treatments. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October 2018
21. **Meaghan J (SPP).** Contrast-Enhanced CT and Dual-Energy CT for Radiotherapy Patients, ASMIRT Queensland RT Weekend MEETS Country AIR conference, Technology in the Tropics, Townsville, 20-21 October 2018
22. **Meaghan J (SPP).** Contrast-Enhanced CT and Dual-Energy CT for Radiotherapy Patients, Qld Continuing Education Committee (CEC), Grab Your Soapbox, Princess Alexandra Hospital, 10 November 2018
23. **Miller K (SPP).** Quality Improvement Project Investigating Potential Dosimetric Impacts of Metal Artefact Reduction Methods, ASMIRT Queensland RT Weekend MEETS Country AIR conference, Technology in the Tropics, Townsville, 20-21 October 2018
24. **Miller K (SPP).** Quality Improvement Project Investigating Potential Dosimetric Impacts of Metal Artefact Reduction Methods, Qld Continuing Education Committee (CEC), Grab Your Soapbox, Princess Alexandra Hospital, 10 November 2018
25. **Lancaster C.** Level III audits of TomoTherapy systems. Accuray Symposium, Brisbane Australia, May 2018
26. **Lathouras M.** Is TomoTherapy a viable option for treating Breast Cancer? Accuray Symposium, Brisbane Australia, May 2018
27. **McCoola B.** Improving Outcomes in Radiation Therapy: Proven Practices in paediatrics applied to other patient groups. CAHRLI, Shining Lights Symposium, Brisbane Australia, June 2018
28. **McCoola B.** AYA (Adolescent and Young Adults) You Can Centre (Sony Foundation). State-wide Research and Development Radiation Therapy Video Conference, 9 July 2018
29. **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. World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018
30. **Milewski C, Wilks R, Kairn T, Crowe S.** The performance of metal artefact reduction algorithms, in comparison to megavoltage CT imaging. Accuray Symposium, Sofitel Brisbane Central, Brisbane, Australia, June 2018
31. **Pagidas A.** Radiation Therapy for Nasopharyngeal Carcinoma using Accuray TomoTherapy at the Royal Brisbane and Women's Hospital. Accuray Symposium, Brisbane Australia, May 2018
32. **Peet S, Kairn T, Lancaster C, Sylvander S, Trapp J, Crowe S.** Evaluating foetal dose in TomoTherapy treatments, Accuray Symposium, Brisbane Australia, May 2018
33. **Ratray G.** Now and Then: a review of the impact of introducing Tomotherapy at RBWH. Accuray Symposium, Brisbane Australia, May 2018
34. **Rijken J, Kairn T, Crowe S, Trapp J.** Optimal treatment planning conditions for SBRT of spinal and lung tumours. Asia-Oceania Congress of Medical Physics, Kuala Lumpur, Malaysia, 2018
35. **Shanker M, Chua B, Pinkham M, Bettington C.** Re-irradiation in recurrent high grade gliomas: an analysis of survival and radionecrosis outcomes. ESTRO, Barcelona Spain, April 2018
36. **Shaw T, Jeffrey RL, Thomas P, Goodman S, Debowski M, Lwin Z, Chua B.** Diagnostic Performance of FDG-PET/CT in the Evaluation of Glioma. 11th COGNO Annual Scientific Meeting (ASM), Targeting survival: living well with brain cancer in the era of precision treatments. Brisbane, Australia, 7-9 October 2018
37. **Sylvander S.** Evaluating foetal dose in TomoTherapy treatments. Accuray Symposium, Brisbane Australia, May 2018
38. **Truong H (SPP).** It's What's on the Surface That Counts, ASMIRT Queensland RT Weekend MEETS Country AIR conference, Technology in the Tropics, Townsville, 20-21 October 2018
39. **Truong H (SPP).** It's What's on the Surface That Counts Qld Continuing Education Committee (CEC), Grab Your Soapbox, Princess Alexandra Hospital, 10 November 2018
40. **Walsh C.** Catalyst Surface Guided Radiation Therapy vs Image Guided Radiation Therapy for breast patients, CEC Breast Seminar, PAH Russell Strong Auditorium, 24 March 2018
41. **Walsh C.** Catalyst: Surface Guided Radiotherapy for DIBH Breast Treatments. RBWH Symposium, RBWH Education Centre 10-13 September 2018
42. **Yu L, Kairn T, Crowe SB.** Retrospective audit of patient specific quality assurance results obtained using helical diode arrays, World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018.

### Poster Presentations:

1. **Cassim N**, Biggerstaff K, Ikeda Y, Skidmore C, **Wilks R**, **Crowe SB**, **Kairn T**. Level III audit of two stereotactic radiosurgery treatment planning and delivery systems. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October 2018
2. **Crowe SB**, **Kairn T**. Calibration seed sampling for iodine-125 prostate brachytherapy. World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018
3. **Kairn T**, **Crowe SB**. Application of data mining to clinical protocol design: Are breath-hold techniques beneficial for prone breast radiotherapy patients? (ePoster), World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018
4. **Kairn T**, **Crowe SB**. Development of an experience-based end-to-end test. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October 2018
5. **Kairn T**, **Crowe SB**. Producing inserts for a commercial motion phantom using 3D printing. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October 2018
6. **Kairn T**, Ikeda Y, Schlect D, **Crowe SB**. Retrospective review of brain dose from stereotactic radiosurgery treatments of brain oligometastases. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October 2018
7. **Kairn T**, **Peet SC**, **Yu L**, **Crowe SB**. Long-term reliability of optically stimulated luminescence dosimeters (ePoster), World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018
8. **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 (ePoster), World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018
9. Ratnayake G, Shankar M, Roberts K, Mason R, Hughes BGM, Lwin Z, Jain V, O'Byrne KJ, **Chua B**. Prior or Concurrent Radiotherapy and Nivolumab Immunotherapy in Non-Small Cell Lung Cancer. ESMO 2018 Congress, Munich, Germany, 19-23 October 2018
10. Stephens S, Kuchelb A, **Cheuk R**, Alexander H, Robertson T, Rajah T, Tran Q, Inglis P. Pineal germinoma: a 13-year Queensland experience. Cooperative trials group for neuro-oncology (COGNO) ASM, Sydney, Australia, 27-28 October 2018
11. Whittle E, **Crowe S**, Khoei S, Spelleken E, **Kairn T**. Conversion of PDDs to TMRs for small radiotherapy fields. Engineering and Physical Sciences in Medicine, Adelaide, Australia, October 2018
12. Zolfaghari S, **Crowe SB**, Papworth D, West M, **Kairn T**. Stereotactic radiosurgery for multiple brain metastases: a dose-volume study (ePoster), World Congress on Medical Physics and Biomedical Engineering, Prague, Czech Republic, June 2018.

### Other Communications and Outputs:

'Cancer Preceptorship for Primary Health Care Providers', 21<sup>st</sup> July 2018. **A Dry; C Walsh; J Devereaux; D Bryant; M Lathouras; J Outhwaite; K Miller; J Meaghan; H Truong.**

Catalyst article in Cancer Care News: **J Blyth.**

## Haemophilia Centre



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

The Queensland Haemophilia Centre (QHC) has a strong focus on collaborative research, both with other departments within RBWH and with Haemophilia Centres nationally through the framework of the Australian Haemophilia Centre Directors Organisation (AHCDO). The QHC is also actively involved in global pharmaceutical sponsored multicentre clinical trials examining novel haemophilia therapies. In 2018, we were an active site in a multicentre phase 3 randomised trial evaluating a longer acting intravenous factor VIII therapy (Adynovate) and a multicentre phase 3 study evaluating the efficacy of a factor VIII mimetic (Emicizumab) given via monthly subcutaneous injection.

QHC staff contributed data and wrote the manuscript for the national study of factor VIII and factor IX prophylaxis in severe and moderate haemophilia A and B, an AHCDO collaborative project which represented the first major publication to come out of the Australian Bleeding Disorders Registry (ABDR).

We completed a retrospective study evaluating our local “fixed dose subcutaneous DDAVP” protocol for patients with mild Haemophilia A. This project demonstrated adequate factor VIII responses for this administration protocol. These local data were shared with the AHCDO group and have led to the commencement of a national collaborative multi-site project comparing DDAVP responses to fixed subcutaneous DDAVP dosing to historic intravenous protocols (aimed to be completed in early 2019).

The QHC established an “Acquired Haemophilia A” state wide working group and entered detailed clinical data in the Australian Bleeding

Disorders Registry (ABDR) for all patients in QLD with Acquired Haemophilia A diagnosed over the previous 5-year period. This case series is one of the largest of its kind and provided important insight into the demographic, clinical features and patient outcomes of this very rare and challenging disease.

The QHC participated in a collaborative project lead by the RBWH Orthopaedic Department which was published in July 2018 and demonstrated a good functional outcome and high patient satisfaction in total hip and knee arthroplasty procedures in Haemophilia patients carried out at RBWH over a 20-year period with use of our local haemostatic protocols. These data are useful to effectively counsel our patients with haemophilic arthropathy of the risks, benefits and likely functional outcome of these major orthopaedic procedures.



### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Jane Mason	Stewart Hunt, John Casey, Joel Collins, Jason Conn, Joshua Richmond, Tzu Yang Wang, Matthew Hourigan, Anthony Mills, Jane Royle	Acquired Haemophilia A: 5 years of Queensland experience
Jane Mason	Beryl Zeissink, Alex Connolly, Simon McRae, Jacoba von Wielligh, John Rowell	Does a fixed “single vial” dose of 15 micrograms of subcutaneous desmopressin (SC-DDAVP) produce adequate biologic responses for persons with mild haemophilia A?



## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Sponsor: Hoffmann-La Roche	John Rowell, Beryl Zeissink, Jane Mason, 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: Shire	John Rowell, Beryl Zeissink, Jane Mason, Alex Connolly	Phase 3, Prospective, Randomized, Multi-center Clinical Study Comparing the Safety and Efficacy of BAX 855 Following PK-guided Prophylaxis Targeting Two Different FVIII Trough Levels in Subjects With Severe Hemophilia A

## 2018 Research Publications

### Journal Articles:

1. **Mason JA**, Aung HT, Nandini A, Woods RG, Fairbairn DJ, **Rowell JA**, et al. Demonstration of a novel Xp22.2 microdeletion as the cause of familial extreme skewing of X-inactivation utilizing case-parent trio SNP microarray analysis. *Molecular genetics & genomic medicine*. 2018;6(3):357-69
2. **Mason JA**, Parikh S, Tran H, **Rowell J**, McRae S. Australian multicentre study of current real-world prophylaxis practice in severe and moderate haemophilia A and B. *Haemophilia*. 2018;24(2):253-60
3. **Mediwake H**, Robertson J, Beggs J, **Mason J**. Anaphylaxis Following Human Prothrombin Complex Concentrate in a Child with Lupus Anticoagulant Hypoprothrombinemia Syndrome: a Cautionary Tale. *TH Open*. 2018;02(01): e25-e7
4. **Anderson JA**, **Mason JA**, **Halliday B**. Clinical outcomes and patient satisfaction following total hip and knee arthroplasty in patients with inherited bleeding disorders: a 20-year single-surgeon cohort. *Haemophilia*. 2018;24(5):786-91.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Mason JA**. Acquired Haemophilia A: 5 years of Queensland Experience. *Blood*. 2018. Brisbane.



## Allied Health Professions – Research related to Cancer Care Services



**Dr Clare Burns**  
Advanced Speech Pathologist  
Speech Pathology Department  
Allied Health Services

Allied Health Professions have continued to lead and actively contribute to Cancer Care Services research in 2018. Our program of research is diverse, incorporating multidisciplinary teams within the streams of Radiation Oncology, Medical Oncology, Haematology/BMT. Our research has continued to be patient-focused, covering the continuum of survivorship from pre-treatment, during treatment, recovery and rehabilitation, and beyond. Examining outcomes through a patient, carer, and health service lens, we have developed and evaluated new and innovative practices and service delivery models delivering improved patient care and service benefits.

During 2018, we have continued to maintain and develop new research collaborations within RBWH, Queensland Health and external departments incorporating leading academic and clinical research centres across Australia. Our research has been funded through grants and scholarships from RBWH Foundation and Allied Health Practitioner Research Scheme and key achievements for this year include prizes to Claire Blake (Leadership in Education), Laura Moroney (CAHRLI New Researcher Award), and Dr Clare Burns and Speech Pathology Led Telehealth Service (Metro North Research Excellence Award).

Finally, Allied Health Professions have demonstrated their ongoing commitment to building research capacity and capability throughout 2018 with senior staff actively supporting and supervising a growing number of research higher degree students. As many of these students are also RBWH clinical staff, it enables opportunity for direct translation of these research outcomes within Cancer 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>
<b>Emilie Croisier</b>	PhD, UQ (2018-2021)	Nutritional outcomes of gynaecology patients undergoing pelvic radiotherapy: understanding the patient experience and dietary recommendations for symptom management	Judy Bauer, <b>Teresa Brown</b>
<b>Joanne Hiatt</b>	PhD, UQ (2017-2023)	Nutrition throughout head and neck cancer treatment: patient experience and adherence, barriers and enablers to enteral feeding recommendations	<b>Merrilyn Banks, Teresa Brown</b> , Judy Bauer
<b>Sarah Andersen</b>	PhD, UQ (2015-2019)	Investigating nutrition support during allogeneic stem cell transplantation	Judy Bauer, <b>Merrilyn Banks</b> , Olivia Wright
<b>Laura Moroney</b>	PhD, UQ (2015-2019)	Dysphagia and related toxicities in head and neck patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy	Liz Ward, <b>Jane Crombie</b> , <b>Clare Burns</b>
<b>Sarah Wilson</b>	MPhil, UQ (2018-2022)	Assessment of dysphagia following laryngectomy	Bena Cartmill, <b>Clare Burns</b>
<b>Jasmine Foley</b>	PhD, UQ (2018-2021)	A statewide model for enhanced access to speech pathology specialist outpatient services for patients following head and neck cancer care	Liz Ward, <b>Clare Burns</b> , Rebecca Nund, Laurelie Wall

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University <i>(years)</i>
Teresa Brown	Research Coordinator, Associate Lecturer	Nutrition in cancer care	University of Queensland (2018-current)
Clare Burns	Honorary Lecturer	School of Health and Rehabilitation Sciences	University of Queensland (2017-current)
Maree Grier	Adjunct Lecturer	School of Psychology	University of Queensland (2018-current)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Robyn Scheer	<b>Nicole Andrews, Erin Molloy</b>	The effect of limb position on leg circumference measurements in patients diagnosed with lower limb lymphoedema
Robyn Scheer		The Lymphoedema Arm Measurement Study – Winter vs Summer
Claire Blake	<b>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)</b>	Nutrition outcomes and toxicities from tomotherapy in head and neck cancer patients
Claire Blake	<b>Teresa Brown, Laura Moroney (SP), Jennifer Helios (SP), Brett Hughes (Cancer Care), Liz Kenny (Cancer Care), Anita Pelecanos (QIMR)</b>	Enteral Nutrition outcomes and toxicities from tomotherapy in head and neck cancer patients
Claire Blake	<b>Merrilyn Banks, Mark Appleyard (Gastroenterology)</b>	Cost effectiveness of Dietitian-led PEG service
Claire Blake	<b>Teresa Brown</b>	Evaluation of pre-treatment model of care in patients with head and neck cancer
Claire Blake	<b>Elise Treleaven, Ally di Bella, Teresa Brown, Adrienne Young, Jenni Leutenegger (Cancer Care), David Wyld (Cancer Care)</b>	Implementation of patient-led malnutrition screening in the cancer care ambulatory setting
Joanne Hiatt	<b>Teresa Brown, Merrilyn Banks, Judy Bauer (UQ)</b>	Patient Experience of Nutrition Care across three treatment modalities for the management of head and neck cancer
Sarah Andersen	<b>Merrilyn Banks, Glen Kennedy (Cancer Care), Teresa Brown, Nicholas Weber (Cancer Care), Judy Bauer (UQ)</b>	Does early proactive enteral nutrition improve outcomes post allogeneic stem cell transplantation – a randomized comparison to standard care
Sarah Andersen	<b>Merrilyn Banks, Glen Kennedy (Cancer Care), Teresa Brown, Nicholas Weber (Cancer Care), Judy Bauer (UQ)</b>	Investigating the effect of enteral and parenteral nutrition on the gastrointestinal microbiome post allogeneic transplantation
Sarah Andersen	<b>Merrilyn Banks, Glen Kennedy (Cancer Care), Teresa Brown, Nicholas Weber (Cancer Care), Judy Bauer (UQ)</b>	Staff perceptions, barriers and enablers to enteral feeding during allogeneic stem cell transplantation
Sarah Andersen	<b>Merrilyn Banks, Glen Kennedy (Cancer Care), Teresa Brown, Nicholas Weber (Cancer Care), Judy Bauer (UQ)</b>	Nutrition support during allogeneic transplantation in Australian adult bone marrow transplantation units
Sarah Andersen	<b>Madison Jefferis (UQ), Cameron Curley (Cancer Care), Teresa Brown, Judy Bauer (UQ)</b>	Investigating the effect of malnutrition on clinical outcomes post allogeneic stem cell transplantation
Teresa Brown	<b>Aaron Chan (UQ), Kathleen Dwyer, Merrilyn Banks, Brett Hughes (Cancer Care), Judy Bauer (UQ), Charles Lin (Cancer Care), Liz Kenny (Cancer Care), Jane Crombie (Speech Path), Ann-Louise Spurgin (Speech Path)</b>	Revalidation of swallow and nutrition guidelines in tomotherapy
Teresa Brown	<b>Ray Chan (PAH), Angela Byrnes, Rebecca Fichera, Alex Molassiotis (Hong Kong), Patsy Yates (QUT), Gillian Nasato (Cancer Care), Elise Button (Cancer Care), Andrea Marshall (Griffith), Liz Isenring (Bond University), David Wyld (Cancer Care), Melissa Eastgate (Cancer Care) Nicole Gavin (Cancer Care)</b>	A patient-family-centred intervention to promote nutrition in advanced cancer patients: a pilot randomised controlled trial
Teresa Brown	<b>Louise Cooney (PAH), Louise Elvin-Walsh (PAH), Eliza Kern, Suzie Ahern, David Smith (QIMR), Liz Kenny (Cancer Care), Brett Hughes (Cancer Care), Sandro Porceddu (PAH), Ingrid Hickman (PAH), Bena Cartmill (PAH)</b>	Comparison of nutrition and clinical outcomes in H&N cancer patients following reactive and proactive nutrition support approaches
Emilie Croisier	<b>Teresa Brown, Judy Bauer (UQ), Philip Chan (Cancer Care), Jeff Goh (Cancer Care), Alice Grigg (Cancer Care)</b>	Retrospective observational cohort study to assess the clinical and nutritional outcomes of gynae-oncology patients undergoing pelvic radiotherapy
Laura Moroney	<b>Elizabeth Ward (UQ), Jane Crombie, Jennifer Helios, Clare Burns, Ann-Louise Spurgin, Liz Kenny Brett Hughes (Cancer Care), Clare Blake</b>	Dysphagia and related toxicities in head and neck patients undergoing Helical Intensity Modulated Radiotherapy (H-IMRT) +/- chemotherapy
Laura Moroney	<b>Laura Moroney, Jennifer Helios, Elizabeth Ward (UQ), Jane Crombie, Anita Pelecanos (QIMR), Clare Burns, Ann-Louise Spurgin, Claire Blake, Liz Kenny (Cancer Care), Ben Chua, Brett Hughes (Cancer Care), Tracy Comans (UQ)</b>	Implementation of the Head and Neck Cancer Low Risk Speech Pathology Pathway

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Clare Burns	Elizabeth Ward (UQ), <b>Claire Blake, Liz Kenny (Cancer Care)</b> , 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
Leonie Naumann	<b>Jennifer Paratz, Hildegard Reul-Hirche, Michelle Cottrell, Clare Burns</b> , Anna Finnane, Tracy Comans, Trevor Russell	A telehealth model for education and monitoring of early lymphoedema detection and shoulder dysfunction in patients after breast cancer surgery: a pilot cohort study

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Judy Bauer (UQ)	<b>Teresa Brown, Merrilyn Banks</b> , Brett Hughes (Cancer Care), Charles Lin (Cancer care), Liz Kenny (Cancer Care), Louise Campbell (Qld PET Service)	Comparison of body composition methods in head and neck cancer patients undergoing chemoradiotherapy – PET-CT vs BIA
Melissa Eastgate (Cancer Care)	Shu Fen Lee (Cancer Care), David Wyld (Cancer Care), <b>Teresa Brown</b>	Patient perceptions of diet and cancer – survey of cancer care patients
Nicole Gavin (Cancer Care)	Glen Kennedy (Cancer Care), David Patterson (Infectious Diseases), Claire Rickard (Griffith Uni), <b>Sarah Andersen</b> , Elise Button (Cancer Care), Rebecca Lippiatt (Cancer Care)	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 (Cancer Care)	Glen Kennedy (Cancer Care), Claire Rickard (Griffith Uni), Patrick Harris (UQ), <b>Sarah Andersen</b> , Elise Button (Cancer Care), Rebecca Lippiatt (Cancer Care)	Improving central-line associated bloodstream infection diagnosis in malignant haematology patients with parenteral nutrition (Improving CLABSI Trial)
Nicole Kiss (Deakin University)	Anna Boltong (Cancer Council), Merran Findlay (RPA), Belinda Steer (Peter mac), Jenelle Loeliger (Peter Mac), <b>Teresa Brown</b> , Liz Isenring (Bond), Judy Bauer (UQ)	Australian cancer clinician's awareness, perceptions and practices regarding to cancer-related malnutrition and sarcopenia
Haryana Dhillon (University of Sydney), Joanne Shaw (University of Sydney), David Kissane (Monash University), Danette Langbecker (UQ), Kim Hobbs (Westmead Hospital), Laura Kirsten (Nepean Cancer Care Centre), Lisa Beatty (Flinders Centre for Innovation in Cancer), Lisa Vaccaro (University of Sydney), Carrie Lethborg (St Vincent's Hospital, Melbourne)	<b>Maree Grier</b>	Adjustment Working Group for the PoCoG Transforming Psychosocial Care of Patients in Australia: Implementation of a Comprehensive Training and Service Delivery Program

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Claire Blake</b>	Leadership in Education	CAHRLI, 20 <sup>th</sup> June 2018
Shu Fen Lee, Melissa Eastgate, David Wyld, <b>Teresa Brown</b>	Best poster	2 <sup>nd</sup> Victorian Cancer Survivorship Conference, 8-9 <sup>th</sup> February, Melbourne
<b>Clare Burns</b>	The National Foundation of Swallowing Disorders Award	Dysphagia Research Society, Annual Scientific Meeting, 17 <sup>th</sup> March 2018
<b>Clare Burns</b>	Research Translation Award	Queensland Health Speech Pathology Advisory Committee Annual Awards September 2018
<b>Clare Burns and Speech Pathology Led Telehealth Team</b>	Highly Commended – Health Service and Implementation Research	MNHHS Research Excellence Awards, 22 <sup>nd</sup> May 2018
<b>Laura Moroney</b>	CAHRLI New Researcher Award	CAHRLI Symposium, 20 <sup>th</sup> June 2018

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Claire Blake, Ally di Bella, Teresa Brown, Adrienne Young,</b> Jenni Leutenegger (Cancer Care), David Wyld (Cancer Care)	Nutrition and Dietetics; Cancer Care	Implementation of patient-led malnutrition screening in the cancer care ambulatory setting	RBWH Foundation Diamond Grant	\$20,000	\$40,000 (2018-2019)
<b>Joanne Hiatt</b>	Nutrition and Dietetics	Nutrition throughout head and neck cancer treatment: patient experience and adherence, barriers and enablers to enteral feeding recommendations	RBWH Scholarship	\$36,864	\$36,864 (2018)
Ray Chan (Cancer Care), Alex Molassiotis (Hong Kong), Patsy Yates (QUT), Gillian Nasato (Cancer Care), <b>Teresa Brown,</b> Elise Button (Cancer Care), Andrea Marshall (Griffith), Liz Isenring (Bond University), David Wyld (Cancer Care), Melissa Eastgate (Cancer Care) Nicole Gavin (Cancer Care)	Cancer Care Services, Nutrition and Dietetics	A patient-family-centred intervention to promote nutrition in advanced cancer patients: a pilot randomised controlled trial	RBWH Foundation Diamond Care Grant	\$40,000	\$40,000 (2018)
<b>Sarah Andersen</b>	Nutrition and Dietetics	Does early proactive enteral nutrition improve outcomes post allogeneic stem cell transplantation – a randomized comparison to standard care	RBWH Scholarship	\$36,864	\$36,864 (2018)
<b>Sarah Andersen</b>	Nutrition and Dietetics	Energy expenditure in patients undergoing allogeneic stem cell transplant: are we feeding them enough?	RBWH PPTF Research and Training Capital Funding Grant	\$39,167	\$39,167 (2018)
<b>Clare Burns</b>	Speech Pathology, Nutrition and Dietetics, and Cancer Care	Implementation and evaluation of a telehealth service providing specialist speech pathology and nutrition and dietetics intervention for patients with head and neck cancer	Post-Doctoral Fellowship Grant - RBWH Research Foundation	\$40,000	\$40,000 (2018)
<b>Laura Moroney</b>	Speech Pathology and Cancer Care	Dysphagia outcomes in head and neck cancer patients undergoing tomotherapy	RBWH Foundation PhD Scholarship	\$36,864	\$36,864 (2018)
<b>Leonie Naumann, Jennifer Paratz, Hildegard Reul-Hirche, Michelle Cottrell, Clare Burns,</b> Anna Finnane (UQ), Tracy Comans(UQ), Trevor Russel (UQ)	Physiotherapy Department	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	\$29,929 (2018/2019 FY)

## 2018 Research Publications

### Journal Articles:

- Di Bella, A,** Blake, C, Young, A, Pelecanos, A, & Brown, T. (2018). Reliability of Patient-Led Screening with the Malnutrition Screening Tool: agreement between Patient and Health Care Professional Scores in the Cancer Care Ambulatory Setting. *Journal of the Academy of Nutrition and Dietetics*. doi: 10.1016/j.jand.2017.11.023
- Moroney, L. B,** Helios, J, Ward, E. C, Crombie, J, Pelecanos, A, Burns, C. L, Spurgin A. L, Blake, C., Kenny, L, Chua, B, Hughes, B. G. M. (2018). Helical intensity-modulated radiotherapy with concurrent chemotherapy for oropharyngeal squamous cell carcinoma: a prospective investigation of acute swallowing and toxicity patterns. *Head Neck*. doi: 10.1002/hed.25182
- Moroney, L. B,** Helios, J, Ward, E. C, Crombie, J, Burns, C. L, Yeo, S. Q, Pelecanos, A, Spurgin, A. L, Blake, C, Kenny, L, Chua, B, & Hughes, B. G. M. (2018). Radiotherapy for cutaneous head and neck cancer and parotid tumours: a prospective investigation of treatment-related acute swallowing and toxicity patterns. *Support Care Cancer*. doi:10.1007/s00520-018-4352-5
- Burns C** & Wall L. Using telepractice to support the management of Head and Neck Cancer: key considerations for speech-language pathology service planning, establishment, and evaluation. *Perspectives of the ASHA Special Interest Groups*, (2018) 2(13), 139-146. doi:10.1044/persp2.SIG13.139

### Journal Articles (cont):

5. 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. Normative inter-limb impedance ratios: Implications for early diagnosis of uni- and bilateral, upper- and lower-limb lymphoedema. *Lymphatic Research and Biology*, (2018) Published Online: 2 Oct 2018 <https://doi.org/10.1089/lrb.2017.0082>
6. Gane EM, Steele ML, Janda M, Ward LC, **Reul-Hirche H**, Carter J, Quinn M, **Obermair A**, Hayes SC. The Prevalence, Incidence, and Quality-of-Life Impact of Lymphedema After Treatment for Vulvar or Vaginal Cancer. *Rehabilitation Oncology*, (2018) 36(1), 48-55. DOI: 10.1097/01.REO.0000000000000102.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. **Andersen S**. Investigating Enteral Nutrition During Allogenic Stem Cell Transplantation. Australasian Society of Parenteral and Enteral Nutrition, Sydney, December 2018
2. **Burns C.L.** & Ward E.C. Application of Telepractice in Speech Pathology Management of Head and Neck Cancer. Webinar Series – Veterans Affairs, USA, December 2018.

### Oral Presentations:

1. **Collins A, Burns C**, Ward E, Comans T, **Blake C**, Kenny L, Greenup P, Best D. Home based telehealth service for swallowing and nutritional management following head and neck cancer treatment. *Speech Pathology Australia*, Adelaide, 29<sup>th</sup> May 2018
2. **Fox, S**. It's a strange thing to say, that a disease like this could be empowering: a qualitative study of head and neck cancer survivors. University of Queensland Social Work Research and Practices Day Program, June 2018
3. **Fox, S**. Working with grief and loss: disrupting theory to make way for skills development. Australian and New Zealand Social Work and Welfare Education and Research (ANZSWWER) Symposium, September 2018.

### Poster Presentations:

1. **Andersen S**, Weber N, Kennedy G, **Brown T, Banks M**, Bauer J. Investigating tolerance and clinical outcomes of early enteral nutrition versus parenteral nutrition support during allogeneic transplantation. European Society for Blood and Marrow Transplantation, Lisbon, Portugal. March 2018
2. Lee SF, Eastgate M, Wyld D, **Brown T**. Dietary patterns and attitudes in cancer survivors. 2<sup>nd</sup> Victorian Cancer Survivorship Conference, February 2018
3. Dhillon HM, Vaccaro L, Langbecker D, Beatty L, **Grier M**, Hobbs K, Kirsten L, Kissane D & Shaw J. (2018). Prevalence and management of adjustment disorder in cancer patients, In: 20<sup>th</sup> World Congress of Psycho-Oncology, Hong Kong, (137-137). 29 October – 2 November 2018. Oxford, United Kingdom: John Wiley & Sons.

**CRITICAL CARE AND  
CLINICAL SUPPORT  
SERVICES**

5 <b>B</b> Boron 10.811	6 <b>C</b> Carbon 12.0107	7 <b>N</b> Nitrogen 14.0064
13 <b>Al</b> Aluminium 26.981538	14 <b>Si</b> Silicon 28.0855	

8 <b>O</b> Oxygen 15.999	9 <b>F</b> Fluorine 18.998
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36 <b>Kr</b> Krypton 83.80	37 <b>Rb</b> Rubidium 85.468	38 <b>Sr</b> Strontium 87.62
54 <b>Xe</b> Xenon 131.29	55 <b>Ba</b> Barium 137.33	56 <b>Lr</b> Lanthanum 138.905

52 <b>Tl</b> Thallium 204.38	53 <b>Pb</b> Lead 207.2	54 <b>Bi</b> Bismuth 208.98
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80 <b>Hg</b> Mercury 200.59	81 <b>Tl</b> Thallium 204.38	82 <b>Pb</b> Lead 207.2
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67 <b>Ho</b> Holmium 164.93032	68 <b>Er</b> Erbium 167.259	69 <b>Tm</b> Thulium 168.93032
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99 <b>Y</b> Yttrium 88.906	100 <b>Zr</b> Zirconium 91.224	101 <b>Nb</b> Niobium 92.906
71 <b>Lu</b> Lutetium 174.967	72 <b>Hf</b> Hafnium 178.49	73 <b>Ta</b> Tantalum 180.948
74 <b>W</b> Tungsten 183.84	75 <b>Re</b> Rhenium 186.207	76 <b>Os</b> Osmium 190.23
77 <b>Ir</b> Iridium 192.222	78 <b>Pt</b> Platinum 195.084	79 <b>Au</b> Gold 196.967
80 <b>Hg</b> Mercury 200.59	81 <b>Tl</b> Thallium 204.38	82 <b>Pb</b> Lead 207.2
83 <b>Bi</b> Bismuth 208.98	84 <b>Po</b> Polonium 209	85 <b>At</b> Astatine 210
86 <b>Rn</b> Radon 222	87 <b>Fr</b> Francium 223	88 <b>Ra</b> Radium 226
89 <b>Ac</b> Actinium 227	90 <b>Th</b> Thorium 232.0377	91 <b>Pa</b> Protactinium 231.036
92 <b>U</b> Uranium 238.02891	93 <b>Np</b> Neptunium 237.048173	94 <b>Pu</b> Plutonium 244.06422
95 <b>Am</b> Americium 243.061381	96 <b>Cm</b> Curium 247.070353	97 <b>Bk</b> Berkelium 247.070353
98 <b>Cf</b> Californium 251.083288	99 <b>Es</b> Einsteinium 252.083288	100 <b>Fm</b> Fermium 257.10352
101 <b>Md</b> Mendelevium 258.10352	102 <b>No</b> Nobelium 259.10352	103 <b>Lr</b> Lawrencium 262.10352

## Critical Care and Clinical Support Services

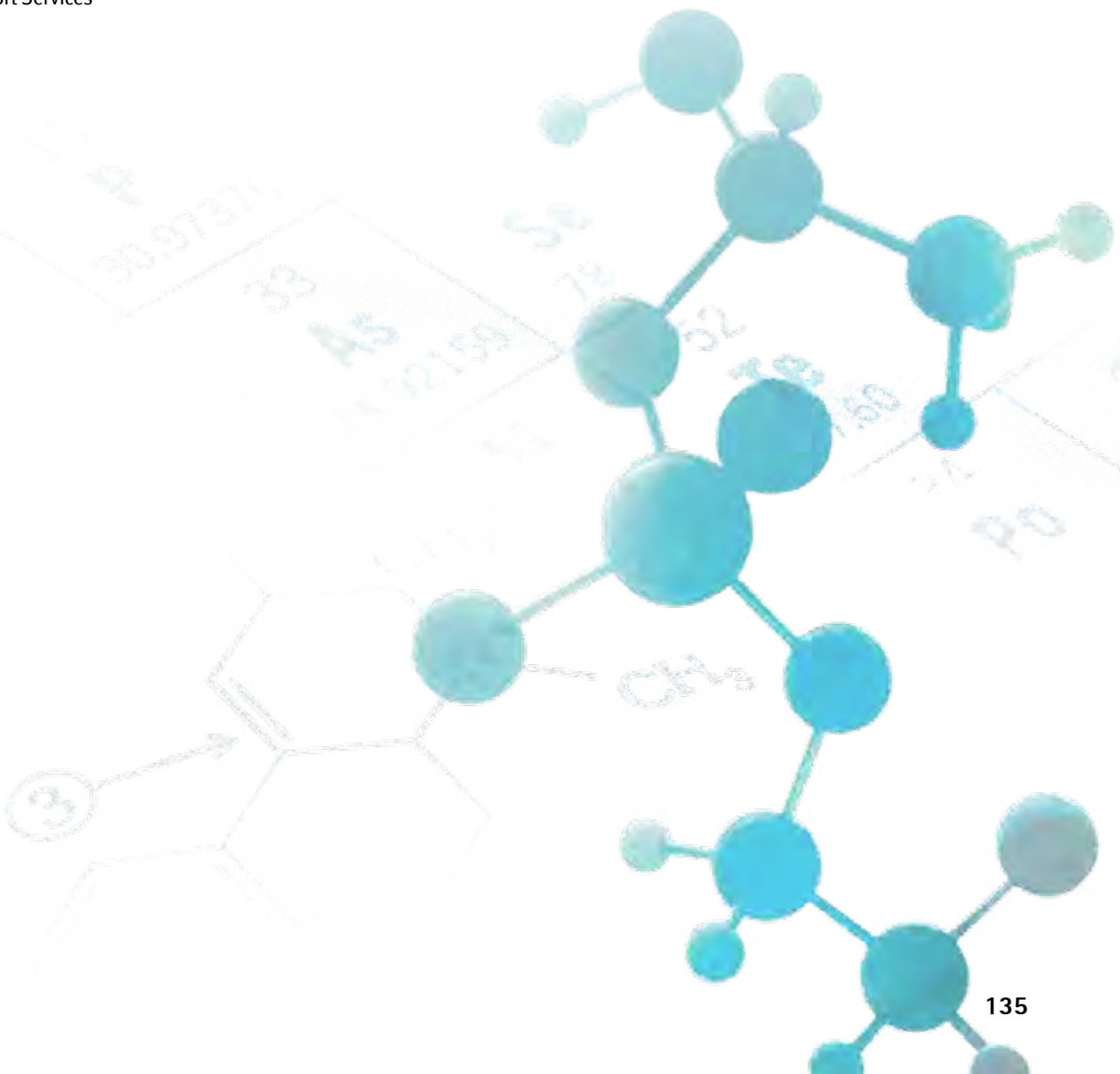


**Dr Mark Mattiussi**  
Executive Director  
Critical Care and  
Clinical Support Services

The RBWH Critical Care and Clinical Support Service team recognise the importance of research as a critical cornerstone to clinical excellence. The team embodies this principle with enthusiasm, a heartfelt passion and a sense of pride of place on the national and international research stage. The 2018 report demonstrates commitment from the entire team to advancing healthcare through research.

In 2018, as in previous years, our research team have been recognised for their work, by their peers and others within MNHHS, their partner organisation and by national expert panels and beyond. Our Critical Care and Clinical Support Services researchers hold pride of place amongst the world's most highly cited research and scientific thought leaders. Our researchers' work, trials and publications have, and continue to, influence the way clinical medicine is practiced nationally and across the world.

The Critical Care and Clinical Support Services team recognise that a focus on partnering and collaboration increases the capacity and capability for research and each and every service describes their partnerships within the 2018 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 2018. They, and I, are extremely proud of their achievements.





## Emergency and Trauma Centre

The Emergency and Trauma Centre's wide-ranging program of departmental and collaborative research activities continued throughout 2018. The year was notable for the development of new and exciting collaborative partnerships with external institutions that focus on novel research questions with potentially transformational outcomes.

We were very pleased to see substantial growth in emergency nurse-led research activities as well as research collaborations with pharmacy and allied health during the year. This was demonstrated by the development of several nurse-led projects and grant applications, good representation by nurses at local and national conferences, and the enrolment of two of our nurses in research higher degrees.

Congratulations go to Dr James Hughes, who completed his PhD on the treatment of pain in emergency departments, and to Dr Jaimi Greenslade for being awarded an Advance Queensland Fellowship. Congratulations also to Professor Louise Cullen, whose influential research into the use of biomarkers in the diagnosis of chest pain and her broader contributions to clinical research were recognised in the receipt of the Chief Executive's Award at the 2018 MNHHS Research Excellence Awards and a "Citation of the Branch" from AMA, Queensland.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Julian Williams</b>	PhD, UQ (2008-2018)	Identifying risk factors for MRSA	<b>Jeffrey Lipman, Anthony Brown</b>
Wahid Allahaibi	PhD, QUT (2015-2018)	A New Approach to Optimise Hospital Emergency and Inpatient Operations	Michael Cholette, Azharul Karim, <b>John Burke</b>
Kazi Ahsan	PhD, QUT (2014-2018)	Lean integrated optimisation model of emergency department for improved patient flow	Azharul Karim, Gerard Fitzgerald, Michael Cholette, <b>John Burke</b> , Doug Morel
Michael Chen	MEpi, UQ (2016-18)	Outcomes of patients with abdominal pain in the emergency department	Melinda Protani (UQ), <b>Kevin Chu</b>
Ariel Ho	MPhil, UQ (2016-2018)	Examination of Troponin Testing during Implementation and Post- Implementation of Accelerated Chest Pain Assessment Strategies: A Marker of Translational Research Success	<b>Louise Cullen, Jaimi Greenslade</b>
Daniel Lancini	PhD, UQ (2016-2020)	Atrial fibrillation in hospitalised patients	<b>Louise Cullen</b> , Paul Martin
<b>Laura Foran</b>	MPhil, QUT (2017-2019)	Clinical presentation characteristics of Aboriginal and Torres Strait Islander patients presenting to an Emergency Department with suspected Acute Coronary Syndrome	<b>Louise Cullen</b>
Siegfried Perez	PhD, UQ (2016-2020)	Data Extraction from Electronic Health Records for a Chest Pain Clinical Data Registry	<b>Louise Cullen, Jaimi Greenslade</b>
Laura Scott	MPhil, UQ (2018-2020)	Long term outcomes for patients undergoing accelerated chest pain assessment strategies	<b>Louise Cullen, Jaimi Greenslade</b>
Min Yan Chen	MN, QUT (2016-2018)	Comparing time to first analgesic medication between cognitively impaired and non-cognitively impaired elderly patients with pain in the emergency department	<b>James Hughes</b>
<b>Elizabeth Doran</b>	MPhil, UQ (2018-2022)	ED pharmacists extended scope of practice	<b>Louise Cullen</b>
<b>Brandon Allwood</b>	MPhil, QUT (2018-2021)	Improving patient's pain through a standardised nurse-initiated medication regime	<b>Fiona Coyer, James Hughes</b>
<b>Samuel Brookfield</b>	PhD, UQ (2018-2021)	Critical Ethnography of Methamphetamine Recovery	Lisa Fitzgerald, Linda Selvey, Lisa Maher
<b>James Hughes</b>	PhD, QUT (2014-2018)	Person, environment, and health and illness factors influencing time to first analgesia and patient experience of pain management in the adult emergency department	Patsy Yates, Kimberley Alexander, Lyndall Spencer

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Venkat Acholi	Emergency Physiotherapist	Physiotherapy defined scope of practice (prescribing)	
Daniel Bodnar	Senior Lecturer	Faculty of Medicine	UQ (2012 – current)
Anthony Brown	Professor of Emergency Medicine	Faculty of Medicine, Discipline of Anaesthesiology and Critical Care	UQ (2009 – current)
	Adjunct Professor	School of Public Health and Social Work	QUT (2009 – current)
Nathan Brown	Honorary Senior Lecturer	Faculty of Medicine, Discipline of Anaesthesiology and Critical Care	UQ (2016 – current)
Julia Brownlie	Nurse Practitioner	Emergency nurse practitioner in early pregnancy	
John Burke	Adjunct Associate Professor	School of Public Health and Social Work	QUT (2016 – current)
Kevin Chu	Adjunct Associate Professor	Faculty of Medicine	UQ (2011 – current)
	Adjunct Associate Professor	School of Public Health and Social Work	QUT (2009 – current)
Louise Cullen	Adjunct Professor	Faculty of Health	QUT (2016 – current)
	Associate Professor	Faculty of Medicine	UQ (2015 – current)
Jaimi Greenslade	Adjunct Senior Lecturer	Faculty of Medicine	UQ (2011 – current)
	Adjunct Associate Professor	School of Public Health and Social Work	QUT (2012 – current)
Janelle Heine	Emergency Physiotherapist	Physiotherapy defined scope of practice (prescribing)	
James Hughes	Conjoint Senior Nursing Research Fellow	Faculty of Nursing	QUT (2017 – current)
Catherine Hurn	Senior Lecturer	Faculty of Medicine	UQ (2008 – current)
Trent Lipp	Senior Lecturer	Faculty of Medicine	UQ (2014 – current)
Bill Lukin	Senior Lecturer	Faculty of Medicine	UQ (2008 – current)
Alexandra Markwell	Senior Lecturer	Faculty of Medicine	UQ (2012 – current)
Duncan McAuley	Senior Lecturer	Faculty of Medicine	UQ (2012 – current)
Kylie Mueller	Research Assistant	Medication-related emergency department presentations	2018
Philip Richardson	Senior Lecturer	Faculty of Medicine	UQ (2001 – current)
David Rosengren	Senior Lecturer	Faculty of Medicine	UQ (2006 – current)
Sean Rothwell	Senior Lecturer	Faculty of Medicine	UQ (2006 – current)
Rina Savage	Senior Lecturer	Faculty of Medicine	UQ (2017 – current)
Frances Williamson	Senior Lecturer	Faculty of Medicine	UQ (2012 – current)
Matilda Schmidt	Adjunct Lecturer	School of Paramedicine	QUT (2017 – current)
Brandon Allwood	Adjunct Lecturer	School of Nursing and Midwifery	Griffith University (2018 – current)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Caitlin Lock (ETC)</b>	Sonia Osborne (QUT), Anthony Bell (The Wesley Hospital), Neil Cottrell (UQ), <b>Ian Coombes (Pharmacy)</b> , <b>Louise Cullen (ETC)</b> , David Brain (QUT)	Evaluation of clinical pharmacist medication review in ED and its impact on hospital length of stay for admitted older medical patients
<b>Matilda Schmidt (ETC)</b>	<b>James Hughes (ETC)</b> , <b>Kim Lai (ETC)</b> , <b>Julia Brownlie (ETC)</b> , <b>Amy Arnold (Women's and Newborn Services)</b>	Identifying the Usage and Appropriateness of Anti-D Immunoglobulin in the Pregnant Female Presenting to the Emergency Department
<b>Kevin Chu</b>	<b>Judith Bellapart (DICM)</b> , <b>Craig Winter (Neurosurgery)</b> , <b>Rosalind Jeffree (Neurosurgery)</b> , <b>Jeffrey Lipman (DICM)</b> , Jacobus Ungerer (Pathology Qld), Anita Pelecanos (QIMR Berghofer), <b>Anthony Brown (ETC)</b> , <b>Nathan Brown (ETC)</b>	Timing of lumbar puncture for the detection of xanthochromia in suspected subarachnoid haemorrhage
<b>Jaimi Greenslade</b>	<b>Louise Cullen (ETC)</b> , <b>William Parsonage (RBWH Cardiology)</b> , Nicholas Graves (QUT), Siegfried Perez (Logan Hospital), Fran Kinnear (TPCH), Christian Hamilton-Craig (TPCH), Niranjan Gaikwad (TPCH), <b>Tracey Hawkins (ETC)</b>	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

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
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
Philip Richardson	Elizabeth Doran (Pharmacy), Kevin Chu (ETC), Jaimi Greenslade (ETC)	Medication and Fluid orders in the Emergency Department: examining the incidence of error and adverse events
Alexandra Markwell	Tegwen Howell (ETC), Carol Windsor (QUT), Anthony Bell (ETC), Kevin Chu (ETC), Angela O'Malia (Social Work)	Describing the experiences of social workers in a tertiary ED
Kevin Chu	Carol Winsor (QUT), Tegwen Howell (ETC)	Understanding the variability in the diagnostic approach to subarachnoid haemorrhage: a qualitative study
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
Julian Williams	David Paterson (Infectious Diseases Unit), Graeme Nimmo (Microbiology), Jaimi Greenslade (ETC), Katherine Doucet, Kevin Chu (ETC), Jeffrey Lipman (ICU), Anthony Brown (ETC)	Identifying risk factors for MRSA
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
Rina Savage	Taylor Kline, Caitlin Lock, Champika Pattullo, Anthony Bell	Emergency Department Opioid Prescribing Intervention: Optimising Discharge (ED OPIOID) Study
Kevin Chu	Anthony Nguyen (Australian eHealth Research Centre, CSIRO)	Preventing missed diagnoses through automated reconciliation of ED medical records
Tina Moriarty	Kevin Chu (ETC), Daniel Bodnar (ETC)	Roll-overs in field triage (RIFT)
Anthony Bell	John Burke (ETC), Gerald Fitzgerald (QUT), Sam Toloo (QUT), Julia Crilly (GCUH), Ged Williams (GCUH)	State-wide models of care in emergency departments (SWAMPED)
Debra Harcourt	Leonie Cartlidge-Gaan (Internal Medicine), Clancy McDonald (ETC), John Burke (ETC), Anthony Nesbit (Patient Flow Unit), Amanda Dines (Executive Services)	Working together to connect care: emergency department frequent presenter's response project
Julia Brownlie	Jaimi Greenslade (ETC), Jessica Suna (ETC), Louise Cullen (ETC), James Hughes (ETC)	Emergency nurse practitioner in early pregnancy
Mercedes Ray	Julian Williams (ETC), James Hughes (ETC), Melisa Dixon (ETC), Angela Hills (ETC), Jill Duncan (ETC), Dr Jacqui Harper (Path Qld)	Identification of blood culture quality and current practices in the emergency and trauma centre
Julian Williams	James Hughes (ETC), Melisa Dixon (ETC), Angela Hills (ETC), Jill Duncan (ETC), Dr Jacqui Harper, Dr Jaimi Greenslade (ETC)	A prospective intervention study to improve the quality of blood cultures in the Emergency and Trauma Centre – <i>The Bugs in Bottles Project</i>
James Hughes	Brandon Allwood (ETC), Jacqui Chiu (UQ), Kevin Chu (ETC), Nathan Brown (ETC).	Exploring Current Pain Practices in the Emergency and Trauma Centre
Leonie Higgs	Di Atkinson (ETC), Nathan Brown (ETC), Leanne Bennett (ETC), Dave Kramer (ETC), Greg Merlo (QUT), Linda Schnicter (QUT)	A pragmatic randomised controlled trial of the effects of therapeutic activity kits in emergency department patients with dementia and responsive behaviours
Louise Cullen	Nathan Brown (ETC), Jaimi Greenslade (ETC), Peter Donovan (Clinical Pharmacology), Ian Coombes (Pharmacy), Neil Cottrell (UQ), Bill Lukin (ETC), Anthony Bell (ETC), Elizabeth Doran (ETC), David Hughes (ETC)	Prevalence and characteristics of medication-related presentations to the emergency department

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Doug Morel (Redcliffe Hospital)	Kevin Chu (ETC)	What influences the choice made by patients between emergency department and primary healthcare for acute illness?
Nam Nguyen (Royal Adelaide Hospital)	Anthony Brown (ETC)	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
Muhammad Alshyyab (QUT)	Kevin Chu (ETC)	Safety culture in the emergency department
Julia Crilly (Griffith University and GCUH)	David Rosengren (ETC), Sean Rothwell (ETC), Jill Duncan (ETC), Nathan Brown (ETC)	Evaluating the impact of alcohol on emergency department presentations (ETOH)
Shane George (GCUH)	Catherine Hurn (ETC), Anthony Holley (DICM)	Fibrinogen early in children with severe trauma study (FEISTY Junior)
James Winnearls (GCUH)	Catherine Hurn (ETC), Anthony Holley (DICM)	Fibrinogen early in severe trauma study (FEISTY)
Thomas Torpie (GCUH)	Alex Markwell (ETC), James Hughes (ETC), James Ready (ETC)	Domestic and family violence screening in the emergency department
Richard Skoien (RBWH Gastroenterology)	Anthony Brown (ETC)	Examination of health outcomes associated with paracentesis in patients admitted with decompensated cirrhosis
Andrea Driscoll (Deakin University)	Louise Cullen (ETC)	Redesigning systems of care for heart failure patients to improve outcomes
William Crawford (TPCH)	Louise Cullen (ETC)	Impact of fluid volume resuscitation on nitric oxide-induced oxidative stress and cardiac dysfunction in an ovine septic shock model
Christopher Reid (Curtin University of Technology, WA)	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 (RBWH Physiotherapy)	Venkat Acholi (ETC), Janelle Heine (ETC), David Kramer (ETC)	Physiotherapy defined scope of practice (prescribing)
Wahid Allahaibi (QUT)	John Burke (ETC)	A New Approach to Optimise Hospital Emergency and Inpatient Operations
Kasi Ahsan (QUT)	John Burke (ETC)	Lean integrated optimisation model of emergency department for improved patient flow
Julia Crilly (Griffith University and GCUH)	Jaimi Greenslade (ETC), James Hughes (ETC)	Morale, stress and coping strategies of staff working in the emergency department: a national and international comparison
Nicola Harper (RBWH Pharmacy)	Jessica Suna (ETC)	A pre- and post-evaluation of the impact of an Automated Medication Distribution System (AMDS) on medication administration in the RBWH Emergency Department
Paul Haber (RPAH, University of Sydney)	Clancy McDonald (ETC)	Reconnecting after a suicide attempt (RAFT) – feasibility study
Georgia Livesay (PAH)	James Hughes (ETC), Nathan Brown (ETC), Tegwen Howell (ETC)	Understanding the patterns, circumstance and outcomes of power tool injuries in occupational and domestic settings to inform a safety campaign
Mahender Samtani (RBWH Physiotherapy)	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) Petra Lawrence (QUT)	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

## 2018 Research Awards and Achievements

Recipient	Award	Event
Louise Cullen	Citation of the Branch	Australian Medical Association, Queensland
Louise Cullen	Chief Executive's Award	Metro North Hospital and Health Service Research Excellence Awards 2018
Jaimi Greenslade	Highly Commended – Research Support Award	Metro North Hospital and Health Service Research Excellence Awards 2018
Tracey Hawkins	Research into practice award	International Conference for Emergency Nursing 2018
James Hughes	Best Research Presentation – Runner up	International Conference for Emergency Nursing 2018
Page CB, Parker LE, Rashford SJ, Bosley E, Isoardi KZ, <b>Williamson FE</b> , Isbister GK	John Gilroy Potts Award for Best Publication by a Fellow in 2018	Australasian College for Emergency Medicine 35 <sup>th</sup> Annual Scientific Meeting 2018

## 2018 Research Publications

### Journal Articles:

1. **Abraham LJ**, Thom O, **Greenslade JH**, Wallis M, Johnston AN, Carlstrom E, et al. Morale, stress and coping strategies of staff working in the emergency department: A comparison of two different-sized departments. *Emerg Med Australas*. 2018;30(3):375-81
2. **Bell A**, Toloo GS, Crilly J, **Burke J**, Williams G, McCann B, et al. Emergency department models of care in Queensland: a multisite cross-sectional study. *Aust Health Rev*. 2018(In press)
3. Braganza S, **Markwell A**, Jayasekara S. Wellness, resilience and performance: translating ideas into action. *Emerg Med Australas*. 2018;30(2):263-5
4. Byrne L, Obonyo NG, Diab S, Dunster K, Passmore M, Boon AC, **Cullen L**, et al. An Ovine Model of Hyperdynamic Endotoxemia and Vital Organ Metabolism. *Shock*. 2018;49(1):99-107
5. Carlton EW, Pickering JW, **Greenslade J**, **Cullen L**, Than M, Kendall J, et al. Assessment of the 2016 National Institute for Health and Care Excellence high-sensitivity troponin rule-out strategy. *Heart (British Cardiac Society)*. 2018;104(8):665-72
6. **Chu K**, Windsor C, Fox J, Howell T, Keijzers G, Eley R, et al. Factors influencing variation in investigations after a negative CT brain scan in suspected subarachnoid haemorrhage: a qualitative study. *Emerg Med J*. 2018(In press)
7. **Chu KH**, **Brown NJ**, Pelecanos A, Brown AFT. Simpson's paradox: a statistician's case study. *Emerg Med Australas*. 2018;30(3):431-3
8. **Chu KH**, Keijzers G, Furyk JS, Eley RM, Kinnear FB, Thom ON, et al. Applying the Ottawa subarachnoid haemorrhage rule on a cohort of emergency department patients with headache. *Eur J Emerg Med*. 2018;25(6):e29-e32
9. **Chu KH**, **Mahmoud I**, **Hou X-Y**, Winter CD, Jeffree RL, Brown NJ, et al. Incidence and outcome of subarachnoid haemorrhage in the general and emergency department populations in Queensland from 2010 to 2014. *Emerg Med Australas*. 2018;30(4):503-10
10. Du Fay de Lavallaz J, Badertscher P, Nestelberger T, Isenrich R, Miró Ò, Salgado E, Cullen L, **Greenslade J**, **Hawkins T**, et al. Prospective validation of prognostic and diagnostic syncope scores in the emergency department. *Int J Cardiol*. 2018;269:114-21
11. Fan L, **Lukin B**, Zhao J, Sun J, Dingle K, **Purtill R**, et al. Cost analysis of improving emergency care for aged care residents under a Hospital in the Nursing Home program in Australia. *PLoS One*. 2018;13(7):e0199879
12. Greenslade J, Cho E, Van Hise C, **Hawkins T**, **Parsonage W**, **Ungerer J**, et al. Evaluating Rapid Rule-out of Acute Myocardial Infarction by Use of a High-Sensitivity Cardiac Troponin I Assay at Presentation. *Clin Chem*. 2018;64(5):820-9
13. **Greenslade JH**, Adikari T, Mueller C, Sandoval Y, Nestelberger T, **Parsonage W**, et al. Characteristics and occurrence of type 2 myocardial infarction in emergency department patients: a prospective study. *Emerg Med J*. 2018;35(3):169-75
14. **Greenslade JH**, Chung K, **Parsonage WA**, **Hawkins T**, Than M, Pickering JW, et al. Modification of the Thrombolysis in Myocardial Infarction risk score for patients presenting with chest pain to the emergency department. *Emerg Med Australas*. 2018;30(1):47-54
15. **Harcourt DI**, **McDonald CJ**, **Carlidge-Gann L**, **Brown NJ**, Rayner K. Frequent presentations to emergency departments and the collaborative community and emergency response: A case series. *Journal of Integrated Care*. 2018;26(4):267-76
16. Hassanzadeh H, Nguyen A, Karimi S, **Chu K**. Transferability of artificial neural networks for clinical document classification across hospitals: A case study on abnormality detection from radiology reports. *Journal of Biomedical Informatics*. 2018;85:68-79
17. **Hughes J**, Cabilan C, **Williams J**, **Ray M**, **Coyer FJ**. The effectiveness of interventions to reduce peripheral blood culture contamination in acute care: a systematic review protocol. 2018;7(1):216
18. Judge C, Eley RM, Miyakawa-Liu M, **Brown NJ**, McCosker L, Livesay G, **Hughes J**, et al. The characteristics of accidental injuries from power tools treated at two emergency departments in Queensland. *Emerg Med Australas*. 2018 (In press)
19. Kavsak PA, Neumann JT, **Cullen L**, Than M, Shortt C, **Greenslade JH**, et al. 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. *Can Med Assoc J*. 2018;190(33):E974-84
20. Keijzers G, **Cullen L**, Egerton-Warburton D, Fatovich DM. Don't just do something, stand there! The value and art of deliberate clinical inertia. *Emerg Med Australas*. 2018;30(2):273-78

### Journal Articles: (cont):

21. Knafel EG, **Hughes JA**, Dimeski G, Eley RJTOJ. Rhabdomyolysis: patterns, Circumstances, and Outcomes of Patients Presenting to the Emergency Department. 2018;18(3):215
22. Page CB, Parker LE, Rashford SJ, Bosley E, Isoardi KZ, **Williamson FE**, et al. A Prospective Before and After Study of Droperidol for Prehospital Acute Behavioral Disturbance. *Prehosp Emerg Care*. 2018;22(6):713-21
23. Pickering JW, Young JM, George PM, Watson AS, Aldous SJ, Troughton RW, **Cullen L**, et al. Validity of a Novel Point-of-Care Troponin Assay for Single-Test Rule-Out of Acute Myocardial Infarction. *JAMA Cardiology*. 2018;3(11):1108-12
24. Pretorius CJ, Tate JR, Wilgen U, **Cullen L**, **Ungerer JPJ**. A critical evaluation of the Beckman Coulter Access hsTnI: Analytical performance, reference interval and concordance. *Clin Biochem*. 2018;55:49-55
25. Ryan G, Swift K, **Williamson F**, Scriven E, Zheng O, Eley R. Feasibility of REBOA – Resuscitative Endovascular Balloon Occlusion of the Aorta—in Trauma-Related Noncompressible Torso Hemorrhage at Two Metropolitan Trauma Centers. *Ochsner Journal*. 2018;18(3):201-3
26. Shetty A, Macdonald SPJ, Keijzers G, **Williams JM**, Tang B, de Groot B, et al. Review article: Sepsis in the emergency department – Part 2: investigations and monitoring. *Emerg Med Australas*. 2018;30(1):4-12
27. Strudwick K, McPhee M, **Bell A**, Martin-Khan M, Russell T. Review article: best practice management of common ankle and foot injuries in The emergency department (part 2 of the musculoskeletal injuries rapid review series). *Emerg Med Australas*. 2018;30(2):152-80
28. Strudwick K, McPhee M, **Bell A**, Martin-Khan M, Russell T. Review article: Best practice management of common shoulder injuries and conditions in the emergency department (part 4 of the musculoskeletal injuries rapid review series). *Emerg Med Australas*. 2018;30(4):456-85
29. Strudwick K, McPhee M, Bell A, Martin-Khan M, Russell T. Review article: best practice management of closed hand and wrist injuries in the emergency department (part 5 of the musculoskeletal injuries rapid review series). *Emerg Med Australas*. 2018;30(5):610-40
30. Sullivan KA, Edmed SL, **Greenslade JH**, White M, **Chu K**, **Lukin B**, et al. Psychological Predictors of Postconcussive Symptoms Following Traumatic Injury. *J Head Trauma Rehabil*. 2018;33(4):E47-60
31. Than MP, Aldous SJ, Troughton RW, Pemberton CJ, Richards AM, Frampton CMA, **Greenslade J**, **Cullen L**, et al. Detectable High-Sensitivity Cardiac Troponin within the Population Reference Interval Conveys High 5-Year Cardiovascular Risk: An Observational Study. *Clin Chem*. 2018;64(7):1044
32. Thomsett R, **Cullen L**. The assessment and management of chest pain in primary care: a focus on acute coronary syndrome. *Aust J Gen Pract*. 2018;47(5):246-51
33. **Williams JM**, **Greenslade JH**, **Chu KH**, **Brown AF**, **Lipman J**. Utility of community-acquired pneumonia severity scores in guiding disposition from the emergency department: Intensive care or short-stay unit? *Emerg Med Australas*. 2018;30(4):538-46.

### 2018 Conference Presentations – Invited Speaker, Oral and Poster

#### Invited Speaker:

1. **Cullen L**. Don't just do something, stand there! 27<sup>th</sup> Annual RBWH Healthcare Symposium; Brisbane, Australia. 11-13 September 2018.

#### Oral Presentations:

1. **Ryan K.**, Jack L., Barnard A., **Hughes J.A.**, The lived experience of emergency nurses caring for elderly patients dying from traumatic injuries, International Conference for Emergency Nursing, October 2018, Melbourne
2. **Hawkins T.**, Changing the culture of the 'just in case' cannula in the emergency department, International Conference for Emergency Nursing, October 2018, Melbourne
3. **Staines E.**, Breaking Nursing Silos: a collaborative approach to improving transitional care, International Conference for Emergency Nursing, October 2018, Melbourne
4. **Schmidt M.**, To bleed or not to bleed, International Conference for Emergency Nursing, October 2018, Melbourne
5. Brown J., East K., Zhang P., Byrnes J., **Duncan J.**, Jones L., Brown N., clinical care requirements of alcohol-related presentations made to emergency departments – a multi-site study., International Conference for Emergency Nursing, October 2018, Melbourne
6. East K., Brown J., Zhang P., Byrnes J., **Duncan J.**, Jones L., Brown N., Rosengreen D., Green D., Furyk D., Rothwell S., Crilly J., Evaluating the impact of alcohol on emergency department presentations., International Conference for Emergency Nursing, October 2018, Melbourne
7. **Hughes, J. A.**, Yates, P., Spencer, L., Alexander, K., The Person, Environment, Health and Illness Factors Influencing Time to First Analgesic Medication in the Emergency Department., International Conference for Emergency Nursing, October 2018, Melbourne
8. **Hughes, J. A.**, Judge C, Eley R, Valmuur K, Livesay G, Miyakawa M, Boyde M, Pollard C, Brown N, The characteristics and causes of accidental injuries from power tool in patients presenting to two Queensland emergency departments, International Conference for Emergency Nursing, October 2018, Melbourne
9. **Hughes, J. A.**, Yates, P., Spencer, L., Alexander, K., The experience of care of patients presenting in pain to the emergency department, International Conference for Emergency Nursing, October 2018, Melbourne – Runner up best research presentation
10. **Hughes, J. A.**, Yates, P., Spencer, L., Alexander, K., Person, Environment, Health and Illness Factors Influencing Time to Analgesia in the Adult Emergency Department, Emergency Care Institute Research Symposium, Invited Speaker, June 2018
11. **Hughes J.A.**, Yates P., Spencer L., Alexander K., (2018) The experience of care of patients presenting in pain to the emergency department, Metro-North HHS Nursing and Midwifery Conference, Brisbane, Australia
12. Helena J., Burkett E., **Hughes J.A.**, (2018) Blood Stream Infections in the Emergency Department: a retrospective observational study of adult Emergency Department presentations with bacteremia

### Oral Presentations: (cont):

13. Lescerak C., Cabilian CJ., **Hughes J.A.**, Tuckett A., (2018) Who is more likely to receive nurse-initiated analgesia in the ED? ACEM Autumn Symposium, Brisbane, Australia
14. **Hawkins T.**, Greenslade J., Cullen L., Peripheral intravenous cannula insertion and use in the emergency department: a multi-modal approach to culture change., Metro North Hospital and Health Service Nursing and Midwifery Conference, Brisbane, March 2018.

### Poster Presentations:

1. **Pattullo C, Ranigs H, Peters N, Hajkowicz K, Hanly R, Donovan P, Lock C.** Choosing the correct antibiotic dose and duration for prophylaxis in orthopaedic surgery. Choosing Wisely National Meeting; Canberra. 30 May 2018
2. **Schmidt M, Brownlie J, Lai K, Arnold A, Hughes J.** Anti-D use in the ED: identifying current practices and the appropriateness of use. 27<sup>th</sup> Annual RBWH Healthcare Symposium; Brisbane, Australia. 11-13 September 2018
3. **Savage R.** Quality, cost, value: ED OPIOID: the effects of an intervention on emergency department oxycodone prescribing and communication at discharge. International Forum on Quality and Safety in Healthcare; Melbourne. 11-12 September 2018
4. **Pattullo C, Lock C.** Improvement Works in Progress: Opioid Prescribing Toolkit. International Forum on Quality and Safety in Healthcare; Melbourne. 11-12 September 2018
5. **Nolan J, Michalski M, Halford M, Legg A, Groom P, McCarthy K.** Outpatient management for patients presenting to emergency with cellulitis who still require intravenous antibiotic therapy: an audit of a new discharge pathway. 27<sup>th</sup> Annual RBWH Healthcare Symposium; Brisbane, Australia. 11-13 September 2018
6. **Lock C, Bell A.** Improvement Works in Progress: ED Medicine Wise: Fostering a Medicine Wise Culture in the Emergency Department International Forum on Quality and Safety in Healthcare; Melbourne. 11-12 September 2018
7. **Lock C.** Building capability and leadership: Qual-ED: creating a culture of value-driven quality in the emergency department. International Forum on Quality and Safety in Healthcare; Melbourne. 11-12 September 2018
8. Ho A, **Greenslade J, Hawkins T, Cullen L.** Troponin testing post-implementation of IMPACT, an accelerated chest pain protocol. 27<sup>th</sup> Annual RBWH Healthcare Symposium; Brisbane, Australia. 11-13 September 2018
9. **Foran L, Parsonage W,** Graves N, McCormack L, **Ashover S, Milburn T, Greenslade J,** Starmer G, Drahm-Butler T, Davis T, Mowatt E, Proctor K, Campbell V, **Cullen L.** Collaborating for Aboriginal and Torres Strait Islander chest pain research. 27<sup>th</sup> Annual RBWH Healthcare Symposium; Brisbane, Australia. 11-13 September 2018
10. **Duncan J, Brown N, Hughes J, Trudgett S,** Crilly J, **Rothwell S, Rosengren D.** Documentation of security interventions in the ED: communicating care in the clinical record. 27<sup>th</sup> Annual RBWH Healthcare Symposium; Brisbane, Australia. 11-13 September 2018
11. **Duncan J, Brown N, Hughes J, Trudgett S,** Crilly J, **Rothwell S, Rosengren D.** Documentation of security interventions in the ED: communicating care in the clinical record. 12<sup>th</sup> International Conference for Emergency Nursing; Melbourne, Australia. 10-12 October 2018
12. **Cruickshank M, Sam S, Heine J, Acholi V.** Physiotherapy prescribing in emergency. 27<sup>th</sup> Annual RBWH Healthcare Symposium; Brisbane, Australia. 11-13 September 2018
13. **Bodnar D, Brown NJ, Stevens Z, Williams S, Handy M,** Rashford SJ. Hypofibrinogenaemia and hypocalcaemia in trauma patients are potential therapeutic targets during pre-hospital care. 27<sup>th</sup> Annual RBWH Healthcare Symposium; Brisbane, Australia. 11-13 September 2018
14. Leskarac C, Caliban CJ, **Hughes J,** Eley R, Tuckett A. Who is more likely to receive nurse-initiated analgesia in the emergency department? A case-control study. Princess Alexandra Research Symposium; Brisbane. 2018
15. **Marks J, Randell T, Hughes J.** A retrospective audit of 12 months of domestic and family violence victim presentations to the Royal Brisbane and Women's Hospital Emergency and Trauma Centre with access to 24-hour social work. 4<sup>th</sup> Stop Domestic Violence Conference; Gold Coast. 3-5 December 2018
16. **Caole M, Brown N, Hughes J, Chu K.** Drug treatment of headache in the ED. Australasian College for Emergency Medicine 35<sup>th</sup> Annual Scientific Meeting; Perth. 18-22 November 2018.

### Other Communications and Outputs:

**Hughes, J. A.** (2018). Person, environment, and health and illness factors influencing time to first analgesia and patient experience of pain management in the adult emergency department (Doctoral dissertation, Queensland University of Technology).

## Genetic Health Queensland

Genetic Health Queensland (GHQ) is a state-wide service which provides clinical genetics services for all age groups in the state of Queensland. GHQ contributes to national and international research projects, and educational sessions at RBWH, Queensland Children's Hospital (QCH) and regional centres. GHQ clinical staff undertake presentations to other health professional groups and non-government organisations.

In 2018, the ICon partnership projects, which began at GHQ in 2015, were completed. This includes the addition of all QLD carriers of an inherited cancer syndrome mutation, up to the 31 December 2016 (deidentified), into the national ICon database.

This year, GHQ continued its close involvement in the Australian Genomic Health Alliance (AGHA) (a \$25 million 5-year grant from the NHMRC) to prepare Australia for the Genomics Revolution in Healthcare. AGHA brings together more than 50 partner organisations committed to integrating genomic medicine into healthcare across Australia. This has included the appointment of GHQ Australian Genomics research staff including a project officer, Flagship Project Coordinator and two part-time Genetic Counsellors. In 2018, GHQ recruited >90 patients into the project at RBWH (combined total for Renal and ICon flagships). GHQ Australian Genomics staff are also working with clinicians at QCH on several other AGHA flagships. In total, across all the flagships that GHQ AGHA staff are involved with, >200 patients have been recruited. Furthermore, staff are collaborating with researchers from organisations including QIMR-Berghofer, UQ, QGHA and others, locally and interstate, in programs regarding bioinformatics, workplace education, ethical and legal issues, implementation, health economics and policy associated with genomic medicine.

Further, the Cardiovascular Genetics AGHA Flagship has now commenced, led by GHQ Director Prof Julie McGaughran. This flagship will recruit and provide genomic testing of around 150 families that are being seen at GHQ with congenital heart disease, arrhythmia disorders and cardiomyopathies. Furthermore, Prof McGaughran is involved in the Clinical Committee and Disease and Gene Selection Committee of MacKenzie's Mission. Mackenzie's Mission is a research study of reproductive genetic carrier screening for approximately 500 debilitating genetic conditions including Spinal Muscular Atrophy (SMA), fragile X syndrome and cystic fibrosis, which has been awarded \$20 million by the Australian Government.

Several Research projects have commenced at Genetic Health Queensland this year including the CaPP3 clinical trial, BIG health Project (indigenous health), Young people with LI Fraumeni Syndrome and ELSI survey (QGHA).

The ELSI survey is a sub study of the Ethics, Legal and Social implication in genomics working stream of the Queensland Genomics Health Alliance (QGHA), which has been established to ensure the safe delivery of genomic medicine for Queenslanders. GHQ clinicians and Genetic counsellors involvement in national and international research collaborations has seen them author over 15 research publications this year and present at national and international conferences.

2018 was a productive year for GHQ and 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.

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Prof Julie McGaughran</b>	Professor Cardiovascular Genetic Disorders Flagship Co-Lead Committee Member	Australian Genomics Health Alliance (AGHA) Mackenzie's Mission (Australian, Reproductive Carrier Screening Project)	UQ
<b>Dr Michael Quinn</b>	Queensland State Project Officer for Australian Genomics	AGHA	NA
<b>Ms Melanie Tom</b>	Genetic Counsellor for Australian Genomics	AGHA – Malformations of Cortical Development, Leukodystrophies, Neuromuscular and Epileptic Encephalopathy Flagships	NA
<b>Dr Lindsay Fowles</b>	Genetic Counsellor for Australian Genomics (Renal flagship)	AGHA	NA
<b>Ms Rachel Austin</b>	Clinical Research Assistant, Flagship Coordinator	AGHA – ICon and Cardiac, RBWH Research Foundation, CaPP3, BIG project	NA
<b>Dr Helen Marfan</b>	Co-Investigator	AGHA, ICon	NA
<b>Dr Rachel Susman</b>	Co-Investigator	AGHA, ICon, Genetics of Sebaceous skin lesions	NA
<b>Dr Chirag Patel</b>	Co-Lead QLD Renal Genetic Program	KidGen Collaborative, AGHA Renal Genetics and HIDDEN Flagships	NA



## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions (cont)

Name	Type of Fellowship	Research Program	University (years)
<b>Ms Linda Wornam</b>	AGHA Cardiac Genetic counsellor	AGHA Cardiac	NA
<b>Ms Julie White</b>	BIG project (CI)	Better Indigenous Genetic Health (BIG) Project	NA
<b>A/Prof Andrew Mallett</b>	Clinical Fellow, Co-Lead QLD Renal Genetics Program, National Director AGHA	KidGen Collaborative, AGHA Renal Genetics and HIDDEN Flagships	UQ

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Prof Julie McGaughran</b>	Prof Chris Semsarian (Co lead), AGHA Flagship	Cardiovascular Genetic Disorders Flagship (AGHA)
<b>A/Prof Andrew Mallett</b>	<b>Prof Julie McGaughran, Dr Chirag Patel,</b> AGHA Renal Flagship	Applying genomics to inherited tubulointerstitial and cystic kidney diseases in Australia (RBWH Foundation research grant)
<b>A/Prof Andrew Mallett</b>	<b>Andrew Mallett, Mohammad Al-Shinnag, Helen Mar Fan, Rachel Susman</b>	Clinical audit of BHD, HLRCC and VHL at RBWH
<b>A/Prof Andrew Mallett</b>	AGHA Renal Flagship <b>Dr Chirag Patel (CI), Prof Julie McGaughran (PI), Dr Lindsay Fowles (GC)</b>	KidGen – renal genetics flagship

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Prof Kathryn North	Prof Julie McGaughran	Australia Genomics Health Alliance (AGHA)
AGHA ICCon Cancer Flagship	Prof Julie McGaughran, Dr Helen Marfan, Rachel Austin (CRA), Dr Rachel Susman, Jan Wakeling (GC)	AGHA: preparing Australia for genomic medicine
AGHA Cardiac Flagship, Chris Semsarian (Co-lead)	Prof Julie McGaughran (co-lead), Dr Michael Quinn, Rachel Austin (CRA), Linda Wornham (GC)	AGHA: preparing Australia for genomic medicine: rare disease flagships: Cardiovascular Genetic Disorders
COSA (Lead by Judy Do and Bettina Meiser)	Dr Helen Marfan	BRCA Mainstreaming project
IMPACT Geoffrey Lindeman (Lead)	Dr Rachel Susman	Identification of Men with a genetic predisposition to ProstAte Cancer: targeted screening in men at higher genetic risk and controls (IMPACT)
ICCon Partnership – Paul James and Gillian Mitchell (Leads)	Prof Julie McGaughran, Dr Rachel Susman, Rachel Austin (CRA)	The Inherited Cancer Connect (ICCon) partnership
Prof Finlay Macrae (lead)	Dr Helen Marfan (PI), Rachel Austin (CRA)	A randomised double-blind dose noninferiority, Trial of aspirin in Lynch syndrome. CaPP3
QGHA ELSI working group, Dr Miranda Vidgen (Lead)	Prof Julie McGaughran (PI)	The use of genomic data from medical records in research: Patient opinion survey (ELSI sub study)
BIG project team – Prof Margaret Kelaher (Lead)	Julie McGaughran (PI)	Better Indigenous Genetic (BIG) Health Services
Prof Ingrid Winship (Lead)	Dr Rachel Susman	Genetics of Sebaceous Skin Lesions Study

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Prof Julie McGaughan (CI)</b>	Genetic Health Queensland	AGHA: preparing Australia for Genomic Medicine	NHMRC	Nationally \$5 million annually for 5 years	2016-2020
<b>Andrew Mallett, Chirag Patel, Julie McGaughan</b>	Renal department, Genetic Health Queensland	Applying genomics to inherited tubulointerstitial and cystic kidney diseases in Australia	RBWH Foundation	\$40,000	1 year

## 2018 Research Publications

### Journal Articles:

1. Nguyen NMP...**Patel C.** et al., The genetics of recurrent hydatidiform moles: new insights and lessons from a comprehensive analysis of 113 patients. *Modern Pathology*, (2018) 31(7), 1116-1130
2. Joo JE...KconFab (**Michael Gattas**) et al., Heritable DNA methylation marks associated with susceptibility to breast cancer. *Nature communications*, (2018) 9
3. Jayasinghe K, Quinlan C, Stark Z, **Patel C.** et al., Meeting report of the 2017 KidGen renal genetics Symposium. *Human genomics*, (2018) 12, 5
4. Fry AE...**Patel CV** et al De Novo mutations in GRIN1 cause extensive bilateral polymicrogyria. *Brain: a journal of neurology*. (2018) Epub ahead of print
5. Bachmeier C, **Patel C**, Kanowski P, Sangla K. et al., Should all patient with hyperparathyroidism be screened for a CDC73 mutation? *Endocrinol Diabetes Metab Case Rep*, (2018) 8
6. Mason JA...**Susman RD** et al., Demonstration of a novel Xp22.2 microdeletion as the cause of familial extreme skewing of X-inactivation utilizing case-parent trio SNP microarray analysis. *Mol Genet Genomic Med*, (2018) 6 (3), 57-369
7. Meiser B...**Susman R** et al., Psychological outcomes and surgical decisions after genetic testing in women newly diagnosed with breast cancer with and without a family history. *European Journal of Human Genetics*, (2018) 26 (7), 972-983
8. Mikropoulos C...**Susman R** et al., Prostate-specific antigen velocity in a prospective prostate cancer screening study of men with genetic predisposition. *BJC*, (2018) 118(2), 1-11
9. Diana E Benn...**Helen Marfan...Rachel Susman** et al., Bayesian approach to determining penetrance of pathogenic SDH variants. *J Med Genet*, (2018) 0:1-6 Epub ahead of print
10. Wambach JA...**Patel C** et al., Bi-allelic POLR3A Loss-of-Function Variants Cause Autosomal-Recessive Wiedemann-Rautenstrauch Syndrome. *Am J Hum Genet.* (2018) 103(6):968-975
11. Kennedy J...**Patel C** et al., KAT6A Syndrome: genotype-phenotype correlation in 76 patients with pathogenic KAT6A variants. *Genet Med.* (2018) [Epub ahead of print]
12. Jayasinghe K...**Patel C** et al., Renal genetics in Australia: kidney medicine in the genomic age. *Nephrology (Carlton)*. (2018) [Epub ahead of print] Review
13. Ng MSY...**Patel C** et al., CFHR5 Nephropathy in a Greek-Cypriot Australian Family: Ancestry-Informed Precision Medicine. *Kidney Int Rep.* (2018) 3(5):1222-1228
14. Aldridge M, **Patel C**, Mallett A, Trnka P. Antenatally Diagnosed ADPKD. *Kidney Int Rep.* (2018) 3(5):1214-1217
15. Forbes TA...**Patel C** et al., Patient-iPSC-Derived Kidney Organoids Show Functional Validation of a Ciliopathic Renal Phenotype and Reveal Underlying Pathogenetic Mechanisms. *Am J Hum Genet.* (2018) 102(5):816-831
16. Richardson E, Spinks C, Davis A, Turner C, Atherton J, **McGaughan J**, Semsarian C, Ingles J. Psychosocial implications of living with atecholaminergic polymorphic ventricular tachycardia in adulthood. *2018 Journal of Genetic Counseling.* Jun;27(3):549-557
17. Cecilie Bredrup, Tomasz Stokowy, **Julie McGaughan**, Samuel Lee, Dipak Sapkota, Ileana Cristea, Linda Xu, Kåre Steinar Tveit, Gunnar Høvdning, Vidar Martin Steen, Eyvind Rødahl, Ove Bruland, Gunnar Houge. A tyrosine kinase-activating variant Asn666Ser in PDGFRB causes a progeria-like condition in the severe end of Penttinen syndrome *EJHG online* 20/12/18.

### Book Chapters / Letters:

1. Stevenson P, Rodins K, Susman R. The association between multiple pilomatrixomas and APC gene mutations. *Australian Journal of Dermatology*, (2018) 59(4), 273-274.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. **Troth S.** How Genetics Influence Our Health. Ausmed Nurses Conference 2018. Bundaberg, Australia
2. **Troth S.** Hereditary Cancer and Genetic Counselling. The Friendlies MDT 2018. Bundaberg, Australia
3. **Boon M.** Genetics update. Pink Hope QLD Information Day 2018. Brisbane, Australia
4. **Van Spaendonck-Zwarts K.** Cardiomyopathy Discussion Panel. International Clinical Cardiovascular Genetics Conference 2018. Brisbane, Australia
5. **McGaughran J.** Developing a national consent form for genomics. RCPA conference 2018. Sydney, Australia
6. **McGaughran J.** Panel discussions on Genomics. Ehealth expo 2018. Brisbane, Australia
7. **McGaughran J.** Workshop on patient-centred genomics. Garvan Institute 2018. Sydney, Australia
8. **Wornham, L.** Issues associated with HD predictive testing. HD Forum 2018. Brisbane, Australia
9. **Hunt L.** Women in Science. Mt St Michael's Future's Conference. Brisbane, Australia
10. **McGrath, P.** NPT vs Nuchal Translucency at Improving Outcomes: Queensland Mothers and babies. Translational research institute PA Hospital 2018. Brisbane, Australia
11. **Quinn M.** Genomics in medicine: implementation of Genomics into Healthcare in Australia. HGSA QLD Branch education meeting 2018. Brisbane, Australia
12. **Patel C.** Genomics in medicine: genomics in the Clinic. HGSA QLD Branch education meeting 2018. Brisbane, Australia
13. **Mehta S.** Inherited Cardiovascular Conditions: Cambridge Experience. HGSA QLD branch. Brisbane, Australia
14. **Sane V.** A Brief Overview of Genetic Counselling. Prince Charles Hospital. Brisbane, Australia
15. **Sane V.** A Brief Overview of Cancer Genetics. Cancer care Forum, Price Charles Hospital. Brisbane Australia.

### Oral Presentations:

1. **Marfan H, Susman R.** Development of a data portal for aggregation and analysis of genomics data in familial platelet disorder with predisposition to myeloid malignancy – the RUNX1.db. American Society of Hematology Annual Meeting 2018. California, USA
2. **Van Spaendonck-Zwarts K.** Genetic Testing in DCM – don't just look at the heart. CSANZ Annual Scientific Meeting 2018. Brisbane, Australia
3. **Susman R.** GI Tract cancer predisposition syndromes. Gastroenterological Society of Australia 2018. Brisbane, Australia
4. **Wakeling J.** The Queensland Familial Cancer Registry. Gastroenterological Society of Australia 2018. Brisbane, Australia
5. **Patel C.** Genomics in Acute Care – NICU/PICU. 27<sup>th</sup> Annual RBWH Healthcare Symposium 2018. Brisbane, Australia
6. **Patel C.** Genetic Renal Disease. HGSA(AACG)-RACP Webinar 2018. Brisbane, Australia.

### Poster Presentations:

1. **Higgins, M. J McGaughran** Further delineation of Bainbridge-Ropers syndrome in five Australasian patients. HGSA Scientific Meeting 2018. Sydney, Australia, Manchester Dysmorphology Meeting, 2018
2. **Tom M,** Edwards S, Boggs K, Wilkins E, de Silva M. Challenges and Successes in Research Genetic Counselling in an Australian National Program. HGSA Scientific Meeting 2018. Sydney, Australia
3. **Gattas M.** Why do patients change their mind about cancer gene testing? HGSA Scientific Meeting 2018. Sydney, Australia
4. Cops E, Michael-Lovett C, James P, **Austin R...McGaughran J, Susman R.** ICon Familial Cancer Database. Familial Aspects of Cancer: research & Practice 2018. Kingscliffe, Australia
5. Dressel U...**Marfan H** et al. The Australian Genomics ICon Flagship: Hereditary Cancer Syndromes. Familial Aspects of Cancer: research and Practice 2018. Kingscliffe, Australia.

# Hyperbaric Medicine Service

## About this service:

The RBWH Hyperbaric Medicine Service provides inpatient and outpatient treatments in line with evidence based indications approved by the international scientific body, The Undersea and Hyperbaric Medicine Society. It is a subspecialty of the Australian and New Zealand College of Anaesthesia but indications are derived from multiple specialities. Approximately 50% of the current workload is provided in support of the late effects of therapeutic radiation induced tissue damage, both symptomatic treatment of and surgical intervention within. There are applications wherever microvascular disease impedes normal tissue metabolism. Support is provided for endovascular and tissue bubble injury, for example with decompression illness and CAGE, both within the recreational and commercial diving community and iatrogenic injury.

## Highlights of 2018:

Work has continued around the newest indication for treatment with hyperbaric oxygen therapy, Idiopathic Sudden Sensorineural Hearing Loss. The timing and dose of the hyperbaric oxygen intervention is being investigated. A previously published paper by the department supported a Cochrane review highlighting Hyperbaric Oxygen as the most effective therapy in the treatment of Idiopathic Sudden Sensorineural Hearing Loss. A randomised RCT protocol is being developed to further the quality of evidence in this area. The department published a paper detailing the results of a double blinded control trial examining the utility of hyperbaric oxygen as an adjunct in the treatment of chronic venous leg ulcers. Despite being underpowered, the trial revealed a statistical and clinically significant reduction in wound healing trajectories with adjunct hyperbaric oxygen. The unit published an audit of CNS oxygen toxicity nationally and variations between treatment protocols nationally. The unit also published a prospective observational cohort study of 51 patients on the effect of hyperbaric oxygen therapy in treating radiation induced xerostomia. The unit continues to be involved in the development of a national and international data registry of outcome measures. Finally, a trial investigating the reliability and accuracy of delivery of B-Braun infusion pumps and syringe drivers under hyperbaric conditions has been completed and is awaiting publication.

## Benefits for clinical practice:

The clinical outcome findings from the chronic venous leg ulcer trial have been incorporated into daily practice via the Choosing Wisely initiative. The B-Braun pumps and syringe drivers have been validated for use under hyperbaric conditions to 4 ATA. The local database will enable ongoing quality assurance programs and the national data registry will help better inform clinical decision making in the hyperbaric medicine area.

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
Susannah Sherlock Ken Thistlethwaite	David Kramer, Adam Storey	National data registry
Susannah Sherlock		CNS toxicity, a national audit of practise

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Pelin Tufekci Biomedical Technology Services	Chrisley Goonawardena	The reliability and precision of B-Braun infusion pumps under hyperbaric conditions to 4 ATA

## 2018 Research Publications

### Journal Articles:

1. Hyperbaric oxygen treatment for the management of radiation-induced xerostomia. Sherlock, Susannah; Way, Mandy; Tabah, Alexis. JOURNAL OF MEDICAL IMAGING AND RADIATION ONCOLOGY; DEC 2018; 62; 6; p841-p846
2. Audit of practice in Australasian hyperbaric units on the incidence of central nervous system oxygen toxicity. Sherlock S, Way M, Tabah A. Diving Hyperb Med. 2018 Jun 30;48(2):73-78
3. The effectiveness of hyperbaric oxygen therapy for healing chronic venous leg ulcers: a randomized, double-blind, placebo-controlled trial. Thistlethwaite KR, Finlayson KJ, Cooper PD, Brown B, Bennett MH, Kay G, O'Reilly MT, Edwards HE. Wound Repair Regen. 2018 Jul;26(4):324-331 Intensive Care Services.

## Intensive Care Services

**Professor Michael Reade:** the Cryopreserved vs. Liquid Platelet (CLIP) pilot trial was completed and submitted for publication, and the subsequent CLIP-II definitive trial was funded by the NHMRC with A\$1.85 million over 4 years. This trial will establish the safety and cost-effectiveness of frozen platelets for surgical bleeding. Professor Reade was elected a Fellow of the Royal Institution of Australia.

**ICS Research team:** In March 2018 the first patient was enrolled into the BLING III study (7000 participants worldwide). Permanent positions gained for x3 research staff – previously temporary positions. Expansion of service provision including study monitoring, mentoring, medical student research facilitation, utilisation and development of REDCap data capture eCRF's, project management for multi centred collaborative research. Successful commencement of health volunteer study. Recruitment reaching 50% target required.

Professor Jeffrey Lipman was one of the nine researchers named on the 2018 Clarivate Highly Cited Researchers List. Those on the list have demonstrated significant influence by publishing multiple highly cited papers during the last decade ranking in the top one per cent by citations for a publication field and year.

Associate Prof Jeremy Cohen: Publication of the ADRENAL trial – in New England Journal of Medicine. This was a 3800-patient study of the use of corticosteroids in septic shock and is currently the largest trial of septic shock ever conducted. Jeremy Cohen was one of the Chief Investigators and authors of the paper. Subsequently this trial was voted by the NEJM Editorial Staff studies as one of the 12 most influential studies of 2018.

## Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Hajar Alasmari	PhD, Queensland University of Technology (2012-2018)	Examining Intensive Care Nurses' Clinical decision-making associated with acute kidney injury and continuous renal replacement therapy in Saudi Arabia	Prof Ann Bonner, <b>Prof Fiona Coyer FM</b>
Sonia Hines	PhD, Queensland University of Technology	An educational intervention to improve nurses' research literacy	Prof Joanne Ramsbotham, <b>Prof Fiona Coyer FM,</b>
Sandra Johnston	PhD, Queensland University of Technology	Effectiveness of high fidelity simulation as a teaching tool in undergraduate nursing education	<b>Prof Fiona Coyer FM,</b> Prof Robyn Nash
<b>Lizanne Dagleish</b>	PhD, Queensland University of Technology	The role of microcirculatory dysfunction and skin breakdown in the critically ill	<b>Prof Fiona Coyer FM, Dr Jill Campbell,</b> Dr Kathy Finlayson, <b>Prof Andre VanZundert</b>
Adrianna Hada	PhD, Queensland University of Technology (2017-2021)	Transforming patient outcomes through improved and effective nursing clinical handover	<b>Prof Fiona Coyer FM,</b> Dr Leanne Jack
Paul Jarrett	PhD, Queensland University of Technology (2017-2021)	Administration of antibiotics in the intensive care unit	<b>Prof Fiona Coyer FM,</b> Prof Sam Keogh, Prof Jason Roberts
<b>Anthony Batterbury</b>	PhD, Queensland University of Technology (2018-2023)	How sick is too sick and how heavy too heavy? Quantifying the clinical acuity and dependency of ward patients whom have triggered emergency response systems in order to understand service delivery boundaries and define thresholds for escalation or resource mobilisation	<b>Prof Fiona Coyer FM,</b> Clint Douglas
Hannauh Rheault	Doctor Health Science, Queensland University of Technology (2014-2019)	Examining the health literacy and chronic disease self-management of remote Aboriginal Australians: a mixed method study	Prof Ann Bonner, <b>Prof Fiona Coyer FM</b>
Leanne Stone	Doctor Health Science, Queensland University of Technology (2014-2019)	Comparing "Magnet" attributes in nursing between Australia and the United States	<b>Prof Fiona Coyer FM,</b> Prof Ray Chan, Prof Alexandra McCarthy
<b>Bryan Gregory</b>	PhD, Queensland 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	<b>Prof Fiona Coyer FM,</b> Prof Jason Roberts, Prof Ann Bonner
Jessica Ingleman	Masters of Applied Science (Research), Queensland University of Technology (2016-)	Exploring tissue reperfusion in two body positions and varied load periods in critically ill patients (EXTREME 2 pressure study)	<b>Prof Fiona Coyer FM,</b> Dr Christina Parker

## Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
David McIntyre	PhD, Queensland University of Technology (2016-)	Developing and validating haemodialysis nurse-sensitive indicators	Prof Ann Bonner, <b>Prof Fiona Coyer FM</b>
Elissa Milford	PhD, UQ	Effects on the glycocalyx of resuscitation with immunomodulatory drugs and cryopreserved blood products in preclinical and clinical trauma	<b>Michael Reade</b> , John-Paul Tung
Gabrielle Simonova	PhD, UQ	Effect of storage conditions and duration on the clinical effect of platelet and red blood cell transfusion	John-Paul Tung, Melinda Dean, <b>Michael Reade</b>
Paul Lee-Archer	PhD, UQ	A randomised controlled trial of dexmedetomidine to lessen postoperative agitation in children undergoing elective surgery or radiology	<b>Michael Reade</b> , Debbie Long, Britta Regli-VonUngern
Adam Mahoney	PhD, UQ	A geospatial approach to quantitative quality assurance in trauma	<b>Michael Reade</b> , Kirsten Vallmur
<b>Anthony Holley</b>	PhD, UQ	Observational studies of critical care practice in the management of severe burns patients in Australia and New Zealand	<b>Jeremy Cohen</b> , <b>Jeff Lipman</b> , <b>Michael Reade</b>
Andrew Flint	PhD, Monash	Retrospective analysis of the effect of platelet transfusion on infection complications in critical illness	Zoe McQuilten, <b>Michael Reade</b>
Gavin Day	MPH, QUT	Does a supervisor's leadership have an effect on burnout in Army clinicians? A multivariable analysis of two validated survey instruments	<b>Michael Reade</b>
John Parr	MD, UQ	Observational study of sedation practices in severe trauma and critical illness	<b>Michael Reade</b>
Patrick Biggins	MD, UQ	Does delay to neurosurgical intervention after trauma affect outcome? If so, what (if any) delay is acceptable? Analysis of Queensland Health data	<b>Michael Reade</b> , Kirsten Vallmuur
Terrance English	MBBS, Deakin	Predictors of platelet transfusions in cardiac surgical patients	<b>Michael Reade</b> , Zoe McQuilten
<b>Jayesh Dhanani</b>	PhD UQ	Study of the disposition of nebulised tobramycin	<b>Jeremy Cohen</b>
Julie Lee	PhD UQ	Rotational Thromboelastography in Obstetrics	<b>Jeremy Cohen</b>
<b>Anthony Holey</b>	PhD UQ	Variability in Critical Care Burn Management	<b>Jeremy Cohen</b>
<b>Alexis Tabah</b>	PhD, UQ 2018-	Local and International epidemiology of Hospital Acquired Blood Stream Infections in the Critically Ill	<b>Jeffrey Lipman</b> , <b>Jason Roberts</b>
Christopher Anstey	PhD 2017-	Extramitochondrial metabolism of citrate metabolism in the critically ill	Bala Venkatesh, <b>Jason Roberts</b>
Andrew Burke	PhD 2018-	Pharmacokinetics of anti-myc drugs in patients with cystic fibrosis	<b>Jason Roberts</b> , Rachel Thomson, Scott Bell, Daniel Smith
Vesa Cheng	PhD 2018-	Optimising antibiotic dosing in critically ill patients on extracorporeal membrane oxygenation	<b>Jason Roberts</b> , Mohd Hafiz Abdul Aziz, Kiran Shekar
Tavey Dorofaeff	PhD 2016-	How to use antibiotics better in Paediatric Intensive Care using pharmacokinetic principles	Suzanne Parker, Mark Coulthard, <b>Jason Roberts</b> , <b>Jeffrey Lipman</b>
William Franks	MPhil 2017-	Pharmacokinetics of commonly used antimicrobials in lung transplant recipients	<b>Jason Roberts</b> , Mohd Hafiz Abdul Aziz, <b>Menino Cotta</b>
Yarmarly Guerra Valero	PhD 2016-	Translating microsampling techniques into better antibiotic dosing for critically ill children	Suzanne Parker, <b>Jason Roberts</b> , Steven Wallis, <b>Jeffrey Lipman</b>
<b>Nilesh Kumta</b>	PhD 2017-	Optimising antibiotic dosing for the treatment and prevention of central nervous system infections	<b>Jeffrey Lipman</b> , <b>Jason Roberts</b>
<b>Rochelle Ryan</b>	PhD 2018-	Perioperative pharmacokinetics of surgical antibiotic prophylaxis	<b>Jason Roberts</b> , <b>Adrien Van Zundert</b> , <b>Jeffrey Lipman</b> , <b>Hildegard Wyssusek</b>

## Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Eko Setiawan	PhD 2018-	Strategies to Improve the Use of Antimicrobials in Hospitalized Indonesian Patients	<b>Jason Roberts, Menino Cotta, Jeffrey Lipman,</b>
<b>Angela Tognolini</b>	MPhil 2018-	Intraoperative lignocaine infusions: development of an optimised infusion dosing regimen for obese patients	<b>Victoria Eley, Jason Roberts</b>
Paul Williams	PhD 2018-	What is the validity of altered dosing approaches for ensuring appropriate antibiotic dosing in the critically ill?	<b>Jason Roberts, Menino Cotta</b>
Gloria Wong	PhD 2012-	A pharmacokinetic-pharmacodynamic evaluation of beta-lactam antibiotics TDM guided dose adjustment in critically ill patients	<b>Jason Roberts, Jeffrey Lipman</b>
Sazlyna Lim	PhD 2018-	In Vitro Evaluation of Antimicrobials Used for Treatment of Carbapenem-Resistant Enterobacteriaceae Infections	<b>Jason Roberts, Fekade Sime</b>
Kamrul Islam	PhD 2018-	Optimising antibiotic dosing for resistant infections	<b>Jason Roberts, Fekade Sime</b>
Helmi Sulaiman	PhD 2017-		<b>Jason Roberts</b>
Chandra Sumi	PhD 2016-	Optimization of alternative antibiotic dosing regimens for maximal antibacterial activity and suppression of emergence of resistance	<b>Jason Roberts, Fekade Sime</b>
Saiyuri Naicker	PhD 2017-	The microbiological effects of antimicrobial deescalation: an in-vitro evaluation in a dynamic infection model	<b>Jason Roberts, Fekade Sime, Suzanne Parker</b>
Aun Raza	PhD 2018-	Can TLR4 active metabolites of drugs administered to cancer surgery patient improve long term cancer outcomes	James Falconer, Peter Cabot, Fekade Sime, <b>Jason Roberts</b>
<b>Timothy Sladden</b>	PhD 2014-	The role of endothelial glycocalyx breakdown in human lung transplantation and the establishment of a porcine model to study mechanisms and evaluate therapeutic interventions	Dan Chambers, Stephanie Yerkovich, Jeffrey Lipman, Jonathan Hill
<b>Kersi Taraporewalla</b>	PhD 2017-	Teaching Psycho-Motor Skills in Anaesthesia	<b>Andre van Zundert, Jeffrey Lipman</b>
Martha Druery	PhD 2014-	Psychosocial outcomes post severe burn injuries in adults – an exploratory study	Peter Newcombe, Catherine Cameron, <b>Jeffrey Lipman</b>
Martha Druery	PhD 2014-	Psychosocial outcomes post severe burn injuries in adults – an exploratory study	Peter Newcombe, Catherine Cameron, <b>Jeffrey Lipman</b>
Caleb Economou,	PhD 2012-	The pharmacokinetics of vancomycin, meropenem and ticarcillin in critically ill patients undergoing prolonged intermittent renal replacement therapy	<b>Jason Roberts, Jeffrey Lipman, Brent Richards</b>
<b>Bryan Gregory</b>	MPhil 2016-		<b>Fiona Coyer, Jason Roberts</b>
Jawana Alawie	Hons 2018-		<b>Jason Roberts</b>
Joash Tan	Hons 2018-		<b>Jason Roberts</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Jessica Ingleman	Project Manager	The effect of time spent in a position on critically ill patient's skin: the EXTREME pressure 2 study. Extreme pressure study: exploring pressures, tissue reperfusion and body positioning – a pilot evaluation among critically ill patients.	QUT (2014-2018)
Jane-Louise Cook	Project Manager	Efficacy of nasogastric and endotracheal tube securement devices, preventative dressings and topical skin applications for reducing device-related pressure injuries in intensive care patients; the REMEDY study, a randomised controlled trial. Translating evidenced-based pressure injury prevention into the intensive care environment: the SUSTAIN trial	QUT (2014-2018)
Anna Doubrovsky	Project Manager	Efficacy of Incontinence-Associated Dermatitis interventions for critically ill patients in intensive care; the Distinct pilot randomised control trial	QUT (2016-2018)
<b>Fiona Coyer FM</b>	Visiting Professor	Institute for skin integrity and infection prevention	University of Huddersfield (2016–present)

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions (cont)

Name	Type of Fellowship	Research Program	University (years)
David Liu	Postdoctoral Research Fellowship	Clinical trials in critical illness (Supervisor: M. Reade)	UQ
Jeremy Cohen	Honorary Professorial Fellow		The George Institute
Jason Roberts	NHMRC Practitioner Fellowship	Redefining antibiotic dosing to reduce bacterial resistance	UQ (2017-2021)
Jason Roberts	Honorary Professor	Redefining antibiotic dosing to reduce bacterial resistance	The University of Liverpool 2014–present
Jeffrey Lipman	Adjunct Professor	Infectious Diseases	Queensland University of Technology, 2010–present
Jeffrey Lipman	Adjunct Professor	Beta-Lactam dosing in critically ill patients	Chinese University of Hong Kong, 2012–present
Jeffrey Lipman	Adjunct Professor	Beta-Lactam dosing in critically ill patients	University of NSW, 2016–present
Jeffrey Lipman	Honorary Professorial Research Fellow	Beta-Lactam dosing in critically ill patients	University of the Witwatersrand, 2016–present

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Prof Fiona Coyer FM (Nursing Research and Critical Care)	Jill Campbell (Skin Integrity)	Efficacy of incontinence-associated dermatitis interventions for critically ill patients in intensive care; the Distinct pilot randomised control trial
Prof Fiona Coyer FM (Nursing Research and Critical Care)	Tony Parker (QUT), Jill Campbell (Skin Integrity), Anna Doubrovsky (QUT)	BiocheMical characteristics and hEaling rates of medical device-related pressure Injuries (the MEDICI study); a prospective observational pilot study
Prof Fiona Coyer FM (Nursing Research)	Stacey Watts (Intensive Care Unit), Jayesh Dhanani (Intensive Care Unit), Samantha Keogh (QUT)	Intensive care point of care testing for arterial gas analyses: The INCEPT audit
Michael Reade	Michael Reade, Anthony Holley, Marks D, Weinberg L, Irving D, McQuilten Z, French C, Royse A, Bannon P, Johnson L, Gattas D	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)
Michael Reade	McCalman J, Kippen R, Reade MC, Shanks D, Hopper D.	Diggers to Veterans: risk, resilience and recovery in the First AIF
Michael Reade	Gruen R, Mitra B, Bernard S, Jacobs I, Medcalf R, Reade MC, Tran H.	Prehospital Antifibrinolytics for Traumatic, Coagulopathy associated with Haemorrhage (The PATCH Study)
Michael Reade	Shehabi Y, Bellomo R, Reade M, Seppelt I, McArthur C, Bailey M, Howe B.	The Australasian Sedation Practice in Intensive Care Evaluation (SPICE) Randomised Controlled Trial
Jeffrey Lipman	Dulhunty J, Roberts J, Cotta	A phase III randomised controlled trial of continuous beta-lactam infusion compared with intermittent beta-lactam dosing in critically ill patients
Jason Roberts	Cotta, Roberts J	Optimising ceftriaxone dosing for critically ill patients with severe pneumonia
Jason Roberts, Jeffrey Lipman	Roberts J, Lipman J	An Observational Pharmacokinetic study of Ceftolozane-Tazobactam in Intensive Care Unit in patients with and without continuous renal replacement therapy
Jason Roberts, Jeffrey Lipman	Roberts J, Lipman J	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
O'Donoghue/Roach	Pang G, Pincus J	An Observational Study to assess aspiration risk using gastric ultrasound in ventilated ICU patients prior to extubation
Jeremy Cohen, David Lui	Cohen J, Lui D	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



## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Jason Roberts/Kumta	Kumta N, J Lipman	The Pharmacokinetics of Ceftriaxone, Meropenem, Piperacillin-Tazobactam and Vancomycin in the Cerebrospinal Fluid of Critically Ill Patients with Uninflamed Meninges
Michael Reade, Cheryl Fourie	Reade M, Fourie C	International prospective observational Study on iNtrAcranial PreSsurE in intensive care (ICU)
Jeffrey Lipman/ Thomas	Lipman J	A Potential Taste Receptor Association with Myocardial Depression Susceptibility in Treated sEpsis
Jeremy Cohen	Cohen J	A Comparison of the Total and Free Cortisol Response to a Standard Short Synacthen Test in Patients with Traumatic Brain Injury
Chu	Chu	Timing of Lumbar puncture for the selection of xanthochromia in subarachnoid haemorrhage
Judith Bellapart	Bellapart J	The prognostication value of plasma Endothelin-1 in sub arachnoid Haemorrhage
Jason Roberts	Cotta, Roberts J	Levetiracetam pharmacokinetics in critically ill patients with severe traumatic brain injury and subarachnoid haemorrhage
Jeremy Cohen	Cohen J	A prospective multicentre observational study of aneurysmal subarachnoid haemorrhage in Australasian intensive care The PROMOTE-SAH Study
Denny	Lipman, J / Denny	Recognising Sepsis in SIRS Trial (RESIST)
Jeremy Cohen	Bala Venkatesh, David Evans, Simon Finfer, John Myburgh, Manoj Saxena, Jacobus Ungerer, Carol Pretorius, Brett McWhinny, David Liu, John Moore	Free Cortisol, Aldosterone and Vitamin C in Septic Shock

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Rachael Bailey (Caboolture Hospital, ICU)	Alexis Tabah (Redcliffe Hospital, ICU), Manesh Ramanen (Redcliffe Hospital, ICU), <b>Prof Fiona Coyer FM (Nursing Research and ICU)</b>	Survey of family visiting in ICU – WELCOME – ICU Study
Kate Kynoch (Mater Hospital)	<b>Prof Fiona Coyer FM (Nursing Research and ICU)</b> , Marian Mitchell (PAH/GU), Gary Von Dohren (Redcliffe Hospital, ICU)	IVES family visiting study
Kathleen Finlayson (QUT)	Helen Edwards (QUT), <b>Prof Fiona Coyer FM (Nursing Research)</b>	Validity of laser speckle contrast imaging for assessment of superficial perfusion in the lower limb of patients with vascular leg and foot ulcers
Stijn Blot (Ghent Uni Belgium)	Sonia Labeau (Ghent Uni Belgium), <b>Prof Fiona Coyer FM (Nursing Research)</b> , Wendy Chaboyer (Griffith), Frances Lin (Griffith)	DecubICUs one-day point-prevalence study on pressure injuries in ICUs
Helen Edwards (QUT)	Kerrie Coleman (Skin Integrity), Patricia Sinasac (TPCH), Kathleen Finlayson (QUT), <b>Prof Fiona Coyer FM (Nursing Research)</b> , Christina Parker (QUT), Jessica Schluter (TPCH)	Reducing the prevalence and severity of wounds through implementation of the Champions for Skin Integrity Model – Protecting Skin Integrity (PSI)
Walsh T, McKenzie C, Lone N, Aitkin L, Parker R, Kydonaki C, <b>Reade MC</b> , Dark P, Gordon A, Morris S, McAuley D, Weir C, Blackwood B, Page V, Perkins G.	<b>Michael Reade (RBWH)</b>	Alpha 2 agonists for sedation to produce Better outcomes from critical illness (A2B Trial): a randomised, parallel-group, allocation concealed, controlled, open, phase 3 pragmatic clinical and cost effectiveness trial with internal pilot
Winearls	<b>Anthony Holley (RBWH)</b>	Fibrinogen Concentrate vs. Cryoprecipitate
Monash University	<b>Michael Reade (RBWH), Anthony Holley (RBWH)</b>	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

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
The George Institute	<b>Jeffrey Lipman (RBWH)</b>	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)
Rogers, C	<b>Jason Roberts (RBWH), Jeffrey Lipman (RBWH)</b>	Screening Anti-Fungal Exposure in Intensive Care Units The SAFE-ICU Study An international, multi-centre prospective pharmacokinetic evaluation of antifungal drug exposure in intensive care unit patients receiving conventional dosing regimens
Eastwood, G	<b>Michael Reade (RBWH)</b>	Targeted Therapeutic Mild Hypercapnia After Resuscitated Cardiac Arrest A Phase III Multi-Centre Randomised Controlled Trial
Merck	<b>Jeffrey Lipman (RBWH), John Gowardman (RBWH)</b>	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
Chapman, A	<b>Neil Widdecombe (RBWH)</b>	Validation of a 10-minute spontaneous breathing trial to predict time to circulatory death in organ donation candidates
AKPA – Asahikasei	<b>John Gowardman (RBWH)</b>	A randomized, double-blind, placebo-controlled, phase 3 study to assess the safety and efficacy of ART-123 in subjects with severe sepsis and coagulopathy
Kwok Ho	<b>Anthony Holley (RBWH)</b>	Detailed assessment of risks and benefits of inferior vena cava filters on patients with complicated injuries (the da Vinci Trial)
Koulenti, D	<b>Jeffrey Lipman (RBWH)</b>	International Study on No Socomial Pneumonia in Intensive Care. An international multi-centre prospective observational cohort study of nosocomial pneumonia in intensive care units
Monash University	<b>O'Donoghue</b>	Early Goal Directed Sedation vs. Standard Care Sedation Sedation Practices in Intensive Care Evaluation: SPICE III: A Prospective Multicentre Randomised Controlled Trial of Early Goal Directed Sedation Compared with Standard Care in Mechanically Ventilated Patients in Intensive Care
Paterson/Harris/ Schlebusch/	<b>Jeffrey Lipman (RBWH)</b>	Assessing the effects of antibiotic choice on gut microbiota of ICU pts – a metagenomic approach
Bala Venkatesh	<b>Jeremy Cohen (RBWH)</b>	Vascular Responsiveness in Shock
David Evans	<b>Jeremy Cohen (RBWH)</b>	Gene Expression in Septic Shock
Antje Blumenthal	<b>Jeremy Cohen (RBWH)</b>	WNT Expression in Sepsis

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Prof Fiona Coyer FM (Nursing Research/ Intensive Care Services)</b>	Vice-Chancellor’s Award for Excellence	2018 Vice-Chancellor’s Award for Excellence ceremony, Queensland University of Technology, 20 July 2018
<b>Michael Reade</b>	Best Military-Academic Collaboration (Frozen platelet trial)	United States Military Health Symposium
<b>Michael Reade</b>	Elected a Bragg Fellow, Royal Institution of Australia	
<b>Jeffrey Lipman</b>	2018 Warwick Parer Award for outstanding contribution to RBWH Medical Research	RBWH and RBWH Foundation Awards 2018

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Bryan Gregory, Dwarakanathan Ranganathan, Fiona Coyer FM</b>	Renal Medicine, Nursing and Midwifery Research Centre, Department of Intensive Care Services	The effects of renal replacement therapy on immunosuppressive drug concentrations	Royal Brisbane and Women's Hospital Foundation	\$20,000	\$40,000 (2018-2019)
<b>Jill Campbell, Judith Eddy, Andrea Garrett, Kerri Coleman, Maree Grier, Cara Masterson, Fiona Coyer FM</b>	Skin Integrity, Gynaecology Department, Gynaecology Oncology Department, Psychology Department, Physiotherapy Department, Nursing & Midwifery Research Centre	A multidisciplinary pre-operative optimisation care bundle for women undergoing vulval surgery; a feasibility study	Royal Brisbane and Women's Hospital Foundation	\$13,332.66	\$39,998 (2017-2019)
Kathleen Finlayson, Helen Edwards, <b>Fiona Coyer FM</b>	Critical Care and Clinical Support Services	Validity of laser speckle contrast imaging for assessment of superficial perfusion in the lower limb of patients with vascular leg and foot ulcers	QUT Institute of Health and Biomedical Innovation Mid-Career Research Grant	\$9,554	\$9,554 (2018)
<b>Fiona Coyer FM, Tony Parker, Jill Campbell, Anna Doubrovsky</b>	Nursing and Midwifery Research Centre, Critical Care and Clinical Support Services, Skin Integrity Services, Queensland University of Technology	Biochemical characteristics and healing rates of medical device-related pressure injuries (the MEDICI study); a prospective observational pilot study	Queensland University of Technology, School of Nursing Pilot Grant	\$30,000	\$30,000 (2018)
<b>Fiona Coyer FM, Stacey Watts, Jayesh Dhani, Samantha Keogh</b>	Nursing and Midwifery Research Centre, Critical Care and Clinical Support Services, Queensland University of Technology	Intensive care point of care testing for arterial gas analyses: the INCEPT audit	Queensland University of Technology, New Professor Grant	\$25,000	\$25,000 (2018)
<b>Liu D, Pincus J, Hallt E, Reade MC</b>	Michael Reade / Intensive Care	Clonidine at Low dose postoperatively to Nocturnally Enhance Sleep (CLONES) phase II pilot trial	RBWH Foundation	\$45,000	\$45,000 (2018)
<b>Therese Starr</b>	Intensive Care Services	Equipment request – centrifuge	Private Practice fund	\$9,222.40	\$9,222.40 (2018)
Wainwright C, <b>Scott Bell</b> , Wason J, Thomson R, <b>Jason Roberts</b> , Coin L, Byrnes J, Tiddens H, Grimwood K, Ahern S	Intensive Care Services	A platform clinical trial approach to the management of Mycobacterium abscessus complex	Medical Research Futures Fund Lifting Clinical Trials and Registries Capacity (LCTRC) grant	\$418,236	\$2,091,178 (2018-2022)
Raby E, Manning L, <b>Jason Roberts</b>	Intensive Care Services	An in vitro study of the stability of ceftolozane-tazobactam in elastomeric infusor devices for ambulatory care	Merck Sharp and Dohme Australia	\$48,382.20	\$48,382.20 (2018-2019)
Reed S, <b>Jeffrey Lipman, Roberts JA, David Paterson</b> , McCombe P, Wallis S	Intensive Care Services	Ion Mobility Separation of challenging clinical samples	University of Queensland Major Equipment and Infrastructure and NHMRC Equipment Grant	\$84,983	\$84,983 (2018-2019)
<b>Jason Roberts</b> , Dorofaeff T, Parker S	Intensive Care Services	Advanced treatment of infectious diseases for critically ill children, through innovation in blood sampling	Children's Hospital Foundation Preclinical and Clinical Research Grant	\$86,215	\$295,445 (2018-2019)
Blaskovich M, Cooper M, Hansford K, <b>Jason Roberts, David Paterson</b>	Intensive Care Services	Lipopeptide antibiotics for XDR Gram-negative infections	NHMRC Development Grant	\$331,632	\$994,897.15 (2018-2020)

## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Kevin Chu, Judith Bellapart</b> , Winter C, Jeffree R, <b>Jeffrey Lipman, Jacobus Ungerer</b> , Pelecanos A, <b>Nathan Brown, Anthony Brown</b>	Intensive Care Services	Timing of lumbar puncture for the detection of xanthochromia in subarachnoid haemorrhage	RBWH and RBWH Foundation	\$39,978.43	\$39,978.43 (2018-2019)
Liu D, <b>Michael Reade, Jason Pincus</b> , Hallt E	Intensive Care Services	Clonidine at Low dosage postOperatively to Nocturnally Enhance Sleep (CLONES)	RBWH and RBWH Foundation	\$30,097.38	\$30,097.38 (2018-2019)

## 2018 Research Publications

### Journal Articles:

1. Kumta N, **Coyer FM F**, David M. Perioperative factors and pressure ulcer development in postoperative ICU patients: a retrospective review. *Journal of Wound Care*. 2018. 27(8):475-485
2. Kynoch K, Chang A, **Coyer FM F**, McArdle A. Developing a model of factors that influence meeting the needs of family with a relative in ICU. 2018. *Int J Nurs Pract*. 8: e12693
3. Chaboyer WP, Thalib L, Harbeck EL, **Coyer FM F**, Blot S, Bull CF, Nogheira PC, Lin FF. Incidence and prevalence of pressure injuries in adult intensive care patients: a systematic review and meta-analysis. *Critical Care Medicine*. 2018. Doi: 10.1097/CCM
4. Beeckman D, Van den Bussche K, Alves P, Arnold Long MC, Beele H, Ciprandi G, **Coyer FM F**, de Groot T, De Meyer D, Deschepper E, Dunk AM, Fourie A, Garcia-Molina P, Gray M, Iblasi A, Jelnes R, Johansen E, Karadağ A, Leblanc K, Kis Dadara Z, Meaume S, Pokorna A, Romanelli M, Ruppert S, Schoonhoven L, Smet S, Smith C, Steining A, Stockmayr M, Van Damme N, Voegeli D, Van Hecke A, Verhaeghe S, Woo K & Kottner J. Towards an international language for Incontinence-Associated Dermatitis (IAD): design and evaluation of psychometric properties of the Ghent Global IAD Categorisation Tool (GLOBIAD) in 30 countries. *British Journal of Dermatology*. 2018. doi:10.1111/bjd.16327
5. **Coyer FM F**, Cook J-L, Doubrovsky A, Campbell J, **Vann A**, McNamara G. Understanding contextual barriers and enablers to pressure injury prevention practice in an Australian intensive care unit: an exploratory study. *Australian Critical Care*. <https://doi.org/10.1016/j.aucc.2018.02.008>
6. Johnson S, Fox A, **Coyer FM F**. Factors influencing nursing student off campus clinical performance: a retrospective audit study. *Journal of Nursing Education*. 2018; 57(6): 333-338
7. **Coyer FM F**, Campbell J. Incontinence-associated dermatitis in the critically ill patient: an intensive care perspective. *Nursing in Critical Care*. 2018; 23(4): 198-206
8. Johnson S, **Coyer FM F**, Nash R. Kirkpatrick's Evaluation of Simulation and Debriefing in Health Care Education: a Systematic Review. *Journal of Nursing Education*. 2018;57(7):393-398
9. Barakat-Johnson M, Lai M, Gefen A, **Coyer FM F**. Evaluation of a fluidised positioner to reduce occipital pressure injuries in intensive care patients: a pilot study. *International Wound Journal*. 2018. <https://doi.org/10.1111/iwj.13051>
10. Fullbrook P, Miles S, **Coyer FM F**. Prevalence of pressure injury in adults presenting to the emergency department by ambulance. *Australian Critical Care*. 2018. <https://doi.org/10.1016/j.aucc.2018.10.002>
11. Hughes JA, Cabilan CJ, Williams J, Ray M, **Coyer FM F**. The effectiveness of interventions to reduce peripheral blood culture contamination in acute care: a systematic review protocol. *BMC Systematic Reviews*. 2018. <https://doi.org/10.1186/s13643-018-0877-4>
12. **Reade MC** & Liu D. Optimising sleep in the ICU. *ICU Management*, 3-2018, 200-204
13. Cap AP, Pidcoke HF, et al. incl. **Reade MC**. Damage Control Resuscitation. *Military Medicine*, 2018; 183 (Suppl. 2): 36-43
14. Cap AP, Beckett A, et al. incl. **Reade MC**. Whole Blood Transfusion. *Military Medicine*, 2018; 183 (Suppl. 2): 44-51
15. Cap AP, Badloe J, et al. incl. **Reade MC**. The use of frozen and deglycerolized red blood cells. *Military Medicine*, 2018; 183 (Suppl. 2): 52-54
16. Zhu R, Allingstrup MJ, Perner A, Doig GS; Nephro-Protective Trial Investigators Group (incl. **Reade MC**). The Effect of IV Amino Acid Supplementation on Mortality in ICU Patients May Be Dependent on Kidney Function: post Hoc Subgroup Analyses of a Multicenter Randomized Trial. *Critical Care Medicine*, 2018; 46(8): 1293-1301
17. Shackelford S, del Junco D, **Reade MC**, Bell R, Becker T, Gurney J, McCafferty R, Marion D. Association of time to craniectomy with survival in combat casualties. *Neurosurgical Focus*, in press, accepted 13 Sep 18
18. **Widdicombe N & Reade MC**. Did epinephrine increase the number of organ donors after cardiac arrest? *New England Journal of Medicine*, in press, accepted 01 DEC 18
19. Rosenfeld JV, Mitra B, Smit DeV, Fitzgerald M, Butson B, Stephenson M, **Reade MC**. Preparedness for treating victims of terrorist attacks in Australia – learning from recent military experience. *Emergency Medicine Australasia*, 2018; May 9. doi: 10.1111/1742-6723.13091
20. Marks DC, Johnson L, **Reade MC**. A clinical trial of frozen platelets: rationale, protocol and pilot analysis plan. *ISBT Science Series*, 2018; 10.1111/voxs.12406 (publish ahead of print 22 JAN 18)
21. Woolley T, Strandenes G, et al. incl. **Reade MC**. Trauma Hemostasis and Oxygenation Research (THOR) Network position paper on the role of hypotensive resuscitation as part of remote damage control resuscitation. *Journal of Trauma and Acute Care Surgery*, 2018; 84(6), S3-S13

### Journal Articles: (cont):

22. Blazak P, **Presneill J, Reade MC**. Early repeat computed tomographic imaging in transferred trauma and neurosurgical patients: incidence, indications and impact. *Journal of Medical Imaging and Radiation Oncology*, 2018; Feb 5. doi: 10.1111/1754-9485.12711. [Epub ahead of print]
23. Lee-Archer P, McBride C, Paterson R, **Reade M**, Regli-von Ungern Sternberg B, Long D. Does dexmedetomidine given as a premedication or intraoperatively reduce post-hospitalisation behaviour change in children? A study protocol for a randomised controlled trial in a tertiary paediatric hospital. *BMJ Open*, 2018; 8(4): e019915
24. Vickers ML, Coorey CP, Milinovich GJ, Eriksson L, Assoum M, **Reade MC**. Bibliometric analysis of military trauma publications: 2000–2016. *Journal of the Royal Army Medical Corps*, 2018; 164(3): 142-149
25. **Dhanani J**, Barnett A, **Lipman J, Reade MC**. Strategies to reduce inappropriate laboratory blood test orders in intensive care are effective and safe: a before-and-after quality improvement study. *Anaesthesia and Intensive Care*, 2018; 46(3): 313-320
26. **Reade MC**. Cultural influences on the rates, acceptability and utility of advance care directives. *Anaesthesia Critical Care & Pain Medicine*, 2018; 37(2): 101-103
27. Udy AA, Jarrett P, **Lassig-Smith M, Stuart J**, Starr T, Dunlop R, Deans R, **Roberts JA**, Senthuran S, Boots R, Bisht K, Bulmer AC, **Lipman J**. Augmented Renal Clearance in Traumatic Brain Injury: a Single-Center Observational Study of Atrial Natriuretic Peptide, Cardiac Output, and Creatinine Clearance. *J Neurotrauma*. 2017 Jan 1;34(1):137-144
28. Sime FB, Johnson A, Whalley S, Santoyo-Castelazo A, Montgomery AB, Walters KA, **Lipman J**, Hope WW, **Roberts JA**. Pharmacodynamics of aerosolized fosfomycin and amikacin against resistant clinical isolates of *Pseudomonas aeruginosa* and *Klebsiella pneumoniae* in a hollow-fiber infection model: experimental Basis for Combination Therapy. *Antimicrob Agents Chemother*. 2016 Dec 27;61(1). pii: e01763-16. doi: 10.1128/AAC.01763-16. Print 2017 Jan
29. Sjövall F, Alobaid AS, Wallis SC, Perner A, **Lipman J, Roberts JA**. Maximally effective dosing regimens of meropenem in patients with septic shock. *J Antimicrob Chemother*. 2018 Jan 1;73(1):191-198
30. De Waele JJ, Akova M, Antonelli M, Canton R, Carlet J, De Backer D, Dimopoulos G, Garnacho-Montero J, Kesecioglu J, **Lipman J**, Mer M, Paiva JA, Poljak M, **Roberts JA**, Rodriguez Bano J, Timsit JF, Zahar JR, Bassetti M. Antimicrobial resistance and antibiotic stewardship programs in the ICU: insistence and persistence in the fight against resistance. A position statement from ESICM/ESCMID/WAAAR round table on multi-drug resistance. *Intensive Care Med*. 2018 Feb;44(2):189-196. Epub 2017 Dec 29
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118. Toulouse E, Maseguin C, Lafont B, McGurk G, Harbonn A, **Roberts JA**, Granier S, Dupeyron A, Bazin JE. French legal approach to clinical research. *Anaesth Crit Care Pain Med* 2018; 607-14
119. Stewart A, **Roberts JA**, Wallis SC; Allworth AM, Legg A, McCarthy KL. Evidence of clinical response and stability of ceftolozane/tazobactam used to treat a carbapenem-resistant *Pseudomonas aeruginosa* lung abscess on an outpatient antimicrobial program. *Int J Antimicrob Agents* 2018; 51: 941-942
120. Rhodes NJ, Liu J, **Lipman J, Roberts JA**. Author response to: piperacillin-tazobactam: extended infusion vs continuous infusion. *Crit Care Med* 2018; 46(7): e725-e726
121. **Roberts JA**. Beta-lactam therapeutic drug monitoring in the critically ill children: big solution for infections in small people? *Crit Care Med* 2018; 46(2):335-337
122. Dahyot-Fizelier C, Marchand S, **Lipman J**. Is augmented renal clearance the Holy Grail of antibiotic therapy failure in ventilator-acquired pneumonia? *Anaesth Crit Care Pain Med* 2018; 37: 5-6
123. Williams JM, Greenslade JH, Dymond CA, Chu K, Brown AF, **Lipman J**. Characteristics, treatment and outcomes for all emergency department patients fulfilling criteria for septic shock: a prospective observational study. *Eur J Emerg Med* 2018; 25: 97-104
124. **Dhanani J**, Barnett A, **Lipman J, Reade MC**. Strategies to reduce inappropriate laboratory blood test orders in intensive care are effective and safe: A before-and-after quality improvement study. *Anaesth Intens Care* 2018; 46: 313-320
125. McCullough J, **Lipman J**, Presneill J. The statistical curriculum within randomized controlled trials in critical illness. *Crit Care Med* 2018; 46: 1985-1990.

### Book Chapters / Letters:

1. **Reade MC**, White JO, Bleeker C. Trauma Critical Care. In: *Manual of the Definitive Surgery in Trauma Care, 5<sup>th</sup> edition*. Boffard K, ed. Boca Raton: CRC Press, in press, accepted 26 Oct 18
2. **Reade MC**, Bleeker C. Military anaesthesia. In: *Manual of the Definitive Surgery in Trauma Care, 5<sup>th</sup> edition*. Boffard K, ed. Boca Raton: CRC Press, in press, accepted 02 Aug 18
3. Milford EM & Reade MC. Resuscitation fluid choices to preserve the endothelial glycocalyx. In: annual Update in Intensive Care and Emergency Medicine 2019. Berlin: Springer-Verlag, in press, accepted 10 Sep 18
4. Reade MC, Rosenfeld J. Triage. In: *Disaster neurosurgery*. AO foundation, Davos, 2018
5. **Liu D, Reade MC**. Central alpha-2 adrenoceptor agonists in intensive care. In: *Annual Update in Intensive Care and Emergency Medicine 2018*. Berlin: Springer-Verlag, in press, accepted 11 Sep 17.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. Campbell J, Coleman K, Hocking K, **Coyer FM F**. Lack of recognition and treatment of pain for people with incontinence-associated dermatitis: A call for action. Wounds Australia National Conference. Adelaide, Australia. October 2018
2. **Coyer FM F**. Efficacy of Incontinence-Associated Dermatitis interventions for critically ill patients in intensive care: the Distinct pilot RCTI. Wounds Australia National Conference. Adelaide, Australia. October 2018
3. Chaboyer W, Thalib L, Harbeck E, **Coyer FM F**, Blot S, Bull C, Nogueira P and Lin F. Incidence and prevalence of pressure injuries in adult intensive care patients: A systematic review and meta-analysis. Australian and New Zealand Annual Scientific Meeting on Intensive Care. Adelaide, Australia. October 2018. Best nursing free paper (\$1,500)
4. **Coyer FM F**. Reducing intensive care medical device-related pressure injuries caused by nasogastric and endotracheal tubes: a pilot study. 20th Annual Meeting of the European Pressure Ulcer Advisory Panel. Rome, Italy. 12-14 September 2018
5. **Coyer FM F**. How to build nursing research in ICU. Queensland Critical Care Research Forum, Sunshine Coast, Australia. May 2018
6. **Reade MC**. Should benzodiazepines be abandoned in the ICU? *34<sup>th</sup> World Congress of Internal Medicine, Cape Town, 2018*
7. **Reade MC**. How to improve sleep quality in the ICU? *34<sup>th</sup> World Congress of Internal Medicine, Cape Town, 2018*
8. **Reade MC**. Prevention and management of delirium. *Australian Commission on Safety and Quality in Health Care webinar series: Caring for Cognitive Impairment*. September 2018. <https://www.youtube.com/watch?v=z7XocVITrpk>
9. **Reade MC**. Fibrinogen Concentrate and Viscoelastic Testing – Targeting the Essence of Trauma Coagulopathy, or an Unholy Alliance? *Australian and New Zealand Intensive Care Society Annual Scientific Meeting, Adelaide, 2018*
10. **Reade MC**. Cryopreserved platelets – how far forward? *Australian Tactical Medical Association conference, Brisbane, 2018*
11. **Reade MC**. Treating Acute Traumatic Coagulopathy in the austere or prehospital environment. *Blood conference (combined Annual Scientific Meeting of the Haematology Society of Australia and New Zealand, Australian and New Zealand Society of Blood Transfusion, and the Thrombosis and Haemostasis Society of Australia and New Zealand), Brisbane, 2018*

### Invited Speaker: (cont):

12. Marks DC, Johnson L, **Reade MC**. Cold stored and cryopreserved platelets. *Blood conference (combined Annual Scientific Meeting of the Haematology Society of Australia and New Zealand, Australian and New Zealand Society of Blood Transfusion, and the Thrombosis and Haemostasis Society of Australia and New Zealand)*, Brisbane, 2018
13. **Reade MC**. Military trauma: what might not translate into civilian practice? *Australasian Trauma Society annual scientific meeting*, Perth, 2018
14. **Reade MC**. Nerve agents: an update. *Australasian Trauma Society annual scientific meeting*, Perth, 2018
15. **Reade MC**. Frozen platelets: current practice, evidence, evidence gaps and clinical research programs underway. *International Society of Blood Transfusion Annual Meeting*, Toronto, 2018
16. **Reade MC**. Australian combat casualty care research. The Technical Co-operation Program – Technical Panel 22 (Military Medicine) annual meeting, Ottawa, 2018. **Reade MC**. Should benzodiazepines be abandoned in the ICU? *38<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine*, Brussels, 2018
17. **Reade MC**. The golden hour is fool's gold – so what trauma metric should we use? *38<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine*, Brussels, 2018
18. **Reade MC**. We need to co-enrol patients in trials. *38<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine*, Brussels, 2018
19. **Reade MC**. Chemical warfare. *38<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine*, Brussels, 2018
20. **Reade MC**. The SOSP phases of fluid management: salvage. *38<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine*, Brussels, 2018
21. **Reade MC**. Military contributions to modern trauma, emergency and critical care medicine. *38<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine*, Brussels, 2018. (invited conference opening plenary session)
22. **Reade MC**. Military trauma registries are more than informative. *38<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine*, Brussels, 2018
23. **Reade MC**. Lyophilised plasma and other new resuscitation options. *38<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine*, Brussels, 2018
24. **Reade MC**. The SYNAPSE observational study of intracranial pressure monitoring. *ANZICS Clinical Trials Group Annual Meeting on Clinical Trials in Intensive Care*, Noosa, 2018
25. **Reade MC**. Replacing the NATO 10:1:2 trauma metric with a 1:1 goal. *Queensland Trauma Symposium*, Brisbane, 2018
26. **Reade MC**. Clinical research is possible virtually anywhere – even during a war. *Australian Academy of Health and Medical Sciences Clinical Science Symposium*, Brisbane, 2018
27. **Roberts JA**. “Population PK – an introduction”. Antimicrobial Pharmacokinetic-Pharmacodynamics (PKPD) Workshop, Kuala Lumpur, Malaysia, September 2018
28. **Roberts JA**. “Therapeutic Drug Monitoring of beta-lactams in ICU – is this ready for prime time?” Antimicrobial Pharmacokinetic-Pharmacodynamics (PKPD) Workshop, Kuala Lumpur, Malaysia, September 2018
29. **Roberts JA**. “Antibiotic dosing and optimization”. Antibiotic Masterclass, University of Malaya, Kuala Lumpur, Malaysia, September 2018
30. **Roberts JA**. “Meet the Expert: Treating the treatment: infections in critically ill patients requiring ECMO” European Conference on Clinical Microbiology and Infectious Diseases, Madrid, Spain, April 2018
31. **Roberts JA**. “Do we need beta-lactam TDM or can we just use prolonged infusions?” European Conference on Clinical Microbiology and Infectious Diseases, Madrid, Spain, April 2018
32. **Roberts JA**. “Challenging breakpoints with supranormal dosing: where is the limit in terms of side effects with higher dosing, and can toxicodynamics help?” European Conference on Clinical Microbiology and Infectious Diseases, Madrid, Spain, April 2018
33. **Roberts JA**. “Posaconazole table and IV formulation: Clinical and Real World Evidence Overview” European Conference on Clinical Microbiology and Infectious Diseases, Madrid, Spain, April 2018
34. **Lipman J**. MASTER CLASS: KEY ISSUES IN SEPTIC SHOCK – “Using biomarkers in sepsis management”. Euro Asia European Society of Intensive Care Medicine, Hong Kong, 2018
35. **Lipman J**. MASTER CLASS: AKI AND RRT – “Drug dosing during RRT”. Euro Asia European Society of Intensive Care Medicine, Hong Kong, 2018
36. **Lipman J**. “Beta Lactams – Better by Continuous Infusion”. 2<sup>nd</sup> World Sepsis Congress, Web Lecture, September 2018
37. **Lipman J**. 34<sup>th</sup> World Congress of Internal Medicine, Cape Town, South Africa, October 2018
38. **Lipman J**. 31<sup>st</sup> Annual European Society of Intensive Care Medicine Meeting, Paris, France, October 2018
39. **Lipman J**. Optimization of antimicrobial therapy in the Intensive Care Unit in the era of resistance and stewardship. Norway, October 2018.

### Oral Presentations:

1. **Reade MC.** Cryopreserved Platelets for Surgical Bleeding: Protocol for the CLIP-II Trial based on CLIP-I Pilot Data. *American Association of Blood Banks Annual Congress*, Boston, 2018. (Plenary session; ranked in top 1% of 600 abstracts accepted for presentation)
2. **Reade MC.** The Cryopreserved vs. Liquid Platelets trial (CLIP-II) protocol and practical implications. *Australian and New Zealand College of Anaesthetists Clinical Trial Network Strategic Research Workshop*, Sydney, 2018. (ranked the top proposal presented at the meeting)
3. **Reade MC, Marks D, Bellomo R, Deans, R, Fraser J, Gattas D, Holley A, Irving D, Johnson L, Pearse B, Royle A, Wong J.** Cryopreserved platelets for surgical bleeding: results of the CLIP clinical trial. *Military Health Services Research Symposium*, Florida, 2018
4. Shackelford S, del Junco D, **Reade MC**, Bell R, Becker T, Gurney J, McCafferty R, Marion D. Association of time to craniectomy with survival in combat casualties. *Military Health Services Research Symposium*, Florida, 2018
5. The Steroid Story ANZICS ACCN ASM 2018 Adelaide. **Cohen J.**

### Poster Presentations:

1. Simonova G, Marks DC, Johnson L, **Reade MC**, Tung JP. Characterisation of microparticles present in cryopreserved sheep platelet concentrates *Blood conference*, Brisbane, 2018
2. Simonova G, Marks DC, Johnson L, **Reade MC**, Tung JP. Sheep platelet microparticles: comparison to human platelet microparticles and investigation of storage-associated changes. *Blood conference*, Brisbane, 2018
3. Milford EM, **Liu D, Lipman J**, Tung JP, Winearls J, Wullschlegler M, **Reade MC.** A pilot observational cohort study of endothelial glycocalyx shedding in severe trauma patients. *Military Health Services Research Symposium*, Florida, 2018
4. Boots R, **Townsend S** "Clinical Management Practices of Life-Threatening Asthma: An Audit of Practices in Intensive Care". Currently accepted for publication in *Critical care and resuscitation* in 2019, date to be confirmed.

### Other communications and outputs:

#### Grant Reviews

##### Jason Roberts

1. French Ministry of Health Clinical Research Program, Grant Reviewer, Bureau Innovation et Recherche Clinique, 2018
2. Finovi, Foundation Innovations in Infection, External Grant Reviewer, University of Lyon, France, 2018
3. Thesis Reviewer, PhD, University of Technology Sydney, Australia, 2018
4. Intensive Care Foundation, Grant Reviewer, 2018
5. NHMRC Practitioner Fellowship Panel, Panel member, 2018.

#### Media Activities

##### Jason Roberts

Education segment, Channel 9, Brainbuzz, "Viruses and Infections". October 5<sup>th</sup>, 2018.

## Nursing and Midwifery Services, Intensive Care Services – Prof Fiona Coyer

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Hajar Alasmari	PhD, Queensland University of Technology (2012-2018)	Examining Intensive Care Nurses' Clinical decision-making associated with acute kidney injury and continuous renal replacement therapy in Saudi Arabia	Prof Ann Bonner, <b>Prof Fiona Coyer</b>
Sonia Hines	PhD, Queensland University of Technology	An educational intervention to improve nurses' research literacy	Prof Joanne Ramsbotham, <b>Prof Fiona Coyer,</b>
Sandra Johnston	PhD, Queensland University of Technology	Effectiveness of high fidelity simulation as a teaching tool in undergraduate nursing education	<b>Prof Fiona Coyer,</b> Prof Robyn Nash
<b>Lizanne Dagleish</b>	PhD, Queensland University of Technology	The role of microcirculatory dysfunction and skin breakdown in the critically ill	<b>Prof Fiona Coyer, Dr Jill Campbell,</b> Dr Kathy Finlayson, <b>Prof Andre VanZundert</b>
Adrianna Hada	PhD, Queensland University of Technology (2017- 2021)	Transforming patient outcomes through improved and effective nursing clinical handover	<b>Prof Fiona Coyer,</b> Dr Leanne Jack
Paul Jarrett	PhD, Queensland University of Technology (2017-2021)	Administration of antibiotics in the intensive care unit	<b>Prof Fiona Coyer,</b> Prof Sam Keogh, Prof Jason Roberts
Anthony Batterbury	PhD, Queensland University of Technology (2018-2023)	How sick is too sick and how heavy too heavy? Quantifying the clinical acuity and dependency of ward patients whom have triggered emergency response systems in order to understand service delivery boundaries and define thresholds for escalation or resource mobilisation	<b>Prof Fiona Coyer,</b> Clint Douglas
Hannah Rheault	Doctor Health Science, Queensland University of Technology (2014-2019)	Examining the health literacy and chronic disease self-management of remote Aboriginal Australians: a mixed method study	Prof Ann Bonner, <b>Prof Fiona Coyer</b>
Leanne Stone	Doctor Health Science, Queensland University of Technology (2014-2019)	Comparing "Magnet" attributes in nursing between Australia and the United States	<b>Prof Fiona Coyer,</b> Prof Ray Chan, Prof Alexandra McCarthy
<b>Bryan Gregory</b>	PhD, Queensland 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	<b>Prof Fiona Coyer,</b> Prof Jason Roberts, Prof Ann Bonner
Jessica Ingleman	Masters of Applied Science (Research), Queensland University of Technology (2016-)	Exploring tissue reperfusion in two body positions and varied load periods in critically ill patients (EXTREME 2 pressure study)	<b>Prof Fiona Coyer,</b> Dr Christina Parker
David McIntyre	PhD, Queensland University of Technology (2016-)	Developing and validating haemodialysis nurse-sensitive indicators	Prof Ann Bonner, <b>Prof Fiona Coyer</b>

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Jessica Ingleman	Project Manager	The effect of time spent in a position on critically ill patient's skin: the EXTREME pressure 2 study.  Extreme pressure study: exploring pressures, tissue reperfusion and body positioning – a pilot evaluation among critically ill patients	QUT (2014-2018)
Jane-Louise Cook	Project Manager	Efficacy of nasogastric and endotracheal tube secu <b>REMENT</b> Devices, preventative dressings and topical skin applications for reducing device-related pressure injuries in intensive care patients; the REMEDy study, a randomised controlled trial  Translating evidenced-based pressure injury prevention into the intensive care environment: the SUSTAIN trial	QUT (2014-2018)
Anna Doubrovsky	Project Manager	Efficacy of Incontinence-Associated <b>DermatitIS</b> interven <b>Tio</b> ns for critically ill patients in intensive care; the Distinct pilot randomised control trial	QUT (2016-2018)
<b>Fiona Coyer</b>	Visiting Professor	Institute for skin integrity and infection prevention	University of Huddersfield (2016-present)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Prof Fiona Coyer (Nursing Research and Critical Care)</b>	<b>Jill Campbell (Skin Integrity)</b>	Efficacy of incontinence-associated dermatitis interventions for critically ill patients in intensive care; the Distinct pilot randomised control trial
<b>Prof Fiona Coyer (Nursing Research and Critical Care)</b>	Tony Parker (QUT), <b>Jill Campbell (Skin Integrity)</b> , Anna Doubrovsky (QUT)	BiocheMical characteristics and hEaling rates of medical device-related pressure Injuries (the MEDICI study); a prospective observational pilot study
<b>Prof Fiona Coyer (Nursing Research)</b>	<b>Stacey Watts (Intensive Care Unit)</b> , <b>Jayesh Dhanani (Intensive Care Unit)</b> , Samantha Keogh (QUT)	Intensive care point of care testing for arterial gas analyses: the INCEPT audit

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Rachael Bailey (Caboolture Hospital, ICU)	Alexis Tabah (Redcliffe Hospital, ICU), Manesh Ramanen (Redcliffe Hospital, ICU). <b>Prof Fiona Coyer (Nursing Research and ICU)</b>	Survey of family visiting in ICU – WELCOME – ICU Study
Kate Kynoch (Mater Hospital)	<b>Prof Fiona Coyer (Nursing Research &amp; ICU)</b> , Marian Mitchell (PAH/GU), Gary Von Dohren (Redcliffe Hospital, ICU)	IvES family visiting study
Kathleen Finlayson (QUT)	Helen Edwards (QUT), <b>Prof Fiona Coyer (Nursing Research)</b>	Validity of laser speckle contrast imaging for assessment of superficial perfusion in the lower limb of patients with vascular leg and foot ulcers
Stijn Blot (Ghent Uni Belgium)	Sonia Labeau (Ghent Uni Belgium), <b>Prof Fiona Coyer (Nursing Research)</b> , Wendy Chaboyer (Griffith), Frances Lin (Griffith)	DecubICUs one-day point-prevalence study on pressure injuries in ICUs
Helen Edwards (QUT)	<b>Kerrie Coleman (Skin Integrity)</b> , Patricia Sinasac (TPCH), Kathleen Finlayson (QUT), <b>Prof Fiona Coyer (Nursing Research)</b> , Christina Parker (QUT), Jessica Schluter (TPCH)	Reducing the prevalence and severity of wounds through implementation of the Champions for Skin Integrity Model – Protecting Skin Integrity (PSI)

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Prof Fiona Coyer (Nursing Research/Intensive Care Services)</b>	Vice-Chancellor's Award for Excellence	2018 Vice-Chancellor's Award for Excellence ceremony, Queensland University of Technology, 20 July 2018

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Bryan Gregory, Dwarakanathan Ranganathan, Fiona Coyer</b>	Renal Medicine, Nursing and Midwifery Research Centre, Department of Intensive Care Services	The effects of renal replacement therapy on immunosuppressive drug concentrations	Royal Brisbane and Women's Hospital Foundation	\$20,000	\$40,000 (2018-2019)
<b>Jill Campbell, Judith Eddy, Andrea Garrett, Kerri Coleman, Maree Grier, Cara Masterson, Fiona Coyer</b>	Skin Integrity, Gynaecology Department, Gynaecology Oncology Department, Psychology Department, Physiotherapy Department, Nursing and Midwifery Research Centre	A multidisciplinary pre-operative optimisation care bundle for women undergoing vulval surgery; a feasibility study	Royal Brisbane and Women's Hospital Foundation	\$13,332.66	\$39,998 (2017-2019)
Kathleen Finlayson, Helen Edwards, <b>Fiona Coyer</b>	Critical Care and Clinical Support Services	Validity of laser speckle contrast imaging for assessment of superficial perfusion in the lower limb of patients with vascular leg and foot ulcers	QUT Institute of Health and Biomedical Innovation Mid-Career Research Grant	\$9,554	\$9,554 (2018)

## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Fiona Coyer, Tony Parker, Jill Campbell,</b> Anna Doubrovsky	Nursing and Midwifery Research Centre, Critical Care and Clinical Support Services, Queensland University of Technology	BiocheMical characteristics and hEaling rates of medical device-related pressure Injuries (the MEDICI study); a prospective observational pilot study	Queensland University of Technology, School of Nursing Pilot Grant	\$30,000	\$30,000 (2018)
<b>Fiona Coyer, Stacey Watts, Jayesh Dhani,</b> Samantha Keogh	Nursing and Midwifery Research Centre, Critical Care and Clinical Support Services, Queensland University of Technology	Intensive care point of care testing for arterial gas analyses: the INCEPT audit	Queensland University of Technology, New Professor Grant	\$25,000	\$25,000 (2018)

## 2018 Research Publications

### Journal Articles:

1. Kumta N, **Coyer F**, David M. Perioperative factors and pressure ulcer development in postoperative ICU patients: a retrospective review. *Journal of Wound Care*. 2018. 27(8):475-485
2. Kynoch K, Chang A, **Coyer F**, McArdle A. Developing a model of factors that influence meeting the needs of family with a relative in ICU. 2018. *Int J Nurs Pract*. 8: e12693
3. Chaboyer WP, Thalib L, Harbeck EL, **Coyer F**, Blot S, Bull CF, Nogueira PC, Lin FF. Incidence and prevalence of pressure injuries in adult intensive care patients: a systematic review and meta-analysis. *Critical Care Medicine*. 2018. Doi: 10.1097/CCM
4. Beeckman D, Van den Bussche K, Alves P, Arnold Long MC, Beele H, Ciprandi G, **Coyer F**, de Groot T, De Meyer D, Deschepper E, Dunk AM, Fourie A, Garcia-Molina P, Gray M, Iblasi A, Jelnes R, Johansen E, Karadağ A, Leblanc K, Kis Dadara Z, Meaume S, Pokorna A, Romanelli M, Ruppert S, Schoonhoven L, Smet S, Smith C, Steininger A, Stockmayr M, Van Damme N, Voegeli D, Van Hecke A, Verhaeghe S, Woo K & Kottner J. Towards an international language for Incontinence-Associated Dermatitis (IAD): design and evaluation of psychometric properties of the Ghent Global IAD Categorisation Tool (GLOBIAD) in 30 countries. *British Journal of Dermatology*. 2018. doi:10.1111/bjd.16327
5. **Coyer F**, Cook J-L, Doubrovsky A, Campbell J, Vann A, McNamara G. Understanding contextual barriers and enablers to pressure injury prevention practice in an Australian intensive care unit: an exploratory study. *Australian Critical Care*. <https://doi.org/10.1016/j.aucc.2018.02.008>
6. Johnson S, Fox A, **Coyer F**. Factors influencing nursing student off campus clinical performance: a retrospective audit study. *Journal of Nursing Education*. 2018; 57(6): 333-338
7. **Coyer F**, Campbell J. Incontinence-associated dermatitis in the critically ill patient: an intensive care perspective. *Nursing in Critical Care*. 2018; 23(4): 198-206
8. Johnson S, **Coyer F**, Nash R. Kirkpatrick's Evaluation of Simulation and Debriefing in Health Care Education: a Systematic Review. *Journal of Nursing Education*. 2018;57(7):393-398
9. Barakat-Johnson M, Lai M, Gefen A, **Coyer F**. Evaluation of a fluidised positioner to reduce occipital pressure injuries in intensive care patients: A pilot study. *International Wound Journal*. 2018. <https://doi.org/10.1111/iwj.13051>
10. Fullbrook P, Miles S, **Coyer F**. Prevalence of pressure injury in adults presenting to the emergency department by ambulance. *Australian Critical Care*. 2018. <https://doi.org/10.1016/j.aucc.2018.10.002>
11. Hughes JA, Cabilan CJ, Williams J, Ray M, **Coyer F**. The effectiveness of interventions to reduce peripheral blood culture contamination in acute care: A systematic review protocol. *BMC Systematic Reviews*. 2018. <https://doi.org/10.1186/s13643-018-0877-4>.

## Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. Campbell J, Coleman K, Hocking K, **Coyer F**. Lack of recognition and treatment of pain for people with incontinence-associated dermatitis: A call for action. Wounds Australia National Conference. Adelaide, Australia. October 2018
2. **Coyer F**. Efficacy of Incontinence-Associated Dermatitis interventions for critically ill patients in intensive care: The Distinct pilot RCTI. Wounds Australia National Conference. Adelaide, Australia. October 2018
3. Chaboyer W, Thalib L, Harbeck E, **Coyer F**, Blot S, Bull C, Nogueira P and Lin F. Incidence and prevalence of pressure injuries in adult intensive care patients: a systematic review and meta-analysis. Australian and New Zealand Annual Scientific Meeting on Intensive Care. Adelaide, Australia. October 2018. Best nursing free paper (\$1,500)
4. **Coyer F**. Reducing intensive care medical device-related pressure injuries caused by nasogastric and endotracheal tubes: a pilot study. 20<sup>th</sup> Annual Meeting of the European Pressure Ulcer Advisory Panel. Rome, Italy. 12-14 September 2018.
5. **Coyer F**. How to build nursing research in ICU. Queensland Critical Care Research Forum, Sunshine Coast, Australia. May 2018.

## Professor Tess Cramond Multidisciplinary Pain Centre

The Professor Tess Cramond Multidisciplinary Pain Centre (PTCMPC) has continued to build research involvement and collaborations throughout 2018. It is the vision of this Centre to continue this growth.

### The Highlights for 2018 were:

- Dr Nicole Andrews (Occupational Therapist) being awarded a 'Rising Star Award' at the 2018 Metro North Research Excellence Awards evening on 22 May 2018. 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
- A new collaboration in 2018 is with the Occupational Therapy Department and this includes research projects around virtual reality distraction during dressing changes in the burn-injured patient and a PhD on 'Is sensory sensitivity a factor in non-adherence with compression garments post-burn'
- A further collaboration from 2018 is with the Trauma Service looking at, 'An investigation of the prevalence, impact, and management of chronic pain post trauma at a tertiary public hospital'. Further work in this area will look at opioid stewardship following major trauma.

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 2020.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Genevieve O'Donoghue	PhD CQU (2018-2020)	Couples, attachment and chronic pain	Pamela Meredith (CQU), Jenny Strong (OT), <b>Nicole Andrews</b>
<b>Erin Molloy</b>	MPhil (2018 – present)	Is sensory sensitivity a factor in non-adherence with compression garments post-burn	Pamela Meredith (CQU), <b>Jenny Strong</b> (OT), <b>Paul Gray</b>
Siti Sarah Fazalul Rahiman	PhD (2013-2017)	The potential role of DYN A (1-17) fragments as an immunotherapeutic target in peripheral inflammation. Research based at PACE	Peter Cabot, <b>Paul Gray</b>

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Nicole Andrews</b>	Postdoctoral Research Fellow, RBWH Postdoctoral Research Fellow	RECOVER Injury Research Centre, Towards understanding how much activity is too much for individuals with chronic pain	The University of Queensland (2018-2019)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Nicole Andrews</b>	Marlien Varnfield (CSIRO), David Ireland (CSIRO)	Towards understanding how much is too much for individuals with chronic pain
<b>Nicole Andrews</b>	Belinda Long (OT), Jenny Strong (OT), Sue Laracy (OT)	Evaluation of occupational therapy interventions within the orthopaedic physiotherapy screening clinic
<b>Nicole Andrews</b>	Olivia Zheng (Trauma Service), Jodie Ross (Trauma Service), Venerina Johnston (UQ), Elise Gane (UQ), Esther Smits (UQ), Charlotte Brakenridge (UQ), <b>Paul Gray</b> , Michael Rudd (Trauma Service)	An investigation of the prevalence, impact, and management of chronic pain post trauma at a tertiary public hospital
Robyn Scheer (OT)	<b>Nicole Andrews</b> , Erin Molloy (OT)	The effect of limb position on leg circumference measurements in patients diagnosed with lower limb lymphoedema
<b>Erin Molloy</b>	Pamela Meredith (CQU), <b>Jenny Strong</b> (OT), <b>Paul Gray</b>	Is sensory sensitivity a factor in non-adherence with compression garments post-burn

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Charlotte Brakenridge (UQ), Venerina Johnston (UQ), Esther Smits (UQ), Elise Gane (UQ)	<b>Nicole Andrews</b>	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)	<b>Nicole Andrews</b>	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)	<b>Nicole Andrews</b>	Recovery following a road traffic crash – a Delphi Study
Jessica Thackeray (UQ), Sophie Bowen (UQ), Cory Poll (UQ), Pamela Meredith (CQU)	Jenny Strong (OT), <b>Nicole Andrews</b>	“Can Sensory- and Attachment-Informed approaches be used to modify perceptions of pain?”
Louise Burgess (Bournemouth University, UK), Thomas Wainwright (Bournemouth University, UK)	<b>Nicole Andrews</b>	What is the evidence for occupational therapy interventions in general surgical pathways and do they have a role in ERAS pathways? A systematic review.
Lynn DeBar (Kaiser Permanente Centre for Health Research, Portland, USA), Meghan Mayhew (Kaiser Permanente Centre for Health Research, Portland, USA)	<b>Nicole Andrews</b>	PPACT Administrative Supplement for Research on Sleep Disturbances and Impact on Chronic Pain

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Nicole Andrews</b>	Rising Star Award	2018 Metro North Research Excellence Awards, 22 May 2018



## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Nicole Andrews</b> , Marlien Varnfield (CSIRO), David Ireland (CSIRO)	Occupational Therapy, OPSC, and the Professor Tess Cramond Multidisciplinary Pain Centre	The development and implementation of a mobile health platform to support activity pacing implementation in chronic pain	Metro North LINK funding scheme	\$7,137	\$60 000 (2017-2018)
Erin Molloy (OT), <b>Paul Gray</b> , Amber Jones (OT)	OT/Pain	Immersive virtual reality in immersive wound care	CAHRLI Innovation Challenge 2017-2018	\$2,000	\$2,000 (2018)
<b>Nicole Andrews</b> , Marlien Varnfield (CSIRO), David Ireland (CSIRO)	Occupational Therapy, OPSC, and the Professor Tess Cramond Multidisciplinary Pain Centre	The development and implementation of a mobile health platform to support activity pacing implementation in chronic pain	RBWH Foundation Postdoctoral Fellowship	\$50,000	\$50,000 (2018)
Julia Lee, <b>Paul Gray</b> , Rebecca Kimble	Department of Anaesthesia and Perioperative Medicine	ROTEM and platelet function in pre-eclamptic obstetric patients	CSL Behring ANZCA Research Award	\$70,000	\$70,000 (2018)

## 2018 Research Publications

### Journal Articles:

1. **Andrews NE, Strong J**, Meredith PJ, & Brandjerporn GS. Approach to activity engagement and differences in activity participation in chronic pain: a five-day observational study, *Australian Occupational Therapy Journal*. 2018; doi:10.1111/1440-1630.12516
2. Morgan M, Deuis JR, Frosig-Jorgensen M, Lewis RJ, Cabot PJ, **Gray P**, Vetter I. (2018) Burn Pain: a Systematic and Critical Review of Epidemiology, Pathophysiology, and Treatment. *Pain Medicine*, 19 (4): 708-734.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Andrews N**. Overactivity in chronic pain: myth or reality? 17<sup>th</sup> World Congress on Pain, September 2018
2. **Andrews N**. The development and implementation of a mobile health platform to support activity pacing in chronic pain. Australian Pain Society 38<sup>th</sup> and New Zealand Pain Society Conjoint Annual Scientific Meeting, April 2018
3. **Gray P**. Clinical Pain Research: The Need; the Challenge. Brisbane Pain Research Forum, Institute of Molecular Biosciences, University of Queensland.

### Oral Presentations:

1. Rahiman S, Morgan M, **Gray P**, Shaw N and Cabot P. Biotransformation of DYN 1-17 in inflamed nasal tissues: potential immunotherapeutics for chronic rhinosinusitis. International Conference on Drug Discovery and Translational Medicine 2018. Putrajaya, Malaysia.

### Poster Presentations:

1. **Clubb B**. Circumstances Associated with Inappropriate Opioid Prescribing. Combined Australian Pain Society and New Zealand Pain Society Annual Scientific Congress. Sydney Australia.

## Skin Integrity Services

Skin integrity Services are involved in wide ranging research into all aspects skin integrity and wound management – pathophysiology, diagnostics and interventions.

Skin Integrity Services undertakes its own research activities and partners with researchers from a number of Australian Universities.

### 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>
<b>Kerrie Coleman</b>	PhD Candidate, CQU	The lived experience of intimacy as described by persons living with chronic wounds	Professor Kerry Reid-Searl, Dr Matt Eliot
<b>Lizanne Dalgliesh</b>	PhD Candidate, QUT		<b>Jill Campbell</b>

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University <i>(years)</i>
Monica Stankiewicz	Honorary Research Fellow RBWH		QUT
Dr Jill Campbell	Visiting Fellow QUT		QUT

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Dr Jill Campbell	Kerrie Coleman, Kathy Hocking	A multidisciplinary pre-operative optimisation care bundle for women undergoing vulval surgery; a feasibility study. The Optimise study
Dr Jill Campbell	Brigid Gillespie, Rachel Walker, Wendy Chaboyer, Marie Cooke, and Jennifer Whitty. AI: Lukman Thalib, Sharon Latimer, Donna McClean, 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)
Dr Dianne Smith	Kerrie Coleman	ELECT, Randomised Controlled Trial comparing wound healing with compression therapy to Electrical Stimulation La Trobe University – recruitment underway
Dr Dianne Smith	Kerrie Coleman	Feasibility study Perfusion measures matched up with clinical assessment of CVI and PAD; using a laser speckle contrast imaging camera – associate investigator; Principle Investigator Professor Helen Edwards QUT
Kerrie Coleman	Pat Sinasac; Dr Alison Mudge	Reducing the prevalence and severity of wounds through implementation of the Champions for Skin Integrity Model – protecting Skin Integrity (PSI) – Associate investigator; Principle Investigator Kathleen Finlayson QUT
Dr Dianne Smith	Kerrie Coleman	An adaptive trial of the effectiveness of topical anti-inflammatory agents on pain in patients with chronic venous leg ulcers: pilot study Principle Investigator Kathleen Finlayson QUT (QUT recruiting)

### 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Jill Campbell</b>	Skin Integrity Services	A multidisciplinary pre-operative optimisation care bundle for women undergoing vulval surgery; a feasibility study. The Optimise study	RBWH Foundation Project Grant	\$39,000	\$39,000 (2018)

## 2018 Research Publications

### Journal Articles:

1. Webster, J., Scuffham, P., **Stankiewicz, M.**, & Chaboyer, W. P. Negative pressure wound therapy for skin grafts and surgical wounds healing by primary intention. *The Cochrane Library*. Current review – accepted and awaiting publication 2018
2. Smith M, Ticchi M, Adkins S, Bennett N, Nair D...**Campbell J** (2018). National Wound and infection collaborative group; a pathway for identification and management of fungal infections associated with incontinence-associated dermatitis. *Infection, Disease and Health* 23(S17)
3. Lee, YC, **Campbell J**, Doubrovsky A, McGarry A, Coyer F. (2018). A descriptive exploratory survey of incontinence-associated dermatitis in the intensive care setting: The ADDRESS study. *Wound Practice and Research*, 26(4), 170-173
4. **Stankiewicz, M.** & Wyland, M. (2017) A review of suspected antiseptic burns intra-operatively: a quality improvement review. *ACORN Journal* (accepted and awaiting publication)
5. Gordon, J., **Stankiewicz, M.**, Pollock, H., Christensen, M., Barker-Gregory, N. & Dulhunty, J. (2017) A trial of two prophylactic sacral dressings (2PSD) in the prevention of stage 1 sacral pressure injury in the critically ill patient: a study protocol. *Wound Practice and Research*, 25(2) 82-87
6. Coyer, F. **Campbell, J.** (2017) Incontinence dermatitis in the critically ill patient: an intensive care perspective. *Nursing in Critical Care*
7. **Campbell J.** (2018). Frenotomy for tongue-tie in newborn infants. *International Journal of Nursing Studies*. Doi.org/10.1016/j.ijnurstu.2018.03.022
8. **Campbell J** (2018). HMG CoA reductase inhibitor (statins) for preventing acute kidney injury after surgical procedures requiring cardiac bypass. *Journal of Perioperative Practice* 28(6)142-143
9. Edwards, H. E., Parker, C. N., Miller, C., Gibb, M., Kapp, S., Ogrin, R., Anderson, J., Coleman, K., **Smith D., & Finlayson, K.** (2017). Predicting delayed healing: the diagnostic accuracy of a venous leg ulcer risk assessment tool. *International Wound Journal*
10. Finlayson, Kathleen J., Christina N. Parker, Charne Miller, Michelle Gibb, Suzanne Kapp, Rajna Ogrin, Jacinta Anderson, **Kerrie Coleman, Dianne Smith**, and Helen E. Edwards. "Predicting the likelihood of venous leg ulcer recurrence: the diagnostic accuracy of a newly developed risk assessment tool." *International wound journal* (2018).

### Invited Speaker

1. **Campbell J** (2018). The Skin Safety Model. *Wounds Australia National Conference*, October, Adelaide, Australia
2. **Campbell J** (2018). Lack of recognition and treatment of pain for people with incontinence-associated dermatitis: a call for action. *Wounds Australia National Conference*, October, Adelaide, Australia
3. **Campbell J** (2018). The Skin Safety Model. *Wound Ostomy and Continence Nurses National Conference*, Philadelphia, USA.

### Other Communications and Outputs:

Dr Jill Campbell – author for Cochrane Nursing Care Field. Three Cochrane Review summaries under review.

Dr Jill Campbell recipient of the Janelle and Robert Bird Early Career Fellowship RBWH Foundation.

Elect Trial (LaTrobe – recruiting)

Speckle (QUT – awaiting ethics)

FICLUS (QUT – completed)

PSI (QUT – underway)

Anti-inflammatory dressings trial (QUT recruiting)

Dr Jill Campbell is the lead AI for RBWH for the following project.

Brigid Gillespie, Rachel Walker, Wendy Chaboyer, Marie Cooke, & 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).

The background of the image is a composite. On the left, there is a close-up, high-magnification view of a petri dish containing a red agar medium. Several distinct, circular bacterial colonies are visible, each with a textured, slightly raised appearance. On the right side, there is a blurred, grayscale image of a document containing chemical structures. These structures include various functional groups such as amide bonds, amine groups, and carbonyl groups, typical of pharmaceutical or biochemical research.

**INTERNAL MEDICINE**

**SERVICES**

## Internal Medicine Services



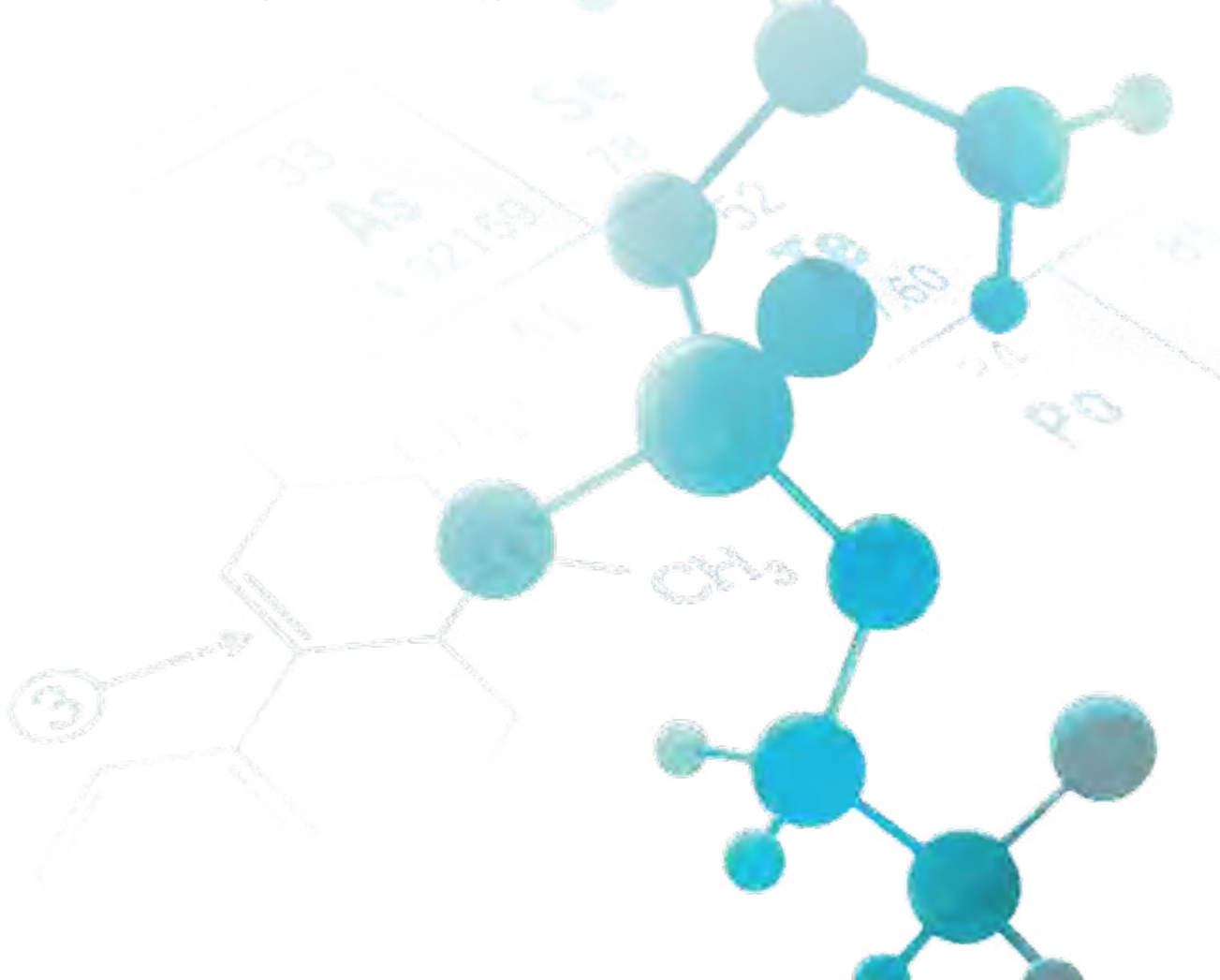
**Prof. Keshwar Baboolal**  
Executive Director  
Internal Medicine Services, RBWH

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 2018, 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, however, also allows our patients to be involved in the latest therapies and diagnostics, have access to the newest medicines, and also to the best models of care under tight monitoring conditions.

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. On behalf of the IMS Executive team I would like to express our acknowledgment and gratitude for all staff within Internal Medicine Services that contribute to the Research outcomes that benefit our patients. We are all very proud of your achievements.



# Department of Cardiology

## About this service:

The cardiology department has a broad investigator-driven research program with a focus on health service research/evaluation. Much of this research has grown from the efforts of clinicians to improve models of care with interdisciplinary collaboration.

## Highlights of 2018:

A **telehealth model of stress testing and Holter monitoring** has been developed through innovation funding to provide services to regional centres throughout Queensland, where the joint supervision and reporting of tests is provided by RBWH Cardiology staff through video link.

To promote ongoing education of doctors and cardiac scientists, **the inaugural Cardiac Imaging in Cardiomyopathies and Heart Failure meeting**, showcasing the expertise built up around the state-wide Cardiomyopathy clinic at the RBWH, was held at the Edwin Tooth Centre, and drew delegates from other states as well as New Zealand.

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 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**. We informed the development of the **Heart Failure Reporting Outcomes (HERO) database**, which is tracking healthcare measures for all patients referred to heart failure services in 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)
- National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand (CSANZ) Heart Failure Guidelines Working Group (Chair)
- Therapeutic Guidelines Cardiovascular Expert Group
- Australian Government Medical Services Advisory Committee (MSAC)
- 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
- 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.

## 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>
<b>Roberts, Tiffany</b>	MPhil	Rural Hospital Chart Audit on Cardiac Investigations	<b>Adam Scott, Robert Mullins</b>
<b>Martin, Curtis</b>	Honours	Remote Control Exercise Stress Testing	<b>Adam Scott</b>
<b>Poulter, Rohan</b>	PhD, UQ (from 2012) (part-time, deferred)	Evaluating the diagnostic performance of dual energy cardiac computed tomography	<b>John Atherton, John Younger</b>
<b>Lo, Ada</b>	PhD, UQ (from 2014) <i>(part-time)</i>	Identification of new echocardiographic parameters in distinguishing between familial cardiomyopathy genotypic positive patients with and without phenotypic expression	<b>John Atherton, Arnold Ng, William Wang, Kristyan Guppy-Coles, Sandhir Prasad</b>
<b>Lancini, Daniel</b>	PhD, UQ (from 2015) <i>(part-time)</i>	Atrial fibrillation in the hospital setting	<b>Paul Martin, Sandhir Prasad, John Atherton, Louise Cullen, Robert Boots</b>
<b>Prasad, Sandhir</b>	PhD, UQ (from 2017) <i>(part-time)</i>	Left ventricular diastolic dysfunction following myocardial infarction: prevalence, predictors and prognosis	<b>John Atherton, John Younger, Kristyan Guppy-Coles</b>
<b>Conradie, Andre</b>	MPhil, UQ (from 2016) <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	<b>John Atherton, Stephen Worthley, D Eccleston</b>
<b>Wicramasingha Arachchilage, Nuwan</b>	Master App Sci (Res), QUT <i>(from 2017)</i>	The clinical utility of salivary galectin-3 in heart failure	<b>Chamindie Punyadeera, Nathan Subramaniam, John Atherton</b>
<b>McCreanor, Victoria</b>	PhD, QUT	Identifying high value care for stable coronary artery disease in Australia. Prof Nick Graves	<b>N Graves, A Barnett, William Parsonage</b>
<b>Foran, Laura</b>	MPhil, QUT	Clinical presentation characteristics of Aboriginal and Torres Strait Islander patients presenting to an Emergency Department with suspected Acute Coronary Syndrome	<b>R Mahoney, William Parsonage, M Gatton, L Cullen</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University <i>(years)</i>
<b>William Parsonage</b>	Professor and Clinical Director	Australian Centre for Health Service Innovation	QUT (2016-)
<b>Adam Scott</b>	Adjunct Professor	Faculty of Health	QUT (2009–2021)
<b>John Atherton</b>	Professor of Cardiology and Heart Failure Management	Faculty of Science, Health, Education and Engineering	University of Sunshine Coast (2017-2020)
<b>John Atherton</b>	Adjunct Professor	Faculty of Health	QUT (2018-2020)
<b>John Atherton</b>	Honorary Fellow	Department of Medicine, Royal Melbourne Hospital, Faculty of Medicine, Dentistry and Health Sciences	The University of Melbourne (2017-2021)
<b>Arun Dahiya</b>	<b>Adjunct Associate Professor</b>	<b>Faculty of Health</b>	Griffith University (2015-current)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Adam Scott</b>	<b>Adam Scott, Alice McDonald, Tiffany Roberts, John Atherton, Paul Scuffham</b>	Tele-Cardiac Investigations to support rural/regional hospitals
<b>Kristyan Guppy-Coles, John Atherton, Sandhir Prasad</b>	<b>Arun Dahiya, Arnold Ng, Kym Smith, Ada Lo, Sam Hillier</b>	Novel 3D echocardiography techniques of left ventricular functional assessment: utilisation in routine clinical practice and screening
<b>Ada Lo, John Atherton, Kristyan Guppy-Coles</b>	<b>Arnold Ng, William Wang, Sandhir Prasad</b>	Identification of new echocardiographic parameters in distinguishing between familial cardiomyopathy genotypic positive patients with and without phenotypic expression
<b>Sandhir Prasad, John Atherton, John Younger, Kristyan Guppy-Coles</b>	<b>Liza Thomas, Tony Stanton, James Anderson, Ada Lo, Joanne Sippel, Christopher Kwan, Kym Smith</b>	Left ventricular diastolic dysfunction following myocardial infarction: prevalence, predictors and prognosis

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Sandhir Prasad, John Atherton, Kristyan Guppy-Coles, Po-Ling Inglis, Joanne Sippel</b>	<b>Kym Smith, Ada Lo, Arun Dahiya</b>	Evaluation of oncology staff performing 3D-echocardiographic left ventricular function assessment for monitoring chemotherapy-induced cardiotoxicity
<b>Kristyan Guppy-Coles, Sandhir Prasad, John Atherton, Ada Lo</b>	<b>Kym Smith, Patrick Beard, James Armstrong, Terena Truloff</b>	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
Sanjoy Paul, Olga Montvida, <b>John Atherton</b>	Kerenaftali Klein, Julius Agbeve	Evaluation of the association of old and new anti-diabetes drugs with the risk of heart failure in patients with type 2 diabetes
<b>Cullen L, Parsonage W, McCormack L, Grenslade J</b>	Cullen L, <b>Parsonage W, McCormack L</b> , Milburn T, Starmer G, Stone R, Starmer K, <b>Greenslade J</b>	The impact of ImpACT: a protocol to improve emergency chest pain assessment
<b>Daniel Lancini, Paul Martin, Sandhir Prasad</b>	<b>Rob Boots</b>	New onset atrial fibrillation in the critically ill
<b>Daniel Lancini, Paul Martin, Sandhir Prasad</b>	<b>Louise Cullen, Jaimi Greenslade</b>	Atrial fibrillation in the emergency chest pain presentation
<b>Arun Dahiya</b> , Rick Jackson (Logan Hospital)	<b>Arun Dahiya</b>	Advanced Cardiovascular Imaging in Patients with Myotonic Dystrophy

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
<b>Alison Mudge, Charles Denaro, Adam Scott</b> , Julie Adsett, Robert Mullins, G Javorsky, <b>John Atherton</b> , Paul Scuffham, Thomas Marwick, Peter O'Rourke (Department of Internal Medicine and Aged care)	<b>Adam Scott, John Atherton</b>	A supervised exercise programme following hospitalisation for heart failure: does it add to disease management?
Jo Wu, <b>John Atherton</b> , Anne Chang, Mary Courtney, Esben Strodl, Steven McPhail (QUT)	<b>John Atherton</b>	Improving delivery by Ehealth-Assurance for Life (IDEAL)
Chamindie Punyadeera, <b>John Atherton</b> , Benjamin Schulz, Goce Dimeski, Karam Kostner (QUT)	<b>John Atherton</b>	Novel diagnostics for heart failure
Robyn Clark, Alexandra McCarthy, <b>John Atherton</b> , Bogda Koczwara, Narelle Berry, Tania Marin, Kerri Gillespie, Jonathon Foote, Sina Vatandoust (Flinders University)	<b>John Atherton</b>	Development of a cardiotoxicity cardiovascular risk assessment tool
Sanjoy Paul, Olga Montvida, <b>John Atherton</b> , Kerenaftali Klein, Julius Agbeve (QIMR)	<b>John Atherton</b>	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, <b>John Atherton (SAHMRI)</b>	<b>John Atherton, John Younger, Paul Martin</b>	Cardiovascular Magnetic Resonance GUIDEd management of mild-moderate left ventricular systolic Heart Failure (CMR GUIDE HF)
Briffa T, <b>Cullen L</b> , Chew D, Knuiman M, Fatovich D, Hickman P, <b>Parsonage W</b> , Nedkoff L, Sanfilippo F, Hillis G, Mitra B, Wilkes G, Schneider H, Rankin J, Karmon J, Scanlan S, Stapleton S, Mather V	<b>William Parsonage, Louise Cullen</b>	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, <b>Karin Lust</b> , Jon Hyett, <b>William Parsonage</b> , Zhuoyang Li	<b>William Parsonage</b>	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, <b>John Atherton</b> , Paul Harnett (Baker ID)	<b>John Atherton, Sandhir Prasad, Joanne Sippel, Arun Dahiya, Louise McCormack, John Younger</b>	Benefit of 2D-strain surveillance in improving cardiovascular outcomes in cancer patients undergoing cardiotoxic chemotherapy
Sanjeeva Kularatna, Nicholas Graves, <b>William Parsonage</b> (AusHSI/QUT)	<b>William Parsonage</b>	Feasibility of using Smartphone app to collect patient reported outcome measurement on patients with cardiovascular disease
Sanjeeva Kularatna, Paul Scuffham, <b>William Parsonage</b> , Joshua Byrnes, Gang Chen, <b>John Atherton</b> (AusHSI, QUT, Griffith)	<b>William Parsonage, John Atherton</b>	Development of cardiovascular disease specific multi attribute utility instrument to assist utility measurement in cardiovascular conditions; a case for economic evaluations



## 2018 Research Awards and Achievements

Recipient	Award	Event
Sandhir Prasad	Australasian Sonologist of the Year 2018	Australasian Society of Ultrasound in Medicine
Stephen Tomlinson (Supervisor Sandhir Prasad)	Queensland Case of the Year Competition Winner	Cardiac Society of Australia and New Zealand Queensland Regional Branch
Tele-Cardiac Investigations, (Adam Scott, Alice McDonald, Tiffany Roberts, Justin O'Connor)	Winner – Metro North Staff Excellence Award	Metro North Staff Excellence Awards

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Briffa T, <b>Cullen L</b> , Chew D, Knuiman M, Fatovich D, Hickman P, <b>Parsonage W</b> , 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)	\$299,250	\$1,197,000.00 (2017- 2020)
T Marwick, L Thomas, A Taylor, A Spencer, A La Gerche, C Tam, S Loi, P Mollee, <b>J Atherton</b> , 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)	\$478,395.80	\$2,391,979.00 (2017-2021)
<b>Adam Scott</b> , <b>John Atherton</b>	Tele-Cardiac Investigations/ Cardiology RBWH	Statewide Tele-Cardiac Investigations	Health Improvement Unit, Metro North HHS, Qld Health	\$543,000.00	\$1,629,000.00 (2017-2019)

## 2018 Research Publications

### Journal articles:

- 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* 2018 Oct 10. doi: 10.1111/dme.13835
- Tomlinson S**, **Atherton J**, **Prasad S**. Primary Carnitine Deficiency: a rare, reversible metabolic cardiomyopathy. *Case Rep Cardiol* 2018 Sep 13; 2018:3232105. doi: 10.1155/2018/3232105
- Atherton JJ**, Sindone A, De Pasquale CG, Driscoll A, MacDonald PS, Hopper I, Kistler, P, Briffa TG, Wong J, Abhayaratna WP, Thomas L, Audehm R, Newton PJ, O'Loughlin J, Connell C, Branagan M. National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Australian clinical guidelines for the management of heart failure 2018. *Med J Aust* 2018;209:363-9
- Atherton JJ**, Sindone A, De Pasquale CG, Driscoll A, MacDonald PS, Hopper I, Kistler, P, Briffa TG, Wong J, Abhayaratna WP, Thomas L, Audehm R, Newton PJ, O'Loughlin J, Branagan M, Connell C. National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand Guidelines for the prevention, detection and management of heart failure in Australia 2018. *Heart Lung Circ* 2018;27:1123-1208. doi: 10.1016/j.hlc.2018.06.214
- Prasad SB**, Holland DJ, **Atherton JJ**. Diastolic stress echocardiography: from basic principles to clinical applications. *Heart* 2018; 104:1739-48
- Ramsay SC**, **Lindsay K**, **Fong W**, **Patford S**, **Younger J**, Atherton J. Tc-HDP quantitative SPECT/CT in transthyretin cardiac amyloid and the development of a reference interval for myocardial uptake in the non-affected population. *Eur J Hybrid Imaging* 2018;2(1):17. doi: 10.1186/s41824-018-0035-1
- Prasad S**, Lin AK, **Guppy-Coles K**, Stanton T, Krishnasamy R, Whalley, G, Thomas L, **Atherton JJ**. Diastolic dysfunction assessed by contemporary guidelines and prognosis following myocardial infarction. *J Am Soc Echocardiogr* 2018; 31:1127-36
- Khan E, Brieger D, Amerena J, **Atherton J**, Chew D, Farshid A, Ilton M, Juergens C, Kangaharan N, Rajaratnam R, Sweeny A, Walters D, Chow C. Gender differences in management and outcomes of patients presenting with ST-elevation myocardial infarction: a prospective registry from Australia. *Med J Aust* 2018; 209:118-23
- Tomlinson S**, **Atherton JJ**. Heart failure: the crucial role of the GP. *Medicine Today* 2018; 19:19-26
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14. Montvida O, Shaw J, **Atherton JJ**, Stringer F, Paul SK. Long-term trends in antidiabetic drug usage in the US: Real-world evidence in patients newly diagnosed with type 2 diabetes. *Diabetes Care* 2018; 41:69-78
15. Richardson E, Spinks C, Davis A, Turner C, **Atherton J, McGaughran J**, Semsarian C, Ingles J. Psychosocial implications of living with catecholaminergic polymorphic ventricular tachycardia in adulthood. *J Genet Couns* 2018; 27:549-57. DOI 10.1007/s10897-017-0152-1
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20. Greenslade J, Cho E, Van Hise C, Hawkins T, **Parsonage W**, Ungerer J, Tate J, Pretorius C, Than M, Cullen L. Evaluating Rapid Rule-out of Acute Myocardial Infarction Using a High-Sensitivity Cardiac Troponin I Assay at Presentation. *Clin Chem*. 2018 May;64(5):820-829
21. Greenslade JH, Carlton EW, Van Hise C, Cho E, Hawkins T, **Parsonage WA**, Tate J, Ungerer J, Cullen L. Diagnostic Accuracy of a New High-Sensitivity Troponin I Assay and Five Accelerated Diagnostic Pathways for Ruling Out Acute Myocardial Infarction and Acute Coronary Syndrome. *Ann Emerg Med*. 2018 Apr;71(4):439-451
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25. Chapman AR, Lee KK, McAllister DA, Cullen L, Greenslade JH, **Parsonage W**, Worster A, Kavsak PA, Blankenberg S, Neumann J, Sørensen NA, Westermann D, Buijs MM, Verdel GJE, Pickering JW, Than MP, Twerenbold R, Badertscher P, Sabti Z, Mueller C, Anand A, Adamson P, Strachan FE, Ferry A, Sandeman D, Gray A, Body R, Keevil B, Carlton E, Greaves K, Korley FK, Metkus TS, Sandoval Y, Apple FS, Newby DE, Shah ASV, Mills NL. Association of High-Sensitivity Cardiac Troponin I Concentration with Cardiac Outcomes in Patients with Suspected Acute Coronary Syndrome. *JAMA*. 2017 Nov 21;318(19):1913-1924
26. Van Hise CB, Greenslade JH, **Parsonage W**, Than M, Young J, Cullen L. External validation of heart-type fatty acid binding protein, high-sensitivity cardiac troponin, and electrocardiography as rule-out for acute myocardial infarction. *Clin Biochem*. 2018 Feb; 52:161-163
27. Carlton EW, Pickering JW, Greenslade J, Cullen L, Than M, Kendall J, Body R, **Parsonage WA**, Khattab A, Greaves K. Assessment of the 2016 National Institute for Health and Care Excellence high-sensitivity troponin rule-out strategy. *Heart*. 2018 Apr;104(8):665-672
28. Greenslade JH, Adikari T, Mueller C, Sandoval Y, Nestelberger T, **Parsonage W**, Hawkins T, Cullen L. Characteristics and occurrence of type 2 myocardial infarction in emergency department patients: a prospective study. *Emerg Med J*. 2018 Mar;35(3):169-175
29. 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. *Catheterization and Cardiovascular Interventions* 2018; 1–9. <https://doi.org/10.1002/ccd.27921>
30. Lapostolle F, van't Hof AW, Hamm CW, Stibbe O, Ecollan P, Collet JP, Silvain J, Lassen JF, Heutz W, Bolognese L, Cantor WJ, Cequier A, Chettibi M, Goodman SG, **Hammett CJ**, Huber K, Janzon M, Merkely B, Storey RF, Berg J, Zeymer U, Licour M, Tsatsaris A, Montalescot G. Morphine and ticagrelor interaction in primary percutaneous coronary intervention in ST-segment elevation myocardial infarction: ATLANTIC-Morphine. *American Journal of Cardiovascular Drugs* 2018; <https://doi.org/10.1007/s40256-018-0305-0>
31. **Hammett CJ**, Amerena J, Brieger D, Sindone A, Thompson PL, Worthley MI, Aylward PE. Preventing recurrent events in survivors of acute coronary syndromes in Australia: consensus recommendations using the Delphi process. *Current Medical Research and Opinion* 2018; 34(3): 551-8
32. Bagai A, Goodman SG, Cantor W, Vicaut E, Bolognese L, Cequier A, Chettibi M, **Hammett CJ**, Huber K, Janzon M, Lapostolle F, Lassen JF, Merkely B, Storey RF, ten Berg J, Zeymer U, Diallo A, Hamm C, Tsatsaris A, El Khoury J, van't Hof A, Montalescot G. Duration of Ischemia and Treatment Effects of Pre- Versus In-Hospital Ticagrelor in Patients with ST-Segment Elevation Myocardial Infarction: Insights from the ATLANTIC study. *Am Heart J* 2018; 196: 56-64

### Journal Articles: (cont):

33. Connolly SJ, Eikelboom JW, Bosch J, Dagenais G, Dyal L, Lanan F, Metsarinne K, O'Donnell M, Dans AL, Ha JW, Parkhomenko AN, Avezum AA, Lonn E, Lisheng L, Torp-Pedersen C, Widimsky P, Maggioni AP, Felix C, Keltai K, Hori M, Yusuf S, COMPASS investigators\*. Rivaroxaban with or without aspirin in patients with stable coronary artery disease: an international, randomised, double-blind, placebo-controlled trial. *Lancet*. 2018 Jan 20;391(10117):205-218. doi: 10.1016/S0140-6736(17)32458-3 \* Site PI: **Chris Hammett**.

### Book Publications:

1. Cardiovascular Expert Group (Moulds R, Allardice J, **Atherton J**, Campbell T, Connell C, Curnow J, Dooley S, Gibbs H, Hazell W, Hopper I, Kritharides L, Liew D, Molga A, Nelson M, O'Connor J, Roberts-Thomson K, Scherer D, Strathmore N, Thomas J). Therapeutic guidelines: cardiovascular. Version 7. Melbourne: Therapeutic Guidelines Limited; 2018.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker (J Atherton):

1. **South Australian Health and Medical Research Institute (SAHMRI) Cardiovascular and Diabetes Event, SAHMRI, Adelaide, November 2018. Topic: heart failure workshop**
2. Cardiac Imaging in Cardiomyopathies and Heart Failure, Royal Brisbane and Women's Hospital Edwin M Tooth Auditorium, November 2018 (**Australasian Society for Ultrasound in Medicine (ASUM) Course: 6.75 myASUM CPD/ CME points**). Topic: Imaging in HFrEF: what do the guidelines say?
3. Heart Foundation Webcast, Redbank Conferencing, Sydney, November 2018. Topic: **National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand (NHFA/CSANZ): guidelines for the prevention, detection and management of heart failure in Australia 2018**
4. ThinkGP Webinar, Reed Medical Education, November 2018. Topic: Australian 2018 Heart Failure Guidelines. What's new and how to incorporate into clinical practice
5. Heart Failure Congress 2018, Melbourne, October 2018. Topic: Australian 2018 heart failure guidelines
6. Heart Failure Congress 2018, Melbourne, October 2018. Topic: genetics in heart failure
7. Iron Academy (Vifor), Melbourne, October 2018. Topic: evidence-based guidelines for the use of IV iron in heart failure
8. European Society of Cardiology Congress Roundup, Sydney, September 2018. Topic: 2018 Cardiology Congress Roundup: heart failure
9. South Australian Health and Medical Research Institute (SAHMRI) Clinical Trial Forum, Munich, Germany, September 2018. Topic: heart failure at the ESC 2018
10. **European Society of Cardiology (ESC) Congress 2018, Munich, Germany, August 2018. Late breaking science in heart failure-discussant**
11. 66<sup>th</sup> Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand, Brisbane Convention and Exhibition Centre, Brisbane, August 2018. Topic: **Heart Failure Reporting of Outcomes (HERO) Registry**
12. 66<sup>th</sup> Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand, Brisbane Convention and Exhibition Centre, Brisbane, August 2018. Topic: National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand (NHFA/CSANZ): Guidelines for the prevention, detection and management of heart failure in Australia 2018
13. 66<sup>th</sup> Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand, Brisbane Convention and Exhibition Centre, Brisbane, August 2018. Topic: Genetic testing for the general cardiologist
14. 66<sup>th</sup> Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand Heart Failure Council, Brisbane Convention and Exhibition Centre, Brisbane, August 2018. Topic: National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand (NHFA/CSANZ): Guidelines for the prevention, detection and management of heart failure in Australia 2018 – Introduction and Devices; Surgery and percutaneous procedures
15. **Australian Cardiovascular Health and Rehabilitation Association (ACRA) Annual Scientific Meeting, Hotel Grand Chancellor, Brisbane, August 2018. Topic: management of renal impairment in the heart failure patient. The cardiologist perspective**
16. **Australian Cardiovascular Health and Rehabilitation Association (ACRA) Annual Scientific Meeting, Hotel Grand Chancellor, Brisbane, August 2018. Topic: emerging treatments in heart failure**
17. **Saliva Technology Application Research Symposium (STARS), Queensland University of Technology, Brisbane, July 2018. Topic: a spit test for heart failure? (Keynote speaker)**
18. Annual Women's and Children's Health Update, Royal International Convention Centre, Brisbane, June 2018. Topic: heart failure in women
19. Expert Scientific Forum on MRAs in Heart Failure- following CSANZ New Zealand Annual Scientific Meeting opening ceremony, Christchurch, New Zealand, June 2018. Topic: Mineralocorticoid receptor antagonists and HFrEF. (Declined offer for flights and accommodation-talk given via video conferencing)
20. International Clinical Cardiovascular Genetics Conference, Brisbane Convention and Exhibition Centre, May 2018. Topic: what else could it be? (phenocopies) (Arrhythmogenic cardiomyopathies and sudden death session)
21. International Clinical Cardiovascular Genetics Conference, Brisbane Convention and Exhibition Centre, May 2018. Topic: case presentation (cardiomyopathy) panel member (National Collaborations and Case Presentations session)
22. International Clinical Cardiovascular Genetics Conference Educational Day, Brisbane Convention and Exhibition Centre, May 2018. Topic: what the cardiologist must do before considering a genetic test
23. Amgen One Scientific Symposium Cardiovascular Academy, Sofitel Melbourne on Collins, Melbourne, March 2018. Topic: new developments in heart failure with a reduced ejection fraction

### Invited Speaker (J Atherton) (cont):

24. 4<sup>th</sup> International 4 Corners of Cardiology Meeting, Melbourne, February 2018. Topic: neurohormonal antagonists: the past, present and future
25. 4<sup>th</sup> International 4 Corners of Cardiology Meeting Novartis Symposium, Melbourne, February 2018. Topic: practicalities of treating heart failure patients and considerations when prescribing sacubitril/valsartan
26. 2<sup>nd</sup> Australia New Zealand Alliance of Cardiovascular Trials (ANZACT): Co-chair of the Discussion Group on Proposed and Ongoing Trials in Primary Care/ Prevention/ Heart Failure, followed by report to the whole group to identify trials suitable for “support/ endorsement/ promotion” from ANZACT, Melbourne, February 2018.

### Invited Speaker (C Hammett):

1. Philippines Heart Association Annual Convention & Scientific Meeting, 24 May 2018. Plenary Lecture. Topic: Dual Antiplatelet Therapy and Anticoagulation in NVAf patients undergoing PCI
2. Philippines Heart Association Annual Convention & Scientific Meeting, 24 May 2018. Dinner Symposium. Topic: Practical Perspectives for Stroke Prevention in AF Patients: spotlight on the 2018 EHRA Guidelines
3. 2018 Cardiology Congress Round Up. Sydney 15 September 2018. Topic: ACS/PCI update
4. Cardiac Society of Australia and New Zealand 66<sup>th</sup> Annual Scientific Meeting, Brisbane 3 August 2018. Breakfast Symposium. Topic: Out with the Old and In with the New – Atrial Fibrillation and PCI – Challenges and Perspectives
5. University of Sydney NHMRC Clinical Trials Centre Masterclass on Diabetes and Vascular Disease, Sydney 17 June 2018. Topic: Triple Antithrombotic Therapy in Problem Patients
6. Pfizer Cardiovascular Forum, Sydney 26-27 May 2018. Topic: ACS and AF and the role of NOACs over the long term (Workshop)
7. ADVANCE Symposium (Cardiology Advanced Trainee Symposium), Sydney 5-6 May 2018. Topic: Acute Coronary Syndromes – Secondary Prevention
8. Bayer Thrombosis College Cardiovascular Alliance 4<sup>th</sup> Annual Meeting, Sydney 28-29 April 2018. Plenary talk and workshops. Topics: Triple Therapy 2018 (Antithrombotics and Antiplatelets) – Balancing Conflicting Priorities.

### Invited Speaker (S Prasad):

1. Cardiac Society of Australia and New Zealand ASM, Brisbane, August 2018. Topic: Stress Echocardiography in HFpEF
2. Australasian Society of ultrasound in Medicine Annual Scientific Meeting Auckland, NZ, August 2018. Topic: Beyond the Filling – Advances in the Assessment of Diastolic Function
3. Australasian Society of Ultrasound in Medicine Annual Scientific Meeting, Auckland, NZ, August 2018. Topic: Mechanical Complications of myocardial Infarction
4. Australasian Society of Ultrasound in Medicine Annual Scientific Meeting, Auckland, NZ, August 2018. Topic: Echo After Dark: Complex On-call Echocardiograms
5. Australasian Society of Ultrasound in Medicine (ASUM) Surf, Sand and Soundwaves Conference, Kingscliff, NSW, March 2018. Topic: Complex Pericardial Cases
6. ASUM Surf, Sand and Soundwaves Conference, Kingscliff, NSW, March 2018. Topic: Complex Valvular Cases
7. Cardiac Imaging in Cardiomyopathies and Heart Failure, Royal Brisbane and Women’s Hospital Edwin M Tooth Auditorium, November 2018 (Australasian Society for Ultrasound in Medicine (ASUM) Course: 6.75 myASUM CPD/CME points). Topic: Imaging in HFpEF – an overview).

### Invited Speaker (A Dahiya):

1. Cardiac Imaging in Cardiomyopathies and Heart Failure, Royal Brisbane and Women’s Hospital Edwin M Tooth Auditorium, November 2018 (Australasian Society for Ultrasound in Medicine (ASUM) Course: 6.75 myASUM CPD/CME points) Topic: Arrhythmogenic Right Ventricular Cardiomyopathy
2. Cardiac Imaging in Cardiomyopathies and Heart Failure, Royal Brisbane and Women’s Hospital Edwin M Tooth Auditorium, November 2018 (Australasian Society for Ultrasound in Medicine (ASUM) Course: 6.75 myASUM CPD/CME points). Topic: Left Ventricular Non-Compaction. Australasian Society of Ultrasound in Medicine (ASUM) Surf, Sand and Soundwaves Conference, Kingscliff, NSW, March 2018. Topic: Aortic Regurgitation – ASE Guidelines Update
3. Australasian Society of Ultrasound in Medicine (ASUM) Surf Sand and Soundwaves Conference, Kingscliff, NSW, March 2018. Topic: Mitral Stenosis
4. Australasian Society of Ultrasound in Medicine (ASUM) Surf, Sand and Soundwaves Conference, Kingscliff, NSW, March 2018. Topic: Constrictive Pericarditis.

### Invited Speaker: (A Lo)

1. Cardiac Imaging in Cardiomyopathies and Heart Failure, Royal Brisbane and Women’s Hospital Edwin M Tooth Auditorium, November 2018 (Australasian Society for Ultrasound in Medicine (ASUM) Course: 6.75 myASUM CPD/CME points). Topic: Hypertrophic Cardiomyopathy – Assessment with Echocardiography
2. Australasian Society of Ultrasound in Medicine (ASUM) Surf, Sand and Soundwaves Conference, Kingscliff, NSW, March 2018. Topic: Aortic Stenosis – Low flow low gradient
3. Australasian Society of Ultrasound in Medicine (ASUM) Surf, Sand and Soundwaves Conference, Kingscliff, NSW, March 2018. Topic: Mitral Regurgitation – ASE Guideline Update
4. Australasian Society of Ultrasound in Medicine (ASUM) Surf, Sand and Soundwaves Conference, Kingscliff, NSW, March 2018. Topic: Assessment of Pericardial Effusion.

### Invited Speaker: (Others)

1. Cardiac Imaging in Cardiomyopathies and Heart Failure, Royal Brisbane and Women's Hospital Edwin M Tooth Auditorium, November 2018 (Australasian Society for Ultrasound in Medicine (ASUM) Course: 6.75 myASUM CPD/CME points). Topic: Hypertrophic Cardiomyopathy – Assessment with CT/MRI. (**John Younger**)
2. Cardiac Imaging in Cardiomyopathies and Heart Failure, Royal Brisbane and Women's Hospital Edwin M Tooth Auditorium, November 2018 (Australasian Society for ultrasound in Medicine (ASUM) Course: 6.75 myASUM CPD/CME points. Topic: cardiac Sarcoid. (Charles Chao)
3. Cardiac Imaging in Cardiomyopathies and Heart Failure, Royal Brisbane and Women's Hospital Edwin M Tooth Auditorium, November 2018 (Australasian Society for Ultrasound in Medicine (ASUM) Course: 6.75 myASUM CPD/CME points). Topic: Imaging in Cardiomyopathies: what the EP doc needs. (**Paul Martin**).

### Other Communications and Outputs:

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#### Journal Abstracts:

1. Clark RA, Marin TS, Atherton JJ, Bradley J, Foote J, Grover S, Karapetis CS, Peters R, SelvaNayagam S, Koczwara B. Cardiotoxicity after cancer treatment: comparing clinical practice with guidelines. *J Card Fail* 2018;24(8): S8
2. Yu A, Rowe M, Atherton J, Dahiya A. A rare case of single right coronary artery with absent left main coronary artery. *Heart Lung Circ* 2018;27: S212
3. Prasad A, Lancini D, Guppy-Coles K, Atherton J, Thomas L, Prasad S. Predictors of new-onset atrial fibrillation following myocardial infarction. *Heart Lung Circ* 2018;27: S264
4. Wong W, Nunan T, Hickey A, Denaro C, Adsett J, Peters R, Atherton J. From hospital to home: Insights from the Queensland statewide heart failure support services registry on heart failure transitional care. *Heart Lung Circ* 2018;27: S103
5. Prasad A, Lancini D, Guppy-Coles K, Atherton J, Thomas L, Prasad S. Prognostic value of left atrial function following myocardial infarction. *Heart Lung Circ* 2018;27: S266
6. Guppy-Coles K, Sippel J, Smith K, Inglis P, Lo A, Atherton J, Prasad S. Accuracy of Oncology Nurses Performing Three-Dimensional left ventricular ejection fraction assessment on previously-acquired image acquisitions. *Heart Lung Circ* 2018;27: S212-S213
7. Wong Y, Hickey A, Nunan T, Adsett J, Denaro C, Peters R, Atherton J. Gender differences in patient characteristics and quality-of-care indicators among referrals to Queensland statewide heart failure support services. *Heart Lung Circ* 2018;27: S104
8. Coppock C, Singh S, Guppy-Coles K, Armstrong J, Beard P, Atherton J. Correlation between key diastolic parameters and outcomes in patients with myocardial infarction. *Heart Lung Circ* 2018;27: S89-S90
9. Dahiya A, Abdul Razak K, Hawkins A, Khoo T, Burrage M, Challa V, Atherton J, Jackson R. Early detection of cardiac structural and functional abnormalities in adult myotonic dystrophy type 1 patients using advanced cardiac magnetic resonance imaging. *Heart Lung Circ* 2018;27: S236
10. Ha T, Atherton J, Chuan F, Douglas C, Ellem F, Mok L, Robertson L, Shah S, Steel L, Wood B, Rofail S. Sacubitril-Valsartan: snapshot of a new heart failure medication. *Heart Lung Circ* 2018;27: S128
11. Atherton J, Branagan M, Sindone A, Abhayaratna W, Driscoll A, De Pasquale C, Hopper I, MacDonald P, Kistler P, Newton P, Audehm R, Briffa T, Wong J, O'Loughlin J, Thomas L. The National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand guidelines for the prevention, detection, and management of chronic heart failure in Australia 2018. *Heart Lung Circ* 2018;27: S139-S140
12. Wicramasingha Arachchilage NTK, Zhang X, Atherton J, Kostner K, Subramaniam VN, Chan W, Fraser J, Adourian A, Punyadeera C. Salivary galectin-3 in heart failure management. *Saliva Technology Application Research Symposium, Queensland University of Technology, Brisbane, June 2018*
13. Zhang X, Schulz B, Atherton J, Kostner K, Punyadeera C. The development and validation of a salivary protein panel to diagnose heart failure. *Saliva Technology Application Research Symposium, Queensland University of Technology, Brisbane, June 2018*
14. Wu C-J (Jo), Atherton J, MacIsaac R, MacIsaac A, Chang AM, Kostner K, Courtney M, McPhail S. The relationships of self-efficacy and gender in a cardiac-diabetes transcare program: A preliminary analysis. *Asian Pacific Society of Cardiology Congress, Taipei, Taiwan, May 2018*
15. Razak AK, Hawkins AM, Khoo TK, Burrage MK, Atherton JJ, Challa V, Jackson RV, Dahiya A. Early detection of cardiac structural and functional abnormalities in adult myotonic dystrophy type 1 patients using advanced cardiac magnetic resonance imaging. *Cardiac Magnetic Resonance (CMR) 2018, Barcelona, Spain, February 2018 (poster presentation)*
16. Scott A, McDonald A, Roberts T, Scuffham P, Atherton J. Tele-Cardiac Investigations is transforming access to treatment for patients living in rural Queensland. *Exercise and Sports Science Australia, Brisbane, 2018*
17. Lancini D, Dahiya A, Lo A, Prasad S, Martin, P. In sickness and in health – coincidental cardiac sarcoid in a husband and wife. *Heart Lung Circulation* 2018;27: s90-91
18. Peverill W, Jalali H, Prasad S. Successful Repair of Unileaflet Mitral Valve with Severe Mitral Regurgitation *Heart Lung Circulation* 2018;27: s100-101.

## Department of Clinical Immunology and Allergy

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Andrew Redmond, Yannick Emond, Amy Legg, Peter Groom, Roger Prentice		Recognition and Evaluation of Antibiotic Allergies to improve patient Care in Hospital (REACH)
Dwaaraka Ranganathan, Yumi Oh, Katharine Foster, Daniel Schuster		Retrospective study of prevalence and type of infections in patients with renal ANCA associated vasculitis and their risk factors

### 2018 Research Publications

#### Journal Articles:

1. Langguth D, Schuster D. Making sense of autoantibodies. Common Sense Pathology in Australian Doctor (Dec 2018).

## 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) and Brisbane (Princess Alexandra Hospital). 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, a Metro North SEED grant is being used to pilot a Support Service for anticoagulant use in two units at RBWH and a systematic review is being undertaken to establish the evidence base for other interventions to improve this practice. 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 safe and appropriate use of opioids within not only within RBWH, but Metro North and Queensland. 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 (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Brooke Myers	PhD, UQ (2014 – current)	Role of the Pharmacist on the Medical Post-Take Ward Round	<b>Ian Coombes</b> , Charles Mitchell, <b>Peter Donovan</b> , Jennifer Whitty
Karen Davies	PhD, UQ (2016 – current)	Establishing the validity and reliability of a tool to test competency of nursing medication administration practice using an expert panel review and inter-rater and intra-rater reliability testing	<b>Karen Whitfield</b> , <b>Ian Coombes</b> , Samantha Keogh

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Karen Davies</b>	<b>Karen Whitfield</b> , <b>Ian Coombes</b> , Samantha Keogh	Establishing the validity and reliability of a tool to test competency of nursing medication administration practice using an expert panel review and inter-rater and intra-rater reliability testing
<b>Peter Donovan</b>	Michael Barras, (Princess Alexandra Hospital), <b>Ian Coombes</b> , <b>Jason Roberts</b> , <b>Ms Carla Scuderi (Pharmacy)</b> , <b>Charles Denaro (Internal Medicine)</b> , <b>John Atherton</b> , Ms Bonnie Tai (Prince Charles Hospital), Ms Anita Pelecanos (QIMR Berghofer)	Development of a therapeutic range for enoxaparin in patients with renal impairment
<b>Peter Donovan</b>	<b>Ian Coombes</b> , <b>Glen Kennedy (Cancer Care Services)</b> , <b>Alison Mudge (Internal Medicine)</b> , <b>Champika Pattullo (Clinical Pharmacology)</b> , Bonnie Tai (Prince Charles Hospital)	Collaborative Optimisation of Anticoagulation (COAG) Pilot Study at RBWH
<b>Peter Donovan</b>	<b>Alison Mudge</b> , Jenny Martin (Uni Newcastle), Michael Barras (Princess Alexandra Hospital), <b>James Rowland</b> , <b>Champika Pattullo</b>	Interventions to improve safety and quality in the management of anticoagulants for therapeutic indications in hospital inpatients: systematic review
<b>Peter Donovan</b>	Nicola Harper, Dr Danielle Stowasser, Natasha Truloff (Metro North IT), <b>Ian Coombes (Pharmacy)</b> , <b>Charles Denaro (Internal Medicine)</b> , Timothy Dunn (Caboolture Hospital Pharmacy), Anita Pelecanos (QIMR Berghofer)	Evaluation of the Implementation of Electronic Prescribing using Interrupted Time-Series Analysis at Two Hospitals in Queensland
<b>Peter Donovan</b>	<b>Champika Pattullo</b> , Anthony Bell, David Arroyo	Trends in Opioid Prescribing in Australia: a Systematic Review

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

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

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Karen Davies</b>	Clinical Pharmacology	Establishing the validity and reliability of a tool to test competency of nursing medication administration practice using an expert panel review and inter-rater and intra-rater reliability testing	RBWH Foundation Scholarship	\$36,863.96	\$36,863.96 (2018)
Dr Susan Jordan (Queensland Institute of Medical Research Berghofer), Prof Sallie-Anne Pearson (University of New South Wales), Dr Nirmala Pandeya (University of Queensland), Assoc Prof Michael Coory (Murdoch Children's Research Institute), Dr Katrina Spillsbury (Curtin University of Technology), <b>Dr Peter Donovan</b>	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	\$95,104	\$438,313.20 (2017-2021)
<b>Louise Cullen, Nathan Brown, Peter Donovan, Ian Coombes, Jaimi Greenslade, David Hughes, Elizabeth Doran</b>	Emergency and Trauma Centre, Pharmacy, Clinical Pharmacology, Internal Medicine and Aged Care	Prevalence and characteristics of medication-related presentations to the emergency department. Emergency and Trauma Centre, Royal Brisbane and Women's Hospital	Emergency Medicine Foundation	\$31,410	\$31,410 (2018)



## 2018 Research Publications

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### Journal Articles:

1. **Davies, K. M., Coombes, I. D., Keogh, S., & Whitfield, K. M.** Medication administration evaluation tool design: an expert panel review. *Collegian*. doi: 10.1016/j.collegn.2018.05.001
2. **Philip C. Robinson**, Nicola Dalbeth and **Peter Donovan**. The Cost-effectiveness of Biannual Serum Urate (SU) Monitoring after Reaching Target in Gout: A Health Economic Analysis Comparing SU Monitoring. *The Journal of Rheumatology* (2018). DOI: 10.3899/jrheum.170199.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. **Davies, K. M.**, “Be Safe, Be Accountable and Be Confident” presentation. *Ausmed Medicines and Midwives Conference 2018*. Brisbane, Australia.

### Oral Presentations:

1. **Davies, K. M., Coombes, I. D., Keogh, S., Hay, K., Hurst, C. & Whitfield, K. M.** “Medication Administration Evaluation and Feedback Tool: Simulation Intra-rater and Inter-rater Validation” presentation. *The National Nursing Forum 2018*. Gold Coast, Australia
1. **Davies, K. M., Coombes, I. D., Keogh, S., & Whitfield, K. M.** “Medication administration evaluation tool design: an expert panel review” *Nursing and Midwifery Conference Presentation 2018*. Brisbane, Australia.

### Poster Presentations:

1. **Davies, K. M., Coombes, I. D., Keogh, S., Hay, K., Hurst, C. & Whitfield, K. M.** “Medication Administration Evaluation and Feedback Tool: Intra-rater and Inter-rater Using Simulation” poster. *SHPA Medicines Management Conference 2018*. Brisbane, Australia
1. **Davies, K. M., Coombes, I. D., Keogh, S., & Whitfield, K. M.** “Medication Administration Evaluation and Feedback Tool: Supporting Safe Medication Practice” poster. *RBWH Symposium 2018*. Brisbane, Australia
1. **Davies, K. M., Coombes, I. D., Keogh, S., Hay, K., Hurst, C. & Whitfield, K. M.** “Medication Administration Evaluation and Feedback Tool: Intra-rater and Inter-rater Using Simulation” poster. *RBWH Symposium 2018*. Brisbane, Australia
2. **Ian Coombes, Peter Donovan**, Brooke Myers, Christy Noble, Charles Mitchell. Improving Intern Medical Officer Prescribing through an Intervention of Self-Assessment and Feedback. Australasian Society of Experimental and Clinical Pharmacologist and Toxicologist Annual Scientific Meeting, Nov 2018 1
3. **Pattullo, C., Lock, C., Savage, R. Bell, A.** Opioid Prescribing Toolkit. International Forum on Quality and Safety in Healthcare, Melbourne. Aug 2018.

## Department of Endocrinology and Diabetes

The Department of Endocrinology and Diabetes conducts a number of research activities within the department and collaborates with a number of other research units within the hospital and in other institutions.

The Department has an active clinical trials centre undertaking a number of externally funded clinical trials in focusing on diabetes and in particular on the prevention of cardiovascular disease in diabetes with **Assoc Prof Michael d'Emden** being the principle investigator. The unit has participated in several of the landmark trials which have changed the practice of medicine – TNT, LIPID, FIELD, EMPA-REG, DECLARE to mention a few.

**Professor Emma Duncan** has a major role within the Department to promote and undertake research. There are now 3 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.

**Dr Don McLeod** leads the thyroid service and is pursuing research in aspects of the epidemiology of Thyroid Cancer and has a major on-going study looking at auto-immune thyroid disease in the United States armed forces, a model of stress-induced auto-immunity.

**Associate Professor Kerry Richard** who supervises the endocrine division of the conjoined internal medical laboratory continues to be a world leader in the study of thyroid hormone transport in the placenta and was invited to be a “meet the professor” at the most recent American Thyroid Association meeting.

### 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>
Aideen McInerney-Leo	PhD; UQ (2014-2018)	Exome sequencing for gene discovery and genetic testing in Mendelian disorder	<b>Emma Duncan</b>
Stephanie Johnson	PhD; UQ; (2014-2018)	Disorders of insulin secretion	<b>Emma Duncan</b>
Xiao Bao	PhD; Uni of Zhengzhou; (2014-2018)	The genetics of complex diseases including osteoporosis and cervical cancer	<b>Emma Duncan</b>
<b>Naomi Achoong</b>	PhD studies; UQ; (2014-2018)	Insulin secretion in pregnancy and the postpartum period	<b>Emma Duncan</b>
<b>Sheila Cook</b>	PhD studies; UQ; (2018-)	The effect of a low carbohydrate diet on clinical outcomes for patients with Type 1 Diabetes Mellitus	<b>Emma Duncan</b>
<b>Andrea Fernandes</b>	PhD; UQ; (2018-)	The Endocrinology of Chronic Renal Disease	<b>Emma Duncan</b>
Jessica Harris	MSc; UQ; (2017-2018)	Genetics of Endocrine Tumours	<b>Emma Duncan</b>
<b>Fiona Britten</b>	MSc; UQ; (2014-)	Breastfeeding in mothers with type 2 diabetes mellitus	<b>Emma Duncan</b>
<b>Kelly Carruthers</b>	MSc; UQ; (2016-)	The Genetics of Familial Non-Medullary Thyroid Cancer	<b>Emma Duncan</b>

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University <i>(years)</i>
<b>Helen Legg</b>	Clinical Trials Coordinator	Diabetes and Cardiovascular Disease	
<b>Liz Lahz</b>	Clinical Trials Coordinator	Diabetes and Cardiovascular Disease	
<b>Erika Tapp</b>	Clinical Trials Coordinator	Diabetes and Cardiovascular Disease	

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
Emma Duncan		Using large scale genome-wide association studies to identify pharmacological targets for osteoporosis intervention
Emma Duncan		The Role of 'Orphan' Solute Carrier Transporter Slc37a2 in Bone Homeostasis and Disease
Don McLeod		Does stress cause Graves' disease
Kerry Richard	Kelly Landers, Michael d'Emden	The influence of maternal health and lifestyle on placental thyroid hormone transport and metabolism
Kerry Richard	Kelly Landers, Michael d'Emden	The role of the high density lipoprotein receptor scavenger receptor class B member 1 (SR-B1) in placental transfer of thyroid hormone

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Emma Duncan	Endocrinology	Using large scale genome-wide association studies to identify pharmacological targets for osteoporosis intervention	NHMRC	\$270,000	\$270,000
Emma Duncan	Endocrinology	The Role of 'Orphan' Solute Carrier Transporter Slc37a2 in Bone Homeostasis and Disease	NHMRC	\$220,000	\$675668.40
Emma Duncan	Endocrinology	Cancer Care Program	QUT	\$10,000	\$10,000
Emma Duncan	Endocrinology	Non-invasive assessment of osteoporosis and bone health in individuals with chronic kidney disease	Amgen	\$40,000	\$40,000
Don McLeod	Endocrinology	Does stress cause Graves' disease	NHMRC	\$190,000	\$565,000
Kerry Richard	Endocrinology	The role of the high density lipoprotein receptor scavenger receptor class B member 1 (SR-B1) in placental transfer of thyroid hormone	Science and Education Research Committee	50,000	50,000

## 2018 Research Publications

### Journal Articles:

- Stephanie R Johnson, Hannah E Carter, Paul Leo, Samantha A Hollingworth, Elizabeth A Davis, Timothy W Jones, Louise S Conwell, Mark Harris, Matthew A Brown, Nicholas Graves, **Emma L Duncan**. "Cost-effectiveness analysis of routine screening using massively parallel sequencing for maturity-onset diabetes of the young in a paediatric diabetes cohort: reduced health system costs and improved patient quality of life." *Diabetes Care*, ePub 6 Dec 2018 (doi 10.2337/dc18-0261)
- Bao X, Hanson AL, Madeleine MM, Wang SS, Schwartz SM, Newell F, Pettersson-Kymmer U, Hemminki K, Tiews S, Steinberg W, Rader JS, Castro F, Safaeian M, Franco EL, Coutlée F, Ohlsson C, Cortes A, Marshall M, Mukhopadhyay P, Cremin K, Johnson LG, Garland SM, Tabrizi SN, Wentzensen N, Sitas F, Trimble C, Little J, Cruickshank M, Frazer IH, Hildesheim A, Brown MA, **Duncan EL**, Sun Y, Leo PJ (2018). "HLA and KIR associations of Cervical Neoplasia". *J Infect Dis*, 218(12):2006-2015
- Benn DE, Zhu Y, Andrews KA, Wilding M, **Duncan EL**, Dwight T, Tothill RW, Burgess J, Crook A, Gill AJ, Hicks RJ, Kim E, Luxford C, Marfan H, Richardson AL, Robinson B, Schlosberg A, Susman R, Tacon L, Trainer A, Tucker K, Maher ER, Field M and Clifton-Bligh RJ (2018) "Bayesian approach to determining penetrance of pathogenic SDH variants." *J Med Genet* 55(11): 729-734
- Trajanoska K, Morris JA, Oei L, Zheng HF, Evans DM, Kiel DP, Ohlsson C, Richards JB, Rivadeneira F, GEFOS consortium (including AOGC lead **Duncan EL**), GENOMOS consortium and 23andMe (2018) "Assessment of the genetic and clinical determinants of fracture risk: genome wide association and mendelian randomisation study." *BMJ* 362: k3225
- Maharaj A, Buonocore F, Meimaridou E, Ruiz-Babot G, Guasti L, Peng H-M, Capper CP, Prasad R, Crowne E, Cheetham TD, Brain CE, Suntharalingham JP, Striglioni N, Yuksel B, Gurbuz F, Lindsay R, Couch R, Spoudeas HA, Guran T, Johnson S, Fowler D, Conwell LS, McInerney-Leo AM, Drui D, Cariou B, Lopez Siguero JP, Harris M, **Duncan EL**, Auchus RJ, Hindmarsh PC, Donaldson MD, Achermann JC, Metherell LA (2018) "Predicted Benign and Synonymous Variants in *CYP11A1* Cause Primary Adrenal Insufficiency Through Missplicing" *J Endocrin Soc*, ePub 30 October 2018 <https://doi.org/10.1210/qs.2018-00130>
- 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**. "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

## Journal Articles: (cont):

7. Maung KZY, Leo PJ, Bassal M, Casolari DA, Gray JX, Bray SC, Pederson S, Singhal D, Samaraweera SE, Nguyen T, Cildir G, Marshall M, Ewing A, **Duncan EL**, Brown MA, Saal R, Tergaonkar V, To LB, Marlton P, Gill D, Lewis I, Deans AJ, Brown AL, D'Andrea RJ, Gonda TJ. (2018) Rare variants in Fanconi anemia genes are enriched in acute myeloid leukemia. *Blood Cancer J*. 8(6):50
8. Johnson SR, Leo P, Conwell LS, Harris M, Brown MA, **Duncan EL** (2018) "Clinical usefulness of comprehensive genetic screening in maturity onset diabetes of the young (MODY): a novel ABCC8 mutation in a previously screened family." *J Diab* 10(9): 764-767
9. Gregson CL, Newell F, Leo PJ, Clark GR, Paternoster L, Marshall M, Forgetta V, Morris JA, Ge B, Bao X, Duncan Bassett JH, Williams GR, Youlten SE, Croucher PI, Davey Smith G, Evans DM, Kemp JP, Brown MA, Tobias JH and **Duncan EL** (2018) "Genome-wide association study of extreme high bone mass: Contribution of common genetic variation to extreme BMD phenotypes and potential novel BMD-associated genes." *Bone* 114: 62-71
10. Johnson SR, McGown I, Oppermann U, Conwell LS, Harris M, **Duncan EL** (2018). "A novel INS mutation in a family with MODY: variable insulin secretion and putative mechanisms." *Paediatr Diabetes* 19(5): 905-9
11. Cundy T, Dray M, Delahunt J, Hald JD, Langdahl B, Li C, Szybowska M, Mohammed S, **Duncan EL**, McInerney-Leo AM, Wheeler PG, Roschger P, Klaushofer K, Rai J, Weis M, Eyre D, Schwarze U and Byers PH (2018) "Mutations That Alter the Carboxy-Terminal-Propeptide Cleavage Site of the Chains of Type I Procollagen Are Associated With a Unique Osteogenesis Imperfecta Phenotype." *J Bone Miner Res* 33(7): 1260-1271
12. Johnson SR, Leo PJ, McInerney-Leo AM, Anderson LK, Marshall M, McGown I, Newell F, Brown MA, Conwell LS, Harris M and **Duncan EL** (2018) "Whole-exome sequencing for mutation detection in pediatric disorders of insulin secretion: maturity onset diabetes of the young and congenital hyperinsulinism." *Pediatr Diabetes* 19(4) 656-62
13. Sztot JO, Cuny H, Blue GM, Humphreys DT, Ip E, Harrison K, Sholler GF, Giannoulou E, Leo P, **Duncan EL**, Sparrow DB, Ho JWK, Graham RM, Pachter N, Chapman G, Winlaw DS and Dunwoodie SL (2018) "A Screening Approach to Identify Clinically Actionable Variants Causing Congenital Heart Disease in Exome Data." *Circ Genom Precis Med* 11(3): e001978
14. Alonso N, Estrada K, Albagha OME, Herrera L, Reppe S, Olstad OK, Gautvik KM, Ryan NM, Evans KL, Nielson CM, Hsu YH, Kiel DP, Markozannes G, Ntzani EE, Evangelou E, Feenstra B, Liu X, Melbye M, Masi L, Brandi ML, Riches P, Daroszewska A, Olmos JM, Valero C, Castillo J, Riancho JA, Husted LB, Langdahl BL, Brown MA, **Duncan EL**, Kaptoge S, Khaw KT, Usategui-Martin R, Del Pino-Montes J, Gonzalez-Sarmiento R, Lewis JR, Prince RL, D'Amelio P, Garcia-Giralt N, Noguez X, Mencej-Bedrac S, Marc J, Wolstein O, Eisman JA, Oei L, Medina-Gomez C, Schraut KE, Navarro P, Wilson JF, Davies G, Starr J, Deary I, Tanaka T, Ferrucci L, Gianfrancesco F, Gennari L, Lucas G, Elosua R, Uitterlinden AG, Rivadeneira F and Ralston SH (2018) "Identification of a novel locus on chromosome 2q13, which predisposes to clinical vertebral fractures independently of bone density." *Ann Rheum Dis* 77(3): 378-385
15. McInerney-Leo AM, Wheeler L, Sturm RA, Tan JM, Harris JE, Anderson L, Jagirdar K, Brown MA, Leo PJ, Soyer HP and **Duncan EL** (2017) "Point mutation in p14(ARF) -specific exon 1beta of CDKN2A causing familial melanoma and astrocytoma." *Br J Dermatol* 178(4): e263-e264
16. Shi H, Enriquez A, Rapadas M, Martin E, Wang R, Moreau J, Lim CK, Sztot JO, Ip E, Hughes JN, Sugimoto K, Humphreys DT, McInerney-Leo AM, Leo PJ, Maghzal GJ, Halliday J, Smith J, Colley A, Mark PR, Collins F, Sillence DO, Winlaw DS, Ho JWK, Guillemin GJ, Brown MA, Kikuchi K, Thomas PQ, Stocker R, Giannoulou E, Chapman G, **Duncan EL**, Sparrow DB and Dunwoodie SL (2017) "NAD Deficiency, Congenital Malformations, and Niacin Supplementation." *N Engl J Med* 377(6): 544-552
17. Flynn A, Dwight T, Benn D, Deb S, Colebatch AJ, Fox S, Harris J, **Duncan EL**, Robinson B, Hogg A, Ellul J, To H, Duong C, Miller JA, Yates C, James P, Trainer A, Gill AJ, Clifton-Bligh R, Hicks RJ and Tothill RW (2017) "Cousins not twins: intratumoural and intertumoural heterogeneity in syndromic neuroendocrine tumours." *J Pathol* 242(3): 273-283. Images chosen for journal cover
18. **Lazarus S**, Tseng HW, Lawrence F, Woodruff MA, **Duncan EL** and Pettit AR (2017) "Characterization of Normal Murine Carpal Bone Development Prompts Re-Evaluation of Pathologic Osteolysis as the Cause of Human Carpal-Tarsal Osteolysis Disorders." *Am J Pathol* 187(9): 1923-1934
19. English K, Inder WJ, Weedon Z, Dimeski G, Sorbello J, Russell AW, **Duncan EL** and Cuneo R (2017) "Prospective evaluation of a week one overnight metyrapone test with subsequent dynamic assessments of hypothalamic-pituitary-adrenal axis function after pituitary surgery." *Clin Endocrinol (Oxf)* 87(3): 312
20. McInerney-Leo AM, Wheeler L, Marshall MS, Anderson LK, Zankl A, Brown MA, Leo PJ, Wicking C and **Duncan EL** (2017) "Homozygous variant in C21orf2 in a case of Jeune syndrome with severe thoracic involvement: extending the phenotypic spectrum." *Am J Med Genet A* 173(6): 1698-1704
21. Willems, SM., Wright DJ, Day FR et al. (including **Duncan EL** as AOGC lead for GEFOS) (2017) "Large-scale GWAS identifies multiple loci for hand grip strength providing biological insights into muscular fitness". *Nature Communications*, 8 16015
22. Barraza-Garcia J, Rivera-Pedroza CI, Hisado-Oliva A, Belinchon-Martinez A, Sentchordi-Montane L, **Duncan EL**, Clark GR, Del Pozo A, Ibanez-Garikano K, Offiah A, Prieto-Matos P, Cormier-Daire V and Heath KE (2017) "Broadening the phenotypic spectrum of POP1-skeletal dysplasias: identification of POP1 mutations in a mild and severe skeletal dysplasia." *Clin Genet* 92(1): 91-98
23. Seymour MG, **McLeod DSA**. Cardiac effects of thyroid disease. *Endocrinology Today*. 2017; 6: 27-30
24. Gild ML, Topliss DJ, Learoyd D, Parnis F, Tie J, Hughes B, Walsh JP, **McLeod DSA**, Clifton-Bligh R, Robinson B. Clinical guidelines for Radioiodine Refractory Differentiated Thyroid Cancer. *Clinical Endocrinology*, 2018; 88: 529-37
25. **Landers KA**, Li H, Mortimer RH, **McLeod DSA**, **d'Emden MC**, **Richard K**. Transthyretin uptake in placental cells is regulated by the high-density lipoprotein receptor, Scavenger Receptor class B member 1. *Molecular and Cellular Endocrinology*. 2018; 474: 89-96
26. **Landers K and Richard K**. Traversing barriers: how thyroid hormones cross the placental, blood-brain and blood-cerebrospinal fluid barriers. Invited review in *Molecular and Cellular Endocrinology* 2017 <http://dx.doi.org/10.1016/j.mce.2017.01.041>
27. Dawson PA, **Richard K**, Perkins A, Zhang Z and Simmons DG, Review: nutrient sulphate supply from mother to fetus: placental adaptive responses during human and animal gestation. *Placenta*. <http://dx.doi.org/10.1016/j.placenta.2017.01.001>
28. Achong N, **Duncan EL**, McIntyre HD and Callaway L (2018) "The physiological and glycaemic changes in breastfeeding women with type 1 diabetes mellitus." *Diabetes Res Clin Pract* 135: 93-101
29. Lim WH and **Duncan EL** (2017) "Is there a role or target value for nutritional vitamin D in chronic kidney disease?" *Nephrology (Carlton)* 22 Suppl 2: 57-64

### Journal Articles: (cont):

30. Clarke M, Dover T, **Duncan EL** (2017) "New and emerging therapies for osteoporosis." *Endocrinology Today*
31. Thuzar M, Perry-Keene DA, **d'Emden MC, Duncan EL**. (2018) "An adrenocortical carcinoma evolving from an apparently benign adrenal incidentaloma". *AACE Clinical case reports*, 4(1) e65-e69.

### 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.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. International Osteoporosis Society Regional Conference – Sydney, December 2018
2. American Society for Bone and Mineral Research Annual Scientific Meeting, Montreal, Sept 2018. **Emma Duncan**
3. American Society for Bone and Mineral Research Annual Scientific Meeting, Denver, 2017 – Genomics Workshop presentation. **Emma Duncan**
4. 5<sup>th</sup> International Symposium on Pheochromocytoma-Paraganglioma, Sydney, 2017. **Emma Duncan**
5. Japanese Society for Bone and Mineral Research, Fukuoka, 2017 – invited international speaker. **Emma Duncan**
6. Joint meeting of the Australian and New Zealand Bone and Mineral Society and the International Federation of Musculoskeletal Research Societies, in collaboration with the Japanese Society for Bone and Mineral Research, Brisbane, 2017. **Emma Duncan**.

### Oral Presentations:

1. Annual Scientific Meeting of the Endocrine Society of Australia, Adelaide, 2018. **Emma Duncan**
2. Annual Scientific Meeting of the Australasian Menopause Society, Brisbane, August 2018. **Emma Duncan**
3. Annual Scientific Meeting of the Australasian College of Dermatology, Gold Coast, May 2018. **Emma Duncan**
4. Familial Cancer Clinics Professional Development Day, Kingscliff, 2017. **Emma Duncan**
5. Endocrine Society of Australia Seminar Meeting, Melbourne, 2017. **Emma Duncan**.

## Other Communications and Outputs:

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### Professor Emma Duncan

#### Conference Leadership

##### International:

- American Society of Bone and Mineral Research:
  - Chair of the Genomics, Transcriptomics, Proteomics and Metabolomics of Musculoskeletal Disease category 2018.
- Joint Australian and New Zealand Bone and Mineral Society International Federation of Musculoskeletal Research Societies, in conjunction with the Japanese Bone and Mineral Society Brisbane 2017:
  - Lead chair of Executive Organising Committee:
    - Budget >\$1million.
- International Symposium on Pheochromocytoma and Paraganglioma 2017:
  - Local Organising Committee member.

##### National/Australasian:

- Member, Programme Organising Committee, Endocrine Society of Australia Annual Scientific meeting, 2018
- Member, Programme Committee for ANZBMS Annual Postgraduate Meeting, 2017.

##### Local:

- Committee member (representing Internal Medicine), Royal Brisbane and Women's Hospital Annual Scientific Meeting, 2018.

##### Conference Session Chairperson (International and National):

- American Society for Bone and Mineral Research Annual Scientific Meeting 2018, 2017:
  - Australian Rheumatology Association Annual Scientific Meeting – joint session with Australian and New Zealand Bone and Mineral Society and Endocrine Society of Australia, Melbourne 2018
  - Australian and New Zealand Bone and Mineral Society Annual Scientific Meeting, 2017, 2018
  - Judge, Young Investigators Presentations, 2018.

### On-Line Opinion Pieces

1. Emma L Duncan "Why do we have bones?". Published online, 29 January 2018
2. Emma L Duncan, Kerrie Sanders, Peter R Ebeling and Warrick J Inder. "How do our bones get calcium, and why do they need it?" Published online, 30 March 2017.

## Department of Gastroenterology and Hepatology

The Gut Health Research group (QIMR Berghofer MRI), working in collaboration with the Department of Gastroenterology at RBWH, and local, national and international colleagues, has focussed on the development of predictors of gut health over the past 12 months. This includes a risk assessment tool for significant colorectal disease, to assist in colonoscopy triage, a risk predictor for high-risk Crohn's disease, and identification of a genetic polymorphism that predicts a healthy gut microbiome. Two of these studies have been published and presented at international meetings. Our team also made it to the finals of the Metro North Research Excellence Awards.

Within the research group focussed on molecular genetics of colorectal cancer, major highlights were publications in the 2 leading journals of the specialty: Gastroenterology and Gut. The Gut publication was in collaboration with Dan Worthley who completed his PhD with our group before taking up a NHMRC fellowship and it used cutting edge organoid technology to demonstrate the genetic changes which cause a serrated polyp to progress to cancer. The Gastroenterology publication showed for the first time that the cancer risk of serrated polyps is heavily dependent on the age of the patient in which the polyp occurs. Polyps of identical size and histology have a much higher risk of progressing if they occur in the proximal colon of older patients. This exciting finding not only opens the door to better understanding of how older tissue is primed for malignancy but can be translated into more efficient surveillance and less colonoscopy.

In 2018, Dr Richard Skoien has presented his basic science research in microRNAs as potential biomarkers of hepatocellular carcinoma (HCC) at international conferences, and is currently investigating their roles in decompensated cirrhosis. He has also further progressed his clinical research into innovative models of care in chronic liver disease, including the novel *HepatoCare* pilot project in palliative and supportive care in advanced cirrhosis, and is leading a clinical audit of spontaneous bacterial peritonitis and other complications in cirrhotic patients of the Liver Unit admitted to the RBWH.

The endoscopy research group has established a research nursing position that has launched a number of clinical studies that we expect to present this year. These include endoscopic outcomes research and pushing the endoscopy boundaries in bariatric patients.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Lauren White</b>	MPhil UQ/QIMRB (2018-2019)	Introduction of Intestinal Ultrasound to a tertiary Gastrointestinal department	<b>Graham Radford-Smith, Andrew Lee</b>
<b>Abigail Marsh</b>	PhD UQ	The effects of an anti-inflammatory diet on disease activity, symptom severity and microbiota profile in patients with inflammatory bowel disease	<b>Graham Radford-Smith, Veronique Chachay, Merrillyn Banks</b>
Caitlin Hall	PhD UQ/QIMRB	Understanding the relationship between the gut microbiome and the brain	Lucca Cochi, <b>Graham Radford-Smith, Anton Lord</b>
<b>Anthony Croft</b>	MPhil UQ/QIMRB	Risk assessment in acute ulcerative colitis	<b>Graham Radford-Smith, Anton Lord</b>
Yoon-Kyo An	MPhil UQ/TRI/QIMRB	AURORA (Australian Ustekinumab Real-World Observational Research)	Jake Begun, <b>Graham Radford-Smith</b>
Cheng Liu	PhD, UQ (2016-2019)	Molecular characterisation of serrated precursors of colorectal carcinoma	Vicki Whitehall, <b>Barbara Leggett, Neal Walker, Mark Bettington</b>
<b>Jennifer Borowsky</b>	PhD, UQ (PT 2016-2021)	Morphological and molecular characterisation of colorectal adenomas and carcinomas	Vicki Whitehall, <b>Barbara Leggett, Neal Walker, Ian Brown, Mark Bettington</b>
<b>Alexandra Kane</b>	PhD, UQ (2017-2019)	Chemoprevention of serrated colorectal neoplasia	Vicki Whitehall, <b>Barbara Leggett</b>
Lochlan Fennell	PhD, UQ (2018-2020)	Investigation of the colorectal cancer epigenome	Vicki Whitehall, <b>Barbara Leggett</b>
<b>Jason Huang</b>	MPhil, UQ (PT 2015-2018)	Endoscopic ultrasound guided techniques for evaluation of liver disease: direct portal venous pressure gradient measurement and liver biopsy	<b>Benedict Devereaux</b>
Anna Weis	PhD, UQ (2015-2018; submitted)	Investigating the potential of circulating microRNAs as non-invasive biomarkers in cirrhosis and hepatocellular carcinoma	<b>Richard Skoien, Grant Ramm</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Ben Devereaux</b>	Associate Professor	Endoscopy	University of Queensland (2013-2018)
<b>Chun How Gan</b>	Endoscopy Fellow	Endoscopy	QHealth
<b>Christopher (Yin Hiew) Kia</b>	Endoscopy Fellow	Endoscopy	QHealth
<b>Kimberley Ryan</b>	Research Co-ordinator	Interventional Gastroenterology	QHealth
<b>Allison Brown</b>	Research Co-ordinator	IBD Clinical Trials, colonoscopy research	QHealth (funded by research)
<b>Ming Han Lim</b>	IBD Clinical Research Fellow	Gut Health Research Group (QIMRB)	QIMRB (2017-2018)
<b>Lauren White</b>	RBWH Scholarship	School of Medicine	UQ/QIMRB (2018-2019)
<b>Abi Marsh</b>	RBWH Scholarship	School of Human Movement and Nutritional Sciences	UQ/QIMRB (2018-2020)
<b>Anthony Croft</b>	RBWH Scholarship	School of Medicine	UQ/QIMRB (2017-2019)
<b>Yoon-Kyo An</b>	Investigator Initiated Study (Janssen)	School of Medicine, School of Medicine	UQ/TRI/QIMRB (2018-2020)
<b>Futoshi Kawamata</b>	Visiting Fellow	Colorectal cancer metastases	Queensland Institute of Medical Research Berghofer (2017-2018)
<b>Vicki Whitehall</b>	Gastroenterological Society of Australia Senior Research Fellowship	Molecular Genetics of Colorectal Cancer	Pathology Queensland (2016-2018)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Mark Appleyard</b>	<b>Florian Grimpén, Jason Hwang, Kimberley Ryan</b>	Does Bowel Preparation Improve Diagnostic Yield in Capsule Endoscopy?
<b>Christopher (Yin Hiew) Kia</b>	<b>Ahmed Abdul Rahman, Jason Hwang</b>	A retrospective audit of endoscopic ultrasound tissue sampling in a large Australian tertiary centre: Cytology vs Histology
<b>Christopher (Yin Hiew) Kia</b>	<b>Benedict Devereaux, Florian Grimpén, Mark Appleyard</b>	A prospective multicentre study of the current ERCP experience in Australia: how are we doing?
<b>Abdulnasser Lafta</b>	<b>Mark Appleyard, Florian Grimpén, Jessica Kinneally, Kimberley Ryan, Matthew Remedios</b>	Two food group elimination diet versus swallowed fluticasone for the management of adult eosinophilic oesophagitis, as a single-centre randomised prospective study
<b>Abdulnasser Lafta</b>	<b>Patrick Walsh</b>	Endoscopic resection and plication for GERD, a prospective study
<b>Florian Grimpén</b>	<b>Joshua Satchwell, Kimberley Ryan, Mark Appleyard</b>	Barrett's Oesophagus and its progression to oesophageal adenocarcinoma – impact of enhanced imaging techniques and endoscopic therapies on outcomes
<b>Kimberley Ryan</b>	<b>Mark Appleyard, Florian Grimpén, Anthony FT Brown</b>	Clinical audit of patients presenting to the ED with upper Gastrointestinal bleeding
<b>Patrick Walsh</b>	<b>Chun How Gan, Mark Appleyard, Jason Huang, George Hopkins</b>	Argon Plasma Coagulation and endoscopic suturing in the management of weight regain after gastric bypass surgery
<b>Jason Huang</b>	<b>Patrick Walsh, Chun How Gan, Daniel Tani, Mark Appleyard, George Hopkins</b>	The Endoscopic Sleeve Gastroplasty – a prospective outcome study
<b>Antonio Lee</b>	<b>Patrick Walsh</b>	Endoscopic removal of eroded gastric band is safe and effective
<b>Richard Skoien</b>	<b>Victoria Grey, Kimberley Ryan, Mark Appleyard, Anthony FT Brown</b>	Examination of health outcomes associated with paracentesis in patients admitted with decompensated cirrhosis
<b>Graham Radford-Smith</b>	Allison Brown (clinical research nurse); Anton Lord (QIMRB); Lisa Simms (QIMRB); Mark Appleyard (SMO); Louisa Gordon (QIMRB); Tom Elliott (QIMRB); Patricia Valery (QIMRB)	Colonoscopy Biomarker Study – optimization of colonoscopy across Queensland
<b>Lauren White</b>	Graham Radford-Smith; Andrew Lee; Anton Lord (QIMRB)	Introduction of Intestinal Ultrasound to a tertiary Gastrointestinal Department

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Abigail Marsh</b>	Graham Radford-Smith; Marilyn Banks; Veronique Chachay (UQ); Anton Lord (QIMRB)	The effects of an anti-inflammatory diet on disease activity, symptom severity and microbiota profile in patients with inflammatory bowel disease
<b>Barbara Leggett</b>	Vicki Whitehall, Catherine Bond, Diane McKeone	Molecular Genetics of Colorectal Cancer
<b>Barbara Leggett and Richtard Skoien</b>	Robyn Medcraft, Rita Lawrie, Joanne Mina	Liver Clinical Trials
<b>Richard Skoien, Olivia Cullen, Mary Fenech, Joanne Mina</b>	Alison Kearney, Amy Legg	Quality of Life in Cirrhosis Project (The HepatoCare Pilot)
<b>Richard Skoien, Olivia Cullen, Karen Beckman, Deborah McIntyre</b>	Grant Ramm, Anna Weis	The roles of microRNAs as biomarkers in hepatocellular carcinoma, cirrhosis and decompensated liver disease
<b>Richard Skoien, Victoria Grey, Kimberley Ryan, Mark Appleyard</b>	Anthony Brown	Outcomes of patients at risk of spontaneous bacterial peritonitis admitted to the RBWH with decompensated cirrhosis

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Macrae, F. (Melbourne)	<b>Florian Grimpén, Mark Appleyard</b>	AUSFAP study – the effects of butyrylated high amylose maize starch on polyposis in familial adenomatous polyposis patients
Marie Ooi, Nam Q Nguyen (Royal Adelaide Hospital)	<b>Mark Appleyard, Florian Grimpén, Abdunnasser Lafta, Kimberley Ryan</b>	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. (Western Hospital, Footscray)	<b>Florian Grimpén, Mark Appleyard, Matthew Remedios, Kimberley Ryan</b>	Cold snare Polypectomy for non-pedunculated colonic polyps sized 10-19mm: a prospective observational study (CSP study)
Nguyen, N., Phan, A., Schoeman, M. (Royal Adelaide Hospital)	<b>Mark Appleyard, Florian Grimpén, Kimberley Ryan, Anthony FT Brown, Carly Silvester, Arrchanah Balanchandran</b>	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
Alan Cripps (Griffith University)	<b>Benedict Devereaux</b>	Mechanisms of mucosal immune regulation in obesity
Yoon-Kyo An (Mater/UQ), Jake Begun (Mater/UQ/TRI)	<b>Graham Radford-Smith</b>	AURORA (Australian Ustekinumab Real-World Observational Research) in Crohn's Disease
Nik Ding (St Vincent's, Melbourne), Edouard Louis (Hopital St Antoine, Liege, Belgium), GETAID IBD Group (Europe)	<b>Graham Radford-Smith, Allison Brown</b>	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 (Austin Hospital, Melbourne), Ronan Burder (Austin Hospital, Melbourne)	<b>Graham Radford-Smith, Allison Brown</b>	PREDICT UC: Optimizing Infliximab Induction Therapy for Acute Severe Ulcerative Colitis – a randomized controlled trial
Ken Croitura, Mount Sinai Hospital, Toronto, Canada	<b>Graham Radford-Smith, Katherine Hanigan (QIMRB); Lisa Simms (QIMRB)</b>	GEMS (Genes, Environment, Microbiome)
SY Ong, A Nicoll, L Powell, MB Delatycki	<b>R Skoien</b>	Investigating the importance of serum ferritin in the management of HFE Haemochromatosis



## 2018 Research Awards and Achievements

Recipient	Award	Event
Lisa Simms (QIMRB)	Poster of Merit	Digestive Diseases Week, Washington DC, 2018
<b>Graham Radford-Smith</b>	Poster of Merit	Australian Gastroenterology Week, Brisbane, 2018
Anton Lord (QIMRB)	Poster of Merit	Australian Gastroenterology Week, Brisbane, 2018
Martha Zakrzewski (QIMRB)	Winner	GE Society Queensland Young Investigator Awards, Noosa, 2018
Anton Lord (QIMRB)	Finalist	GE Society Queensland Young Investigator Awards, Noosa, 2018
<b>Colonoscopy Biomarker study team</b>	Finalist	Metro North HHS Research Excellence Awards, 2018
<b>Lochlan Fennell</b>	Young Investigator Award	Gastroenterological Society of Queensland Annual Scientific Meeting 2018
<b>Alexandra Kane</b>	Short listed for Young Investigator Award	Australian Gastroenterology Week 2018
<b>Jennifer Borowsky</b>	Trainee Travel Award	American Society for Investigative Pathology 2018

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Graham Radford-Smith</b> , Lisa Simms, Anton Lord, <b>Allison Brown</b>	Gut Health Research Group (QIMRB), <b>Gastroenterology Department</b>	Colonoscopy Biomarker Study – optimization of colonoscopy across Queensland	Healthcare Improvement Unit, Queensland Health	\$147,305.23	\$147,305.23 (2018-2019)
<b>Barbara Leggett</b> , <b>Vicki Whitehall</b>	Conjoint Gastroenterology Laboratory	DNA Methylation in sessile serrated adenomas to predict malignant potential	RBWH Research Advisory Committee	\$39,305	\$39,305 (2018)
<b>Richard Skoien</b> , <b>Olivia Cullen</b> , <b>Alison Kearney</b> , <b>Mary Fenech</b> , <b>Amy Legg</b> , <b>Joanne Mina</b>	Department of Gastroenterology and Hepatology, RBWH	Quality of Life in Cirrhosis Project (The HepatoCare Pilot)	RBWH (SEED Initiative Funding)	\$43,115	\$123,750 (2017-2018)

## 2018 Research Publications

### Journal Articles:

- Desomer L, Tate DJ, **Jayanna M**, Pellise M, Awadie H, Burgess NG, McLeod D, Mahajan H, Lee EYT, Williams SJ, Bourke MJ. The clinical significance and synchronous polyp burden of large ( $\geq 20$ mm) sessile serrated polyps in patients without serrated polyposis syndrome. *Endoscopy*. 2018; 50 (11),1080-1088, doi: 10.1055/a-0596-7231. Epub 2018 May 8
- Tate DJ, **Jayanna M**, Awadie H, Desomer L, Lee R, Heitman SJ, Sidhu M, Goodrick K, Burgess NG, Mahajan K, McLeod D, Bourke MJ. A standardized imaging protocol for the endoscopic prediction of dysplasia within sessile serrated polyps (with video). *Gastrointest Endoscopy*. 2018; 87(1), 222-231.e2, doi: 10.1016/j.gie.2017.06.031
- Skekhar A, Hendahewa R, **Jayanna M**, Ratnayake S. Bizarre cause for abdominal pain in a young female. *ANZ J Surg*. 2018;88(10), E739-E740, doi: 10.1111/ans.13707
- Huang JY**. Role of EUS-guided liver biopsy in benign parenchymal disease (with video). *Endosc Ultrasound*. 2018; 7(4), 236-239
- Samarasena JB, **Huang JY**, et al., EUS-guided portal pressure gradient measurement with a simple novel device: a human pilot study. *VideoGIE*. 2018; 3(11), 361-363
- Devereaux B**, Athan E, Brown RR, Greig SM, Jone DM, Bailey FK, Wallis DJ, Singh R. Australian infection control in endoscopy consensus statements on carbapenemase-producing Enterobacteriaceae. *J Gastroenterol Hepatol*. 2018, ISSN:1440-1746, Oct 21
- Wynne K, **Devereaux B**, Dornhorst A. Diabetes of the exocrine pancreas. 2018: Epub, August 27, doi:10.1111/jgh.14451
- Cox AJ, Zhang P, Bowden DW, **Devereaux B**, Davoren PM, Cripps AW, West NP. Enteroendocrine and adipokine associations with type 2 diabetes: phenotypic risk scoring approaches. *J Gastroenterol Hepatol*. 2018

## Journal Articles: (cont):

9. **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 Dis.* (2018) Dec 18. [Epub ahead of print]
10. Irwin JR, Ferguson E, Simms LA, Hanigan K, Doecke JD, Langguth D, Arnott A, **Radford-Smith G**. Detectable Laboratory Abnormality Is Present up to 12 Months Prior to Diagnosis in Patients with Crohn's Disease. *Dig Dis Sci.* (2018) Nov 26. [Epub ahead of print]
11. Patrick D, Doecke J, Irwin J, Hanigan K, Simms L, **Howlett M**, **Radford-Smith G**. The effect of pre-admission immunosuppression on colectomy rates in acute severe ulcerative colitis. *Therap Adv Gastroenterol.* (2018) Nov 13;11: eCollection
12. Zakrzewski M, Simms LA, **Brown A**, **Appleyard M**, Irwin J, Waddell N, **Radford-Smith GL**. IL23R-protective coding variant promotes beneficial bacteria and diversity in the ileal microbiome in healthy individuals without inflammatory bowel disease. *J Crohns Colitis.* (2018) Nov 16. doi: 10.1093/ecco-jcc/jjy188. [Epub ahead of print]
13. Duffy DL, Zhu G, Li X, Sanna M, Iles MM, Jacobs LC, Evans DM, Yazar S, Beesley J..., Uitterlinden AG, Madden PA, Heath AC, Nelson EC, Green AC, Chanock S, Barrett JH, Brown MA, Hayward NK, MacGregor S, Sturm RA, Hewitt AW; Melanoma GWAS Consortium (**Radford-Smith**), ..Han J, Martin NG. Novel pleiotropic risk loci for melanoma and nevus density implicate multiple biological pathways. *Nat Commun.* (2018) Nov 14;9(1):4774
14. Zhang T, Choi J, Kovacs MA, Shi J, Xu M; NISC Comparative Sequencing Program; Melanoma Meta-Analysis Consortium, et al. Cell-type-specific eQTL of primary melanocytes facilitates identification of melanoma susceptibility genes. *Genome Res.* (2018) Nov;28(11):1621-1635. Epub 2018 Oct 17
15. Tye H, Yu CH, Simms LA, de Zoete MR, Kim ML, Zakrzewski M, Penington JS, Harapas CR, Souza-Fonseca-Guimaraes F, Wockner LF, Preaudet A, Mielke LA, Wilcox SA, Ogura Y, Corr SC, Kanojia K, Kouremenos KA, De Souza DP, McConville MJ, Flavell RA, Gerlic M, Kile BT, Papenfuss AT, Putoczki TL, **Radford-Smith GL**, Masters SL. NLRP1 restricts butyrate producing commensals to exacerbate inflammatory bowel disease. *Nat Commun.* (2018) Sep 13;9(1):3728
16. MacGregor S, Ong JS, An J, Han X, Zhou T, Siggs OM, Law MH, Souzeau E, Sharma S, Lynn DJ, Beesley J, Sheldrick B, ... Graham SL, Healey PR, White AJR, Casson RJ, Best S, Grigg JR, Goldberg I, Powell JE, Whiteman DC, **Radford-Smith GL**, Martin NG, Montgomery GW, Burdon KP, Mackey DA, Gharahkhani P, Craig JE, Hewitt AW. Genome-wide association study of intraocular pressure uncovers new pathways to glaucoma. *Nat Genet.* (2018) Aug;50(8):1067-1071
17. Momozawa Y, Dmitrieva J, Théâtre E, Defontaine V, ...International IBD Genetics Consortium (**Radford-Smith**), Lathrop M, Hugot JP, Weersma RK, De Vos M, Franchimont D, Vermeire S, Kubo M, Louis E, Georges M. IBD risk loci are enriched in multigenic regulatory modules encompassing putative causative genes. *Nat Commun.* (2018) Jun 21;9(1):2427
18. Roberts RL, Wallace MC, Seinen ML, van Bodegraven AA, Krishnaprasad K, Jones GT, van Rij AM, Baird A, Lawrance IC, Prosser R, Bampton P, Grafton R, Simms LA, Studd C, Bell SJ, Kennedy MA, Halliwell J, Geary RB, **Radford-Smith G**, Andrews JM, McHugh PC, Barclay ML. Nonsynonymous Polymorphism in Guanine Monophosphate Synthetase Is a Risk Factor for Unfavorable Thiopurine Metabolite Ratios in Patients With Inflammatory Bowel Disease. *Inflamm Bowel Dis.* 2018 Nov 29;24(12):2606-2612
19. Entyvio lengthen dose-interval study: lengthening vedolizumab dose interval and the risk of clinical relapse in inflammatory bowel disease. Chan W, Lynch N, Bampton P, Chang J, Chung A, Florin T, Hetzel DJ, Jakobovits S, Moore G, Pavli P, **Radford-Smith G**, Thin L, Baraty B, Haifer C, Yau Y, Leong RWL. *Eur J Gastroenterol Hepatol.* (2018) Jul;30(7):735-740
20. Predicting response after infliximab salvage in acute severe ulcerative colitis. Choy MC, Seah D, Gorelik A, An YK, Chen CY, Macrae FA, Sparrow MP, Connell WR, Moore GT, **Radford-Smith G**, Van Langenberg DR, De Cruz P. *J Gastroenterol Hepatol.* (2018) Jul;33(7):1347-1352
21. Lim MH, Doecke JD, **Radford-Smith GL**. Editorial: first among Equals-not for either infliximab or adalimumab in Crohn's disease-yet. *AlimenPharmacol Ther.* (2018) Apr;47(8):1225-1226
22. Lord AR, Simms LA, **Brown A**, Hanigan K, Krishnaprasad K, Schouten B, **Croft AR**, **Appleyard MN**, **Radford-Smith GL**. Development and evaluation of a risk assessment tool to improve clinical triage accuracy for colonoscopic investigations. *BMC Cancer.* (2018) Feb 27;18(1):229
23. Fricker M, Goggins BJ, Mateer S, Jones B, Kim RY, Gellatly SL, Jarnicki AG, Powell N, Oliver BG, **Radford-Smith G**, Talley NJ, Walker MM, Keely S, Hansbro PM. Chronic cigarette smoke exposure induces systemic hypoxia that drives intestinal dysfunction. *JCI Insight.* (2018) Feb 8;3(3)
24. Wright EK, Kamm MA, De Cruz P, Hamilton AL, Selvaraj F, Princen F, Gorelik A, Liew D, Prïdeaux L, Lawrance IC, Andrews JM, Bampton PA, Jakobovits SL, Florin TH, Gibson PR, Debinski H, Macrae FA, Samuel D, Kronborg I, **Radford-Smith G**, Geary RB, Selby W, Bell SJ, Brown SJ, Connell WR. Anti-TNF Therapeutic Drug Monitoring in Postoperative Crohn's Disease. *J Crohns Colitis.* (2018) May 25;12(6):653-661
25. Roberts G, Perry A, Lord A, Frankland A, Leung V, Holmes-Preston E, Levy F, Lenroot RK, Mitchell PB, Breakspear M. Structural dysconnectivity of key cognitive and emotional hubs in young people at high genetic risk for bipolar disorder. *Mol Psychiatry.* (2018) Feb;23(2):413-421
26. Lord A, Simms L, Hanigan K, Sullivan R, Hobson P, **Radford-Smith GL**. Protective effects of *Helicobacter pylori* for IBD are related to the cagA-positive strain. *Gut* (2018); 67:393-394
27. Kawamata F, Patch A, Nones K, Bond C, McKeone D, Pearson S, Homma S, Liu C, Fennell L, Dumenil T, Hartel G, Kobayasi N, Yokoo H, Fukai M, Nishihara H, Kamiyama T, Burge M, Karapetis C, Taketomi A, **Leggett B**, Waddell N and Whitehall V. Copy number profiles in paired primary and metastatic colorectal cancer, 2017, *Oncotarget* 2018; 9:3394-3405
28. Fennell L, Clendenning M, McKeone D, Jamieson S, Balachandra S, Borowsky J, Liu C, Kawamata F, Bond C, Rosty C, Burge M, Buchanan D, **Leggett B**, Whitehall V. RNF43 is less frequently mutated in Lynch Syndrome compared with sporadic microsatellite unstable colorectal cancers. *Familial Cancer* 2018; 17:63-69
29. Fennell L, Jamieson S, McKeone D, Corish T, Rohdmann M, Furner T, Bettington M, Liu C, Kawamata F, Bond C, Van der Pols J, **Leggett B**, Whitehall V. MLH1-93 G/A polymorphism is associated with MLH1 promoter methylation and protein loss in dysplastic sessile serrated adenomas with BRAF V600E mutation. *BMC Cancer* 2018; 18:35 DOI 10.1186/s12885-017-3946-5

## Journal Articles: (cont):

30. Lannagan TRM, Lee YK, Wang T, Roper J, Bettington ML, Fennell L, Vrbanac 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 BA**, Whitehall VLJ, Worthley DL, Woods SL. Genetic editing of colonic organoids provides a molecularly distinct and orthotopic preclinical model of serrated carcinogenesis. *Gut*; Apr 2018, gutjnl-2017-315920; DOI: 10.1136/gutjnl-2017-315920
31. Jenkins MA, Win AK, Templeton AS, Angelakos MS, Buchanan DD, Cotterchio M, Figueiredo JC, Thibodeau SN, Baron JA, Potter JD, Hopper JL, Casey G, Gallinger S, Le Marchand L, Lindor NM, Newcomb PA, Haile RW; Colon Cancer Family Registry Cohort Investigators including **Leggett B**. Cohort Profile: the Colon Cancer Family Registry Cohort (CCFRC). *Int J Epidemiol*. 2018;47(2):387-388
32. Mayo MJ, Wigg AJ, **Leggett BA**, Arnold H, Thompson AJ, Weltman M, Carey EJ, Muir AJ, Ling L, Rossi SJ, DePaoli AM. Engineered FGF19 for the treatment of primary biliary cholangitis: a multicentre, randomized, placebo-controlled trial. *Hepatol Communications* 2018; 2:1037-1050
33. Liu C, Bettington ML, Walker NI, Dwine J, Hartel GF, **Leggett BA**, Whitehall VLJ. CpG Island Methylation in Sessile Serrated Adenomas Increases with Age, Indicating Lower Risk of Malignancy in Young Patients. *Gastroenterology* 2018; 155:1362-1365
34. Roberts SK, Lim R, Strasser S, Nicoll A, Gazzola A, Mitchell J, Siow W, Khoo T, Hamarneh Z, Weltman M, Gow P, Janko N, Tse E, Mishra G, Cheng EH, Levy M, Cheng W, Sood S, **Skoien R**, Mitchell J, Zekry A, George J, MacQuillan G, Wigg A, Stuart K, Sievert W, McCaughan G; ALA Clinical Research Network. Efficacy and Safety of Mycophenolate Mofetil in Patients with Autoimmune Hepatitis and Suboptimal Outcomes After Standard Therapy. *Clin Gastroenterol Hepatol*. 2018 Feb;16(2):268-277.

## Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Appleyard M**. Obscure GI bleeding investigation. Australian Gastroenterology Week 2018. Brisbane
2. **Walsh P**. Managing complications of obesity surgery. Australian Gastroenterology Week 2018. Brisbane
3. **Walsh P**. Gastric sleeve overstitch. Australian Gastroenterology Week 2018. Brisbane
4. **Walsh P. RAP: Resection and plication anti-reflux procedure. Bariatric and metabolic endoscopy symposium, September 2018. Sydney**
5. **Walsh P**. Endoscopic revision of Roux en Y gastric bypass. Bariatric and metabolic endoscopy symposium, September 2018. Sydney
6. **Walsh P**. Has the time of the endoscopic surgeon arrived? Lessons learnt in the post bypass population, GESQ Quarterly meeting, September 2018. Brisbane
7. **Tutticci N**. ESD & STER in the upper GI tract. Australian Gastroenterology Week 2018. Brisbane
8. **Huang JY**. Emerging Role of Endohepatology, WCDD, Rome, November 2018
9. **Huang JY**. Role of endoscopic ultrasound in endohepatology, Australian EUS symposium, Adelaide, April 2018
10. **Devereaux, B**. Best practice colonoscopy in Australia in 2018: Item numbers as an instrument of change. Gastroenterology Society of Queensland educational meeting 2018. Brisbane
11. **Devereaux, B**. Are you sure your colonoscopy procedure reaches a standard level? Thai Association for Gastrointestinal Endoscopy (TAGE) Annual Endoscopy Workshop 2018. Bangkok
12. **Devereaux, B**. Colorectal Cancer: Who is at risk? Gastroenterology Association of Thailand/World Gastroenterology Organisation Conference. 2018. Bangkok, Thailand, 2018
13. **Barbara Leggett**. “SSA” Australian Gastroenterology Week 2018, Brisbane.
14. **Barbara Leggett**. “Making it happen: approval for universal tumour testing and what it means for the health care system” Lynch Syndrome Australia Symposium 2018, Garvan Institute of Medical Research, Sydney.
15. **Barbara Leggett**. “Molecular Genetics of Colorectal Tumorigenesis” 9th Asian-Pacific Topic Conference as part of the 104th General Meeting of the Japanese Society of Gastroenterology 2018, Tokyo.
16. **Richard Skoien**. “Biomarkers in HCC”. 2018 ALA Experimental Liver Cancer Workshop; Gallipoli Institute, Greenslopes Hospital, Brisbane.
17. **Richard Skoien**. “Emerging Therapies in NAFLD”. Australian Gastroenterology Week 2018; Brisbane.
18. **Richard Skoien**. “Is inflammation still the key modifiable factor in liver disease progression?” talk. GESA Research Workshop 2018; Gold Coast
19. **Devereaux, B**. Infection Control in Endoscopy Consensus Statements on Carbapenemase-producing Enterobacteriaceae. Gastroenterology Association of Thailand/ World Gastroenterology Organisation Conference. 2018. Bangkok, Thailand
20. **Devereaux, B**. Maximising colonoscopy quality and efficiency. Gastroenterology Association of Thailand/ World Gastroenterology Organisation Conference 2018. Bangkok, Thailand
21. **Devereaux, B**. Approach to solid pancreatic lesions. Gastroenterology Association of Thailand/ World Gastroenterology Organisation Conference 2018. Bangkok, Thailand
22. **Devereaux, B**. GESA Finishing School: Item numbers demystified. Australian Gastroenterology Week 2018. Brisbane
23. **Devereaux, B**. EUS-guided liquid biopsies. GESA EUS Australia 2018. Adelaide
24. **GL Radford-Smith**, invited speaker, “No Guts, No Glory”, Brain Food Breakfast, World Science Festival, Brisbane, March 2018
25. **GL Radford-Smith**. “Inflammatory Bowel Diseases and Irritable Bowel Syndrome – An overview”. Australian Medical Forum, Brisbane, November 2018

### Invited Speaker: (cont):

26. **GL Radford-Smith**. “Biologics in IBD – Timing is everything”. Biosimilars Masterclass, Sydney, August 2018
27. **A Lee**. “Introduction to bowel Ultrasonography”. Theory and Hands on Workshop. International Bowel Ultrasound Group. Royal Melbourne Hospital, Melbourne, Australia, November 2018
28. **A Lee**. “Establishing an intestinal ultrasound service”. International Bowel Ultrasound Group. Royal Melbourne Hospital, Melbourne, Australia, November 2018.

### Oral Presentations:

1. Samarasena J, Han JY, Patel A, Fortinsky KJ, Shimizu T, Hu K, **Huang JY**, Chang KC. EUS-Guided portal pressure gradient measurement: a single center experience. DDW, Washington, June 2018
2. **Lim MH**, Lord A, Simms LA, Hanigan K, Edmundson A, Rickard M, Stitz R, Clark D, Radford-Smith GL. Have changes in medical therapy and surgical techniques for ulcerative colitis altered post colectomy outcomes over the past 26 years? Australian Gastroenterology Week 2018, Brisbane
3. Zakrzewski M, Simms LA, **Brown A, Appleyard MN**, Irwin J, **Radford-Smith GL**. IL23R (Interleukin 23 Receptor) R381Q Gene Variant Impacts the Microbial Composition in Non-IBD Healthy Controls. Australian Society for Microbiology, 2018, Brisbane
4. Lord A, Baird A, Simms LA, Krishnaprasad K, Hanigan K, Doecke JD, Bampton PA, Andrews JM, Gearry RB, **Radford-Smith GL**, Lawrance IC. Crohn's Disease Patients with at least one NOD2 Mutation and Who Smoke Regularly are Four Times as Likely to Need Two or more Resections. Australian Gastroenterology Week 2018, Brisbane.

### Poster Presentations:

1. Anton Lord A, Angela Baird A, Lisa Simms LA, Krupa Krishnaprasad K, Katherine Hanigan K, James D. Doecke JD, Richard Gearry R, Peter A. Bampton PA, **Radford-Smith GL**, et al. Crohn's Disease Patients with at least one NOD2 Mutation and Who Smoke Regularly are Four Times as Likely to Need two or more Resections. Gastroenterology, Vol. 154, Issue 6, S-629–S-630. Digestive Diseases Week, Washington DC, June 2018
2. Choy MC, Seah D, Faleck D, Shah S, Al Khoury A, An YK, **Radford-Smith GL**, Bessissow T, et al. Salvage Therapy in Acute Severe Ulcerative Colitis: a Systematic Review and Meta-Analysis. Gastroenterology, Vol. 154, Issue 6, S-840. Digestive Diseases Week, Washington DC, June 2018
3. Pulusu SSR, Srinivasan A, Krishnaprasad K, Cheng D, Mogilevski T, Flanagan E, Keung C, Wu Y, **Radford GL**, et al. Vedolizumab (VDZ) Real World Outcomes in Ulcerative Colitis (UC). Gastroenterology, Vol. 154, Issue 6, S-836. Digestive Diseases Week, Washington DC, June 2018
4. Weis A, Marquart L, Calvopina D, Genz B, Ramm GA, **Skoien R**. A Novel Diagnostic Serum microRNA Biomarker Panel for Hepatocellular Carcinoma in Hepatitis C. The Liver Meeting (AASLD) 2018; San Francisco, USA
5. Ong SY, Worland T, Pateria P, Powell L, Gurrin L, Ramm L, Testro A, Olynyk J, Ramm G, Anderson G, Skoien R, Delatycki M, Nicoll AJ. The relationship between serum ferritin and markers of liver fibrosis in a hemochromatosis cohort. Australian Gastroenterology Week 2018; Brisbane, Australia.

## Department of Infectious Diseases Unit

In 2018, The RBWH Infectious Diseases Unit continued to produce international-standard, practice-changing clinical and translational research in partnership with the University of Queensland Centre for Clinical Research (UQCCR), Queensland Institute for Medical Research – Berghofer (QIMR-B) and other collaborators.

The international MERINO trial, co-ordinated in Brisbane by UQCCR, examined different antibiotic strategies for common drug-resistant bacterial infections. It was published in the Journal of the American Medical Association and has since had over 90 000-page views. The Infectious Diseases Society of America voted it as the trial most likely to change clinical practice in 2018. By applying the results of this study, it is estimated that more than 10,000 lives could be saved worldwide each year.

Professor Paterson and UQCCR continued to produce a large amount of other very high quality and highly-sited clinical infectious diseases research and are leading several new clinical trials of anti-infectives.

Professor McCarthy and his group at (QIMR-B) continued to publish critically important research addressing drug therapy for malaria and other parasitic infections. Professor McCarthy's contribution to Australian science was acknowledged with the award of Fellowship of the Australian Academy of Health and Medical Sciences.

Dr Kate McCarthy was awarded her PhD for "*Pseudomonas aeruginosa* blood stream infections: clinical and molecular epidemiology, virulence and outcome."

Drs Redmond, Wright, Chapman and Hajkowicz had a number of publications accepted and presented at international and national conferences.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Paul Griffin	PhD UQ (2013-)	Human challenge studies in malaria	<b>James McCarthy</b> , David Looke
John Woodford	PhD UQ (2016-)	Microcirculatory disturbance in malaria	<b>James McCarthy</b> , Nick Anstey
<b>Anand Odedra</b>	PhD University of Liverpool (2017-)	Transmission of Malaria	<b>James McCarthy</b> , David Lalloo
<b>Paul Chapman</b>	PhD UQ (2017-)	A radiation-attenuated hookworm vaccine	<b>James McCarthy</b> , Alex Loukas
<b>Dr Kate McCarthy</b>	PhD, UQ (2014-2018)	<i>Pseudomonas aeruginosa</i> blood stream infections: Clinical and molecular epidemiology, virulence and outcome	<b>David Paterson</b>
<b>Dr Hugh Wright</b>	PhD, UQ (2017 -		David Paterson
Dr Patrick Harris	PhD, UQ (completed 2018)		<b>David Paterson</b>
Dr Andrew Henderson	PhD		<b>David Paterson</b>
Dr John McNamara	PhD		<b>David Paterson</b>
Dr Sanmarie Schlebusch	PhD		<b>David Paterson</b>

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>James McCarthy</b>	NHMRC Practitioner Fellow	QIMR Berghofer	QIMR Berghofer (2002-current)
<b>Anand Odedra</b>	Medicines for Malaria	QIMR Berghofer	University of Liverpool (2017-)
Bridget Barber	NHMRC ECF	QIMR Berghofer	Menzies School of Health and Research

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
James McCarthy	Medicines for Malaria/multiple Pharma/Bill and Melinda Gates Foundation	Human Challenge Studies in malaria
James McCarthy	<b>Paul Thomas</b> (Nuclear Medicine)	In vivo imaging in malaria
James McCarthy	Robert Sauerwein (Netherlands)	Transmission studies in malaria
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 (PATH)	Biomarkers for Malaria Elimination
James McCarthy	Merck; Wellcome Trust	MK5717

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Tiffany Harris-Brown, Anna Donaldson, Kyra Cottrell, Michelle Bauer, Dr Delaney Burnard, Susan Moss, A/Prof Mark Butler	<b>Professor David Paterson</b>	UQCCR Antibiotic Resistance – Paterson Group
Luke Coffey (QPP), Prof Charles Gilks (UQ)	<b>Dr Andrew Redmond</b>	Taking the Lead: Peer Delivery of Point of Care Testing for STI within a Community Setting
Dr Nina Hall, Professor Paul Memmott (UQ)	<b>Dr Andrew Redmond</b>	Housing and health: do housing repairs and maintenance improve community health?
Dr Patrick Harris, A/Prof Scott Beatson, Dr Brian Forde	<b>Professor David Paterson, Dr Krispin Hajkowicz, Ms Michelle Doidge, Ms Trish Hurst</b>	Queensland Genomic Health Alliance Microbiology Demonstration Project
A/Prof Lachlan Coin (UQ), Dr Seweryn Bialasiewicz (QPID), Dr Mark Blaskovich (UQ)	<b>Dr Krispin Hajkowicz, Dr Marion Woods, A/Prof Glen Kennedy</b>	Rapid detection of antibiotic resistant bacterial infection in patients with suspected sepsis
<b>James McCarthy</b> , John Woodford	<b>Paul Thomas</b>	In vivo images in malaria
<b>James McCarthy</b> , Anand Odedra	<b>Glen</b>	Apheresis in malaria

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>James McCarthy</b>	Fellow	Australian Academy of Health and Medical Sciences

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Kate McCarthy</b>	Infectious Diseases Unit	Coalface Diabetic Foot Infection Study	RBWH Foundation	\$15,000	\$15,000 (2018)
<b>Krispin Hajkowicz</b> , David Whiley	Infectious Diseases Unit, Intensive Care Unit	Rapid detection of resistance genes from gram-negative bacteria isolated from blood in ICU-admitted patients	RBWH Foundation	\$40,000	\$40,000 (2018)
<b>David Paterson</b> , Sharon Lewin, Tania Sorrell, J McVernon, S Webb, J Kaldor, R Andrews, Allen Cheng and others	Infectious Diseases Unit	Australian Partnership (for) Preparedness Research on Infectious (disease) Emergencies (APPRISE) (NHMRC CRE administered by the University of Melbourne)	University of Melbourne	\$27,500	
Mark Blaskovich, Matthew Cooper, Karl Hansford, <b>Jason Roberts</b> and <b>David Paterson</b>	Infectious Diseases Unit, Intensive Care Unit	Lipopeptide antibiotics for XDR Gram-negative infections	NHMRC Development Grant		\$994,897 (2018-2020)

## 2018 Research Grants – Awarded (cont)

Investigators ( <i>RBWH staff in bold</i> )	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>David Paterson</b> , Sharon Chen, Tony Korman and Jenny Kok	Infectious Diseases Unit	Clostridium difficile Infections: burden, clinical practice and health outcomes in five large tertiary hospitals in Eastern Australia	Western Sydney Local Health District	\$44,000	\$44,000 (2018)
<b>David Paterson</b> , Andrew Henderson and Patrick Harris	Infectious Diseases Unit	Pilot Randomised Controlled Trial of Penicillin versus Flucloxacillin for Definitive Treatment of Invasive Penicillin susceptible Staphylococcus aureus	Metro North Hospital and Health Service	44,000	\$44,000 (2018)
<b>David Paterson</b> , Patrick Harris, Andrew Henderson and <b>Jason Roberts</b>	Infectious Diseases Unit	Rapid characterisation of pathogens for personalised antimicrobial selection in critically ill patients	Metro North Hospital and Health Service	\$44,000	\$44,000 (2018)
<b>David Paterson</b> , Len Gray, Mark Schembri, Ruth Hubbard, Christopher Freeman, Elaine Pascoe, Patrick Harris, Nancy Peel, <b>Krispin Hajkowicz</b> and others	Infectious Diseases Unit	Cluster randomised trial of a multimodal intervention to reduce antimicrobial use in residential aged care facilities	NHMRC MRFF – Antimicrobial Resistance Targeted Call for Research		\$1,199,976 (2018-2023)
<b>James McCarthy</b>	Infectious Diseases	Centre for Research Excellence in Malaria Elimination	NHMRC	\$500,315.30	\$2,470,291.30 (2017-2022)
<b>James McCarthy</b>	Infectious Diseases	T-follicular helper cell subsets that induce protective anti-Plasmodium falciparum antibodies	NHMRC	\$152,087.16	\$456,261.50 (2017-2019)
<b>James McCarthy</b>		NHMRC Practitioner Fellowship GNT1135955 Project: Translational Studies in Malaria	NHMRC	\$100,331.85	\$507,679.17 (2018-2022)
<b>James McCarthy</b> , Nicholas Anstey, Denise Doolan, Christian Engwerda, Michael Good, Alex Loukas, Don McManus, Richard Price, Istvan Toth	Infectious Diseases	NHMRC Program Grant GNT1132975 Project: Tropical diseases: translating discoveries into better health	NHMRC	\$4,016,182.25 (Total) \$446,245.21 (McCarthy share)	\$20,321,882.17 (Total) \$2,258,000.81 (McCarthy share) (2018-2022)

## 2018 Research Publications

### Journal Articles

- Avent ML**, Rogers BA, Cheng AC, Athan E, Francis JR, Roberts MJ, **Paterson DL**, Harris PNA. Fosfomycin: what was old is new again. Intern Med J. 2018 Dec;48(12):1425-1429
- Shen C, Feng S, Chen H, Dai M, **Paterson DL**, Zheng X, Wu X, Zhong LL, Liu Y, Xia Y, Ma R, Huang X, Tian GB. Transmission of mcr-1-Producing Multidrug-resistant Enterobacteriaceae in Public Transportation in Guangzhou, China. Clin Infect Dis. 2018 Nov 13;67(suppl\_2): S217-S22
- Henderson A, Tan E, **McCarthy KL**, **Paterson DL**. Activity of ceftolozane/tazobactam against a collection of Pseudomonas aeruginosa isolates from bloodstream infections in Australia. Pathology. 2018 Dec;50(7):748-752
- Evans SR, Follmann D, Liu Y, Holland T, Doernberg SB, Rouphael N, Hamasaki T, Jiang Y, Lok JJ, Tran TTT, Harris AD, Fowler VG Jr, Boucher H, Kreiswirth BN, Bonomo RA, van Duin D, **Paterson DL**, Chambers H. Sequential Multiple Assignment Randomized Trials for COMparing Personalized Antibiotic StrategieS. (SMART-COMPASS). Clin Infect Dis. 2018 Oct 23. doi: 10.1093/cid/ciy912. [Epubahead of print] PubMed PMID: 30351426
- Isler B, Doi Y, Bonomo RA, **Paterson DL**. New Treatment Options against Carbapenem-Resistant Acinetobacter baumannii Infections. Antimicrob Agents Chemother. 2018 Dec 21;63(1). pii: e01110-18. doi: 10.1128/AAC.01110-18. Print 2019 Jan. Review
- Forde BM, Zowawi HM, Harris PNA, Roberts L, Ibrahim E, Shaikh N, Deshmukh A, Sid Ahmed MA, Al Maslamani M, Cottrell K, Trembizki E, Sundac L, Yu HH, Li J, Schembri MA, Whiley DM, **Paterson DL**, Beatson SA. Discovery of mcr-1-Mediated Colistin Resistance in a Highly Virulent Escherichia coli Lineage. mSphere. 2018 Oct 10;3(5). pii: e00486-18

### Journal articles: (cont):

7. Harris PNA, Tambyah PA, Lye DC, Mo Y, Lee TH, Yilmaz M, Alenazi TH, Arabi Y, Falcone M, Bassetti M, Righi E, Rogers BA, Kanj S, Bhally H, Iredell J, Mendelson M, Boyles TH, Looke D, Miyakis S, Walls G, Al Khamis M, Zikri A, Crowe A, Ingram P, Daneman N, Griffin P, Athan E, Lorenc P, Baker P, Roberts L, Beatson SA, Peleg AY, Harris-Brown T, **Paterson DL**; MERINO Trial Investigators and the Australasian Society for Infectious Disease Clinical Research Network (ASID-CRN). Effect of Piperacillin-Tazobactam vs Meropenem on 30-Day Mortality for Patients with E coli or Klebsiella pneumoniae Bloodstream Infection and Ceftriaxone Resistance: A Randomized Clinical Trial. *JAMA*. 2018 Sep 11;320(10):984-994
8. Xu Y, Zhong LL, Srinivas S, Sun J, Huang M, **Paterson DL**, Lei S, Lin J, Li X, Tang Z, Feng S, Shen C, Tian GB, Feng Y. Spread of MCR-3 Colistin Resistance in China: An Epidemiological, Genomic and Mechanistic Study. *EBioMedicine*. 2018 Aug; 34:139-157
9. Russo A, Falcone M, Gutiérrez-Gutiérrez B, Calbo E, Almirante B, Viale PL, Oliver A, Ruiz-Garbajosa P, Gasch O, Gozalo M, Pitout J, Akova M, Peña C, Cisneros JM, Hernández-Torres A, Farcomeni A, Prim N, Origüen J, Bou G, Tacconelli E, Tumbarello M, Hamprecht A, Karaiskos I, de la Calle C, Pérez F, Schwaber MJ, Bermejo J, Lowman W, Hsueh PR, Mora-Rillo M, Rodríguez-Gomez J, Souli M, Bonomo RA, **Paterson DL**, Carmeli Y, Pascual A, Rodríguez-Baño J, Venditti M; REIPI/ESGBIS/INCREMENT investigators. Predictors of outcome in patients with severe sepsis or septic shock due to extended-spectrum  $\beta$ -lactamase-producing Enterobacteriaceae. *Int J Antimicrob Agents*. 2018 Nov;52(5):577-585
10. McNamara JF, Righi E, **Wright H**, Hartel GF, Harris PNA, **Paterson DL**. Long-term morbidity and mortality following bloodstream infection: a systematic literature review. *J Infect*. 2018 Jul;77(1):1-8
11. Zowawi HM, Syrmis MW, Kidd TJ, Balkhy HH, Walsh TR, Al Johani SM, Al Jindan RY, Alfaresi M, Ibrahim E, Al-Jardani A, Al Salman J, Dashti AA, Sidjabat HE, Baz O, Trembizki E, Whiley DM, **Paterson DL**. Identification of carbapenem-resistant *Pseudomonas aeruginosa* in selected hospitals of the Gulf Cooperation Council States: dominance of high-risk clones in the region. *J Med Microbiol*. 2018 Apr 17
12. **McCarthy KL**, Wailan AM, Jennison AV, Kidd TJ, **Paterson DL**. *P. aeruginosa* blood stream infection isolates: A "full house" of virulence genes in isolates associated with rapid patient death and patient survival. *Microb Pathog*. 2018 Jun; 119:81-85
13. Scheuerman O, Schechner V, Carmeli Y, Gutiérrez-Gutiérrez B, Calbo E, Almirante B, Viale PL, Oliver A, Ruiz-Garbajosa P, Gasch O, Gozalo M, Pitout J, Akova M, Peña C, Molina J, Hernández-Torres A, Venditti M, Prim N, Origüen J, Bou, G, Tacconelli E, Tumbarello M, Hamprecht A, Karaiskos I, de la Calle C, Pérez F, Schwaber MJ, Bermejo J, Lowman W, Hsueh PR, Navarro-San Francisco C, Bonomo RA, **Paterson DL**, Pascual A, Rodríguez-Baño J; REIPI/ESGBIS/INCREMENT investigators. Comparison of Predictors and Mortality Between Bloodstream Infections Caused by ESBL-Producing *Escherichia coli* and ESBL-Producing *Klebsiella pneumoniae*. *Infect Control Hosp Epidemiol*. 2018 Jun;39(6):660-667
14. Mitchell BG, White N, Farrington A, Allen M, Page K, Gardner A, Halton K, Riley TV, Gericke CA, **Paterson DL**, Graves N, Hall L. Changes in knowledge and attitudes of hospital environmental services staff: The Researching Effective Approaches to Cleaning in Hospitals (REACH) study. *Am J Infect Control*. 2018 Sep;46(9):980-985
15. Avery RK, Silveira FP, Benedict K, Cleveland AA, Kauffman CA, Schuster MG, Dubberke ER, Husain S, **Paterson DL**, Chiller T, Pappas P. Cytomegalovirus infections in lung and hematopoietic cell transplant recipients in the Organ Transplant Infection Prevention and Detection Study: a multi-year, multicentre prospective cohort study. *Transpl Infect Dis*. 2018 Jun;20(3): e12877
16. Sidjabat HE, Gien J, Kvaskoff D, Ashman K, Vaswani K, Reed S, McGeary RP, **Paterson DL**, Bordin A, Schenk G. The use of SWATH to analyse the dynamic changes of bacterial proteome of carbapenemase-producing *Escherichia coli* under antibiotic pressure. *Sci Rep*. 2018 Mar 1;8(1):3871
17. Yadav R, Rogers KE, Bergen PJ, Bulitta JB, Kirkpatrick CMJ, Wallis SC, **Paterson DL**, Nation RL, Lipman J, **Roberts JA**, Landersdorfer CB. Optimization and Evaluation of Piperacillin-Tobramycin Combination Dosage Regimens against *Pseudomonas aeruginosa* for Patients with Altered Pharmacokinetics via the Hollow-Fiber Infection Model and Mechanism-Based Modeling. *Antimicrob Agents Chemother*. 2018 Apr 26;62(5). pii: e00078-18
18. Bergen PJ, Bulitta JB, Sime FB, **Lipman J**, McGregor MJ, Millen N, **Paterson DL**, Kirkpatrick CMJ, **Roberts JA**, Landersdorfer CB. Differences in suppression of regrowth and resistance despite similar initial bacterial killing for meropenem and piperacillin/tazobactam against *Pseudomonas aeruginosa* and *Escherichia coli*. *Diagn Microbiol Infect Dis*. 2018 May;91(1):69-76
19. Blaskovich MAT, Hansford KA, Gong Y, Butler MS, Muldoon C, Huang JX, Ramu S, Silva AB, Cheng M, Kavanagh AM, Ziora Z, Premraj R, Lindahl F, Bradford TA, Lee JC, Karoli T, Pellingon R, Edwards DJ, Amado M, Elliott AG, Phetsang W, Daud NH, Deecker JE, Sidjabat HE, Ramaolaga S, Zuegg J, Betley JR, Beevers APG, Smith RAG, **Roberts JA**, **Paterson DL**, Cooper MA. Protein-inspired antibiotics active against vancomycin- and daptomycin-resistant bacteria. *Nat Commun*. 2018 Jan 2;9(1):22
20. Tacconelli E, Carrara E, Savoldi A, Harbarth S, Mendelson M, Monnet DL, Pulcini C, Kahlmeter G, Kluytmans J, Carmeli Y, Ouellette M, Outterson K, Patel, J, Cavalieri M, Cox EM, Houchens CR, Grayson ML, Hansen P, Singh N, Theuretzbacher U, Magrini N; WHO Pathogens Priority List Working Group. Discovery, research, and development of new antibiotics: the WHO priority list of antibiotic-resistant bacteria and tuberculosis. *Lancet Infect Dis*. 2018 Mar;18(3):318-327
21. **McCarthy KL**, Cherian JD, **Avent ML**, **Paterson DL**. Combination antibiotic therapy for *Pseudomonas aeruginosa* bacteremia in febrile neutropenic patients? The question still remains. *Infect Dis (Lond)*. 2018 May;50(5):403-406
22. Djoko KY, Achard MES, Phan MD, Lo AW, Miraula M, Prombhul S, Hancock SJ, Peters KM, Sidjabat HE, Harris PN, Miti N, Walsh TR, Anderson GJ, Shafer WM, **Paterson DL**, Schenk G, McEwan AG, Schembri MA. Copper Ions and Coordination Complexes as Novel Carbapenem Adjuvants. *Antimicrob Agents Chemother*. 2018 Jan 25;62(2). pii: e02280-17
23. van Duin D, Lok JJ, Earley M, Cober E, Richter SS, Perez F, Salata RA, Kalayjian RC, Watkins RR, Doi Y, Kaye KS, Fowler VG Jr, **Paterson DL**, Bonomo RA, Evans S; Antibacterial Resistance Leadership Group. Colistin Versus Ceftazidime-Avibactam in the Treatment of Infections Due to Carbapenem-Resistant Enterobacteriaceae. *Clin Infect Dis*. 2018 Jan 6;66(2):163-171
24. Tattersall T, **Wright H**, **Redmond A**. Meropenem-induced liver injury and beta-lactam cross-reactivity. *BMJ Case Rep*. (2018) 11(1) e227124
25. **Coghill S**, McNamara J, **Woods M**, **Hajkovicz K**. Epidemiology and clinical outcomes of hepatitis delta (D) virus infection in Queensland, Australia. *Int J Infect Dis*. 2018 Sep; 74:123-127
26. **Stewart A**, **Hajkovicz K**. Heterogeneity in skin manifestations of spotted fever group rickettsial infection in Australia. *Australas J Dermatol*. 2018 Nov;59(4):349-351



### Journal articles: (cont):

27. **Stewart A, Roberts JA**, Wallis SC, **Allworth AM, Legg A, McCarthy KL**. Evidence of clinical response and stability of Ceftolozane/Tazobactam used to treat a carbapenem-resistant *Pseudomonas Aeruginosa* lung abscess on an outpatient antimicrobial program. *Int J Antimicrob Agents*. 2018 Jun;51(6):941-942
28. **Armstrong MR, McCarthy KL**, Horvath RL. A contemporary 16-year review of *Coxiella burnetii* infective endocarditis in a tertiary cardiac center in Queensland, Australia. *Infect Dis (Lond)*. 2018 Jul;50(7):531-538
29. **Chew R, Woods ML**. Epidemiology of fungal keratitis in Queensland, Australia. *Clin Exp Ophthalmol*. 2018 Jun 21. doi: 10.1111/ceo.13346. [Epub ahead of print]
30. **Clarke NE, Clements, ACA, Amaral S, Richardson A, McCarthy JS, McGown J, Bryan S, Gray DJ, Nery SV**. (S)WASH-D for Worms: a pilot study investigating the differential impact of school- versus community-based integrated control programs for soil-transmitted helminths. *PLoS Negl Trop Dis* 2018 12(5): e0006389
31. **Collins KA, Wang CY, Adams M, Mitchell H, Rampton M, Elliott S, Reuling JJ, Bousema T, Sauerwein R, Chalons S, Mohrle JJ, McCarthy JS**. a controlled human malaria infection model enabling evaluation of transmission-blocking interventions. *J Clin Invest* 2018 128(4): 1551-1562
32. **Edwards CL, Ng SS, Corvino D, Montes de Oca M, Rivera FL, Nones K, Lakis V, Waddell N, Amante FH, McCarthy JS, Engwerda CR**. Early changes in CD4+ T cell activation following blood-stage *Plasmodium falciparum* infection. 2018 *J Infect Dis*
33. **Feng, G, Boyle MJ, Cross N, Chan JA, Reiling L, Osier F, Stanisic DI, Mueller I, Anders RF, McCarthy JS, Richards JS, Beeson JG**. Human Immunization with a Polymorphic Malaria Vaccine Candidate Induced Antibodies to Conserved Epitopes That Promote Functional Antibodies to Multiple Parasite Strains. 2018 *J Infect Dis* 218(1): 35-43
34. **Khoury DS, Aogo R, Randrianomezantsoa-Radohery G, McCaw JM, Simpson JA, McCarthy JS, Haque A, Cromer D, Davenport MP**. Within-host modeling of blood-stage malaria. 2018 *Immunol Rev* 285(1): 168-193
35. **Vaz Nery S, Qi J, Llewellyn S, Clarke NE, Traub R, Gray DJ, Vally AJ, Williams GM, Andrews RM, McCarthy JS, Clements ACA**. Use of quantitative PCR to assess the efficacy of albendazole against *Necator americanus* and *Ascaris* spp. in Manufahi District, Timor-Leste. 2018 *Parasit Vectors* 11(1): 373
36. **Wang CYT, McCarthy JS, Stone WJ, Bousema T, Collins KA, Bialasiewicz S**. Assessing *Plasmodium falciparum* transmission in mosquito-feeding assays using quantitative PCR. 2018 *Malar J* 17(1): 249
37. **Woodford J, Shanks GD, Griffin P, Chalons S, McCarthy JS**. The Dynamics of Liver Function Test Abnormalities after Malaria Infection: a Retrospective Observational Study. 2018 *Am J Trop Med Hyg* 98(4): 1113-1119
38. **Clarke NE, Llewellyn S, Traub RJ, McCarthy JS, Richardson A, Nery SV**. Quantitative Polymerase Chain Reaction for Diagnosis of Soil-Transmitted Helminth Infections: A Comparison with a Flotation-Based Technique and an Investigation of Variability in DNA Detection. 2018 *Am J Trop Med Hyg*
39. **Reuling JJ, van de Schans LA, Coffeng LE, Lanke K, Meerstein-Kessel L, Graumans W, van Gemert GJ, Teelen K, Siebelink-Stoter R, van de Vegte-Bolmer M, de Mast Q, van der Ven AJ, Ivinson K, Hermsen CC, de Vlas S, Bradley J, Collins KA, Ockenhouse CF, McCarthy J, Sauerwein RW, Bousema T**. A randomized feasibility trial comparing four antimalarial drug regimens to induce *Plasmodium falciparum* gametocytemia in the controlled human malaria infection model. *Elife*. 2018 Feb 27;7
40. **Ng SS, Souza-Fonseca-Guimaraes F, Rivera FL, Amante FH, Kumar R, Gao Y, Sheel M, Beattie L, Montes de Oca M, Guillerey C, Edwards CL, Faleiro RJ, Frame T, Bunn PT, Vivier E, Godfrey DI, Pellucci DG, Lopez JA, Andrews KT, Huntington ND, Smyth MJ, McCarthy J, Engwerda CR**. Rapid loss of group 1 innate lymphoid cells during blood stage *Plasmodium* infection. *Clin Transl Immunology*. 2018;7(1): e1003
41. **Andrews KA, Wesche D, McCarthy J, Mohrle JJ, Tarning J, Phillips L, Kern S, Grasela T**. Model-Informed Drug Development for Malaria Therapeutics. *Annu Rev Pharmacol Toxicol*. 2018 Jan 6; 58:567-582
42. **Stanisic DI, McCarthy JS, Good MF**. Controlled Human Malaria Infection: Applications, Advances, and Challenges. *Infect Immun*. 2018 Jan;86(1)
43. **Sekuloski S, Batzloff MR, Griffin P, Parsonage W, 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(7):e0198658
44. **Pawliw R, Farrow R, Sekuloski S, Jennings H, Healer J, Phuong T, Sathe P, Pasay C, Evans K, Cowman AF, Schofield L, Chen N, McCarthy J, Trenholme K**. A bioreactor system for the manufacture of a genetically modified *Plasmodium falciparum* blood stage malaria cell bank for use in a clinical trial. *Malar J*. 2018 Aug 6;17(1):283
45. **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 TNF and IL-10 in subpatent malaria. *J Infect Dis*. 2018 Sep 15
46. **Berna AZ, McCarthy JS, Wang XR, Michie M, Bravo FG, Cassells J, Trowell SC**. Diurnal variation in expired breath volatiles in malaria-infected and healthy volunteers. *J Breath Res*. 2018 Sep 19;12(4):046014
47. **Leow CH, Fischer K, Leow CY, Braet K, Cheng Q, McCarthy J**. Isolation and characterization of malaria PfHRP2 specific VNAR antibody fragments from immunized shark phage display library. *Malar J*. 2018 Oct 24;17(1):383
48. **McCarthy JS, Smith B, Reid M, Berman J, Marquart L, Dobbin C, West L, Read LT, Dow G**. Blood schizonticidal activity and safety of tafenoquine when administered as chemoprophylaxis to healthy, non-immune participants followed by blood stage *Plasmodium falciparum* challenge: a randomized, double-blinded, placebo-controlled Phase 1b study. *Clin Infect Dis*. 2018 Nov 1
49. **Hii SF, Senevirathna D, Llewellyn S, Inpankaew T, Odermatt P, Khieu V, Muth S, McCarthy J, Traub RJ**. Development and Evaluation of a Multiplex Quantitative Real-Time Polymerase Chain Reaction for Hookworm Species in Human Stool. *Am J Trop Med Hyg*. 2018 Nov;99(5):1186-1193. doi: 10.4269/ajtmh.18-0276
50. **Shriemer K, Bobogare A, Ley B, McCarthy J, Price RN et al**. Quantifying primaquine effectiveness and improving adherence: a round table discussion of the AP MEN Vivax Working Group. *Malar J*. 2018 Jun 20;17(1):241. doi: 10.1186/s12936-018-2380-8
51. **Vickers ML, Dulhunty JM, Ballard E, Chapman P, Muller M, Roberts JA, Cotta MO**. Risk factors for multidrug-resistant Gram-negative infection in burn patients. *ANZ J Surg*. 2018 May;88(5):480-485.

## 2018 Conference Presentations– Invited Speaker, Oral and Poster

### Invited Speaker:

1. Microbial Genomics – A Case Study. Australasian College for Infection Prevention and Control Annual Scientific Meeting, Brisbane, November 2018
2. **Krispin Hajkowicz** - Surgical Prophylaxis – The Evidence or Lack Thereof. Australian Society for Antimicrobials Annual Scientific Meeting, Brisbane, February 2018
3. **Krispin Hajkowicz** – Metagenomic Sequencing. Australian national antimicrobial resistance and stewardship forum, Melbourne, November 2018
4. **Stewart A, Roberts JA, Wallis SC, Allworth AM, Legg A, McCarthy KL.** Evidence of clinical response and stability of Ceftolozane/Tazobactam used to treat a carbapenem-resistant *Pseudomonas Aeruginosa* lung abscess on an outpatient antimicrobial program. Australian Society for Antimicrobials Annual Scientific Meeting, Brisbane, February 2018
5. **James McCarthy** – exploiting new understanding of the stage transition of *Plasmodium* to develop a model able to interrogate transmission, American Society of Tropical Medicine and Hygiene (ASTMH) 67<sup>th</sup> Annual Meeting, November 2018, New Orleans
6. **James McCarthy** – the induced blood stage malaria model: a tool to accelerate the development of new interventions against malaria. Joint International Tropical Medicine Meeting (JITMM), January 2018, Bangkok
7. **James McCarthy** – translational tools for Early Development of Antimalarials: the Human Malaria Challenge Model, American Society for Clinical Pharmacology and Therapeutics, March 2018, Orlando USA
8. **James McCarthy** – World Malaria Congress, July 2018, Melbourne
9. **James McCarthy** – translational tools for Early Development of Antimalarials: the Human Malaria Challenge Model, Australian Red Cross Blood Service, May 2018, Sydney
10. **James McCarthy** – learnings from experimental human malaria infection studies, Walter & Eliza Hall Institute, November 2018, Melbourne
11. **Krispin Hajkowicz** – Carbapenem-Resistant *Acinetobacter baumannii* (CRAB) Outbreak Control using.

### Oral Presentations:

1. Characterization of new antimalarial combinations in Induced Blood Stage Malaria studies **James S. McCarthy**
2. A randomized controlled trial comparing parasite clearance profiles after single dose artesunate among subjects experimentally infected with artemisinin-resistant or artemisinin-sensitive *Plasmodium falciparum* parasites. Rebecca E. Watts, **Maria Rebelo**, Anand Odedra, Jörg J. Möhrle, Stephan Chalon, Louise Marquart, James S. McCarthy
3. Risk factors for infection with soil transmitted helminths in Timor-Leste: a longitudinal analysis during a community integrated WASH and deworming intervention **Susana Vaz Nery**, Naomi E. Clarke, James S. McCarthy, Rebecca Traub, Alice Richardson, Darren J. Gray, Suzy J. Campbell, Andrew J. Vallely, Gail M. Williams, Ross M. Andrews, Archie C. Clements
4. **Brodie B, Hurst T, Doidge M.** The effectiveness of a dedicated Cleaning Team Post Discharge – a Reduction of Positive Environments. ACIPC Conference 2018, Brisbane.

### Poster Presentations:

1. LB-5320 Live-Attenuated Hookworm Vaccination in Humans: Interim Results of the EVRA-Hookworm Trial . **Paul R. Chapman**, Paul Giacomini, Stacey Llewellyn, Christian Engwerda, Alex Loukas, James McCarthy. The ex vivo growth profile of artemisinin-resistant parasites after artesunate treatment in the induced blood stage malaria model **Maria Rebelo**, Rebecca Pawliw, Jeremy Gower, Hayley Mitchell, Rebecca E. Watts, Louise Marquart, Jörg J. Möhrle, James S. McCarthy
2. Safety and feasibility of apheresis to harvest and concentrate parasites in subjects with induced blood stage *Plasmodium vivax* infection **Anand Odedra, Rebecca Pawliw, Rebecca Watts, Kari Mudie, Glen Kennedy, David Laloo, James McCarthy**
3. **Hurst T, Doidge M, Hajkowicz K, Harris P, Forde B, Bergh H, Jennison A, Roberts L, Allworth T, Nimmo G, Beatson S, Paterson D.** Mastering Resistant Bacteria using Whole Genome Sequencing. ACIPC Conference 2018, Brisbane
4. **Brodie B, Hurst T, Doidge M.** The Effectiveness of a Dedicated Cleaning Team Post discharge: a reduction of positive environments. ACIPC 2018, Brisbane
5. **Gabatan I, de Ruitter C, Doidge M, Hurst T, Haddock T.** RBWH Hand Hygiene Program: leading the way to success, a two-year observational study of the hand hygiene compliance of Urology ward, ACIPC 2018, Brisbane.

## Internal Medicine Research Unit/ Internal Medicine and Aged Care

The Internal Medicine Research Unit supports investigator initiated collaborative research including basic, 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, and collaborate with a range of universities and health services.

### Our main focus areas are:

- Hospital-associated complications and frailty in older inpatients
- Multidisciplinary collaborative models of care for inpatients
- Multidisciplinary management of chronic diseases including heart failure and Fabry disease
- Safe prescribing
- Quality improvement methods, health services research methods and implementation science.

### Research highlights of 2018 include:

- Collaboration with a wide range of disciplines (medicine, nursing, nutrition and dietetics, occupational therapy, pharmacy) and specialty services (cancer care, nephrology, cardiology, geriatrics, critical, care emergency care, psychiatry, surgery)
- Publication of the primary outcomes of the 5-site EJECTION-HF randomised controlled trial in Journal of the American College of Cardiology-Heart Failure
- Ongoing analysis of CHERISH cluster randomised controlled trial, with publication of primary outcome validation paper in Journal of the American Geriatrics Society
- Completion of a hospital-wide point prevalence audit of cognitive impairment in older patients at RBWH, with preliminary results presented at the Australasian Delirium Association Meeting and the Australasian Association of Gerontology meeting
- Publication of evidence of long term (10year) improvements in nutrition care, recognised with a highly commended award in the Metro North Research Awards (complex healthcare challenges) and presented at the prestigious American Geriatrics Society conference
- Dr Adrienne Young was awarded the CAHRLI prize for Outstanding Leadership in Research, Learning and Innovation, and was RBWH Health Practitioner Researcher of the Year
- Dr Alison Mudge was awarded a Metro North Clinician Research Fellowship
- Two of our postgraduate students submitted their PhD thesis for examination.

In addition, we have built substantial capacity in implementation science and knowledge translation, collaborating with local and national partners. Activities led by Dr Mudge, Dr Young and Prue McRae have included a monthly knowledge translation interest group supporting 20 health professionals from diverse backgrounds; a 3-day Knowledge Translation course in Adelaide, hosted by Flinders University; and support for Sally Barrimore in leading MNHHS Allied Health-Translation into Practice (AH-TRIP) project.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Julie Adsett</b>	PhD Griffith 2012-2018	Exercise rehabilitation for patients with stable heart failure	Norman Morris, Suzanne Kuys, <b>Jennifer Paratz, Alison Mudge</b>
<b>Angela Byrnes</b>	PhD UQ 2015-2018	Investigating the nutritional status and care of older ( $\geq 65$ years) patients on two general surgical wards: a multiphase, action research study	Judy Bauer, <b>Adrienne Young, Alison Mudge, Merrilyn Banks</b>
<b>Karen Lee-Steere</b>	M Phil UQ 2017-2020	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, <b>Alison Mudge</b>
Brooke Myers	PhD, UQ 2014-current	Role of the Pharmacist on the Medical Post-Take Ward Round	<b>Ian Coombes</b> , Charles Mitchell, <b>Peter Donovan</b> , Jennifer Whitty

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Alison Mudge</b>	Adjunct Professor	Improving acute and post-hospital care of older patients	QUT (2013-2018)
<b>Charles Denaro</b>	Associate Professor	Screening for Fabry Disease in Chronic Kidney Disease	UQ (1998-current)
<b>Dylan Flaws</b>	Queensland Junior Doctor Fellowship	Developing and validating a delirium risk score in older inpatients	2016-2018
<b>Prue McRae</b>	Adjunct Senior Lecturer and postdoctoral fellow	Preventing delirium and improving mobility	QUT (2018)
<b>Adrienne Young</b>	Adjunct Assoc Professor	Nutrition in older adults and hospital inpatients	Queensland University of Technology (2013 – current)
<b>Samantha Olenski</b>	Project manager and postdoctoral fellow	Nutrition care	

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Adrienne Young</b>	Mikaela Wheeler (UQ), <b>Angela Byrnes</b> , <b>Alison Mudge</b>	Co-designing a project to explore patient mealtime environments and experience
<b>Angela Byrnes</b>	<b>Adrienne Young</b> , <b>Merrilyn Banks</b> , <b>Alison Mudge</b> , Judy Bauer (UQ)	Investigating the nutritional status and care of older (≥65 years) patients on two general surgical wards: a multiphase, action research study
<b>Alison Mudge</b>	<b>Alison Mudge</b> , <b>Prue McRae</b> , <b>Samantha Olenski</b> , <b>Elise Treleaven</b> , <b>Margaret Cahill</b> , <b>Karen Lee-Steere</b>	Delirium Day: a hospital wide quality audit
<b>Alison Mudge</b>	<b>Merrilyn Banks</b> , <b>Adrian Barnett</b> (QUT), <b>Irene Blackberry</b> (Latrobe), <b>Ann Chang</b> (QUT), <b>Nick Graves</b> (QUT), <b>Ruth Hubbard</b> (UQ), <b>Sharon Inouye</b> (Harvard), <b>Sue Kurrle</b> (Uni of Sydney), <b>Kwan Lim</b> (Uni of Melbourne), <b>Prue McRae</b> , <b>Nancye Peel</b> (UQ), <b>Adrienne Young</b>	CHERISH Collaborative for Hospitalised Elders: reducing the Impact of Stays in Hospital
<b>Julian de Looze</b>	<b>Julian de Looze</b> , <b>Joan Webster</b> , <b>Charles Denaro</b> , <b>Alison Mudge</b> , <b>John Gowardman</b> , <b>Robyn Fox</b> , <b>Catriona Booker</b> , <b>Peter Thomas</b> , <b>Samantha Olenski</b> , <b>Elise Treleaven</b> , <b>Melissa Eastgate</b> , <b>Tracy Glynn</b>	Patients of Concern: a qualitative exploratory study within the Royal Brisbane and Women's Hospital
<b>Julie Adsett</b>	<b>Julie Adsett</b> , <b>Alison Mudge</b> , Norm Morris (Griffith Un)	Exercise adherence and outcomes in heart failure patients: substudy of EJECTION-HF
<b>Alison Mudge</b>	<b>Alison Mudge</b> , <b>Dylan Flaws</b> , <b>Gerard Byrne</b>	Systematic review of tools to predict delirium during adult inpatient admissions
<b>Alison Mudge</b>	<b>Alison Mudge</b> , <b>Margaret Shaw</b>	Effect of pre-planned physician involvement in care of adult surgical patients on clinical and health service outcomes: a systematic review
<b>Samantha Olenski</b>	<b>Alison Mudge</b> , <b>Adrienne Young</b> , <b>Prue McRae</b> , <b>Elise Treleaven</b> , <b>Kimberley Mallan</b> (ACU), <b>Zoe Walsh</b> (CISS), <b>Jill Ross</b> (CISS), <b>Alanna Geary</b> (Nursing and Midwifery)	Developing and validating a novel survey to identify barriers and enablers to improving nutrition care in acute and subacute inpatient settings
<b>Prue McRae</b>	<b>Alison Mudge</b> , <b>Jesse Spurr</b> , <b>Kaye Rolls</b>	Getting Eat Walk Engage to talk-is a virtual community of practice acceptable?
<b>Peter Donovan</b>	<b>Peter Donovan</b> , <b>Alison Mudge</b> , <b>Jenny Martin</b> (Uni Newcastle), <b>Michael Barras</b> (Princess Alexandra Hospital), <b>James Rowland</b> , <b>Champika Pattullo</b>	Interventions to improve safety and quality in the management of anticoagulants for therapeutic indications in hospital inpatients: systematic review
<b>Peter Donovan</b>	<b>Ian Coombes</b> , <b>Glen Kennedy</b> (Cancer Care Services), <b>Alison Mudge</b> (Internal Medicine), <b>Champika Pattullo</b> (Clinical Pharmacology), <b>Bonnie Tai</b> (Prince Charles Hospital)	Collaborative Optimisation of Anticoagulation (COAG) Pilot Study at RBWH
<b>Peter Donovan</b>	<b>Michael Barras</b> , (Princess Alexandra Hospital), <b>Ian Coombes</b> , <b>Jason Roberts</b> , <b>Ms Carla Scuderi</b> (Pharmacy), <b>Charles Denaro</b> (Internal Medicine), <b>John Atherton</b> , <b>Ms Bonnie Tai</b> (Prince Charles Hospital), <b>Ms Anita Pelecanos</b> (QIMR Berghofer)	Development of a therapeutic range for enoxaparin in patients with renal impairment

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Peter Donovan</b>	Nicola Harper, Dr Danielle Stowasser, Natasha Truloff (Metro North IT), <b>Ian Coombes, (Pharmacy), Charles Denaro (Internal Medicine)</b> , Timothy Dunn (Caboolture Hospital Pharmacy), Anita Pelecanos (QIMR Berghofer)	Evaluation of the Implementation of Electronic Prescribing using Interrupted Time-Series Analysis at Two Hospitals in Queensland
<b>Peter Donovan</b>	<b>Champika Pattullo</b> , Anthony Bell, David Arroyo	Trends in Opioid Prescribing in Australia: a Systematic Review
<b>Michael Tresilian</b>		Diagnosis delirium: improvement project

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Laurie Grealish (Griffith/GCUH)	<b>Alison Mudge, Margaret Cahill</b>	Using Normalisation Process Theory to engage nurses in delirium care
Helen Edwards, Patricia Sinasac, Kathleen Finlayson, Fiona Coyer,	<b>Alison Mudge, Kerrie Coleman</b>	Reducing the prevalence and severity of wounds through implementation of the Champions for Skin Integrity model: Protecting Skin Integrity
<b>Natasha Roberts</b> (Cancer Care Services)	Monica Janda (QUT), <b>Alison Mudge, Kimberley Alexander, David Wyld</b>	i-PROMOS: Implementing Patients Reported Outcome Measures in Oncology Outpatients
<b>Dylan Flaws</b> (Mental Health)	<b>Alison Mudge, Gerard Byrne</b> (Mental Health), <b>Prue McRae, Megan Nitz</b> (Mental Health), Conor O'Launaigh (TPCH), Trevor Hollingsworth (Caboolture), <b>Adrienne Young</b>	Delirium in older psychiatry inpatients: protocol for an observational study
<b>Phillip Robinson (Rheumatology)</b>	<b>Peter Donovan</b> , Nicola Dalbeth (University of Auckland, Auckland Hospital)	A Health Economic Analysis Colchicine Therapy for Gout Prophylaxis
<b>Ian Coombes (Pharmacy)</b>	<b>Peter Donovan</b> , Charles Mitchel (UQ), Brooke Myers, Christy Noble, (Gold Coast University Hospital, Griffith University)	Improving Intern Medical Officer Prescribing through an Intervention of Self-Assessment and Feedback
Dr Susan Jordan (Queensland Institute of Medical Research Berghofer), Prof Sallie-Anne Pearson (University of New South Wales), Dr Nirmala Pandeya (University of Queensland), Assoc Prof Michael Coory (Murdoch Children's Research Institute), Dr Katrina Spilsbury (Curtin University of Technology)	<b>Dr Peter Donovan</b> (Clinical Pharmacology, Internal Medicine and Aged Care)	IMPROVE – Investigating Medication Re-Purposing to Reduce risk of Ovarian cancer and Extend survival
Louise Cullen (Emergency and Trauma Centre)	Nathan Brown, <b>Peter Donovan, Ian Coombes, Jaimi Greenslade</b> , 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.
W Hoy (UQ)	<b>Andrew Mallett, Helen Healy, Charles Denaro, Mark Thomas, Vincent Lee.</b>	aCQuiRE: to determine the prevalence of Fabry Disease in individuals with chronic kidney disease
David Copland (UQ), Tracy Roxbury (UQ), Katie McMahon (UQ), Greig de Zubicaray (QUT), Marcus Meinzer (UQ)	<b>Penni Burfein (SP), Anna Farrell (SP)</b> , Dr Kana Appadurai (GARU), Dr Andrew Wong (Stroke), Prof Alan Coulthard	Predicting and Promoting Sub-Acute Aphasia Recovery
Linda Worrall (UQ), David Copland (UQ), Melissa Lawrie (Gold Coast HHS), Liz Ward (UQ), Moya Pattie (Wesley)	<b>Penni Burfein (SP) (GARU), Anna Farrell (SP)</b>	Can a new, intensive model of aphasia rehabilitation achieve better outcomes than usual care?

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Adrienne Young</b> , Merrilyn Banks, <b>Alison Mudge</b>	Highly Commended, Complex Health Challenges	MNHHS Research Excellence Awards, 22 <sup>nd</sup> May 2018
<b>Margaret Shaw</b>	Ramesh Nagappan Memorial Prize	Internal Medicine Society of Australia and New Zealand Annual Scientific Meeting
<b>Adrienne Young</b>	Outstanding Leadership in Research, Learning and Innovation	CAHRLI, 20 <sup>th</sup> June 2018
<b>Adrienne Young</b>	Health Practitioner Researcher of the Year	RBWH Research Symposium, 11-13 <sup>th</sup> September 2018
<b>Adrienne Young</b>	2019 Royal Alumni Research Encouragement Award	2019 RBWH and RBWH Foundation Grant Awards Ceremony

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Olenski S, Mudge A, Young A, McRae P</b> , Mallan K.	Internal Medicine Research Unit; RBWH Department of Nutrition and Dietetics	Developing and validating a nutrition care survey	RBWH Research Foundation	\$9,041	\$32,000 (2018-2019)
<b>McRae P, Mudge A</b> , Spurr J, Rolls, K	Internal Medicine Research Unit	Getting Eat Walk Engage to talk-is a virtual community of practice acceptable?	RBWH Research Foundation	\$24,406	\$39,900 (2018-2019)
Edwards H, <b>Coleman K</b> , Sinasac P, Finlayson K, Coyer F, Schluter J, Parker C, <b>Mudge A</b>	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	\$39,795	\$119,385 (2017-2019)
<b>Mudge A, McRae P, Cahill M, Lee-Steere K, Finnigan S</b>	Internal Medicine Research Unit	Dementia and delirium day: a point prevalence study	RBWH Research Foundation	\$27,180	\$32,180 (2017-2018)
<b>De Looze J, Denaro C, Lipman J, Webster J, Mudge A, Thomas P, Olenski S</b>	Internal Medicine and Aged Care, Internal Medicine Research Unit, Intensive Care Unit, Centre for Nursing Research	Identifying patients of concern	RBWH Research Foundation	\$15,537	\$40,000 (2017-2018)
<b>Lee-steere, K.</b> , Bennett, S., Liddle, J. and <b>Mudge, A.</b>	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	\$36,863	\$36,863 (2017-2019)
<b>Byrnes, A.</b>	Nutrition and Dietetics; Internal Medicine Research Unit	Investigating the nutritional status and care of older (≥65 years) patients on two general surgical wards: A multiphase, Action Research study	RBWH Scholarship (top-up)	\$6,000	\$6,000 (2018)
<b>Louise Cullen, Nathan Brown, Peter Donovan, Ian Coombes, Jaimi Greenslade, David Hughes, Elizabeth Doran</b>	<b>Emergency and Trauma Centre, Pharmacy, Clinical Pharmacology, Internal Medicine and Aged Care</b>	Prevalence and characteristics of medication-related presentations to the emergency department. Emergency & Trauma Centre, Royal Brisbane and Women's Hospital	Emergency Medicine Foundation	\$31,410	\$31,410 (2018)
Dr Susan Jordan (Queensland Institute of Medical Research Berghofer), Prof Sallie-Anne Pearson (University of New South Wales), Dr Nirmala Pandeya (University of Queensland), Assoc Prof Michael Coory (Murdoch Children's Research Institute), Dr Katrina Spillsbury (Curtin University of Technology), <b>Dr Peter Donovan</b>	<b>Clinical Pharmacology, Internal Medicine and Aged Care</b>	IMPROVE – Investigating Medication Re-Purposing to Reduce risk of Ovarian cancer and Extend survival	National Health and Medical Research Council	\$95,104	\$438,313.20 (2017-2021)

## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
W Hoy, <b>A Mallett, H Healy, C Denaro</b> , M Thomas, V Lee	<b>CKD.QLD, Centre for Chronic Disease UQ; Internal Medicine Research Unit</b>	aCQuiRE: assessing the prevalence of Fabry disease in CKD	Sanofi-Genzyme	\$236,638	\$946,554 (2016-2019)
Penni Burfein	Speech Pathology/ GARU	Return to work for younger stroke survivors with aphasia in the Australian context	CAHLRI Pre-PhD/Pre-MPhil Scholarship	\$13,077	\$13,077 (2018)
Sarah Wallace, David Copland, Stephen Birch, <b>Anna Farrell, Penni Burfein</b> , 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 (2018)

## 2018 Research Publications

### Journal Articles:

- Mudge AM, Denaro CP, Scott A** Et al. Addition of supervised exercise training to a post-hospital disease management program for patients recently hospitalized with acute heart failure: the EJECTION-HF randomized trial. *JACC: Heart Failure* Feb 2018, 6 (2) 143-152
- 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* published early view 2018 Nov 13, 2018 doi:10.1111/jgs.15662
- Lynch EA, **Mudge A**, Knowles S, Kitons AL, Hunter SC, Harvey G. "There is nothing so practical as a good theory": a pragmatic guide for selecting theoretical approaches for implementation projects. *BMC Health Serv Res* 2018; 18:857
- Cahill M, Lee-Steere K, Mudge A, McRae P**. Eat Walk Engage: a delirium prevention program for acute care. *Aust J Dementia Care* 2018; 7 (3)
- Byrnes A, Young A, Banks M, Mudge A**, Bauer J. Exploring practice gaps to improve perioperative nutrition care (Experience Study): a qualitative study to identify barriers to implementation of evidence-based practice guidelines *Eur J Clin Nutr* published online 14 August doi.or/10.1038/s41430-018-0276-x
- Byrnes A, Mudge A**, Bauer J, **Young A**. Prospective application of an implementation framework to improve postoperative nutrition care processes: Evaluation of a mixed methods implementation study. *Nutr Diet* 2018; 75 (4): 353-362
- Byrnes A., Worrall J., Young A., Mudge A., Banks M.** & Bauer J. Early post-operative diet upgrade in older patients may improve energy and protein intake but patients still eat poorly: an observational pilot study. *J Hum Nutr Diet* 2018; 31:818-824
- Byrnes A, Young A, Banks M, Mudge A**, Bauer J. The use of handgrip strength in nutrition risk screening of older patients admitted to general surgical wards *Nutr Diet* 2018; 75 (5): 520-526
- Mudge AM, Douglas C, Sansome X, Tresillian M, Murray S, Finnigan S, Blaber C**. Risk of 12-month mortality among hospital inpatients using the surprise question and SPICT criteria: a prospective study *BMJ Supportive & Palliative Care*. doi: 10.1136/bmjspcare-2017-001441 (Epub Online First: 02 March 2018)
- Young A, Mudge AM**, Isenring E, Banks M. Improving nutritional discharge planning and follow-up in older medical inpatients: Hospital to Home Outreach for Malnourished Elders (HHOME) *Nutr Diet* 2018 75(3): 283-290
- Young A, Mudge A, Banks M**. Improving nutrition care and intake for older hospital patients through system-level dietary and mealtime interventions. *Clinical Nutrition ESPEN* 2018; 24:140-147
- Mudge AM**, Hubbard RE. Frailty: mind the gap. *Age Ageing* 2018; 47(4): 508-511
- Adsett JA**, Morris NR, Kuys SS, **Paratz JD, Mudge AM**. 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*. 2018 Dec 4. pii: S0147-9563(18)30335-2. doi: 10.1016. (epub ahead of print)
- Philip C. Robinson, Nicola Dalbeth and **Peter Donovan**. The Cost-effectiveness of Biannual Serum Urate (SU) Monitoring after Reaching Target in Gout: A Health Economic Analysis Comparing SU Monitoring. *The Journal of Rheumatology* (2018). DOI: 10.3899/jrheum.170199
- Aranha AA, Petrus P, Chiang PP, **Denaro CP**. Are all METcalls Required? Patient Characteristics Who Have MET Calls in General Medical Wards. *Curr Trends Intern Med* 2018, DOI: 10.29011/CTIM-114. 100014.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker;

1. **Mudge, A.** Collaborative co-management of older surgical patients: how do physicians add value? Australia and New Zealand College of Anaesthetists Perioperative Medicine Special Interest Group Meeting Melbourne 2018
2. **Mudge A.** Impact of frailty on exercise and heart failure. Cardiac Society of Australia and New Zealand Annual Scientific Meeting Brisbane August 2018
3. **Mudge A.** Mobility, frailty and exercise in older people. Australian Cardiovascular Health and Rehabilitation Association Annual Scientific Meeting Brisbane August 2018
4. **Mudge A.** Improving hospital care for older people. Getting evidence into practice. Jeremy Anderson Oration, Peninsula Health Research Week November 2018.

### Oral Presentations:

1. **Young A,** Banks M, Pei Yen Kwek T, **Mudge A.** Improving nutritional intake and care in hospital: a ten-year journey of quality improvement and research in practice. Dietitians Association of Australia. May 2018
2. **Mudge A, Cahill M, Lee-Steere K, Finnigan S, Treleaven E, McRae P.** Prevalence of cognitive impairment in acute older inpatients and associated documented care needs: a hospital point prevalence study. DECLARED Australasian Delirium Association meeting Melbourne September 2018
3. **Treleaven E, Mudge A, McRae P, Lee-Steere K, Cahill M.** Delirium Day: cognitive impairment and the carer experience. DECLARED Australasian Delirium Association meeting Melbourne September 2018
4. **Shaw M, Mudge A.** Effectiveness of physician involvement in care of surgical patients: a systematic review and meta-analysis. Internal Medicine Society of Australia and New Zealand Annual Scientific Meeting Queenstown September 2018
5. **McRae P, Treleaven E, Lee-Steere K, Cahill M, Finnigan S, Mudge A.** Cognitive impairment in a tertiary hospital: prevalence and carer experience. Australian Association of Gerontology, Melbourne November 2018.

### Poster Presentations:

1. **Byrnes A, Young A, Mudge A,** Banks M, Bauer J. Exploring practice gaps to improve Perioperative Nutrition Care (Experience Study): a qualitative study to identify barriers to implementation of evidence-based practice guidelines. Dietitians Association of Australia. May 2018
2. Worrall J, **Byrnes A,** Banks M, **Mudge A, Young A,** Bauer J. Postoperative oral intake of older ( $\geq 65$  years) general surgical patients and factors associated with inadequate intake on postoperative day 2. Dietitians Association of Australia. May 2018
3. **Young A,** Banks M, Kwek T, **Mudge A.** Improving nutritional intake and care for older inpatients: a ten-year journey of quality improvement and research in practice. Annual Scientific Meeting of the American Geriatrics Society, May 2018
4. **Young A, Mudge A, McRae P,** Gray L, Beattie E, Graham F, Whiting L, Banks M, Hubbard R. Toward the Older Person Friendly Hospital: barriers and enablers within the Australian context. Annual Scientific Meeting of the American Geriatrics Society, May 2018
5. **Ian Coombes, Peter Donovan,** Brooke Myers, Christy Noble, Charles Mitchell. Improving Intern Medical Officer Prescribing through an Intervention of Self-Assessment and Feedback. Australasian Society of Experimental and Clinical Pharmacologist and Toxicologist Annual Scientific Meeting, Nov 2018
6. Wong Y, Nunan T, Hickey A, **Denaro CP, Adsett J,** Peters R, **Atherton J.** From Hospital to Home: insights from the Queensland State-wide Heart Failure Support Services Registry on Heart Failure Transitional Care. Cardiac Society of Australia and New Zealand Annual Scientific Meeting. Heart, Lung & Circ 2018 DOI 10.1016/j.hlc.2018.06.135
7. **Adsett J, Hickey A,** Foreman R. Heart Education Assessment Rehabilitation Toolkit (HEART) Online: 5 Years On. Heart Lung Circ. Cardiac Society of Australia and New Zealand Annual Scientific Meeting, Brisbane August 2018
8. Wong Y, Hickey A, Nunan T, **Adsett J, Atherton J.** Gender differences in patient characteristics and quality of care indicators among referrals to Queensland Statewide Heart Failure Services. Cardiac Society of Australia and New Zealand Annual Scientific Meeting, Brisbane August 2018.

## Other Communications and Outputs:

**Adrienne Young.** Older people in hospital are having their cake and eating it too: A 10-year journey to improve nutrition at the Royal Brisbane and Women's Hospital. The Australian Hospital Healthcare Bulletin p56-7, Winter 2018

**Angela Byrnes.** Implementation and process evaluating using an implementation framework. Allied Health Translating Research into Practice website <https://www.tri.edu.au/online-pd-suite>

**Alison Mudge.** Invited visiting scholar Flinders Medical Centre 2019 including keynote address "Eat Walk Engage: improving hospital care of older people"

Alison Mudge. Invited speaker AusHSI Knowledge Translation Showcase QUT Gardens Point November 2018

**Alison Mudge, Prue McRae, Adrienne Young.** Facilitators and co-leads, Knowledge Translation 3-day workshop, Flinders University November 2018.

### IMDTU staff participated in two research trials in this period:

Epstein-Barr virus-specific T cell therapy for progressive multiple sclerosis (PI Prof M. Pender)

The free cortisol response to Synacthen and other aspects of Endocrine. Physiology in Healthy Participants: (PI Dr Gladness Nethathe).



## Kidney Health Service

More of our people presented the excellent work we do in national and international places in 2018, normalising research in our workplaces.

In addition to mentoring these early career researchers the Kidney Health Research Leadership Group collectively supervised 25 Research Higher Degree students, three to completion. The Group developed our research capacity further through a Visiting Scholar program, hosting five International Academics to interact with our staff, and three Symposia, to broaden our networks. Their work has attracted named awards from Academic and Government Institutions.

Research revenue in calendar year 2018 was in excess of \$3M. Grant funding into 2019 is secured including >\$500,000 in new NHMRC funding, one of Australia's most prestigious granting bodies. In addition, our RHD students continue to be successful in winning new start and renewal scholarships from Academic and Government Institutions to support themselves during their studies.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Hajar Alasmari	Conferred PhD, QUT (2013-2018)	Examining intensive care nurses' clinical decision-making associated with acute kidney injury and continuous renal replacement therapy	<b>Ann Bonner, Fiona Coyer</b>
Kylie Barr	PhD, UWS (Sydney) (2015-2019)	"Evaluation of the effectiveness of intradialytic yoga for patients with end stage kidney disease"	Caroline Smith, Birinder Cheema, <b>Helen Healy</b>
Marina Cousins	PhD, CQU (2018-2024)	Interpersonal relationships with people receiving haemodialysis	Julie Bradshaw, <b>Ann Bonner</b>
<b>Bryan Gregory</b>	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	<b>Ann Bonner, Fiona Coyer</b>
Kathryn Havas	Conferred PhD, QUT (2014-2018)	Comparison of a brief and an in-depth intervention to support self-management in people with chronic kidney disease	<b>Ann Bonner, Clint Douglas</b>
Kushani Jayasinghe	Doctor of Philosophy, UQ	"Clinical utility of targeted whole exome sequencing within a multidisciplinary renal genetics clinic"	<b>Andrew Mallet</b>
Muhammad Ali Khan	PhD, UQ (2017-2020)	Treating chronic kidney disease with plant extracts of elephant foot yam	Glenda Gobe, <b>Andrew Kassianos, Helen Healy</b>
Lan Van Hoang	PhD, QUT (2016-2019)	Relationship between health care supports, social supports and patient outcomes among haemodialysis population in Vietnam	<b>Ann Bonner, Theresa Green</b>
Becker M.P. Law (Meng-Po LAW)	PhD, QUT (2015-2019)	Functional characterisation of lymphocyte subsets in human kidney disease	<b>Andrew Kassianos, Helen Healy, Kenneth Beagley, Ray Wilkinson</b>
Tain Lloyd	MAppSc, QUT (2017-2019)	Investigation of chronic kidney disease and stroke	<b>Ann Bonner, Theresa Green, Louise Purtell</b>
Dominique McConnachie	Doctor of Philosophy, UQ	"Phenotype-genotype correlations in cystic kidney disease"	<b>Andrew Mallet</b>
Amanda Mckie	MPhil, QUT (2018-2022)	Understanding nurses' perception of sexual dysfunction in people with end stage kidney disease requiring haemodialysis	<b>Ann Bonner, Theresa Green</b>
<b>David McIntyre</b>	PhD, QUT (2016-2022)	The development and validation of haemodialysis nurse sensitive indicators	<b>Ann Bonner, Fiona Coyer</b>
<b>Molly Milazi</b>	DHlthSc, QUT (2014-2020)	Nurse-led teach back intervention to improve people with End Stage Kidney Disease adherence with phosphate control	<b>Ann Bonner, Clint Douglas</b>
<b>Pauline Nicholas</b>	MPhil, QUT (2017-2020)	Measuring the prevalence of mild cognitive impairment in end stage kidney disease	<b>Ann Bonner, Theresa Green, Louise Purtell</b>
Nguyet Thi Nguyen	Conferred PhD, QUT (2014-2018)	Self-management of people with early stages of chronic kidney disease in Hanoi, Vietnam	<b>Ann Bonner, Clint Douglas</b>
Evan Owens	PhD, UQ (2017-2020)	Using biomarkers of chronic kidney disease progression to predict future kidney function: a novel clinical model	Glenda Gobe, Wendy Hoy, David Vesey, <b>Helen Healy</b>
Arti Raghubar	Masters, UQ (2016-2018)	Investigating underlying molecular processes in IgA nephropathy cases using SWATH-MS	<b>Andrew Mallett, Andrew Kassianos, Helen Healy</b>

## Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Cassandra Rawlings</b>	PhD, UQ (2018-2024)	"Elderly and frail patients with kidney disease: experiences in different care pathways"	<b>Helen Healy, Ann Bonner</b>
<b>Haannah Rheault</b>	DHlthSc, QUT (2016-2022)	Health literacy and chronic disease self-management in Indigenous Australians	<b>Ann Bonner, Fiona Coyer</b>
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, <b>Helen Healy, Keshwar Baboolal</b>
<b>Carla Scuderi</b>	PhD, UQ (2017-2023)	"Improving patient centred outcomes in kidney transplant recipients"	Christine Staatz, <b>Helen Healy, Andrew Mallett</b>
Sri Krishna Venuthurupalli	PhD, UQ (2010-2019)	"CKD.QLD: profile of chronic kidney disease (CKD) from Darling Downs Health and Hospital Service (DDHHS)"	Wendy Hoy, <b>Helen Healy</b> , Robert Fassett
Nicole Wu	PhD	Regulation of NCC in health, diseases of salt homeostasis	Michael Stowasser, <b>Martin Wolley</b>
Harith Yapa	PhD, QUT (2017-2020)	Perceived palliative care needs of patients with Chronic Kidney Disease (CKDu) in Sri Lanka	<b>Ann Bonner; Louise Purtell</b> , Shirley Connell

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Ann Bonner</b>	Honorary Research Fellow	Renal Nursing Professorial Unit	Queensland University of Technology – QUT (2011-current)
<b>Ann Bonner</b>	Honorary Professor	Faculty of Nursing and Midwifery	Hanoi Medical University (2014-current)
<b>Ann Bonner</b>	Visiting Renal Nurse Scholar	Renal Medicine	Princess Alexandra Hospital (2013-current)
<b>Ann Bonner</b>	Visiting Nurse Scholar	Department of Nursing	Logan and Beaudesert Hospitals (2014-current)
Ann Cameron	Manager	CKD.QLD and CKD.CRE	UQ (xxxx-current)
<b>Vishal Diwan</b>	Honorary Research Appointment	NHMRC Chronic Kidney Disease Centre for Research Excellence and University of Queensland.	Research Assistant, Faculty of Medicine, University of Queensland
Kurt Giuliani	Research Assistant	Conjoint Kidney Research Laboratory	(2018-current)
Sebastian Hutlin	Research Student	Conjoint Kidney Research Laboratory	2018
Matthew Jose	Credentialed Honorary Research Appointment	Kidney Genetics and Genomics Program	Royal Hobart Hospital and University of Tasmania
<b>Andrew Kassianos</b>	Post-doctoral Fellow	School of Biomedical Sciences, Conjoint Kidney Research Laboratory	Queensland University of Technology – QUT (2013-current)
<b>Andrew Kassianos</b>	Honorary Fellow	School of Medicine	University of Queensland – UQ (2015-current)
<b>Katrina Kildey</b>	Post-doctoral Fellow	Conjoint Kidney Research Laboratory	(2017-current)
<b>Andrew Mallett</b>	Credentialed Honorary Medical Officer,	Children's Hospital Westmead Clinical Liaison and Multidisciplinary Team, Australian Renal Gene Panels	2016 – Present
<b>Andrew Mallett</b>	Credentialed Honorary Medical Officer	Children's Health Queensland (Lady Cilento Children's Hospital)	2016 – Present
<b>Andrew Mallett</b>	Research Fellowship	RACP Jacquot Research Establishment Fellowship	2018
Dominique McConnachie	Honorary Research Appointment	University of Queensland Institute for Molecular Bioscience	University of Queensland – UQ (2018 – current)
<b>Louise Purtell</b>	Honorary Post-Doctoral Fellow	Health Services Research Group	QUT (2016 – current)
Xiangju Wang	Research Assistant	Conjoint Kidney Research Laboratory	(2012-current)
Zaimin Wang	Honorary Post-Doctoral Fellow	CKD.QLD and CKD.CRE	UQ (xxxx-current)
Ray Wilkinson	Post-doctoral Fellow	Conjoint Kidney Research Laboratory	QUT (-2018), UQ (-2018)
Jenny Zhang	Honorary Post-Doctoral Fellow	CKD.QLD and CKD.CRE	UQ (xxxx-current)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Conjoint Kidney Research Group – Mechanisms of Progression of CKD <b>Helen Healy</b>	<b>Andrew Kassianos, George John, Andrew Mallett, Katrina Kildey</b> , Ray Wilkinson (QPath), Xiangju Wang (QPath), Kurt Giuliani (QPath), Becker Law (QUT), Arti Raghubar (QPath), Muhammad Ali Khan (UQ)	Treating progressive chronic kidney disease (CKD) by targeting how proximal tubular epithelial cells (PTEC) control the inflammatory micro-environment – a program of research into how PTEC regulate cells of the immune response in the inflammatory phase of CKD
Conjoint Kidney Research Group - Mechanisms of Chronic Kidney Rejection <b>Helen Healy</b>	<b>Andrew Kassianos, Katrina Kildey, George John</b> , Ray Wilkinson (QPath), Ross Francis (PAH), <b>Sebastian Hultin</b>	Targeting proximal tubular epithelial cells (PTEC) in chronic allograft nephropathy – a program of research into changing long-term graft loss in kidney transplantation through modification of the functions of PTEC
CKD.Qld Collaborative <b>Helen Healy</b>	Wendy Hoy (UQ)	Co-Chairs, CKD.QLD – a collaborative of clinicians in the public kidney practices in Queensland and academics for the purposes of studying the natural history of chronic kidney disease, practice patterns across the state and biobanking of biosamples with linked phenotypes
Health Services Implementation Group - Keeping Kidney Collaborative <b>Helen Healy</b>	<b>Adrian Kark, Alexandra Cation; Ann Bonner, Louise Purtell</b>	Studying the implementation of the General Practitioner with Special Interest delivery of services at Caboolture
Health Services Implementation Group – Kidney Supportive Care Collaborative <b>Helen Healy</b>	<b>Ann Bonner; Louise Purtell; Ilse Berquier; Julie Kirby; Carla Scuderi</b>	Continuing studies into the efficacy and value-added effect of services tailored to the needs of people with advanced kidney disease at the end of life
<b>Helen Healy, Andrew Mallett, Carla Scuderi</b>	Christine Staatz, <b>George John, Margaret Jacks</b> , Suzanne Parker, Jason Roberts	Innovative blood sampling to reduce the burden of long-term treatment for kidney transplant recipients
<b>Helen Healy, Andrew Mallett, Carla Scuderi</b>	<b>Sadia Jahan</b> , Christine Staatz, <b>George John, Margaret Jacks</b> , Suzanne Parker, Jason Roberts	An observational pharmacokinetic study of Bactrim® (trimethoprim-sulfamethoxazole) in renal transplant recipients
aCQuiRE Collaborative <b>Helen Healy, Andrew Mallett</b>	<b>Charles Denaro</b> , Wendy Hoy (UQ), Samantha Stark, Vincent Lee (Westmead Hospital) Mark Thomas (Sir Charles Gardner Hospital)	A point prevalence study of Fabry's disease in people managed in specialist nephrology practices
KidGen Collaborative, <b>Andrew Mallett</b>	<b>Chirag Patel</b> ; Amali Mallawaarachichi (Liverpool Hospital), Cathy Quinlan (Melbourne Children's Hospital), Zonitza Stark (Murdoch Research), Randall Faull (Royal Adelaide Hospital) Aron Chakera (Newcastle Hospital) Melissa Little	<ul style="list-style-type: none"> <li>• National Clinic Evaluation</li> <li>• HIDDEN Flagship</li> <li>• Clinical Implementation Science</li> <li>• IKD HSU</li> </ul>
<b>Andrew Mallett</b>	<b>Belinda Elford</b>	An open – label Phase 2 proof-of-concept study in patients with C3 Glomerulopathy (C3G) or Immune-complex Membranoproliferative Glomerulonephritis (IC-MPGN) treated with ACH-0144471
<b>Andrew Mallett</b>	<b>Belinda Elford</b>	A phase 2/3 trial of the efficacy and safety of bardoxolone methyl in patients with Alport Syndrome
<b>Dwarakanathan Ranganathan</b> , Drew Yates, Paul Kubler	Saw Yu Mu	Retrospective study of prevalence and type of infection in patients with renal ANCA associated vasculitis and their risk factors
<b>Sharad Ratanjee</b>	<b>Belinda Elford</b>	A phase 3 randomized, open-label (Sponsor Blind), active controlled, parallel-group, multi centre, event driven study in dialysis subjects with anaemia associated with chronic kidney disease to evaluate the safety and efficacy of daprodustat compared to recombinant human erythropoietin, following a switch from erythropoietin-stimulating agents
PD Research Group, <b>Lesley Williams, Nicola Williams</b>	<b>Pauline Nicholas, Carla Scuderi, Deborah Smith, Michelle Rice, Martin Wooley, Dwarakanathan Ranganathan</b>	A 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)
<b>Martin Wolley</b>	Mark Marshall, Carmel Hawley, David Johnson, Matthew Roberts	Twice weekly haemodialysis in Australia and New Zealand

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Suceena Alexander (Christian Medical College, Vellore, India)	<b>Helen Healy</b> (Kidney Health Service), <b>George John Healy</b> (Kidney Health Service), <b>Andrew Kassianos</b> (Kidney Health Service)	Pathogenic molecular/cellular responses leading to chronic kidney disease in primary Focal and Segmental Glomerulosclerosis (FSGS) in Indians
Glenda Gobe (UQ)	<b>Helen Healy</b> (Kidney Health Service), <b>Andrew Kassianos</b> (Kidney Health Service)	Treating chronic kidney disease with plant extracts of elephant foot yam
Nick Graves (QUT)	<b>Helen Healy</b> (Kidney Health Service), <b>Keshwar Baboolal</b> (Kidney Health Service)	Cost utility of human kidney transplantation
Alberta Hoi (Monash Medical Centre)	<b>Dwarakanathan Ranganathan</b> (Kidney Health Service), <b>Paul Kubler</b> (Rheumatology)	Australian Lupus Registry and Biobank
Wendy Hoy (UQ)	<b>Helen Healy</b> (Kidney Health Service) <b>Carol Douglas</b> (Palliative Care)	NHMRC Chronic Kidney Disease Centre of Research Excellence
Nicole Isabel	<b>Dwarakanathan Ranganathan Healy</b> (Kidney Health Service), <b>Andrew Mallet Healy</b> (Kidney Health Service), Cameron Curley (Hematology)	An observational, non-interventional, multi-centre, multi-national study of patients with Atypical Haemolytic-Uraemic Syndrome (aHUS Registry)
David Jayne (Cambridge University)	<b>Dwarakanathan Ranganathan</b> (Kidney Health Service)	A Randomized, Double-Blind, Active-Controlled, Phase 3 Study to Evaluate the Safety and Efficacy of CCX168 (Avacopan) in Patients with Anti-Neutrophil Cytoplasmic Antibody (ANCA) - Associated Vasculitis Treated Concomitantly with Rituximab or Cyclophosphamide/Azathioprine
David Jayne (Cambridge University)	<b>Dwarakanathan Ranganathan</b> (Kidney Health Service)	An international, open label, randomised controlled trial comparing rituximab with azathioprine as maintenance therapy in relapsing ANCA-associated vasculitis. RITAZAREM
Melissa Little (Murdoch Children's Research Institute)	<b>Andrew Mallett</b> (Kidney Health Service) <b>Helen Healy</b> (Kidney Health Service)	Applying functional genomics to kidney disease
Multi Centre Study	<b>Dwarakanathan Ranganathan</b> (Kidney Health Service), <b>Andrew Mallett</b> (Kidney Health Service)	Treatment of Proteinuria Due to Treatment Resistant or Treatment Intolerant Idiopathic Focal Segment Glomerulosclerosis (PODOCYTE) Study
Caroline Smith (Uni Western Sydney)	<b>Helen Healy</b> (Kidney Health Service)	Effectiveness of intradialytic yoga for patients with end stage kidney disease
Michael Stowasser, David Ellison, Robert Fenton, Paul Welling, Eric Delpire	<b>Martin Wolley</b> (Kidney Health Service)	Role of potassium in hypertension
Santosh Varughese (Christian Medical College, Vellore, India)	<b>Helen Healy</b> (Kidney Health Service), <b>George John</b> (Kidney Health Service), <b>Andrew Kassianos</b> (Kidney Health Service)	Molecular profiling in renal allograft recipients with acute rejection and chronic allograft dysfunction

## 2018 Research Awards and Achievements

Recipient	Award	Event
Ann Bonner, Fiona Coyer, Theresa Green, Ray Chan	QUT Vice Chancellor Award	
Ann Bonner, Louise Purtell, Ilse Berquier, Helen Healy	Best Research paper	Renal Society of Australasia, 46 <sup>th</sup> Annual Conference, 21 <sup>st</sup> -23 <sup>rd</sup> June, Adelaide
Ilse Berquier, Ann Bonner, Louise Purtell, Helen Healy, Bernadette Taylor, Danielle Heffernan, Carol Douglas	Best poster	7 <sup>th</sup> Palliative Care Nursing Association Conference, 20-21 May, Brisbane
Haunnah Rheault, Fiona Coyer, Ann Bonner	Best paper	Metro North Hospital and Health Service Nursing and Midwifery Leadership Conference, 1-2 March, Brisbane
Kurt Giuliani	University of Queensland Postgraduate Scholarship	PhD studies – to commence 2019
Becker Law	Queensland Pathology Scholarship	PhD studies – commenced 2015
Andrew Mallett	Metro North Clinical Research Fellowship	Commencing 2019
Arti Raghubar	University of Queensland Postgraduate Scholarship	PhD studies – to commence 2019

## 2018 Research Awards and Achievements (cont)

Recipient	Award	Event
Cassandra Rawlings	RBWH Research Postgraduate Scholarship – renewal	PhD studies continuing part-time
Carla Scuderi	RBWH Research Postgraduate Scholarship – renewal	PhD studies continuing part-time

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
Wendy Hoy, <b>Helen Healy</b> , Luke Connolly, Geoffrey Mitchell, Kate Panaretto, Zoltan Endre, Jeffrey Coombes, Glenda Gobe, <b>Ann Bonner</b> , Robert Fassett	CKD.Qld Collaborative	NHMRC Centre of Research Excellence – CKD.CRE	NHMRC APP1079502	\$499,396	\$2,496,981 (2014-2019)
Ha Dinh, <b>Ann Bonner</b>	Endeavour Research Fellowship	Health literacy, knowledge and self-management in comorbid chronic diseases	Endeavour	\$24,500	\$24,500 (2018)
<b>Andrew Kassianos</b> , <b>Helen Healy</b> , Ray Wilkinson, Leo Francis, Ross Francis	Conjoint Kidney Research Group	Pathogenic dendritic cells in human kidney disease	NHMRC APP1099222	\$125,000	\$370,983 (2016-2018)
<b>Katrina Kildey</b> , <b>Andrew Kassianos</b> , <b>Helen Healy</b> , Jacobus Ungerer, Sandra Klingberg, Brett McWhinney, George John, Ross Francis, Ray Wilkinson	Conjoint Kidney Research Laboratory	Natural killer cell subsets in kidney transplant rejection	Royal Brisbane and Women's Hospital Foundation	\$40,000	\$40,000 (2018)
Becker Law, <b>Helen Healy</b> , <b>Andrew Kassianos</b>	Conjoint Kidney Research Laboratory	Functional interactions between lymphocyte subsets and proximal epithelial cells in renal hypoxic injury and chronic kidney disease	Pathology Queensland – Study, Education and Research Committee	\$25,000	\$75,000 (2015-2018)
Melissa Little, Ian Smyth, Cas Simons, <b>Andrew Mallett</b> , Steven Alexander, Ernst Wovetang, A Oshlack, Chirag Patel, <b>Helen Healy</b> , Bruce Bennetts, Michel Tchan, Cathy Quinlan, Amanda Walker, S White, Z Stark	KidGen	Applying functional genomics to Kidney Disease	NHMRC APP1098654	\$409,772	\$1,229,316 (2016-2019)
<b>Andrew Mallett</b>	UQ IMB	HIDDEN Project Pilot Study	Royal Brisbane and Women's Hospital Foundation	\$40,000	\$40,000 (2018)
<b>Andrew Mallett</b>	UQ IMB	Translating Inherited Tubulointerstitial Disease in Australia	RACP Foundation Jacquot	\$90,000	\$90,000 (2018)
<b>Andrew Mallett</b>	KidGen	The HIDDEN (wHole genome Investigation to iDentify undetected Nephropathies) Project	AGHA Rare Disease Flagship	\$240,000	\$480,000 (2018-2020)
<b>Andrew Mallett</b>	KidGen	Evaluation of clinical genomics and a MDT clinic model in inherited kidney disease	AGHA Rare Disease Flagship	\$204,223.50	\$408,447 (2016-2018)
<b>Andrew Mallett</b> , <b>Helen Healy</b> , <b>Charles Denaro</b> , 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)
<b>Molly Milazi</b> , <b>Ann Bonner</b> , <b>Clint Douglas</b>	Professorial Nursing Unit Group	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 Research	\$18,431.50	\$36,863 (2018-2019)

## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Arti Raghubar, <b>Andrew Mallett</b> , <b>Helen Healy</b> , <b>Andrew Kassianos</b>	Conjoint Kidney Research Laboratory	Investigating underlying molecular processes in IgA nephropathy cases using SWATH-MS	Pathology Queensland – Study, Education and Research Committee	\$20,000	\$20,000 (2018)
<b>Dwarakanathan Ranganathan</b> , <b>Nigel Mott</b>	Investigator initiated study – project grant	Radcath Study	Royal Brisbane and Women's Hospital Foundation	\$30,000.00	\$30,000.00 (2018)
<b>Dwarakanathan Ranganathan</b> , Sudha Ekambaram, Peter Trnka	International Society of Nephrology	The International Society of Nephrology 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	\$US12,000 = \$A16,405.35	\$24,000 (2018-2019)
<b>Jason Roberts</b> , <b>Dwarakanathan Ranganathan</b>	Investigator initiated study – project grant	Immunosuppressive Drugs in CRRT	Royal Brisbane and Women's Hospital Foundation	\$40,000.00	\$40,000.00 (2018)
<b>Carla Scuderi</b> , <b>George John</b> , Suzanne Parker, <b>Helen Healy</b> , Christine Staatz, <b>Jason Roberts</b>	Kidney Transplant Research Group	Innovative blood sampling to reduce the burden of long-term treatment for kidney transplant patients	Royal Brisbane and Women's Hospital Foundation	\$39,873	\$39,873 (2018)
Patsy Yates, Geoffrey Mitchell, D Currow, K Eagar, Helen Edwards, Glen Gardner, L Willmott, <b>Ann Bonner</b> , R Clark, j Tieman		NHMRC Centre of Research Excellence - End of Life Care	NHMRC APP1060254	\$499,108.50	\$2,495,543 (2013-2018)

## 2018 Research Publications

### Journal Articles:

- Alexander S, **John GT**, Korula A Et al. Protocol and rationale for the first South Asian 5-year prospective longitudinal observational cohort study and biomarker evaluation investigating the clinical course and risk profile of IgA nephropathy: GRACE IgANI cohort Wellcome Open Research 2018;3:91 doi:10.12688/wellcomeopenres.14644.1
- Bonner A**, Chambers S, **Healy H**, Hoy WE, Mitchell G, **Kark A**, **Ratanjee S**, Yates P. Tracking patients with advanced kidney disease in last 12 months of life. Journal of Renal Care 2018;44(2):115-122. doi:10.1111/jorc.12239
- Bonner A**, Gillespie K, Campbell KL, Coronas-Watkins K, Hayes B, Harvie B, Kelly JT, Havas K. Evaluating the prevalence and opportunity for technology use in chronic kidney disease patients: a cross-sectional study. BMC Nephrology 2018; doi:10.1186/s12882-018-0830-8
- Chambers S, **Healy H**, Hoy WE, **Kark A**, **Ratanjee S**, Mitchell G, Douglas C, Yates P, Bonner A. Health service utilization during the last year of life: a prospective, longitudinal study of the pathways of patients with chronic kidney disease stages 3-5. BMC Palliative Care 2018; 17:57-68
- Chan RJ, Marx W, Bradford N, Gordon L, **Bonner A**, Douglas C, Schmalkuche D, Yates Y. A systematic review of clinical, process and economic outcomes of nurse-led services in the ambulatory setting. International Journal of Nursing Studies 2018;81, 61-80. doi: 10.1016/j.ijnurstu.2018.02.002
- Chan S**, Cameron A, Wang Z, Venuthurupalli S, Tan K-S, **Healy H**, Hoy W. Body Mass index in an Australian population with chronic kidney disease. BMC Nephrology 2018;19:209
- Dinh T.T.H, **Bonner A**, Ramsbotham J, Clark R. Improving knowledge and self-care using teach-back method through a heart failure self-management program: a cluster randomized trial protocol. Nursing and Health Sciences, 2018;20(4):458-463. DOI: 10.1111/nhs.12534
- Douglas C**, Schmalkuche D, Nizette D, Yates P, **Bonner A**. Nurse-led services in Queensland: a scoping study. Collegian 2018; doi: 10.1016/j.coln.2017.10.011
- Forbes TA, Howden S, Lawlor K, Phipson B, Maksimovic J, Hale L, Wilson S, Quinlan C, Ho G, Holman K, Bennetts B, Crawford J, Trnka P, Oschlack A, Patel C, **Mallett A**, Simons C, Little M. Patient iPSC-derived kidney organoids show functional validation of a ciliopathic renal phenotype and reveal underlying pathogenetic mechanisms. American Journal of Human Genetics
- Gois P**, **Wolley M**, **Ranganathan D**, Seguro A. Vitamin D deficiency in chronic kidney disease: Recent evidence and controversies. International Journal of Environmental Research and Public Health. 2018. Aug 17;15(8)
- Guo Z, Poglitsch M, McWhinney B, **Ungerer J**, Ahmed A, Gordon R, **Wolley M**, Stowasser M. Aldosterone LC-MS/MS Assay-Specific Threshold Values in Screening and Confirmatory Testing for Primary Aldosteronism. The Journal of Clinical Endocrinology and Metabolism, 2018 Nov 1;103(11) 3965-3973. doi: 10.1210/jc.2018-01041

### Journal Articles: (cont):

12. Havas K, **Douglas C, Bonner A**. Meeting patients where they are: Improving outcomes in early chronic kidney disease with tailored self-management support (the CKD-SMS study). *BMC Nephrology*, 2018;19:279. DOI:10.1186/s12882-018-1075-2
13. Hoang LV, Green T, **Bonner A**. Informal caregivers' experiences of caring for people receiving dialysis: A mixed-methods systematic review. *Journal of Renal Care* 2018;44(2):82-95. doi:10.1111/jorc.12235
14. **Killey K**, Law B, Muczynski K, Wilkinson R, **Healy H, Kassianos A**. Identification of leukocyte subpopulations in human kidneys by flow cytometry. *Bio-protocol* 2018;8(16): e2980. doi: 10.21769/BioProtoc.2980
15. **Milazi M, Douglas C, Bonner A**. A bundled phosphate control intervention (4Ds) for adults with end stage kidney disease receiving haemodialysis: a cluster randomised controlled trial protocol. *Journal of Advanced Nursing*, 2018;74(10):2431-2241. DOI:10.1111/jan.13774
16. Mohapatra A, Valson AT, Gopal B, Singh S, Nair SC, Viswabandya A, Varughese S, Tamilarasi V, **John GT**. Hemostatic Abnormalities in Severe Renal Failure: Do They Bark or Bite? *Indian J Nephrol* 2018 Mar-Apr;28(2):135-142. doi: 10.4103/ijn.IJN\_104\_17 (International Collaboration)
17. Mohapatra A, Kakde S, Annapandian VM, Valson AT, Duhli N, Korula A, Matthai SM, Pulimood AB, David VG, Alexander S, Jacob S, Varughese S, Basu G, Tamilarasi V, John GT. Spectrum of biopsy proven renal disease in South Asian children: two decades at a tropical tertiary care centre. *Nephrology* 2018; Nov;23(11):1013-1022. doi:10.1111/nep.13160. PMID: 28846194
18. **Purtell L**, Sowa M, **Berquier I, Scuderi C, Douglas C, Taylor B**, Kramer K, Hoy W, Healy H\*, **Bonner A\***. The Kidney Supportive Care program: Characteristics of patients referred to a new model of care for advanced chronic kidney disease. *BMJ Supportive and Palliative Care* 2018; doi:10.1136/bmjspcare-2018-001630. \* equal last authors
19. **Scuderi C, Berquier I, Purtell L, Douglas C, Healy H, Bonner A**. Complex prescribing in chronic kidney disease: the role of the renal pharmacist in Kidney Supportive Care uncovering hydralazine-related lupus. *Journal of Pharmacy Practice and Research* 2018; doi:10.1002/jppr.1520
20. **Scuderi C**, Pain T. Using confidence assessment to explore physiotherapists, dieticians, speech pathologists and occupational therapist's knowledge of medicines. *Journal of Interprofessional Care*. 2018 <https://doi.org/10.1080/13561820.2018.1551860>
21. Stowasser M, Ahmed A, Cowley C, **Wolley M**, Guo Zeng, **McWhinney B, Ungerer J**, Gordon R. Comparison of seated with recumbent saline suppression testing for the diagnosis of primary aldosteronism. *The Journal of Clinical Endocrinology and Metabolism*, 2018 Nov 1. 103(11):4113-4124. doi: 10.1210/jc.2018-01394
22. Venuthurupalli K, Hoy WE, **Healy HG**, Cameron A, Fassett R. CKD screening and surveillance in Australia: past, present and future. *Kidney International Reports* 2018; 3:36-46
23. **Wilson G, Franca-Gois P**, Zhang A, Wang X, Law B, **Kassianos A, Healy H**. The role of oxidative stress and inflammation in acute oxalate nephropathy associated with ethylene glycol intoxication. *Kidney International Reports*, *Kidney International Reports* 2018;3(5):1217
24. **Wolley M**, Jardin, M, Hutchison C. Exploring the clinical relevance of providing increased removal of large middle-molecules by haemodialysis. *Clinical Journal of the American Society of Nephrology*. 2018 May 7;13(5)
25. **Wolley M**, Hutchison C. Large Uremic Toxins: An unsolved problem in ESRD. *Nephrology, Dialysis and Transplantation*. 2018 Oct 1; 33(suppl\_3): iii6-iii11. doi: 10.1093/ndt/gfy179.

### Book Chapters / Letters:

1. **Bonner A**, Douglas B. (2018). Chronic kidney disease. In E. Chang & A. Johnson (Eds). *Chronic Illness and Disability: Principles of Nursing Practice*. (3<sup>rd</sup> ed.). (pp. 392-408). Sydney: Elsevier
2. Hryciw D, **Bonner A**. (2018). Fluids and electrolytes, acids and bases. In J. Craft, C. Gordon, S. E., Huether, K. L. McCance, & V. L. Brashers. (Eds). *Understanding Pathophysiology*. (3<sup>rd</sup> ed.). pp. 882-910. Elsevier: Sydney. ISBN: 9780729542647
3. Hryciw D, **Bonner A**. (2018). Alterations of renal and urinary tract function across the lifespan. In J. Craft, C. Gordon, S. E., Huether, K. L. McCance, & V. L. Brashers. (Eds). *Understanding Pathophysiology*. (3<sup>rd</sup> ed.). pp. 911-946. Elsevier: Sydney. ISBN: 9780729542647.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Ann Bonner**. How do we relieve uraemic symptoms. Professional Society for Nephrological Nurses annual conference, 4-5 October, Aarhus, Copenhagen
2. **Ann Bonner** Calcium phosphate what works. Professional Society for Nephrological Nurses annual conference, 4-5 October, Aarhus, Copenhagen
3. **Healy H**. Fabry's in the Kidney – the aCQUIRE Study. International Conference on Fabry Disease. 2018, August 26, Osaka, Japan
4. **Healy H**. It's all about integrated care – the picture of kidney disease in our community. Brisbane Diamantia Health Partners Chronic Theme Disease Forum, 2018, June 15, Brisbane, Australia
5. **Healy H**. PUZ019 Graduate Certificate in Health Service Innovation - Implementation Science: Theory and Practice in Health. 2018 March, Royal Brisbane and Women's Hospital, Brisbane Australia
6. **John G**. International Congress of the Transplant Society. 2018 June – July, Madrid, Spain
7. **John G**. Continuing Medical Education Session in Renal Transplantation, 2018 May, India
8. **Mallett A**. CSIRO eHealth Colloquium, 2018, May, Brisbane, Australia
9. **Mallett A**. ANZSN Basic Course, 2018 April, Auckland, New Zealand
10. **Mallett A**. AAHMS QLD Clinical Science Symposium, 2018 March, Brisbane, Australia

### Invited Speaker: (cont):

11. **Ranganathan D.** Plasma Exchange in Renal disorder, 2018, Feb, Dr DY Patil Medical College, Pune, India
12. **Ranganathan D.** Home Haemodialysis - Pune Society of Nephrology, 2018, Feb, Pune, India.

### Oral Presentations:

1. Adegbija O, Cameron A, Hoffman D, Segelov D, Freeman T, Waugh D, **Huynh S**, Hoy WE. Profile of patients in a renal specialty practice in metropolitan Sydney, utilising Audit 4. In: Nephrology 018;23(S3):25. Oral presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
2. Adegbija O, Hoy WE, Wang Z, Cameron A, **Healy HG**, Tan KS, Venuthurupalli SK., Chronic kidney disease is not characterised solely by those starting renal replacement therapy. In: Nephrology 2018;23(S3):24. Oral presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney Australia
3. **Arndt A, Angus S.** Who cares? We do. Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
4. **Berquier I, Bonner A, Purtell L, Douglas C, Healy H.** Kidney supportive care: an alternative pathway of care. Paper presented at the 7<sup>th</sup> Palliative Care Nursing Association Conference, 20-21 May 2018, Brisbane Australia
5. **Berquier I, Bonner A, Healy H, Purtell L.** Kidney Supportive Care: Does it meet patient and carer needs? Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
6. **Bonner A, Berquier I, Healy H, Purtell L.** Making decisions and preparing advance care plans: outcomes from a Kidney Supportive Care program. Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
7. **Bonner A, Purtell L, Berquier I, Healy H.** Characteristics of Indigenous Australians who attend a kidney supportive care program. Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
8. **Bonner A, Stone C, Abel J, Barnes M, Havas K, Tam V, Mills K, Douglas, C.** Chronic Disease Multi-Morbidity: Nurse Practitioners Reforming Health Care Delivery in Australia. Paper presented at Sigma Theta Tau International's 29<sup>th</sup> International Nursing Research Congress, 19-23 July 2018, Melbourne
9. **Bublitz L, Hiremagalar B, Purtell L, Gillespie K, Sowa M, Bonner A.** Tracking patient-reported symptoms in people undergoing dialysis: the LEOPARD study. Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
10. **Healy HG, Law B, Wang X, Kilday K, Giuliani B, Beagley K, Wilkinson R, Kassianos A.** Tissue-resident mucosal-associated invariant T (MAIT) cells in human renal fibrosis and chronic kidney disease. In: Nephrology 2018;23(S3):22. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
11. **Healy, H., Odewumi, A.** CKD. QLD / CRE, Profile of patients in a renal specialty practice in metropolitan Sydney, utilising Audit 4: are they different? Oral presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
12. **Hoang VL, Bonner A, Green T.** Social support, depression and quality of life among people receiving haemodialysis in Vietnam. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
13. **Hoy WE, Zhang J, Wang Z, Cameron A, Healy HG, Venuthurupalli S, Tan K-S, Govindarajulu S, Rolfe A, Mantha M, Titus T, Cherian R, Wu P, Banney C, Mutatiri C, Madhan K, Ranganathan D, Kan G, Han T, Hossain S, Kark A, Coleman S, Taylor B, Mallett AJ.** The end of the CKD journey – RRT or death without RRT: the CKD.QLD experience. In: Nephrology 2018;23(S3):50. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
14. **Jeyaruban A, Hoy WE, Cameron A, Healy HG, Zhang J, Mallett AJ.** Factors that influence hospitalisations in patients with chronic kidney disease. In: Nephrology 2018;23(S3):49. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
15. **Jeyaruban A, Hoy WE, Cameron A, Healy HG, Zhang J, Mallett AJ.** Assessing the impact of hyperuricaemia, gout and allopurinol treatment on progression of renal function in patients with chronic kidney disease. In: Nephrology 2018;23(S3):61. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
16. **Jeyaruban A, Hoy WE, Cameron A, Healy HG, Zhang J, Mallett AJ.** Cardiovascular events do not accelerate decline of renal function in patients with chronic kidney disease. In: Nephrology 2018;23(S3):44. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
17. **Jeyaruban A, Hoy WE, Cameron A, Healy HG, Zhang J, Mallett AJ.** Cardiovascular events increase the risk of mortality in patients with chronic kidney disease. In: Nephrology 2018;23(S3):43. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
18. **Jeyaruban A, Hoy WE, Cameron A, Healy HG, Zhang J, Mallett AJ.** Does the type of intervention for ischaemic heart disease impact on mortality and morbidity in patients with chronic kidney disease. In: Nephrology 2018;23(S3):44. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
19. **Mallet A, Cameron, A., Hoy, W.** CKD. QLD / CRE, Chronic Kidney Disease patients with autosomal dominant Polycystic Kidney Disease or other inheritable Kidney disease have distinct Characteristics and higher associated healthcare. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
20. **McIntyre D, Coyer F, Bonner A.** Developing specific haemodialysis nurse sensitive indicators: Results from a Delphi study. Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
21. **Milazi M, Bonner A, Douglas C.** A cluster randomised control trial study protocol to improve phosphate control in adults receiving haemodialysis. Paper presented at 47<sup>th</sup> EDTNA/ERCA International Conference, 15-18 September 2018; Genoa, Italy
22. **Milazi M, Bonner A, Douglas C.** Nurse-led teach back intervention to improve adherence with phosphate control in people receiving haemodialysis. Paper presented at 47<sup>th</sup> EDTNA/ERCA International Conference, 15-18 September 2018; Genoa, Italy
23. **Milazi M, Bonner A, Douglas C.** Educational interventions for phosphate control in patients receiving haemodialysis: a systematic review and meta-analysis. Paper presented at 47<sup>th</sup> EDTNA/ERCA International Conference, 15-18 September 2018; Genoa, Italy



### Oral Presentations: (cont):

24. Nguyen NT, **Bonner A, Douglas C.** Does a chronic kidney self-management education support to improve self-efficacy, quality of life, and blood pressure: Results from a randomised control trial, Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
25. Nguyen NT, **Bonner A, Douglas C.** A randomised control trial of a chronic kidney disease self-management intervention on patient knowledge and self-management behaviour. Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
26. Olenski S., **Scuderi C,** Jeyaseelan L, **John G.** Clinical audit of urinary tract infections in renal transplant patients at the Royal Brisbane and Women's Hospital. In: *Nephrology* 2018;23(S3):19. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
27. Owens EP, Edey DP, **Healy H,** Tan KS, Hoy WE, Gobe GC. The chronic kidney disease biobank, open for business. Paper presented at: *Nephrology: from the Laboratory to the Clinic.* 6-8 December 2018, Bienheim New Zealand
28. **Purtell L, Bonner A, Healy HG.** Younger adults also require kidney supportive care. In: *Nephrology* 2018;23(S3):52. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
29. **Purtell L, Healy HG, Bonner A.** Evaluating and optimising the delivery of kidney supportive care. In: *Nephrology* 2018;23(S3):51. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
30. **Purtell L.** Hiremagalur B, Sowa M, Bublitz L, **Bonner A.** CKD.QLD / CRE, Predicting Improvement in Health – Related Quality of Life in people receiving dialysis: The leopard Study. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
31. Raghubar A, Wang X, **Kassianos AJ,** Ng MS, Dave KA, Norris E, Headlam MJ, **Healy HG,** Mallett AJ. Micro proteomic profiling in the diagnosis of kidney disease. In: *Nephrology* 2018;23(S3):23. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
32. Ramsbotham J, Dinh TTH, Truong H, **Bonner A.** Vietnamese Nursing Students' perspectives on learning environments: a multi-site benchmarking study to inform future initiatives. Paper presented at the Nursing Education Research Conference, 19-21 April 2018, Washington, USA
33. Sowa PM, Zhang J, Cameron A, **Healy HG,** Hoy WE, Connelly LB. Chronic Kidney Disease: who are the high cost users of hospital care? In: *Nephrology* 2018;23(S3):51. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
34. Stowasser M, Ahmed A, Cowley D, **Wolley M,** McWhinney B, Ungerer J, Gordon R. Seated Saline Suppression testing for the diagnosis of Primary Aldosteronism – a validation Study. Oral at International Society of Hypertension Annual Scientific Meeting 2018 Beijing
35. Venuthurupalli SK, Gupta A, Lee A, Mahmood U, Govindarajulu S, **Healy HG,** Fassett R, Cameron A, Hoy WE. CKD.QLD: profile and long-term outcomes of Aboriginal and Torres Strait Islander (A&TSI) people with chronic kidney disease (CKD) from Darling Downs, Queensland. In: *Nephrology* 2018;23(S3):32. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia
36. **Wolley M.,** Ahmed AH, Cowley D, Gordon RD, McWhinney BC, Ungerer JP, Stowasser M. Seated saline suppression testing for the diagnosis of primary aldosteronism. International Aldosterone conference 2018. Chicago. USA
37. Zhang H, **Scuderi C,** Eglinton J, **Broadbent T,** Jones S, **Mallett, A.** (2018). Sensipar<sup>®</sup> instead of surgery: Is it a sensible option? Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
38. Zhang J, Hoy WE, **Baboolal K,** Wang Z, Cameron A, **Healy HG,** Venuthurupalli S, Tan K-S, Govindarajulu S, Rolfe A, Mantha M, Titus T, Cherian R, Wu P-C, Banney C, Mutatiri C, Madhan K, Ranganathan D, Kan G, Han T, Hossain S, **Kark A, Coleman S, Taylor B, Mallett AJ.** Acute kidney injury in patients with chronic kidney disease in public nephrology practices in Queensland. In: *Nephrology* 2018;23(S3):69. Paper presented at: 54<sup>th</sup> Annual Scientific Meeting Australian and New Zealand Society of Nephrology. 8-12 September 2018; Sydney, Australia.

### Poster Presentations:

1. **Arndt A, Angus S.** Transition unit Nursing model. Poster presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
2. **Berquier I, Bonner A, Purtell L, Healy H, Taylor B, Heffernan D, Douglas C.** Kidney supportive care Development of an advanced practice nurse. Poster presented at the 7<sup>th</sup> Palliative Care Nursing Association Conference, 20-21 May 2018, Brisbane Australia
3. Dinh TTH, **Bonner A,** Ramsbotham J, Clark RA Jones L. Validation of the Dutch heart failure scale: Results from factor analyses. Poster presented at the Australian Cardiovascular Nursing College Conference, 9-10 March 2018, Sydney Australia
4. Guo Z, Poglitsch M, McWhinney B, Ungerer J, Ahmed A, Gordon R, **Wolley M,** Stowasser M Measurement of aldosterone; comparison of liquid chromatography-tandem mass spectrometry with radioimmunoassay in screening and confirmatory testing for primary aldosteronism. Poster at International Society of Hypertension Annual Scientific Meeting 2018 Beijing.
5. Guo Z, Poglitsch M, McWhinney B, Ungerer J, Ahmed A, Gordon R, **Wolley M,** Stowasser M, Application of a novel equilibrium angiotensin II assay in screening and confirmatory testing for primary aldosteronism: a pilot study. Poster at International Society of Hypertension Annual Scientific Meeting 2018 Beijing
6. **Healy HG,** Law B, Wang X, Kildey K, Giuliani K, Beagley K, Wilkinson R, Kassianos A. Tissue-resident mucosal-associated invariant T (MAIT) cells in human renal fibrosis and chronic kidney disease. In: *Journal of the American Society of Nephrology Supplement* 2018;29;366. Poster presented at: Kidney Week American Society of Nephrology, 23-28 October 2018; San Diego, US. (TH-PO953)
7. Hoang VL, **Bonner A, Green T.** Exploration of social support for people receiving haemodialysis in Vietnam: a study overview. Poster presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June 2018, Adelaide Australia
8. Hoy AJ, Zhang J, Wang Z, Cameron A, **Healy HG, Mallett AJ,** Venuthurupalli SK. The end of the CKD journey – who starts renal replacement therapy and who dies without it among CKD patients in public renal specialty practices in Queensland, Australia. In: *Journal of the American Society of Nephrology Supplement* 2018;29;485. Published at Kidney Week American Society of Nephrology, October 23-28 October 2018; San Diego, US. (FR-PO252)

## Poster Presentations (cont):

- Hoy AJ, Zhang J, Wang Z, Cameron A, **Healy HG**, Venuthurupalli SK, **Mallett AJ**. Frequency and consequences of AKI in patients with CKD in public nephrology practices in Queensland, Australia. In: Journal of the American Society of Nephrology Supplement 2018;29;117. Poster presented at: Kidney Week American Society of Nephrology, 23-28 October 2018; San Diego, US. (TH-PO026)
- Ironside D**, **Scuderi C**, Eglington J, **Rice M**, **Millhouse S**, **Kark A**. Case series: hypocalcaemia requiring hospitalisation following administration of denosumab in chronic kidney disease (CKD) patients: Medicines Management 2018. 2018 November 22-25; Brisbane
- Law B, Wilkinson R, Wang X, Kildey K, Giuliani K, Beagley K, **Healy H**, **Kassianos A**. Development of tissue-resident mucosa-associated invariant T (MAIT) cells in human renal fibrosis and chronic kidney disease (CKD). Poster at: 5<sup>th</sup> European Congress of Immunology. 2-5 September 2018, Amsterdam, Holland. (P.C1.07.09)
- Mallett AJ**, **Jeyaruban A**, Cameron A, Zhang J, **Healy HG**, Hoy WE. Impact of cardiovascular events on mortality and decline of renal function in patients with CKD. In: Journal of the American Society of Nephrology Supplement 2018;29;233. Poster presented at: Kidney Week American Society of Nephrology, 23-28 October 2018; San Diego, US (TH-PO447)
- Mallett AJ**, **Jeyaruban A**, Cameron A, Zhang J, **Healy HG**, Hoy WE. Determining the association of allopurinol prescription on progression of renal dysfunction and progression to renal replacement therapy in patients with CKD. In: Journal of the American Society of Nephrology Supplement 2018;29;462. Poster presented at: Kidney Week American Society of Nephrology, 23-28 October 2018; San Diego, US (FR-PO167)
- Mallett AJ**, Wilkins EJ, Broughtwood T, Simons C, McCarthy H, Mallawaarachchi A, Faull R, Smyth I, **Healy HG**, Little MH, Wardrop L, Quinlan C, Stark Z, Patel C, Goranitis I, Chakera A, Best S, Long JC, Jose M. Evaluating an Australian national network of multidisciplinary renal genetics clinics: the KidGen collaborative. Information Poster presented at: Kidney Week American Society of Nephrology, 23-28 October 2018; San Diego, US (INFO 19)
- Raghubar A, Wang X, **Kassianos AJ**, Ng MSY, Dave KA, Norris EL, Headlam MJ, Healy H, Mallett AJ. Application of mass spectrometry-based micro-proteomics in IgA Nephropathy. Eposter at: 15<sup>th</sup> International Symposium on IgA Nephropathy – IIGAN 2018. 27-29 September 2018; Buenos Aires, Brazil
- Ramsbotham J, Dinh TTH, Truong H, **Bonner A**. Translation and Psychometric evaluation of the Vietnamese Clinical Learning Environment Inventory with nursing students. Poster presented at the Nursing Education Research Conference, 19-21 April 2018, Washington, USA
- Rice M**, Goie H, **Scuderi C**, **Ironside D**, **Zipf J**. Proton pump inhibitor use and chronic kidney disease- a clinical audit.: Medicines Management 2018. 2018 November 22-25; Brisbane
- Scuderi C**, Olenski S, **John G**, Choo A, Singh A, Way M, Jeyaseelan L. Clinical audit of urinary tract infections in renal transplant patients. Poster at: Medicines Management 2018. 2018 November 22-25; Brisbane
- Williams N**. An efficacy and feasibility study comparing topical use of acetic acid at the exit site versus mupirocin to prevent exit site infection in PD patients (ACES Study). Poster presented at Home Therapies Conference, 2018, New Zealand
- Wolley M**, Hawley C, Marshall M, Roberts M. Incremental and Twice Weekly Hemodialysis in Australia and New Zealand. Poster at Kidney Week American Society of Nephrology, 23-28 October 2018; San Diego, US (TH-PO339)
- Wu A, **Wolley M**, Cowley D, Gordon R, Fenton R, Stowasser M. Exogenous Mineralocorticoid Administration and Acute Salt Loading Effects on NCC Expression and Activity in Hypertensives with Raised Aldosterone/Renin Ratio (ARR). Poster at Kidney Week American Society of Nephrology, 23-28 October 2018; San Diego, US (FR-PO320)
- Wu A, **Wolley M**, Xu S, Gordon R, Fenton R, Stowasser M. Variations in abundance of urinary exosomal renal sodium transporters in response to mineralocorticoid administration and oral salt loading and in relation to baseline plasma aldosterone and potassium. Poster at International Society of Hypertension Annual Scientific Meeting 2018 Beijing.

## Other Communications and Outputs:

### Symposiums:

- Healy H**, **Baboolal K**. Metro North Kidney Health Service Discrete Event Simulation Modelling, 2018, RBWH
- Berquier I**, **Douglas C**, **Scuderi C**, **Bonner A**, **Heffernan D**, **Purtell L**, **Healy H**. Kidney Supportive Care Symposium, 2018, RBWH
- Baboolal K**, **Mallett A**, **Berquier I**, **Rice M**, Hoy W, Cameron A, **Healy H**. Statewide Renal Clinical Network Forum – Renal Service: Putting Consumers First, Queensland State Library, 2018. Brisbane, QLD.

### Academic Appointments 2018

- Assoc Prof Helen Healy** – Associate Professor, University of Queensland, Faculty of Medicine
- Assoc Prof Andrew Mallett** – Associate Professor, University of Queensland Faculty of Medicine
- Assoc Prof Andrew Mallett** – Inaugural Clinical Fellow, UQ Institute for Molecular Bioscience
- Assoc Prof Andrew Mallett** – Honorary Fellow Manager Murdoch Children’s Research Institute
- Assoc Prof Andrew Mallett** – Visiting Fellow, University of Cambridge School of Medicine, Addenbrooke’s Hospital (CUH NHS Trust) and Cambridge Institute for Medical Research
- Ms Carla Scuderi** – Course Coordinator University of Qld Clinical Pharmacy Post graduate program
- Assoc Prof Dwarakanathan Ranganathan** – School of Medicine, Griffith University
- Dr Martin Wolley** – Senior Lecturer, University of Queensland, Faculty of Medicine.

### Conference Abstract, Peer Review Panels and Meetings:

1. **Prof Ann Bonner** – Reviewer GRANTS – NHMRC, NMRC (Singapore), IHBI
2. **Prof Ann Bonner** – Assoc Editor – Renal Society of Australasia journal; Editorial Board – Journal of Renal Care
3. **Prof Ann Bonner** – Reviewer MANUSCRIPTS – American Journal of Kidney Disease, BMC Nephrology, BMC Health Services, International Journal of Nursing Studies, Journal of Advanced Nursing, Journal of Clinical Nursing, Journal of Renal Care, International Journal of Nursing Practice, Social Science & Medicine
4. **Prof Ann Bonner** – Reviewer MEETING ABSTRACTS – Renal Society of Australasia, Transplant Society, Australian College of Nursing
5. **Assoc Prof Helen Healy** – Sub Editor – Frontiers in Physiology – Renal and Epithelial Physiology, Case Reports in Nephrology
6. **Assoc Prof Helen Healy** – Reviewer MANUSCRIPTS – Internal Medicine
7. **Assoc Prof Helen Healy** – Reviewer GRANTS – NHMRC, RBWH & Foundation Research Council scholarships and project grants
8. **Assoc Prof Helen Healy** – Reviewer MEETING ABSTRACTS – Australian and New Zealand Society of Nephrology Annual Scientific Meeting
9. **Assoc Prof Helen Healy** – Reviewer OTHER – MN Research Excellence Awards
10. **Dr Helen Healy** – Royal Brisbane and Women’s Hospital Annual Healthcare Symposium
11. **Ms Carla Scuderi** – Society of Hospital Pharmacists MM2018.

### Kidney Health Service International Visiting Academics:

Visiting Academic	Hosted By	Event	Visiting Academic’s Institute
Professor Adeera Leevin	Healy H. Kidney Health Service Baboolal K. Statewide Renal Network	Site Visit and Presentation to Kidney Health Service Heads of Departments	Executive Director of the British Columbia Renal Agency, Director Division of Nephrology, St Paul’s Hospital, Vancouver, Canada
Professor Christian Kurts	Healy H. Kassianos A. Conjoint Kidney Research Laboratory, Chemical Pathology, Queensland Pathology	QIMR Immunology and Infectious Disease Seminar	Director and Group Leader, Institute of Experimental Immunology, Bonn, Germany
Professor Fliss Murtagh	Healy H. Kidney Health Service, Berquier I. Kidney Supportive Care, Bonner A. Professorial Nursing Unit	Key Note Speaker: Kidney Supportive Care Symposium	Professor in Palliative Care Hull York Medical School, Associate Director Wolfson Centre for Palliative Care Research University of Hull, Visiting Professor of Palliative Care King’s College London
Professor Futoshi Iwata	Healy H. Kidney Health Service, Berquier I. Kidney Supportive Care	Kidney Supportive Care Think Tank	Professor of Law, Sophia University Tokyo Japan
Professor Agnes Fogo	Healy H, Kidney Health Service	Invited Lecturer, Royal Brisbane Hospital Medical Ground Rounds	John L Shapiro Professor of Pathology, Director Renal Pathology/EM Laboratory Vanderbilt University Medical Centre Nashville USA

### 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 Trmka(SC) - US\$ 12000 pa for years 2018 and 2019.

## Neurology – Epilepsy

The RBWH Epilepsy group has been active in several areas of research in 2017. This includes epilepsy in pregnancy, genetic studies and functional MRI. Our research has included studies of humans and animal models of epilepsy, and promising new treatments including intravenous immunoglobulin and cannabidiol gel.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.)	University (duration)	Supervisors (RBWH staff in bold)
Javier Urriola	PhD		David Reutens
Ruben Pellicer-Guridi	PhD		David Reutens
Jiasheng Su	PhD		David Reutens
Surabhi Sood	PhD		David Reutens
Sharhzad Bagheri	PhD		David Reutens
Peter Caradonna	PhD		David Reutens
Shaez Abdulla	PhD		David Reutens
Zahid Kausar	PhD		David Reutens
Zheng Qiao	PhD		David Reutens

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Kimberley Irwin	Research Trial Coordinator	Clinical Trials	UQ
Leanne Rigby	Research Officer	Clinical Trials	UQ
Yvonne Gautam	Research Officer	Drug Registry	UQ
Maryam Ziaei	Post-doctoral Fellow	Neuroimaging	UQ
Min Chen	Post-doctoral Fellow	Neuroimaging	UQ
Stephen Walsh	Epilepsy Fellow	Epilepsy	Qld Health
Michael Vogel	Post-doctoral Fellow	Neuroimaging	UQ
Reuben Pellicer	Post-doctoral Fellow	Neuroimaging	UQ
Jaixin Du	Post-doctoral Fellow	Neuroimaging	UQ

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Lata Vadlamudi	Jeffrey Craig	Combining genetic and epigenetic analyses to generate biomarkers for epilepsy in twins and singletons

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Prof T O'Brien (Melbourne Health)	Professor David Reutens	A Phase 2A, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Multiple-Dose Study to Assess the Safety and Efficacy of ZYN002 Administered as a Transdermal Gel to Patients with Partial Onset Seizures Synthetic Transdermal Cannabidiol for the Treatment of Epilepsy (STAR 1)
Prof T O'Brien (Melbourne Health)	Professor David Reutens	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 (STAR 2)
Dr. Eva Pietras (SK Life Sciences)	Professor David Reutens	An Open Label, Multicenter, Safety and Pharmacokinetic Study of YKP3089 as Adjunctive Therapy in Subjects with Partial Onset Seizures
Prof T O'Brien (Melbourne Health)	Professor David Reutens	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
Prof T O'Brien (Melbourne Health)	Professor David Reutens	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
Prof. David Reutens	Professor David Reutens	Observational phase IV Clinical Registry of the use of perampanel (Fycompa) for the treatment of focal and generalised epilepsy
Prof. T O'Brien	Professor David Reutens	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. Phase II
Prof. David Reutens	Professor David Reutens	Feasibility study of a wearable drowsiness detector in epilepsy

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
V Vegh, DC Reutens, M Gray, C Riney, S Malone	NHMRC Project Grant. APP1104933	Novel MRI approaches to map focal cortical dysplasia in focal epilepsy	NHMRC		\$465,489 (2016-2018)
<b>David Reutens</b>	Neurology/Epilepsy	Training Centre of Innovation in Biomedical Imaging Technology IC170100035	ARC Industrial Transformation	\$948,742	\$4,743,710 (2017-2021)
<b>David Reutens</b>	Neurology/Epilepsy	“Targeting Complement in post-traumatic epileptogenesis”	US Department of Defence Congressionally Directed Medical Research Programs. EP160027	\$687,170	USD \$545,005.46

## 2018 Research Publications

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### Journal Articles:

1. Venkatachalam TK, Bernhardt PV, Stimson DHR, Pierens GK, Bhalla R, **Reutens DC**. A novel strategy to introduce F-18, a positron emitting radionuclide, into a gallium nitrate complex. Synthesis, NMR, X-ray crystal structure and preliminary studies on radiolabeling with F-18. *Aust J Chem* 2018; 71:81-86
2. Venkatachalam T, Stimson D, Pierens G, Bhalla R, **Reutens D**. Challenges in the automated synthesis of [<sup>18</sup>F]-1-fluoroethyl tryptophan: Formation of both O- and N-alkylated products. *Appl Radiat Isot* 2018; 131:41-48
3. Nguyen HD, Ullmann JFP, McLachlan GJ, Voleti V, Li W, Hillman EMC, **Reutens DC**, Janke AL. Whole-volume clustering of time series data from zebrafish brain calcium images via mixture modelling. *Stat Anal Data Min* 2018; 11(1): 5-16
4. Rigg J, Irwin K, Tremayne F, **Reutens D**. Postural change in convulsive seizures: a retrospective review of video EEG recordings. *Intern Med J* 2018; 48: 50-54
5. Bollman S, Robinson SD, O'Brien K, Vegh V, Janke A, Marstaller L, **Reutens DC**, Barth M. The challenge of bias free coil combination for quantitative susceptibility mapping at ultra-high field. *Magn Reson Med* 2018; 79(1): 97-107
6. Barton S, Nadebaum C, Anderson VA, Vajda F, **Reutens DC**, Wood AG. Memory dysfunction in school-aged children exposed prenatally to anti-epileptic drugs. *Neuropsychology* 2018;32(7):784-796
7. Benjamin CFA, Li AX, Blumenfeld H, Constable RT, Alkawadri R, Bickel S, Helmstaedter C, Meletti S, Bronen R, Warfield SK, Peters JM, **Reutens D**, Spencer DD, Hirsch LJ. Presurgical language fMRI: Clinical practices and patient outcomes in epilepsy surgical planning. *Hum Brain Mapp* 2018; 39:2777-2785
8. Yu Q, **Reutens D**, Vegh V. Can anomalous diffusion models in magnetic resonance imaging be used to characterise white matter tissue microstructure? *Neuroimage* 2018; 175:122-137
9. Ziser L, Meyer-Schell N, Kurniawan ND, Sullivan R, **Reutens D**, Chen M, Vegh V. Utility of gradient recalled echo magnetic resonance imaging for the study of myelination in cuprizone mice treated with fingolimod. *NMR Biomed* 2018; 31(3). doi: 10.1002/nbm.3877
10. Frisch K, Stimson DHR, Venkatachalam T, Pierens GK, Keiding S, **Reutens D**, Bhalla R. N-(4-[<sup>18</sup>F] fluorobenzyl) cholyglycine, a novel tracer for PET of enterohepatic circulation of bile acids: radiosynthesis and proof-of-concept studies in rats. *Nucl Med Biol* 2018; 61:56-62
11. Marstaller L, Fynes-Clinton S, Burianová H, **Reutens DC**. Evidence for a functional specialization of ventral anterior temporal lobe for language. *Neuroimage* 2018 Dec; 183:800-810
12. Bonyadi MR, Tieng QM, **Reutens DC**. Optimization of distributions differences for classification. *IEEE Trans Neural Netw Learn Syst*. 2018 Jul 2. doi: 10.1109/TNNLS.2018.2844723
13. Benjamin CFA, Dhingra I, Li AX, Blumenfeld H, Alkawadri R, Bickel S, Helmstaedter C, Meletti S, Bronen RA, Warfield SK, Peters JM, **Reutens D**, Potczyńska MM, Hirsch LJ, Spencer DD. Presurgical language fMRI: Technical practices in epilepsy surgical planning. *Hum Brain Mapp*. 2018 Oct;39(10):4032-4042. doi: 10.1002/hbm.24229
14. Kadamangudi S, **Reutens D**, Sood S, Vegh V. Signal compartments in ultra-high field multi-echo gradient echo MRI reflect underlying tissue microstructure in the brain. *Neuroimage* 2018 Sep; 178:403-413. doi: 10.1016/j.neuroimage.2018.05.061
15. Venkatachalam TK, Bernhardt PV, Pierens GK, **Reutens DC**. NMR, X-ray crystal structure studies and mechanism for formation of a novel di-gallium complex and 5-methoxy-4,5,6-triphenyl-4,5-dihydro-1,2,4-triazene-3(2H)-thione. *J Chem Crystallogr* (In Press; Accepted 23/10/18)
16. Du J, Vegh V, **Reutens D**. Abrupt transition of neuronal network dynamics: implications for the generation of seizures and epilepsy. *Sci Rep* (In Press; Accepted 24/11/18)
17. 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* (In Press; Accepted 17/12/18)
18. Venkatachalam TK, Bernhardt PV, Pierens GK, Stimson DHR, Bhalla R, **Reutens DC**. Synthesis and characterization of indium(III) bis-thiosemicarbazone complexes: <sup>18</sup>F incorporation for PET imaging. *Aust J Chem* (Accepted 11/12/18)
19. Ando T, Bhamidimarri SP, Brending N, Colin-York H, Collinson L, De Jonge N, de Pablo P J, Debroye E, Eggeling C, Franck C, Fritzsche M, Gerritsen H, Giepmans BNG, Grunewald K, Hofkens J, Hoogenboom JP, Janssen KPF, Kaufman R, Klumpermann J, Kurniawan N, Kusch J, Liv N, Parekh V, Peckys DB, Rehfeldt F, **Reutens DC**, Roeffaers MJB, Salditt T, Schaap IAT, Schwarz US, Verkade P, Vogel MW, Wagner R, Winterhalter M, Yuan H, Zifarelli G. The 2018 correlative microscopy techniques roadmap. *J Phys D* 2018; 51(44): Article Number: 443001.

## Neurology – Motor Neurone Disease Research

The Motor Neurone Disease (MND) research team is led by Associate Professor Rob Henderson and Professor Pam McCombe. The team involves neurologists, scientists, University of QLD (UQ), PhD students, a neuropsychologist and research coordinators, the team has links to the University of QLD, University of NSW and the Royal Prince Alfred Hospital and also collaborates with international MND researchers.

MND research includes involvement in clinical pharmaceutical trials currently three are in progress. The research coordinators are involved in the setup and running of these ongoing studies.

MND participants are recruited via bi monthly MND clinics or via referral from external Neurologists. A regular MND Research clinic is conducted weekly to allow interested patients and families to meet all the researchers and discuss current research projects prior to deciding whether they wish to participate.

Neuropsychological research is conducted by the team neuropsychologist and a PhD student investigating cognitive and behavioural changes in MND patients. Another project investigates the role of metabolism in MND and has found a proportion of patients experience hypermetabolism. The study has expanded to include collection and analysis of gut biomes and more extensive dietary history.

There remains a lack of reliable diagnostic and prognostic biomarkers for the disease. Several of the research projects aim to find novel biomarkers for the disease. This includes blood collection sent to UQ laboratories for genetic screening/biomarker studies. A national MND database system known as SALSAs has been implanted over the last two years and all new and existing patients participating in research are entered onto the new database. There are regular fund-raising events throughout the year including a Golf Day and an MND lunch event. Money for the MND research is held within the Royal Brisbane and Women's Hospital Foundation.

### 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>
Amelia Hobson	Doctorate of Clinical Psychology & Clinical Neuropsychology UQ (2015- present)	Internally- generated responses and the role of apathy and depression in Motor Neurone Disease	Gail Robinson

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University <i>(years)</i>
Gaurav Singh	Research Fellow	Clinical Research	Fellow Royal Australian College of Physicians (2018-)
Frederick Steyn	Honorary Research Fellow	Clinical Research	University of Queensland (2008-)
Amelia Ceslis	Visiting Researcher	UQ Psychology	University of Queensland (2016-)
Gail Robinson	Visiting Researcher	UQ Psychology	University of Queensland (2010-)

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Motor Neurone Disease Research Clinic, Neurology Department	Amelia Ceslis, <b>Rosemary Argall</b> , Gail Robinson, <b>Robert Henderson</b> , <b>Pamela McCombe</b> , <b>Susan Heggie</b> , <b>Kate Thorpe</b>	Assessment of cognition and behaviour in Motor Neurone Disease in a clinical setting and the impact of education sessions on care giver well-being

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Frederick Steyn	<b>Pam McCombe (Neurology) Robert Henderson (Neurology)</b>	Endocrine and Appetite Targets and Therapies for Motor Neuron Disease; a prospective observational Study
Frederick Steyn	<b>Robert Henderson (Neurology)</b>	Use of Point of Care (PoC) testing to improve respiratory management and monitoring of disease progression in ALS: a Pilot Study
Gail Robinson, Naomi Wray, Anjali Henders, Sharon Abrahams, Ammar Al-Chalabi	<b>Robert Henderson, Pamela McCombe</b>	Longitudinal assessment of behaviour and cognition in ALS through brief Online Carer's behavioural Questionnaire (OCQ)

## 2018 Research Grants – Awarded

Investigators ( <i>RBWH staff in bold</i> )	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Gail Robinson, Naomi Wray, Anjali Henders, Sharon Abrahams, <b>Robert Henderson, Pamela McCombe</b> , Ammar Al-Chalabi	<b>Motor Neurone Disease Research Clinic, Neurology Department</b>	Longitudinal assessment of behaviour and cognition in ALS through brief Online Carer's behavioural Questionnaire (OCQ)	MNDRIA	\$107,000	2018-2019

## 2018 Research Publications

### Journal Articles:

1. **McCombe PA**, Ngo ST, Guo CC, Fazlollahi A, Bollmann S, Wang L, Hu X, Barth M, Salvado O, Davis M, **Ceslis A**, Robinson G, **Henderson RD, Steyn FJ**. Patient with ALS with a novel TBK1 mutation, widespread brain involvement, behaviour changes and metabolic dysfunction. *J Neurol Neurosurg Psychiatry*. 2018 Sep 8. pii: 10.1136/jnnp-2018-318823. doi: 10.1136/jnnp-2018-318823
2. Ngo ST, Mi JD, **Henderson RD, McCombe PA, Steyn FJ**. Exploring targets and therapies for amyotrophic lateral sclerosis: current insights into dietary interventions. *Degener Neurol Neuromuscul Dis*. 2018 Jul 25; 7:95-108
3. **Henderson RD**, Garton F, Kiernan MC, Turner MR, Eisen A. Human cerebral evolution and the clinical syndrome of amyotrophic lateral sclerosis. *J Neurol neurosurg Psychiatry*. 2018 Apr 17. pii: jnn9p-2017-317245. Doi: 10.1136/jnnp-2017-317245. (Epub ahead of print)
4. Xu Z. Mass spectrometry analysis of plasma from Amyotrophic lateral Scler Frontotemporal Degener. 2018; 19:362-376
5. **Frederick J Steyn, Zara Ioannides**, Ruben PA van Eijk, **Susan Heggie, Kathryn Thorpe, Amelia Ceslis, Saman Heshmat, Anjali J Henders, Naomi R Wray, Leonard H van den Berg, Robert Henderson, Pamela A McCombe**, Shyuan T Ngo. Hypermetabolism in ALS is associated with greater functional decline and shorter survival. *J Neurol Neurosurg Psychiatry*. 2018 Apr 29. pii: jnnp-2017-317887. doi: 10.1136/jnnp-2017-317887.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Oral Presentations:

1. Robinson, G. Cognition and behaviour in MND. MND Connect Conference, November 2018. Melbourne, Australia
2. Ceslis, A, **Argall, R., Henderson. R., McCombe, P.**, & Robinson, G. The spectrum of language impairments in amyotrophic lateral sclerosis. 11th International Conference for frontotemporal Dementia 2018. Sydney, Australia.

### Poster Presentations:

1. Ceslis, A, **Argall, R., Henderson. R., McCombe, P.**, & Robinson, G. The language signature of amyotrophic lateral sclerosis. Fight MND Australasian MND Symposium 2018. Melbourne, Australia
2. Ceslis, A, **Argall, R., Henderson. R., McCombe, P.**, & Robinson, G. The language signature of amyotrophic lateral sclerosis. 11<sup>th</sup> International Conference for frontotemporal Dementia 2018. Sydney, Australia.



## Neurology – Stroke

The RBWH Stroke group continues to play a leading role in Queensland stroke research at all levels of the stroke journey, both leading and facilitating research of many types within the Stroke Unit.

In the prehospital phase we are working on device-assisted diagnosis of stroke. In the emergency phase we continue to refine diagnostic evaluation and treatment approaches in collaboration with the Department of Medical Imaging. Our multicentre secondary prevention studies included anticoagulant and antiplatelet research and medications to enhance stroke recovery.

Our Nurse Practitioner has also started research into novel models of care for previously-employed stroke patients discharged directly from hospital (i.e. without being transferred for inpatient rehabilitation). We continue to collaborate with and facilitate research by other staff from QUT and UQ who are investigating various aspects of the acute stroke journey with our patients.

We thank the RBWH Foundation for their ongoing support of our research program, the pinnacle of which is their organisation and support for the annual Master Stroke Business Luncheon.

### 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	An investigation of the pre-hospital diagnosis and triage of ischemic hyper-acute stroke to recommended reperfusion therapies	Vivienne Tippet, <b>Andrew Wong</b> , Emma Bosley, Michele Clarke

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>A/Prof Andrew Wong</b>	Prof Vivienne Tippet, Dr Simon Finnigan, Wayne Loudon	Stroke Prehospital Informed Decision-making using EEG Recordings (SPIDER)

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Chris Bladin (The Florey Institute of Neuroscience and Mental Health)	Claire Muller, Andrew Wong	A multicentre, randomised controlled trial of exenatide versus standard care in acute ischaemic stroke
Andrew Lee (Flinders Medical Centre)	Andrew Wong, Michael Roizman	An MRI registry of clinical and radiological outcomes following initiation of anticoagulation after ischaemic stroke or transient ischaemic attack in patients with atrial fibrillation
Geoffrey Donnan (The Florey Institute of Neuroscience and Mental Health), Stephen Davis (Royal Melbourne Hospital)	Andrew Wong, Claire Muller	A randomised, multicentre, double blinded, placebo controlled phase 3 trial in ischaemic stroke patients with significant penumbral mismatch at 4.5–9 hours post onset of stroke or after 'wake up' stroke comparing intravenous tPA with placebo
Mark Parsons (John Hunter Hospital)	Andrew Wong, Claire Muller	A multicentre, prospective, randomised open-label blinded endpoint phase III study in stroke thrombolysis patients to compare tenecteplase and alteplase for an outcome of less disability at three months
Bruce Campbell (Royal Melbourne Hospital), Peter Mitchell (Royal Melbourne Hospital)	Andrew Wong, Claire Muller	A randomized controlled trial of tenecteplase versus alteplase before intra-arterial reperfusion therapy within 4.5 hours of stroke onset
C. de Bodinat (France)	Andrew Wong, Claire Muller	An international, multi-centre, randomized, double-blind placebo-controlled phase II study, assessing the efficacy and safety of S44819 versus placebo in ischemic stroke recovery
Todd Verdoorn (USA), Bruce Campbell (Royal Melbourne Hospital)	Andrew Wong, Claire Muller	A randomized, double-blind, placebo-controlled phase II multi-center evaluation to assess the safety and tolerability of DM199 administered intravenously and subcutaneously in subjects with acute ischemic stroke

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Dr Claire Muller</b>	Neurology/Stroke	TEXAIS: Treatment with exenatide in acute ischemic stroke trial protocol: a prospective, randomized, open label, blinded end-point study of exenatide vs. standard care in post stroke hyperglycaemia (Imaging sub-study)	Herston Imaging Research Facility	Provision of scanner access, until 30 <sup>th</sup> June 2019	Provision of scanner access, until 30 <sup>th</sup> June 2019

## 2018 Research Publications

### Journal Articles:

- Muller, Claire;** Cheung, N Wah; Dewey, Helen; Churilov, Leonid; Middleton, Sandy; Thijs, Vincent; Ekinci, Elif I; Levi, Chris; Lindley, Richard; Donnan, Geoffrey; Parsons, Mark; Bladin, Chris. Treatment with exenatide in acute ischemic stroke trial protocol: a prospective, randomized, open label, blinded end-point study of exenatide vs. standard care in post stroke hyperglycaemia. *Int J Stroke* (2018) 13(8): 857-862
- Campbell, Bruce CV; Mitchell, Peter J; Churilov, Leonid; Yassi, Nawaf; Kleinig, Timothy J; Yan, Bernard; Dowling, Richard J; Bush, Steven J; Dewey, Helen M; Thijs, Vincent; **Wong, Andrew A** et al. Tenecteplase versus alteplase before endovascular thrombectomy (EXTEND-IA TNK): a multicenter, randomized, controlled study. (2018) 13 (3): 328-334
- Fanning, Jonathon P; Wesley, Allan J; Walters, Darren L; **Wong, Andrew A;** Barnett, Adrian G; Strugnell, Wendy E; Platts, David G; Fraser, John F; Topographical distribution of perioperative cerebral infarction associated with transcatheter aortic valve implantation. *Am Heart Journal* (2018) 197: 113-123
- Campbell, Bruce CV; Mitchell, Peter J; Churilov, Leonid; Yassi, Nawaf; Kleinig, Timothy J; Dowling, Richard J; Yan, Bernard; Bush, Steven J; Dewey, Helen M; Thijs, Vincent; **Wong, Andrew A;** Muller, Claire T et al. Tenecteplase versus alteplase before thrombectomy for ischemic stroke. *NEJM* (2018) 378(17): 1573-82
- Cornwell, Petrea; Gustafsson, Louise; Hodson, Tenelle; Kuys, Suzanne; **Wong, Andrew;** Thompson, Leah; Longitudinal investigation of fatigue following mild stroke: impact on community integration. (2018) 13:12.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

- Muller, C.** Updates in Cerebral Amyloid Angiopathy. National Stroke Unit Heads Meeting, 2018
- Muller, C.** Debate: All DOACs are Essentially Different. Stroke Society of Australasia ASM, 2018
- Muller, C.** Case Discussions: Neuroimaging Forum. Stroke Society of Australasia ASM, 2018
- Muller, C.** Case Discussions: Thrombolysis Forum. Stroke Society of Australasia ASM, 2018
- Muller, C.** MRI Interpretation. Multiple Sclerosis Nurses Australia Inc Conference 2018
- Wong, A.** When to start/restart anticoagulation after stroke/TIA/ICH, Bayer Cardiovascular Alliance 4<sup>th</sup> Annual Meeting
- Wong, A.** DAWN in detail, 1<sup>st</sup> Australian Korean Joint Stroke Congress, Seoul, Korea
- Wong, A.** Cardioembolic source evaluation: Extensive, 1<sup>st</sup> Australian Korean Joint Stroke Congress, Seoul, Korea
- Wong, A.** PFO: close or not close it, 1<sup>st</sup> Australia-Vietnam Joint Stroke Congress, Ho Chi Minh City, Vietnam
- Wong, A.** Secondary Prevention after Stroke: the importance of lipid control, 1<sup>st</sup> Australia-Vietnam Joint Stroke Congress, Ho Chi Minh City, Vietnam
- Wong, A.** Local Thrombolysis for Intraventricular Hemorrhage (IVH) & Intracranial Hemorrhage (ICH) - Is there a Role? 1<sup>st</sup> Australia-Vietnam Joint Stroke Congress, Ho Chi Minh City, Vietnam
- Wong, A.** Therapeutic strategies for cerebral small vessel disease. Asia Pacific Stroke Conference, Jakarta, Indonesia.
- Wong, A.** Antiplatelets to New Oral Anticoagulants. Asia Pacific Stroke Conference, Jakarta, Indonesia.
- Wong, A.** The eligibility and admission criteria for stroke rehabilitation. Asia Pacific Stroke Conference, Jakarta, Indonesia.
- Wong, A.** Concept of the ischaemic penumbra. Asia Pacific Stroke Conference, Jakarta, Indonesia.
- Wong, A.** Stroke – from acute onset to long-term management. Bayer GP Masterclass, Brisbane
- Wong, A.** Difficult Thrombolysis Cases, Australasian Stroke Academy Seminar, Sydney
- Wong, A.** Stroke Management 2018: Thrombolysis and clot Retrieval, Australasian College of Emergency Medicine Autumn Symposium, Brisbane.

## Nuclear Medicine and Specialised PET Services Qld

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 ( $^{18}\text{F}$ FDG), the Service also conducts research using  $^{18}\text{F}$ DOPA,  $^{18}\text{F}$ MISO,  $^{18}\text{F}$ PSMA1007,  $^{18}\text{F}$ FGE180 and  $^{68}\text{Ga}$ -DOTATATE,  $^{68}\text{Ga}$ -PSMA and  $^{68}\text{Ga}$ -Pentixafor. 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 recently commenced 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.

Steven Goodman, Shaun Patford, Jye Smith and David Pattison received a QuARRIES Award for their Novel Efficient Radionuclide Therapy Risk Assessment project.

David Pattison was a Co-Investigator on successful \$1.8 million Medical Research Future Fund (MRFF) grant for the TarGeted Therapy and Avelumab in Merkel Cell Carcinoma (GoTHAM) Trial.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Dominique Scott</b>	MPhil UQ (PT 2017-)	New radiopharmaceutical methodology for PET imaging	<b>Melissa Latter</b> , Kristofer Thurecht
<b>Brenda Tai</b>	MPhil UQ (PT 2018-)	PET radiopharmaceuticals as molecular imaging tools for improved clinical outcome	<b>Melissa Latter</b> , Kristofer Thurecht
Rahul Ladwa	MPhil UQ (PT 2017-)	Predictors of dosimetry and response to peptide receptor radionuclide therapy in metastatic neuroendocrine tumour	<b>David Wyld</b> , <b>David Pattison</b> , Stephen Rose

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Dr Jye Smith</b>	Adjunct lecturer	Faculty of Medicine	UQ (2009-current)
<b>Dr Marissa Bartlett</b>	Adjunct lecturer	Faculty of Medicine	UQ (2010-current)
<b>Dr Melissa Latter</b>	Honorary Research Fellow	Faculty of Medicine	UQ (2014-current)
<b>A/Prof David Pattison</b>	Associate Professor	Faculty of Medicine	UQ (2018-current)
<b>A/Prof Paul Thomas</b>	Associate Professor	Faculty of Medicine	UQ (2014-current)
<b>A/Prof Stuart Ramsay</b>	Associate Professor	Medicine	JCU (2013-current)

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>David Pattison</b>	Paul Thomas, Stuart Ramsay, Brook Gulhane, Maciej Debowski	$^{18}\text{F}$ -PSMA-1007 vs $^{68}\text{Ga}$ -PSMA-11 trial
<b>Manoj Bhatt</b>	David Pattison, David Wyld, Kevin Lee, Matthew Burge	Ga-DOTATATE PET/MRI
<b>Jye Smith</b>	Matthew Griffiths, Paul Thomas	PSMA Salivary Gland Vasoconstriction

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	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 <sup>18</sup> 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

## 2018 Research Awards and Achievements

Recipient	Award	Event
Brittany Robinson	Curium Award	World Federation of Nuclear Medicine and Biology, 2018
Steven Goodman	Finalist – Physics Prize	World Federation of Nuclear Medicine and Biology, 2018
Steven Goodman, Shaun Patford, Rahul Ladwa, Jye Smith, David Wyld, David Pattison	Service Line Award – Novel Efficient Radionuclide Therapy Risk Assessment	QuARRIES Award 2018

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Sandhu S, Scolyer R, Atkinson V, Poulsen M, Emmett L, Tothill R, Neeson P, <b>Pattison DA</b> , Guminski A	Dept of Nuclear Medicine and Specialised PET Services	TarGeted Therapy and Avelumab in Merkel Cell Carcinoma (GoTHAM) Trial	MRFF	\$360,000	\$1,800,000 (2018-2022)
PI Pryor D Al2 <b>Thomas P</b>		“A Prospective Pilot Study of a Novel PET/MRI Evaluation of Regional Liver Function to Guide Surgery and Stereotactic Radiation Therapy for Hepatocellular Carcinoma”	FDGal PET quantitation liver grant Princess Alexandra Hospital Foundation	\$100,000	\$100,000 (2018)

## 2018 Research Publications

### Journal Articles:

- Pattison DA\***, Bozin M\*, Gorelik A, Hofman MS, Hicks RJ, Skandaraja A. <sup>18</sup>F-fluorodeoxyglucose-avid thyroid incidentalomas: the importance of contextual interpretation. *Journal of Nuclear Medicine* 2018; 59: 749-755
- Hicks RJ, Jackson P, Kong G, Ware RE, Hofman MS, **Pattison DA**, et al. First-in-human trial of <sup>64</sup>Cu-SARTATE PET imaging of patients with neuroendocrine tumours demonstrates high tumor uptake and retention, potentially allowing prospective dosimetry for peptide receptor radionuclide therapy. *Journal of Nuclear Medicine* 2018; [Epub ahead of print]
- Ladwa R**, Wen Hong H, **Wyld D**, **Pattison DA**, **Burge M**. Tumour Cystic Necrosis following Peptide Receptor Radionuclide Therapy in Neuroendocrine Tumours. *Clinical Nuclear Medicine* 2018; 43: 186-187
- Mossman A, **Pattison DA**, Hicks RJ, Hamblin PS, Yates C. Localisation of occult extra-pancreatic insulinoma using Glucagon-Like Peptide-1 receptor molecular imaging. *Internal Medicine Journal* 2018; 48: 97-98
- Tang V**, **Campbell P**, **Pattison DA**. Lymphangitic carcinomatosis from prostate cancer identified with Gallium-68 Prostate-Specific Membrane Antigen positron emission tomography imaging. *Urology* 2018; 114: e1-e2
- Bongetti E, Lee MH, **Pattison DA**, Hicks RJ, Norris R, Sachithanandan, Maclsaac RJ. Diagnostic challenges in a patient with an occult insulinoma: <sup>68</sup>Ga-DOTA-exendin-4 PET/CT and <sup>68</sup>Ga-DOTATATE PET/CT. *Clinical Case Reports* 2018; 6: 719-722
- Ramsay S**, **Lindsay K**, **Fong W**, **Patford S**, **Younger J**, **Atherton J**. Tc-HDP quantitative SPECT/CT in transthyretin cardiac amyloid and development of a reference interval for myocardial uptake in the non-affected population. *European Journal of Hybrid Imaging*; DOI: 10.1186/s41824-018-0035-1.
- Dhanani J A, Cohen J, Parker SL, **Bhatt MK**, **Goodman S**, et al. A research pathway for the study of the delivery and deposition of nebulised antibiotics: an incremental approach from in vitro to large animal models. *Intensive Care Medicine Experimental*; (2018) 6:17: p 2-19
- Donato P<sup>1</sup>, Roberts MJ<sup>1,2</sup>, Morton A<sup>2</sup>, **Kyle S<sup>2,3</sup>**, Coughlin G<sup>1</sup> & Esler R<sup>1</sup> & Dungleison N<sup>1</sup> & Gardiner RA<sup>1,2,4,5</sup> & **Yaxley J<sup>1,2</sup>**. Improved specificity with <sup>68</sup>Ga-PSMA PET/CT to detect clinically significant lesions “invisible” on multiparametric MRI of the prostate: a single institution comparative analysis with radical prostatectomy histology. *European Journal of Nuclear Medicine and Molecular Imaging*. Published online: 19 September 2018.

## Book Chapters / Letters:

1. **Pattison DA**, Miller JA, Khavar B, Tie J. Management of distant metastasis in differentiated thyroid cancer. In: Parameswaran R, Agrawal A, editors. Evidence-Based Endocrine Surgery, Springer Nature, Netherlands; 2018.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Pattison DA**. FDOPA imaging in hypoglycaemia of infancy; World Federation of Nuclear Medicine and Biology Congress (Melbourne) 2018
2. **Pattison DA**. Current controversies in Thyroid Cancer Management; World Federation of Nuclear Medicine and Biology Congress (Melbourne) 2018
3. **Pattison DA**. The complexities of treating metastatic Differentiated Thyroid Cancer; World Federation of Nuclear Medicine and Biology Congress (Melbourne) 2018
4. **Latter MJ**. Experiences from a Clinical Radiopharmaceutical Laboratory; 9<sup>th</sup> International Nanomedicine Conference (Sydney) 2018
5. **Pattison DA**. Molecular Imaging and Radionuclide Therapy for Advanced Thyroid Cancer. Australia & New Zealand Head and Neck Cancer Society Meeting (Melbourne), July 2018
6. **Pattison DA**. Molecular Imaging and Radionuclide Therapy for Neuroendocrine Tumours. Royal Australasian College of Physicians Endocrine Registrar Lecture Series (Brisbane), August 2018
7. **Pattison DA**. LuPSMA and Theranostics for mCRPC. Brisbane Cancer Conference (Brisbane), November 2018
8. **Pattison DA**. Iodine PET scans. Australia & New Zealand Endocrine Surgeons Association 7<sup>th</sup> Postgraduate Course in Endocrine Surgery (Gold Coast), November 2018
9. **Pattison DA**. Management of Pancreatic Hormone Syndromes. Asia Pacific Neuroendocrine Tumour Society Annual Scientific Meeting (Melbourne), November 2018.

### Oral Presentations:

1. **Robinson B, Pattison DA, Lee K**. <sup>18</sup>F PET/CT Cardiac Sarcoid Imaging: monitoring ketone levels to avoid inadequate suppression of physiologic myocardial uptake (Oral). World Federation of Nuclear Medicine and Biology Congress 2018
2. **Lindsay K, Ramsay S**. Quantitative xSPECT/CT: Redefining the Diagnosis of Transthyretin Cardiac Amyloidosis. World Federation of Nuclear Medicine and Biology Congress 2018.

### Poster Presentations:

1. **McGuinness M, Ramsay S, Latter MJ, Thomas P, Bhatt M, Kyle S, Lee L, Pattison DA**. Variations in physiological radiopharmaceutical distribution between <sup>18</sup>F-PSMA-1007 and <sup>68</sup>Ga-PSMA-11 PET/CT (Poster). World Federation of Nuclear Medicine and Biology Congress 2018
2. **Goodman S, Patford S, Ladwa R, Smith J, Wyld D, Pattison DA**. Validation of abbreviated <sup>177</sup>Lu-DOTATATE renal and tumour dosimetry protocol using quantitative SPECT (Poster). World Federation of Nuclear Medicine and Biology Congress 2018
3. **Latter MJ, Tapper S, Coogan P, Millar S, Maguire G, Scott D, Tai C, Bartlett M, Lummis S, Ergenekon A, Brown G, Pattison DA, Thomas P**. <sup>68</sup>Ga and <sup>18</sup>F PSMA – the radiopharmaceutical laboratory perspective and experience (Poster). World Federation of Nuclear Medicine and Biology Congress 2018
4. **Ladwa, R, Pattison DA, Smith J, Goodman S, Burge M**, Dowson N, Rose S, **Wyld D**. Tumour absorbed dosimetry and response of radionuclide therapy in metastatic neuroendocrine tumour (Poster). European Neuroendocrine Tumour Society (ENETS) Conference 2018
5. **Ladwa, R, Pattison DA, Smith J, Goodman S, Burge M**, Dowson N, Rose S, **Wyld D**. Pretherapeutic PET predictors of tumour response of radionuclide therapy for metastatic neuroendocrine tumours (Poster). European Neuroendocrine Tumour Society (ENETS) Conference 2018
6. **Ladwa, R, Pattison DA, Smith J, Goodman S, Burge M**, Dowson N, Rose S, **Wyld D**. Pretherapeutic predictors of tumour absorbed dosimetry in radionuclide therapy for metastatic neuroendocrine tumours (Poster). European Neuroendocrine Tumour Society (ENETS) Conference 2018
7. **Kisiel N, Ladwa R, Smith J, Lee K, Ramsay S, Bhatt M, Nocher S, Burge M, Wyld D**, Pattison DA. Renal Function Influences Renal Absorbed Dosimetry, haematologic toxicity and early withdrawal from <sup>177</sup>Lu-DOTATATE treatment (Poster). Asia Pacific Neuroendocrine Tumour Society 2018 (APNETS), Congress 9<sup>th</sup>-11<sup>th</sup> November 2018
8. Saunus JM, Lim M, Puttick S, Kalita-de Croft P, Houston ZH, Jones ML, **Latter MJ, Campbell LC, Thomas P**, Jeffrey RL, Rose SE, Mahler SM, Thurecht KJ, Scott AM, and Lakhani SR. Innovation in diagnosis and treatment of brain metastases using multifunctional nanomedicines. San Antonio Breast Cancer Symposium 2018
9. Scott A, **Thomas P** Et al. Targeted Molecular Imaging of Translocator Protein (TSPO) Using <sup>18</sup>FGE180-PET for the Diagnosis of Gastrointestinal Graft Versus host Disease (GI-GVHD American Society of Haematology 60<sup>th</sup> Annual Meeting, San Diego, USA, December 2018.

## Other Communications and Outputs:

**Latter MJ**. To establish a premier training and manufacturing site in translation radiopharmaceutical science; 2018 CAHRLI (Collaborative for Allied Health, Research, Learning and Innovation) Symposium (20<sup>th</sup> June 2018)

**Pearson T**, eHealth Qld to run proof of concept for universal health translator solution. Pulse IT Magazine.

## Palliative and Supportive Care

The RBWH Palliative and Supportive Care Service has continued to support research in the award-winning MN Kidney Supportive Care Program as evidenced by multiple collaborative projects. Preliminary results from the Hepatic Supportive Care Program have been well received when presented at two national conferences in 2018.

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Pharmacy/ Palliative Care/ Oncology	<b>Mika Varitimos Neil Cottrell, Alison Kearney, Melissa Eastgate, Catherine Bettington</b>	Ref No: HREC/18/QRBW/180: investigating patient perceptions towards medicine burden in palliative oncology patients
Pharmacy/ Palliative Care	<b>Kathryn Hurree, Karen Whitfield, Elise Button, Alison Kearney, Glen Kennedy</b>	Educating patients their way
Janet Hardy	Alison Kearney	Oral Medicinal Cannabinoids to Relieve Symptom Burden in the Palliative Care of patients with Advance Cancer: double-blind, placebo controlled, RCT of efficacy and safety
<b>Dr Carol Douglas</b>	<b>Sarah Northfield</b>	The Care of the Dying Evaluation (CODE) Project: a survey of bereaved persons in an Australian acute care setting

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
David Currow, Palliative Care Clinical Studies Collaborative	<b>Alison Kearney, Carol Douglas</b>	Rapid Pharmacovigilance in Palliative Care

### 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Douglas C</b>	Palliative and Supportive Care	QH Care at the End of Life project – ‘Giving ‘VOICE’ to the bereaved-the evaluation of ‘CODE’ in an Australian acute care setting’	Care at the End of Life SEED grant	\$63,990	\$63,990 (2018-2019)

### 2018 Research Publications

#### Journal Articles:

1. **Shirley Chamber**, Helen Healy, Wendy E. Hoy, Adrian Kark, Sharad Ratanjee, Geoffrey Mitchell, Carol Douglas, **Patsy Yates, Ann Bonner**. Health service utilisation during the last year of life: a prospective, longitudinal study of the pathways of patients with chronic kidney disease stages *BMC Palliative Care* (2018) 17:57 DOI: 10.1186/s12904-018-01310-8
2. **Alison Mudge, Carol Douglas, Xanthe Sansome, Michael Tresillin, Stephen Murray, Simon Finnigan, Cheryl Ruth Blaber**, Risk of 12-month mortality among hospital inpatients using the surprise question and SPICT criteria: a prospective study *BMJ Supportive & Palliative Care* Mar 2018, DOI: 10.1136/bmjspcare-2017-001441
3. Purtell, L., Sowa, M., Berquier, I., Scuderi, C., Douglas, C., Taylor, K., Hoy, W.E., Healy, H., & Bonner, A. (2018). The kidney supportive care program: Baseline results from a new model of care for advanced chronic kidney disease. *BMJ Supportive & Palliative Care*, DOI: 10.1136/bmjspcare-2018-001630
4. Scuderi, C., Berquier, I., Purtell, L., Bonner, A., Douglas, C., & Healy, H. (In press). Complex prescribing in chronic kidney disease: the role of the renal pharmacist in kidney supportive care uncovering hydralazine-related lupus. *Journal of Pharmacy Practice and Research*.

#### Book Publication:

1. **Carol Douglas** Text book of Adult Emergency Medicine 5E published by Elsevier. Co-Author Chapter 2.1 and 2.6.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. **Douglas C** Indian Association Palliative Care 2018, Delhi India. Proffered Paper “Point Prevalence of Patients at End of Life in an Australian Acute Hospital”
2. **Kearney Alison** Palliative Care and Supportive Management for Advanced Cirrhosis: Introducing a New Integrated Hepatocare Model GESA Australian Gastroenterology Week, September 2018.

### Oral Presentations:

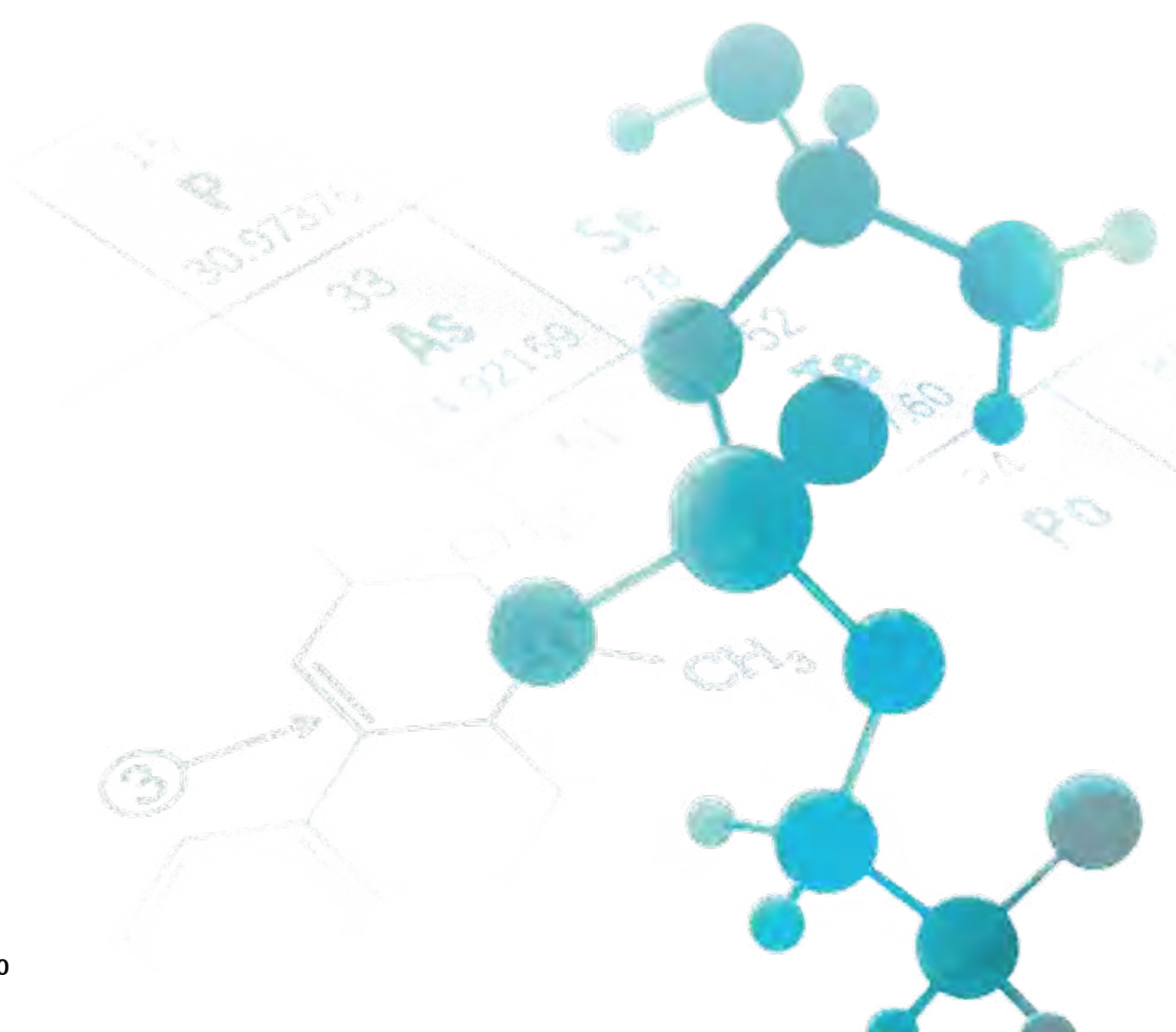
1. **Kearney Alison** Hepatocare – comparison of a new multi-disciplinary model of care for advanced cirrhosis to standard care ANSPM September 2018 Sydney.

## Other Communications and Outputs:

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### Published Abstracts:

1. Purtell, L., Bonner, A., & Healy, H.G (2018). Younger adults also require kidney supportive care. *Nephrology*, 23(suppl. 3), 52. DOI: 10.1111/nep.13441
2. Purtell, L., Healy, H.G., & Bonner, A. (2018). Evaluating and optimising the delivery of kidney supportive care. *Nephrology*, 23(suppl. 3), 51. DOI: 10.1111/nep.13441
3. Purtell, L., Berquier, I., Douglas, C., Taylor, B., Kramer, K., Heffernan, D., Hoy, W.E., Bonner, A., & Healy, H.G (2017). What a patient wants: a consumer perspective of kidney supportive care. *Nephrology*, 22(suppl. 3), 49. DOI: 10.1111/nep.13104.



## Pharmacy

Practice based, translational research is now a core component of the outputs of the pharmacy department and 2018 has been a year of an expanding array of research being undertaken by RBWH pharmacy staff either as part of larger research teams as a higher degree research (HDR) students or supervisors of HDR, or post doctorate research fellows in addition to the substantial research outputs of Professor Jason Roberts' Antibiotic program.

Sixty journal articles, eight oral and 37 poster presentations were associated with 10 HDR pharmacy staff undertaking HDRs and 28 other medical, pharmacy and nursing HDR students supervised by and collaborating with RBWH senior researchers.

The range of research includes the evaluation of electronic medicine management systems, novel areas of new clinical pharmacy practice such as palliative care and emergency department services and drug therapy optimisation such Prof Jason Roberts' NHMRC funded program "Optimising antibiotic dosing to improve patient outcomes and suppress emergence of resistant superbugs." A range of research projects are being led by RBWH researchers and HDR students supervised in collaborating sites especially pharmacy departments across Queensland health.

Pharmacy staff presented or their collaborators presented work Nationally and internationally at pharmacy, nursing, medical and multi-professional meetings.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Jenna Turkington</b>	Masters, UQ (2017-)	Pharmacists engagement with feedback	Christy Noble, Elizabeth Molloy, <b>Ian Coombes</b>
<b>William Franks</b>	Mphil, UQ (2017-)	Pharmacokinetics of antifungals and antivirals in lung transplant recipients	<b>Jason Roberts</b> , Osmino Cotta, Mohd Abdul Aziz, Peter Hopkins
<b>Elizabeth Doran</b>	PhD (2018-2022)	The Role of the Emergency Department Pharmacist (EDP) in the Management of Drug Toxicities	<b>Karen Whitfield</b> , <b>Ian Coombes</b>
<b>Karen Davies</b>	PhD (2015-2018)	Evaluation and Assessment of medication administration by nurses	<b>Karen Whitfield</b> , <b>Ian Coombes</b>
<b>Angela North</b>	MPhil (2015-2018)	Investigation of Therapeutic Heparin in the peri partum period	<b>Karen Whitfield</b>
<b>Paul Firman</b>	MPhil (2016-2018)	Pharmacist Led Therapeutic Drug Monitoring	<b>Karen Whitfield</b>
<b>Kathryn Hurree</b>	MPhil (2017-2019)	Investigation of Impact of a pharmacist in palliative Care Clinics	<b>Karen Whitfield</b>
<b>Brooke Myers</b>	PhD UQ (2014-)	Evaluation of impact of pharmacists on medical post take ward rounds	<b>Ian Coombes</b> , <b>Peter Donovan</b> , Jenny Whitty, Charles Mitchell
<b>Caitlin Locke</b>	MPhil QUT (2017-)	Evaluation of Department of Emergency Pharmacy Service	Greg Merlo, Neil Cottrell, <b>Louise Cullen</b> , <b>Ian Coombes</b>
<b>Nicola Harper</b>	PhD UQ (2015-)	Impact of Electronic prescribing and Automated Medication distribution on medication errors	<b>Danielle Stowasser</b> , <b>Ian Coombes</b> , Neil Cottrell
Dr Alexis Tabah	PhD UQ (2018-)	Role of antibiotic de-escalation in critical care	<b>Jason Roberts</b>
Dr Sazlyna Lim	PhD UQ (2018-)	Optimised treatment for multidrug resistant <i>Acinetobacter baumannii</i>	<b>Jason Roberts</b>
Kamrul Islam	PhD UQ (2018-)	Optimised treatment for multidrug resistant <i>E. coli and Klebsiella pneumoniae</i>	<b>Jason Roberts</b>
Eko Setiawin	PhD UQ (2017-)	Developing antimicrobial stewardship in a resource poor hospital environment	<b>Jason Roberts</b>
Helmi Sulaiman	PhD The University of Malaya (2017-)	Optimised treatment for ventilator associated pneumonia	<b>Jason Roberts</b>
Chris Anstey	PhD UQ (2017-)	Characterising citrate disposition in continuous renal replacement therapy	<b>Jason Roberts</b>
Andrew Burke	PhD UQ (2017-)	Optimised treatment for multidrug resistant non-tuberculous mycobacterial infections	<b>Jason Roberts</b>
Paul Williams	PhD UQ (2017-)	Optimised antibiotic dosing in ICU: the role of dosing nomograms	<b>Jason Roberts</b>
Chandra Sumi	PhD UQ (2017-)	Characterising the microbiological effects of beta-lactams administered by bolus versus continuous infusion	<b>Jason Roberts</b>



## Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Vesa Cheng	PhD UQ (2017-)	Optimised drug dosing for critically ill patients receiving extracorporeal membrane oxygenation	<b>Jason Roberts</b>
Dr Rochelle Ryan	PhD UQ (2017-)	Optimised dosing of perioperative antibiotics	<b>Jason Roberts</b>
Aaron Heffernan	PhD Griffith University, (2017-)	Characterising antibiotic pharmacodynamics when administered by nebulisation	<b>Jason Roberts</b>
Paul Jarrett	PhD QUT (2016-)	Characterising antibiotic wastage in ICUs	<b>Jason Roberts</b>
Nilesh Gupta	MPhil UQ (2016-)	Optimised dosing of antibiotics for central nervous system infections	<b>Jason Roberts</b>
Yarmarly Guerra Valero	PhD UQ (2016-)	Role of microsampling to improve the feasibility of dosing studies in children	<b>Jason Roberts</b>
Dr Tavey Dorofaeff	PhD UQ (2016-)	Optimised antibiotic dosing in critically ill children	<b>Jason Roberts</b>
<b>Dr Angela Tognolini</b>	MPhil UQ (2018-)	Optimised lignocaine dosing for analgesia in chronic pain patients	<b>Jason Roberts</b>
<b>William Franks</b>	MPhil UQ (2017-)	Optimised antifungal dosing in solid organ transplant patients	<b>Jason Roberts</b>
Bryan Gregory	MPhil QUT (2016-)	Optimised immunosuppressant dosing in renal replacement therapy	<b>Jason Roberts</b>
<b>Elizabeth McCourt</b>	PhD (2016-2019)	Australian pharmacists' preparedness to fulfil roles in disasters	Lisa Nissen, Vivienne Tippet, Judith Singleton
Penelope Richards	MPhil QUT (2018-)	An Assessment of Pharmacist prescribing in an Elective Surgery Pre-Admission Clinic	Lisa Nissen, Greg Kyle, <b>Andrew Hale</b>
Monika Ogilvie	MPhil QUT (2018-)	Pharmacist prescribing in the Emergency Department	Lisa Nissen, Greg Kyle, <b>Andrew Hale</b>
Karen Bettenay	PhD QUT (2018-)	An evaluation of allied health prescribing in Queensland and development of non-medical prescribing implementation and evaluation frameworks	<b>Andrew Hale</b>
Jason Waddell	PhD QUT (2018-)	An investigation into the personality characteristics of Australian Pharmacists	<b>Andrew Hale</b>
<b>Karen Davies</b>	PhD UQ (2016-)	Establishing the validity and reliability of a tool to test competency of nursing medication administration practice using an expert panel review and inter-rater and intra-rater reliability testing	<b>Karen Whitfield, Ian Coombes, Samantha Keogh</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Ian Coombes</b>	Adjunct Associate Professor		UQ (2011-)
<b>Andrew Hale</b>	Adjunct Associate Professor		QUT (2016-)
<b>Jason Roberts</b>	NHMRC Practitioner	Optimising antibiotic dosing to improve patient outcomes and suppress emergence of resistant superbugs	2017-2021
<b>Andrew Hale</b>	Adjunct Senior Lecturer		UQ

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
PD Research Program <b>Lesley Williams, Nicola Williams</b>	Pauline Nicholas, <b>Carla Scuderi, Deborah Smith, Michelle Rice</b> , Martin Wooley, Dwarakanathan Ranganathan	A 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)
Kidney Supportive Care Collaborative	<b>Anne Bonner</b> , Louise Purtell (QUT), <b>Helen Healy, Ilse Berquier, Julie Kirby, Carla Scuderi</b>	Kidney Supportive care in the community through access to clinics and information sessions
<b>Helen Healy, Andrew Mallett, Carla Scuderi</b>	Christine Staatz, <b>Helen Healy, George John, Margaret Jacks, Andrew Mallett</b> , Suzanne Parker, Jason Roberts	Innovative blood sampling to reduce the burden of long-term treatment for kidney transplant recipients
<b>Helen Healy, Andrew Mallett, Carla Scuderi</b>	<b>Sadia Jahan, Carla Scuderi</b> , Christine Staatz, <b>Helen Healy, George John, Margaret Jacks, Andrew Mallett</b> , Suzanne Parker, Jason Roberts	An observational pharmacokinetic study of Bactrim® (trimethoprim-sulfamethoxazole) in renal transplant recipients

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Paul Chapman, Jaryth Twine, Sumbal Shahid, <b>William Franks</b>		Antimicrobial prescribing in community acquired pneumonia at Caboolture hospital
David Carr, <b>William Franks</b>		Antimicrobial prescribing in oral health

## 2018 Research Awards and Achievements

Recipient	Award	Event
Melynda Flor	Best First Time Presenter- Research	SHPA Medicines Management 2018. 2018 November 22-25; Brisbane
Nicola Harper	Best Poster	SHPA Medicines Management 2018. 2018 November 22-25; Brisbane
Ian Coombes	William Harris Award	SHPA Medicines Management 2018. 2018 November 22-25; Brisbane

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Carla Scuderi, George John</b> , Suzanne Parker, <b>Helen Healy</b> , Christine Staatz, <b>Jason Roberts</b>	Kidney Health Service – Kidney Transplant Research Group	Innovative blood sampling to reduce the burden of long-term treatment for kidney transplant patients	Royal Brisbane and Women's Hospital and Royal Brisbane and Women's Foundation Research	\$39,873	\$39,873 (2018)
<b>K Hurree E. Button</b> , <b>K Whitfield</b>	Pharmacy department (Cancer Care)	Educating Cancer Patients – their way	SEED funding MNHHS	\$82,631	\$82,631 (2018)
Davies M, Irwin A, Parker S, <b>Roberts JA</b>		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	\$19,040	\$38,081 (2018-2019)
Karamujic N, <b>Roberts JA</b>	(SAFE-ICU) study	Pharmacokinetic and statistical analysis of data from Screening Anti-Fungal Exposure in Intensive Care Units	Royal Brisbane and Women's Hospital Research Foundation	\$20,000	\$40,000 (2018-2019)
Woods M, Harris P, Whiley D, <b>Roberts JA</b> , Lipman J, <b>Hajkowicz K</b> , 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	\$20,000	\$40,000 (2018-2019)
Wainwright C, Bell SC, Wason J, Thomson R, <b>Roberts JA</b> , 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	\$418,236	\$2,091,178 (2018-2022)
Raby E, Manning L, <b>Roberts JA</b>		An in vitro study of the stability of ceftolozane-tazobactam in elastomeric infusor devices for ambulatory care	Merck Sharp and Dohme Australia	\$48,382	\$48,382 (2018)
Reed S, Lipman J, <b>Roberts JA</b> , Paterson DL, McCombe P, Wallis S		Ion Mobility Separation of challenging clinical samples	University of Queensland Major Equipment and Infrastructure and NHMRC Equipment Grant	\$84,983	\$84,983 (2018)
<b>Roberts JA</b> , Dorofaeff T, Parker S		Advanced treatment of infectious diseases for critically ill children, through innovation in blood sampling	Children's Hospital Foundation Preclinical and Clinical Research Grant	295,445	295,445 (2018)

## 2018 Research Publications

### Journal Articles:

1. **Angela M. North**, Helen L. Barrett, **Karin M. Lust**, **Karen M. Whitfield**. Therapeutic heparin during the peripartum period – challenges associated with safe use. *Journal of Pharmacy Practice and Research*. <https://doi.org/10.1002/jppr.1399>
2. **Andrew Hale**, Greg Merlo, Lisa Nissen, **Ian Coombes** and Nicholas Graves. Cost-effectiveness analysis of doctor-pharmacist collaborative prescribing for venous thromboembolism in high risk surgical patients
3. **Carla Scuderi**, Tilley Pain. Using confidence assessment to explore physiotherapists, dietitians, speech pathologists and occupation therapist knowledge of medicines. *Journal of Interprofessional Care*
4. Purtell L, Sowa M, **Berquier I**, **Scuderi C**, **Douglas C**, **Taylor B**, Kramer K, Hoy W, **Healy H\***, Bonner A\*. The Kidney Supportive Care program: Characteristics of patients referred to a new model of care for advanced chronic kidney disease. *BMJ Supportive and Palliative Care* 2018; in press. \* equal last authors
5. **Scuderi C**, **Berquier I**, Purtell L, **Douglas C**, **Healy H**, Bonner A. Complex prescribing in chronic kidney disease: the role of the renal pharmacist in Kidney Supportive Care uncovering hydralazine-related lupus. *Journal of Pharmacy Practice and Research* 2018; in press
6. Neithe M, **Whitfield K** (2018) Psychotropic Medication use During Pregnancy *Journal of Pharmacy Practice and Research* 48, 384-391
7. **Davies K**, **Coombes I**, Keogh S, **Whitfield K**. (2018) Medication administration evaluation tool design: an expert panel review *Collegian* <https://doi.org/10.1016/j.colegn.2018.05.001>
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### Journal Articles: (cont):

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29. Sime FS, Stuart J, Butler J, Starr T, Wallis SC, Pandey S, Lipman J, **Roberts JA**. Pharmacokinetics of intravenous posaconazole in critically ill patients. *Antimicrob Agents Chemother* 2018; 62(6). pii: e00242-18
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31. 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* 2018; in press (date accepted 1<sup>st</sup> March 2018; AA-D-17-02259)
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41. Heffernan A, 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; (date accepted 19<sup>th</sup> October 2018; IJAA-D-18-00639)
42. Heffernan A, Sime FB, Taccone FS, **Roberts JA**. How to optimize PK/PD in Gram-negative infections in critically-ill patients. *Curr Opin Infect Dis* 2018; in press (date accepted 14<sup>th</sup> September 2018; QCO310603)
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44. Roger C, **Roberts JA**, Muller L. Clinical Pharmacokinetics and Pharmacodynamics of Oxazolidinones. *Clin Pharmacokinet* 2018; ;57(5):559-575
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49. Cheng V, Abdul-Aziz MH, **Roberts JA**, Shekar K. Optimising drug dosing in patients receiving extracorporeal membrane oxygenation. *J Thoracic Dis* 2018; 10(Suppl 5):S629-S641
50. Udy AA, **Roberts JA**, Lipman J, Blot SI. The Effects of Major Burn Related Pathophysiological Changes on the Pharmacokinetics and Pharmacodynamics of Drug Use: An Appraisal Utilizing Antibiotics. *Adv Drug Del Rev* 2018; 123:65-74
51. Kumta N, **Roberts JA**, Lipman J, Cotta MOC. Antibiotic distribution into cerebrospinal fluid - can dosing safely account for drug and disease factors in the treatment of ventriculostomy-associated infections? *Clin Pharmacokinet* 2018; 57(4):439-454
52. 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* 2018; in press (date accepted June 6<sup>th</sup>, 2018; CPKA-D-17-00099)

### Journal Articles: (cont):

53. Dhanani J, Cohen J, Parker SL, Chan HK, Tang P, Ahern BJ, Khan A, Bhatt M, Goodman S, Diab S, Chaudhary J, Lipman J, Wallis SC, Barnett A, Chew M, Fraser JF, **Roberts JA**. A research pathway for the study of the delivery and disposition of nebulized antibiotics: an incremental approach from in vitro to large animal models. *Intensive Care Med Exp* 2018; 6(1):17
54. Jamal JA, Roger C, **Roberts JA**. Understanding the impact of pathophysiological alterations during critical illness on drug pharmacokinetics. *Anaesth Crit Care Pain Med* 2018; 515-7
55. Toulouse E, Masseguin C, Lafont B, McGurk G, Harboun A, **Roberts JA**, Granier S, Dupeyron A, Bazin JE. French legal approach to clinical research. *Anaesth Crit Care Pain Med* 2018; 607-14
56. Stewart A, **Roberts JA**, Wallis SC; Allworth AM, Legg A, McCarthy KL. Evidence of clinical response and stability of ceftolozane/tazobactam used to treat a carbapenem-resistant *Pseudomonas aeruginosa* lung abscess on an outpatient antimicrobial program. *Int J Antimicrob Agents* 2018; 51: 941–942
57. Rhodes NJ, Liu J, Lipman J, **Roberts JA**. Author response to: piperacillin-tazobactam: extended infusion vs continuous infusion. *Crit Care Med* 2018; 46(7): e725-e726
58. **Davies, K. M., Coombes, I. D., Keogh, S., & Whitfield, K. M.** Medication administration evaluation tool design: an expert panel review. *Collegian*. doi: 10.1016/j.colegn.2018.05.001
59. Kanji S, **Roberts JA**, Xie J, Alobaid AS, Zelenitsky S, Hiremath S, Zhang G, Watpool I, Porteous R, Patel R. Piperacillin population pharmacokinetics in critically ill adults during sustained low efficiency dialysis. *Ann Pharmacother* 2018; 52(10):965-973
60. Dhanani J, Tang P, Wallis SC, Parker S, Pandey P, Fraser J, Cohen J, Barnett A, **Roberts JA**, Chan HK. Characterisation of 40 mg/ml and 100 mg/ml tobramycin formulations for aerosol therapy with adult mechanical ventilation. *Pulm Pharmacol Ther* 2018; in press (date accepted 9<sup>th</sup> April 2018; YPUPT\_2018\_27)
61. Maseda E, Grau S, Luque S, Castillo-Mafla MDP, Suarez-de-la-Rica A, Montero-Feijoo A, Salgado P, Gimenez MJ, Garcia-Bernedo CA, Gilsanz F, **Roberts JA**. Population pharmacokinetic/ pharmacodynamic of micafungin against *Candida* species in obese, critically ill, and morbidly obese critically ill patients. *Crit Care* 2018; 22(1):94.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Roberts JA**. “Meet the Expert: Treating the treatment: infections in critically ill patients requiring ECMO” European Conference on Clinical Microbiology and Infectious Diseases, Madrid, Spain, April 2018
2. **Roberts JA**. “Do we need beta-lactam TDM or can we just use prolonged infusions?” European Conference on Clinical Microbiology and Infectious Diseases, Madrid, Spain, April 2018
3. **Roberts JA**. “Challenging breakpoints with supranormal dosing: Where is the limit in terms of side effects with higher dosing, and can toxicodynamics help?” European Conference on Clinical Microbiology and Infectious Diseases, Madrid, Spain, April 2018
4. **Roberts JA**. “Posaconazole table and IV formulation: Clinical and Real World Evidence Overview” European Conference on Clinical Microbiology and Infectious Diseases, Madrid, Spain, April 2018
5. **Coombes I**. Professional recognition and credentialing for transforming pharmaceutical care – Pharmacy: transforming outcomes! At 78<sup>th</sup> FIP World Congress of Pharmacy and Pharmaceutical Sciences, Glasgow, UK, 2-6 September 2018
6. **Roberts JA**. “Population PK – an introduction”. Antimicrobial Pharmacokinetic-Pharmacodynamics (PKPD) Workshop, Kuala Lumpur, Malaysia, September 2018
7. **Roberts JA**. “Therapeutic Drug Monitoring of beta-lactams in ICU – is this ready for prime time?” Antimicrobial Pharmacokinetic-Pharmacodynamics (PKPD) Workshop, Kuala Lumpur, Malaysia, September 2018
8. **Roberts JA**. “Antibiotic dosing and optimization”. Antibiotic Masterclass, University of Malaya, Kuala Lumpur, Malaysia, September 2018
9. **Whitfield K, Coombes I, Hale A** Building team and personal resilience. Life Long Learning Pharmacists 12 International Conference Brisbane Australia (workshop). Proceedings of the 2018 44<sup>th</sup> SHPA National Conference, November 2018 Brisbane
10. **Roberts JA**, “Leadership: Never give up, great things take time” Medicines Management 2018, Society of Hospital Pharmacists of Australia National Conference, Sydney, Australia November 2018.
11. **Davies, K. M.**, “Be Safe, Be Accountable and Be Confident” presentation. Ausmed Medicines and Midwives Conference 2018. Brisbane, Australia
12. **Harper N, Tai B, Stowasser D**. Time-and-motion study on nursing time before and after Pyxis implementation in an Emergency Department
13. **Franks W** Antimicrobial stewardship for nurse practitioners. Australian college of nurse practitioner’s national seminar, Brisbane.

### Oral Presentations:

1. **Midori Nakagaki, Elise Button, Amy Keating**, Chris Mitchell, Jody Marsh, Andrew Birchley and **Glen Kennedy**. The evaluation of hyperhydration for high dose melphalan in stem cell transplantation. EBMT March 2018
2. Zhang H, **Scuderi C, Eglinton, J, Broadbent, T.**, Jones, S., & **Mallett, A.** (2018). Sensipar<sup>®</sup> instead of surgery: is it a sensible option? Paper presented at Renal Society of Australasia, 46<sup>th</sup> annual conference, 21-23 June, Adelaide.
3. **Whitfield K, Coombes I, Hale A, Tessier C** Building team and personal resilience. Life Long Learning Pharmacists 12 International Conference Brisbane Australia (workshop)
4. **I Coombes, P Donovan**, C Noble C Mitchell Supporting junior doctor prescribers’ learning through self-assessment and feedback. Health Care Round table Annual conference. 20<sup>th</sup> & 21<sup>st</sup> of June 2018 – Sydney
5. **Coombes I, Whitfield K, Hale A**. Why Implement a Structured Competency and Portfolio of Impact Based, Performance Development Program When an OSCE Will Do? Life Long Learning in Pharmacy, Brisbane, 6<sup>th</sup> – 9<sup>th</sup> July 2018.

### Oral Presentations: (cont):

6. **Winckel K, Coombes J, Woodruff G**, Cheng V. Evaluation tools for identifying gaps in knowledge and practice: advantages and disadvantages of observational and non-observational tools. Life Long Learning in Pharmacy, Brisbane, 6<sup>th</sup>-9<sup>th</sup> July 2018.
7. **Turkington J**, Noble C, Molloy E, **Coombes I**. Using scholarly approaches to enhance interprofessional feedback practices for junior doctor prescribing. Life Long Learning in Pharmacy, 6<sup>th</sup>-9<sup>th</sup> July 2018.
8. **McCourt, E.**, Watson, K., Patounas, M. Working together: using disaster table-top exercises to teach interprofessional collaboration. At 78<sup>th</sup> FIP World Congress of Pharmacy and Pharmaceutical Sciences, Glasgow, Scotland, 2-6 September 2018
9. **Hale A** et al (Capacity and Capability Working Group, SHPA) Research competence-targeting identified gaps to build research capability and capacity. Accepted for presentation at FIP International Conference, Glasgow 2<sup>nd</sup>-6<sup>th</sup> September 2018
10. Olenski S, **Scuderi C**, Jeyaseelan L, **John G**, Clinical audit of urinary tract infections in renal transplant patients at the Royal Brisbane and Women's Hospital 54<sup>th</sup> Australian and New Zealand Society of Nephrology (ANZSN), September, Sydney, 2018
11. **Amy Keating, Midori Nakagaki, Jason Butler**. Collaboratively Managing a patient with a body surface area of 3.3 through HSCT for MDS. Blood October 2018
12. **Melynda Flor** Is a UK-trained accuracy checking pharmacy assistant as proficient and efficient as an Australian Pharmacist? SHPA Medicines Management Conference Brisbane 23-26 November 2018
13. **Whitfield K, Coombes I, Hale A** Building team and personal resilience. Life Long Learning Pharmacists 12 International Conference Brisbane Australia (workshop). Proceedings of the 2018 44<sup>th</sup> SHPA National Conference, November 2018 Brisbane
14. **Coombes I, Hale A, Barras M, Woodruff G, Hendy A, Whitfield K** OSCEs or Portfolios: why implement a structured competency based, performance development program with a portfolio of impact, when an OSCE will do? SHPA Medicines Management Conference Brisbane 23-26 November 2018
15. **Silvestro D**. RBWH experience of portfolio evaluation and feedback from first cohort of residents. SHPA Medicines Management Conference Brisbane 23-26 November 2018
16. **Midori Nakagaki, Elise Button, Amy Keating**, Chris Mitchell, Jody Marsh, Andrew Birchley and **Glen Kennedy**. The evaluation of hyperhydration for high dose melphalan in stem cell transplantation. SHPA Medicines Management Conference Brisbane 23-26 November 2018
17. **Davies K. M, Coombes I. D, Keogh S**, Hay K, Hurst C, **Whitfield K.M.** "Medication Administration Evaluation and Feedback Tool: Simulation Intra-rater and Inter-rater Validation" presentation. The National Nursing Forum 2018. Gold Coast, Australia
18. **Davies KM, Coombes ID, Keogh S, Whitfield K.M.** "Medication administration evaluation tool design: an expert panel review" Nursing and Midwifery Conference Presentation 2018. Brisbane, Australia.

### Poster Presentations:

1. **Melynda Flor**, Centaine L. Snoswell, **Cameron Tessier, Sunita Rantanjee, Dr Andrew Hale**, Andrew Matthews, Prof Lisa Nissen, **A/Prof Ian Coombe**. Is a UK-trained accuracy checking pharmacy assistant as proficient and efficient as an Australian Pharmacist?
2. **Angela M. North**, Helen L. Barrett, **Karin M. Lust, Karen M. Whitfield**. Therapeutic Anticoagulation during the Peripartum Period: a Survey of Clinical Practice. Waddell J, Nissen L and **Hale A**. The Personality Traits of Australian Pharmacy Students [abstract]. Proceedings of the 12<sup>th</sup> International Life Long Learning in Pharmacy Conference; 2018 Jul 7-9; Brisbane, Queensland. Brisbane: Lifelong Learning Conferences International Planning Committee
3. Waddell J, Nissen L, **Hale A** and Kyle G. Nature or nurture: using the BFI to evaluate the personality traits of Australian pharmacy students [abstract]. Proceedings of the 78<sup>th</sup> World Congress of Pharmacy and Pharmaceutical Sciences; 2018 Sep 2-8; Glasgow, Scotland. Scotland: International Pharmacy Federation
4. Waddell J, Nissen L, **Hale A** and Kyle G. An evaluation of the personality traits of Australian Pharmacists using the Big Five Inventory [abstract]. Proceedings of the 75<sup>th</sup> World Congress of Pharmacy and Pharmaceutical Sciences; 2018 Sep 2-8; Glasgow, Scotland. Scotland: International Pharmacy Federation
5. **Withers J, Coetzee R**, Hui Shin Choon, **Coombes I, Eglington J, Hale A**. Assessing the Impact and Feasibility of Pharmacist Attendance on Post-Take Ward Rounds
6. **Katina Black, Jesseca Eglington**, Linda Prentice, Sophie Lloyd, Carlos Fernandez, **Serena Rofail**. Flexible diuretic plans: utilisation in heart failure across the healthcare continuum ACRA 2018 (Australia Cardiovascular Health and Rehabilitation Association) 28<sup>th</sup> Annual Scientific Meeting
7. Tina Ha, Dr John Atherton, Claire Douglas, Leonie Mok, Leigh Robertson, **Serena Rofail**, Simon Shah, **Lyndsay Steel**, Bronwyn Wood. Sacubitril-Valsartan: snap-shot of a new heart failure medication CSANZ 2018 (Cardiac Society of Australia and New Zealand) 66<sup>th</sup> Annual Scientific Meeting
8. **Turkington J**, Noble C, Molloy E, **Coombes I**. Hospital pharmacists' engagement with feedback in interdisciplinary workplace setting: a Scoping Review. Medicines Management, November 2018.
9. **Caitlin McGarry, Jesseca Eglington, Lyndsay Steel, Serena Rofail, Lisa Allard** Pharmacist contributions on the cardiology post-take ward round SHPA Qld Branch Cardiology Symposium 2018
10. **Jesseca Eglington and Lyndsay Steel** a Partner in medication management and safety: A review of the addition of a pharmacist to the Cardiology Outpatient Clinics CSANZ 2018 (Cardiac Society of Australia and New Zealand) 66<sup>th</sup> Annual Scientific Meeting
11. **Lyndsay Steel and Lisa Allard** Oral anticoagulation dose and adjustment advice. A retrospective review of pharmacist communication at discharge. CSANZ 2018 (Cardiac Society of Australia and New Zealand) 66<sup>th</sup> Annual Scientific Meeting
12. **Lyndsay Steel and Lisa Allard** Anticoagulation in the era of NOACs. An audit of Prescribing Errors in Non-Valvular Atrial Fibrillation CSANZ 2018 (Cardiac Society of Australia and New Zealand) 66<sup>th</sup> Annual Scientific Meeting
13. **Coombes, Ian** "Perspectives from Australian practitioners on professional recognition and credentialing: changing careers" 2018 FIP Congress in Glasgow
14. **Bonnie Tai, Nicola Harper, Danielle Stowasser** Imprest supply timing before and after Pyxis implementation in four Queensland Emergency Departments

## Poster Presentations (cont):

15. **Turkington J**, Noble C, Molloy E, **Coombes I**. Hospital pharmacists' engagement with feedback in interdisciplinary workplace setting: a Scoping Review. *Medicines Management*, November 2018
16. **Hendy A**, **Coombes I**, **Woodruff G**. Is our money where our mouth is? Do action plans get actioned?
17. **Trenerry H**, **Lander C**. Can low-dose methotrexate cause seizures? SHPA 44<sup>th</sup> National Medicines Management Conference. November 22-25, Brisbane 2018
18. **Trenerry H**. Development and evaluation of a residency program in medicines information. SHPA 44<sup>th</sup> National Medicines Management Conference. November 22-25, Brisbane 2018
19. **Varitimos M**, **Hale A**, **Legg A**. Vancomycin Training for Pharmacists – a Pilot Program. *Life Long Learning in Pharmacy*, Brisbane, 6<sup>th</sup>-9<sup>th</sup> July 2018
20. Waddell J, Nissen L and **Hale A**. The Personality Traits of Australian Pharmacy Students. *Life Long Learning in Pharmacy Conference*, Brisbane, 6<sup>th</sup>-9<sup>th</sup> July 2018
21. **McCourt, E.**, Tippet, V., Nissen, L., & Singleton, J. (2018). Are pharmacists prepared for disaster? A systematic literature review. Poster presented at 78<sup>th</sup> FIP World Congress of Pharmacy and Pharmaceutical Sciences, Glasgow, Scotland, 2-6 September
22. **McCourt, E.**, Tippet, V., Nissen, L., & Singleton, J. (2018). Exploring Australian pharmacists' perceived preparedness to respond to disasters. Poster presented at 78<sup>th</sup> FIP World Congress of Pharmacy and Pharmaceutical Sciences, Glasgow, Scotland, 2-6 September
23. Waddell JJ, Nissen LM, Kyle GJ and **Hale AR**. An evaluation of the personality traits of Australian pharmacists using the Big Five Inventory – FIP, Glasgow Sept 2018
24. Waddell JJ, Nissen LM, Kyle GJ and **Hale AR**. Nature versus nurture: using the BFI to evaluate the personality of Australian pharmacy student. FIP, Glasgow Sept 2018
25. **McCourt, E.** (2018). Pharmacists involvement in pandemic influenza planning and response in Australia. Poster presented at IHF World Hospital Congress, Brisbane, Australia, 10-12 October
26. **Nakagaki M**, **Johnstone S**. Advanced Technician in a Specialised Bone Marrow Transplant Pharmacy Clinic. *Cancer Care Research Retreat*, November 2018
27. **McIlwain J**, **Rantucci M**. Glucarpidase: Treatment for Methotrexate Toxicity. *Cancer Care Research Retreat*, November 2018
28. **McCourt, E**, Tippet, V., Nissen, L., & Singleton, J. (2018). What factors affect Australian pharmacists' preparedness for disasters? Poster presented at 44<sup>th</sup> SHPA Medicines Management Conference, Brisbane, Australia, 22-25 November
29. **Scuderi C**, Olenski S, **John G**, Choo A, Singh A, Way M, Jeyaseelan L. Clinical audit of urinary tract infections in renal transplant patients. Poster at: *Medicines Management 2018*. 2018 November 22-25; Brisbane
30. **Rice M**, Goie H, **Scuderi C**, **Ironside D**, **Zipf J**. Proton pump inhibitor use and chronic kidney disease- a clinical audit. *Medicines Management 2018*. 2018 November 22-25; Brisbane
31. **Ironside D**, **Scuderi C**, Eglinton J, **Rice M**, **Millhouse S**, **Kark A**. Case series: hypocalcaemia requiring hospitalisation following administration of denosumab in chronic kidney disease (CKD) patients. *Medicines Management 2018*. 2018 November 22-25; Brisbane
32. **Nakagaki M**, **Johnstone S**. Advanced Technician in a Specialised Bone Marrow Transplant Pharmacy Clinic. 44<sup>th</sup> SHPA Medicines Management Conference, Brisbane, Australia, 22-25 November
33. **Midori Nakagaki**, **Elise Button**, **Amy Keating**, Chris Mitchell, Jody Marsh, Andrew Birchley and **Glen Kennedy**. The evaluation of hyperhydration for high dose melphalan in stem cell transplantation. 44<sup>th</sup> SHPA Medicines Management Conference, Brisbane, Australia, 22-25 November.
34. **Davies K.M**, **Coombes I.D**, **Keogh S**, Hay K, Hurst C, **Whitfield K.M**. "Medication Administration Evaluation and Feedback Tool: Intra-rater and Inter-rater Using Simulation" poster. SHPA Medicines Management 2018. 2018 November 22-25; Brisbane
35. Gardiner, KM, **McCourt, E.**, Watson, K., & Serrano Santos, M. (2018). Kahoot! Identifying where students need support in a large multidisciplinary clinical therapeutics unit. Poster presented to APSA Annual Conference, Adelaide, Australia, 2-5 December
36. **Davies K.M**, **Coombes I.D**, **Keogh S**, **Whitfield K.M**. "Medication Administration Evaluation and Feedback Tool: Supporting Safe Medication Practice" poster. RBWH Symposium 2018. Brisbane, Australia
37. **Davies K.M**, **Coombes I.D**, **Keogh S**, Hay K, Hurst C, **Whitfield K.M**. "Medication Administration Evaluation and Feedback Tool: Intra-rater and Inter-rater Using Simulation" poster. RBWH Symposium 2018. Brisbane, Australia.

## Other Communications and Outputs:

### Symposiums:

**Berquier I**, **Douglas C**, **Healy H**, **Scuderi C**, **Bonner A**. (QUT), **Heffernan, D.**, Purcell, L. (UQ), (2018) *Kidney Supportive Care Symposium, RBWH*.

**Baboolal K**, **Mallet A**, **Berquier I**, **Rice M**, Hoy W (QUT), **Cameron A**, **Healy H**. (2018) *Statewide Renal Clinical Network Forum – Renal Service: Putting Consumers First*, Queensland State Library, Brisbane, QLD.

**McCourt E**. Improving pharmacist involvement in pandemic influenza planning and response in Australia. *Deeble Institute Issues Brief*.

**Silvestro D**, **Busuttin L**, **Pattullo C** *Warfarin bridging with unfractionated heparin infusion in pre-operative patients; how are we doing?* 27<sup>th</sup> RBWH Healthcare Symposium.

### ACADEMIC APPOINTMENTS 2018

**Carla Scuderi** Course Coordinator University of Qld Clinical Pharmacy Post graduate program.

# Department of Rheumatology

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
Dr Philip Robinson	Nil	Gout Genetics

## 2018 Research Publications

### Journal Articles:

1. **Philip C. Robinson.** Gout – an update of aetiology, genetics, co-morbidities and management. *Maturitas* 2018; 118:67-73 (IF 3.32)
2. **Philip Robinson** and Nicola Dalbeth. Febuxostat for the treatment of hyperuricaemia in gout. *Expert Opinion on Pharmacotherapy* 2018 e-published 19<sup>th</sup> July 2018 (IF 3.53)
3. Roberts RL, Wallace MC, Harrison AA, White D, Dalbeth N, Stamp LK, Ching D, Highton J, Merriman TR, **Robinson PC**, Brown MA, Stebbings SM. (2018) Association of Crohn's disease-related chromosome 1q32 with ankylosing spondylitis is independent of bowel symptoms and faecal calprotectin. *PeerJ* 6: e5088 <https://doi.org/10.7717/peerj.5088>
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*, in press May 2018 (IF 3.32)
5. **Philip C Robinson**, Nicola Dalbeth and Peter Donovan. The cost effectiveness of six-monthly serum urate monitoring after reaching target in people with gout: a health economic analysis comparing biannual or annual monitoring to no monitoring. *Journal of Rheumatology* 2018;45(5):697-704 (IF 3.24)
6. LA Bradbury, KA Hollis, BGautier, S Shankaranarayana, **PC Robinson**, N Saad, KA Lê Cao, MA Brown. Diffusion-Weighted Imaging is a Sensitive and Specific MRI Sequence in the Diagnosis of Ankylosing Spondylitis. *Journal of Rheumatology* 2018;45(6):771-778 (IF 3.24)
7. Kathleen Morrisroe, Ayano Nakayama, Jason Soon, Mark Arnold, Les Barnsley, Claire Barrett, Prof. Peter M Brooks, Stephen Hall, Patrick Hanrahan, Dr Pravin Hissaria, Graeme Jones, Veera Srividya Katikireddi, Helen Keen, Rodger Laurent, Mandana Nikpour, Katherine Poulsen, **Philip Robinson**, A/Prof Muriel Soden, Nigel Wood, Nicola Cook, Catherine Hill and Rachelle Buchbinder. EVOLVE: The Australian Rheumatology Association's 'top five' list of investigations and interventions doctors and patients should question. *Internal Medicine Journal* 2018;48(2):135-143. (IF 1.90)
8. Matthew A. Brown, Paul A. Bird, **Philip C. Robinson** et al. Evaluation of the effect of baseline MRI sacroiliitis and C reactive protein status on etanercept treatment response in non-radiographic axial spondyloarthritis: a post hoc analysis of the EMBARK study. *Annals of the Rheumatic Diseases* 2018;77(7):1091-1093 (IF 12.81)
9. Paul Kubler. Fast-tracking of new drugs: getting the balance right. *Aust Prescr* 2018; 41: 98-9.



## Sexual Health and HIV Services

A good year for Research within Sexual Health and HIV Service.

QPREP – Queensland State-wide research project for the implementation of Pre-exposure Prophylaxis for the prevention of HIV transmission. Commenced January 2017 and closed in November 2018. Sexual Health and HIV Service has a large recruitment site.

### 1. HIV Prevention

QPREP – Queensland Government State-wide research project for the implementation of Pre-exposure Prophylaxis for the prevention of HIV transmission. Commenced January 2017 and closed in November 2018. PrEP added to PBS in April 2018.

**Evidence of reduction in new HIV cases in 2017-2018.**

### 2. Multidrug resistance *Mycoplasma Genitalium*

In 2017-2018 the emergence of multidrug resistance in *Mycoplasma Genitalium*, has led to significant complexity in treatment regimens. The work with UQCCR and Queensland Pathology with the public funded sexual health and HIV clinics (Ongoing).

**Achievements – Molecular resistance platforms to guide treatment options.**

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Sexual Health and HIV Service, Julian Langton-Lockton	<b>E.L. Sweeney, E. Trembizki, C. Bletchly, C.S. Bradshaw, A. Menon, F. Francis, J., Langton-Lockton, G.R. Nimmo, D.M. Whiley</b>	Levels of <i>Mycoplasma genitalium</i> antimicrobial resistance differ by both region and gender in the state of Queensland, Australia: implications for treatment guidelines
SHHS Julian Langton-Lockton, Queensland Positive People, Metro North Public Health Unit	SHHS, Metro North Public Health Unit, Queensland Positive People	LINK funding – Testing to Treatment, Closing the Circle

## 2018 Research Publications

### Journal Articles:

1. J Clin Microbiol. 2019 Jan 2. pii: JCM.01555-18. doi: 10.1128/JCM.01555-18
2. Levels of *Mycoplasma genitalium* antimicrobial resistance differ by both region and 2 genders in the state of Queensland, Australia: implications for treatment guidelines. Authors: E.L. Sweeney, E. Trembizki, C. Bletchly, C.S. Bradshaw, A. Menon, F. Francis, **J. Langton-Lockton, G.R. Nimmo, and D.M. Whiley.**

## Other Communications and Outputs:

### Ongoing projects:

1. AHOD-Australasian HIV Observation Data – Ongoing site for Project nationwide, Kirby Institute UNSW
2. Cease – Kirby – Control and Eradication within Australia of Hepatitis C from people living with HIV
3. Start – Kirby – Comparing early initiation of ART with deferred ART
4. Thrive – We did SSA but never recruited anyone (UQ) Tobacco harm reduction with vaporised nicotine
5. AHOD – Kirby
6. Long term non progressor (last patient off after June VL 11500) Also a Kirby study.

## Queensland State-wide Antimicrobial Stewardship Program

The research highlights for the Queensland State-wide 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.

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Prof Jodie McVernon	Dr Kathryn Daveson	Hot North project

### 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Dr Kathryn Daveson</b>	Queensland Statewide Antimicrobial Stewardship Program	Hot North	Menzies	\$36,000	
Dr Minyon Avent	Queensland Statewide 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 Health Foundation	\$95,000	

### 2018 Research Publications

#### Journal Articles:

- Avent ML**, Fejzic J, van Driel M 'An underutilised resource for Antimicrobial Stewardship: a 'snapshot' of the community pharmacists' role in delayed or 'wait and see' antibiotic prescribing'. *International Journal of Pharmacy Practice*. 2018;26; 4:373-375
- Avent, Minyon L., Rogers, Benjamin A., Cheng, Allen C., Athan, Eugene, Francis, Joshua R., Roberts, Matthew J., Paterson, David L., Harris, Patrick N. A.** Fosfomycin: what was old is new again: Editorial. *Internal Medicine Journal*. 2018;48(12):1425-1429 • DOI: 10.1111/imj.14122.

### 2018 Conference Presentations – Invited Speaker, Oral and Poster

#### Invited Speaker:

- Avent, ML.** Supporting rural and regional prescribers: antibiotic optimisation in 'the bush'. National Antimicrobial Resistance and Stewardship Forum 2 November 2018
- McNamara S.** AMS: widening the collaborative approach presented to the Antimicrobial Stewardship: getting it right the first-time workshop Medicines Management – 44<sup>th</sup> Society of Hospital Pharmacists of Australia (SHPA) National Conference, Brisbane, 22-25 November 2018
- Avent M.** AMS monitoring at the bedside and providing feedback to prescribers AMS interventions presented to the Antimicrobial Stewardship: getting it right the first-time workshop Medicines Management – 44<sup>th</sup> Society of Hospital Pharmacists of Australia (SHPA) National Conference, Brisbane, 22-25 November 2018.

#### Oral Presentations:

- Avent ML**, Fejzic J, van Driel M 'An underutilised resource for Antimicrobial Stewardship: a 'snapshot' of the community pharmacists' role in delayed or 'wait and see' antibiotic prescribing'. Presented to the Antimicrobials 2018 scientific meeting on 23<sup>rd</sup>-25<sup>th</sup> February 2018, Brisbane, Queensland
- Avent, ML, Handy A, Waddell E., Hajkowicz K and Daveson K.** Tackling antibiotic shortages: a statewide approach presented to the Antimicrobials 2018 scientific meeting on 23<sup>rd</sup>-25<sup>th</sup> February 2018, Brisbane, Queensland
- Waddell E, McNamara S, Avent M.L., Hajkowicz K & Daveson K.L.** Evaluation of an innovative model of care to promote quality use of antibiotics by rural and remote clinicians presented to Statewide Rural and Remote Clinical Network Forum 6 June 2018
- Waddell E, Daveson K, McNamara S.** 'Connecting the Dots: Developing Quality Improvement skills in rural areas for the optimisation of the use of antibiotics'. Royal Brisbane & Women's Hospital 27<sup>th</sup> Annual Healthcare Symposium, 11-13 September 2018
- Waddell E and Daveson K.** Assessing Prescribing in Small Australian Hospitals. The Patient Journey. presented to the Medicines Management – 44<sup>th</sup> Society of Hospital Pharmacists of Australia (SHPA) National Conference, Brisbane, 22-25 November 2018.

#### Poster Presentations:

- Waddell E and Daveson K.** Assessing Prescribing in Small Australian Hospitals. The Patient Journey presented to the Antimicrobials 2018 scientific meeting on 23<sup>rd</sup>-25<sup>th</sup> February 2018, Brisbane, Queensland
- 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 presented to Australasian Society for Infectious Diseases 10 to 12 May 2018, Gold Coast, Queensland.

# Department of Thoracic Medicine

Research carried out by department members in 2018 covers the fields of lung cancer, interstitial lung disease, respiratory physiology and asthma.

## 2018 Research Grants – Awarded

Investigators ( <i>RBWH staff in bold</i> )	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Assoc Prof David Fielding</b>	RBWH Thoracic Medicine	Improving lung cancer diagnosis through genomic testing of cytology smears	Cancer Australia	\$400,000	\$400,000 (2018-2019)
<b>Assoc Prof David Fielding</b>	RBWH Thoracic Medicine	Improving lung cancer diagnosis through genomic testing of cytology smears	Cancer Council of Qld	\$100,000	\$100,000 (2018)

## 2018 Research Publications

### Journal Articles:

- Fielding D** et al. 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* 2018 In press DOI: 10.1159/000495661
- Fielding DI; Travers J; Nguyen P; Brown MG; Hartel G; Morrison S**, Expiratory reactance abnormalities in patients with expiratory dynamic airway collapse: a new application of impulse oscillometry. *ERJ Open Research [ERJ Open Res]*, ISSN: 2312-0541, 2018 Nov 12; Vol. 4 (4); Publisher: European Respiratory Society; PMID: 30443553
- Langton D; Ing A; **Fielding D**; Wang W; Plummer V; Thien F, Bronchodilator responsiveness as a predictor of success for bronchial thermoplasty. *Respirology (Carlton, Vic.) [Respirology]*, ISSN: 1440-1843, 2019 Jan; Vol. 24 (1), pp. 63-67;
- Pattison A**; Cook A; Singh M; Nandakumar L; Ravi Kumar A; **Fielding D** EBUS-TBNA Cytology Specimens are Predictive of Occupational Dust Exposure in Patients With Bilateral Mediastinal and Hilar Lymphadenopathy. *Journal Of Occupational And Environmental Medicine [J Occup Environ Med]*, ISSN: 1536-5948, 2018 Oct; Vol. 60 (10), pp. 880-885; Publisher: Lippincott Williams & Wilkins; PMID: 29995650
- Diaz ME; Debowski M; Hukins C; **Fielding D**; Fong KM; Bettington CS, Non-small cell lung cancer brain metastasis screening in the era of positron emission tomography-CT staging: Current practice and outcomes. *Journal Of Medical Imaging And Radiation Oncology [J Med Imaging Radiat Oncol]*, ISSN: 1754-9485, 2018 Jun; Vol. 62 (3), pp. 383-388; Publisher: Wiley-Blackwell Pub. Asia; PMID: 29745036
- Fielding D**; Kurimoto N Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration for Diagnosis and Staging of Lung Cancer. *Clinics In Chest Medicine [Clin Chest Med]*, ISSN: 1557-8216, 2018 Mar; Vol. 39 (1), pp. 111-123; Publisher: Elsevier Health Science
- Fielding D** Tissue is the issue to confirm benign disease at pleuroscopy in lung cancer. *Respirology (Carlton, Vic.) [Respirology]*, ISSN: 1440-1843, 2018 Feb; Vol. 23 (2), pp. 126-127; Publisher: Blackwell Science; PMID: 29168601
- Fielding DI**; Schuster DD Distinguishing Bronchoscopic Changes of Mitral Stenosis From Carcinoma In Situ With Narrow Band Imaging. *Journal Of Bronchology & Interventional Pulmonology [J Bronchology Interv Pulmonol]*, ISSN: 1948-8270, 2018 Jul; Vol. 25 (3), pp. 231-234; Publisher: Wolters Kluwer Health/Lippincott Williams & Wilkins; PMID: 27070339
- Jo HE, Glaspole I, Goh N, Hopkins PMA, Moodley Y, Reynolds PN, Chapman S, Walters EH, **Zappala C**, Allan H, Macansh S, Grainge C, Keir GJ, Hayen A, Henderson D, Klebe S, Heinze SB, Miller A, Rouse HC, Duhig E, Cooper WA, Mahar AM, Ellis S, McCormack SR, Ng B, Godbolt DB, Corte TJ. Implications of the diagnostic criteria of idiopathic pulmonary fibrosis in clinical practice: Analysis from the Australian Idiopathic Pulmonary Fibrosis Registry. *Respirology*. 2018 Oct 17. doi:10.1111/resp.13427. [Epub ahead of print] PubMed PMID: 30328644
- Jo HE, Glaspole I, Moodley Y, Chapman S, Ellis S, Goh N, Hopkins P, Keir G, Mahar A, Cooper W, Reynolds P, Haydn Walters E, **Zappala C**, Grainge C, Allan H, Macansh S, Corte TJ. Disease progression in idiopathic pulmonary fibrosis with mild physiological impairment: analysis from the Australian IPF registry. *BMC Pulm Med*. 2018 Jan 25;18(1):19. doi: 10.1186/s12890-018-0575-y. PubMed PMID: 29370786; PubMed Central PMCID: PMC5785886
- Bui DS, Lodge CJ, Burgess JA, Lowe AJ, Perret J, Bui MQ, Bowatte G, Gurrin L, Johns DP, Thompson BR, Hamilton GS, Frith PA, James AL, Thomas PS, Jarvis D, Svanes C, Russell M, **Morrison SC**, Feather I, Allen KJ, Wood-Baker R, Hopper J, Giles GG, Abramson MJ, Walters EH, Matheson MC, Dharmage SC. Childhood predictors of lung function trajectories and future COPD risk: a prospective cohort study from the first to the sixth decade of life. *Lancet Respir Med*. 2018 Jul;6(7):535-544. doi: 10.1016/S2213-2600(18)30100-0. Epub 2018 Apr 5. PubMed PMID: 29628376
- Perret JL, Matheson MC, Gurrin LC, Johns DP, Burgess JA, Thompson BR, Lowe AJ, Markos J, **Morrison S**, McDonald CF, Wood-Baker R, Svanes C, Thomas PS, Hopper JL, Giles GG, Abramson MJ, Walters EH, Dharmage SC. Childhood measles contributes to post-bronchodilator airflow obstruction in middle-aged adults: a cohort study. *Respirology*. 2018 Aug;23(8):780-787. doi: 10.1111/resp.13297. Epub 2018 Mar 20. PubMed PMID: 29560611.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Oral Presentations:

1. Perret J, Bowatte G, **Morrison S**, Dharmage S et al. Nitrogen dioxide is adversely associated with transfer factor of carbon monoxide in a dose-response manner. SANZ Annual Scientific Meeting, Adelaide, March 2018
2. Bui D, Walters H, **Morrison S**, Dharmage S et al. Middle-age lung function decline is predominantly influenced by adult factors and their interactions with childhood and genetic factors. TSANZ Annual Scientific Meeting, Adelaide, March 2018
3. **Skinner T, Churton J, Edwards T, Bashirzadeh F, Zappala C, Hundloe J, Tan H, Pattison A, Fielding D**. Diagnostic accuracy of bronchoscopy with conscious sedation versus general anaesthetic in a randomised prospective cohort. TSANZ Annual Scientific Meeting, Adelaide, March 2018.

### Poster Presentations:

1. **Olive G, Byrnes R, Bashirzadeh F, Fielding D**. Prospective objective audit of safety of transbronchial cryobiopsy in a single Australian centre using the Bronchoflex endotracheal tube. TSANZ Annual Scientific Meeting, Adelaide, March 2018
2. **Olive G, Byrnes R, Singh M, Bashirzadeh F, Fielding D**. High diagnostic yield of transbronchial cryobiopsy includes focal pathologies and is enhanced by EBUS. TSANZ Annual Scientific Meeting, Adelaide, March 2018
3. Rodwell L, Schneider I, McElrea M, **Brown M**. A culturally appropriate indigenous spirometry training program – a means to improve quantity and quality of spirometry performed in primary care. ANZSRS Annual Scientific Meeting, Adelaide, March 2018
4. **Leong M, Brown M, Ritchie A, Samaratunga D**. Encouraging nasal/nasal pillow masks during initial titration reduces recommended CPAP pressures and improves titration outcomes. Sleep Down Under, Brisbane, October 2018
5. **Galt L, Ritchie A**. Safety of feeding tube insertion in MND patients. Sleep Down Under, Brisbane, October 2018
6. Perret J, Bowatte G, **Morrison S**, Dharmage S et al. Relationships between nitrogen dioxide exposure, post-bronchodilator airflow obstruction and gas transfer in middle-age. European Respiratory Society Annual Scientific Meeting, Paris, September 2018.

# DEPARTMENT OF MEDICAL IMAGING



# Medical Imaging – Clinical Support Services



**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, nurses and radiographers provide expertise on imaging protocols, clinical diagnosis and interventional procedures to best support these projects. Partnerships with research institutions such as the Queensland Brain Institute, the Centre for Advanced Imaging, QIMR Berghofer, UQCCR and CSIRO have only strengthened over 2018.



**Assoc. Prof. Karin Steinke**  
Acting Medical Director  
Medical Imaging

## Highlights of our research from 2018 include:

**CONSULT Study** – This year we completed the first stage in clinically validating tractography software to be used by radiologists and neurosurgeons for pre-surgical planning of patients about to receive brain surgery. This is a collaborative project 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.

**Interventional Oncology Unit** – There has been a substantial increase in the demand for interventional radiologists to be involved in treating cancer patients. Data collected from this service will support many new research initiatives currently under development between these two departments.

**Centre of Excellence for Interventional Neuroradiology** – We are currently establishing a process for First in Human Clinical Trials for medical devices used in interventional neuroradiology procedures such as treating unruptured aneurysms and clot retrieval.

Our research provides 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.



**Prof. Alan Coulthard**  
Director of Research  
Medical Imaging

## Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Ms Rachael Anstey</b>	MPhil, UQ	The Use of MRI and Ultrasound in Foetal Ventriculomegaly	Dr Gail Durbridge
<b>Mr Muhammed Latif</b>	MSc, Anglia Ruskin University, UK	Magnetic Resonance Imaging	Dr Catherine Westbrook
<b>Ms Alice Graham</b>	MPhil, QUT	Project title pending	<b>Dr Karen Dobeli</b>
<b>Ms Kate Smith</b>	MPhil, QUT	The Impact of Patient Arm Position for Multi-trauma Patients with Upper Extremity Injuries	<b>Dr Karen Dobeli</b>
<b>Ms Jill Davies</b>	Graduate Certificate, QUT	N/A	N/A

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Dr Alan Coulthard</b>	Professor	Director of Research	UQ School of Medicine
<b>Dr Karin Steinke</b>	Associate Professor	Chest and Breast Oncology	UQ School of Medicine
<b>Dr Peter Scally</b>	Associate Professor	Fluoroscopy, Tier A procedures	UQ School of Medicine
<b>Dr Craig Hacking</b>	Senior Lecturer	Trauma and Emergency Radiology	UQ School of Medicine
<b>Dr Karen Dobeli</b>	Honorary Associate	Senior lecture in the Masters in Medical Imaging CT programme	University of Sydney

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>M Fielder, N Waters, J Hocking, M Prior, A Coulthard</b>	Dept. Medical Imaging	Bright Spots Study – prospective study of clinically silent ischaemic events post elective endovascular treatment of intracranial aneurysms
<b>M Fielder, J Hocking, M Prior, A Coulthard</b>	R Jeffrey (Neurosurgery) T Robertson (Anatomical Pathology) D Reutens (Centre for Advanced Imaging)	High field magnetic resonance imaging of hippocampal sclerosis
<b>J Hocking, M Fielder, M Prior, A Coulthard</b>	Dept. Medical Imaging	Enoxaparin for postoperative prophylaxis in intracranial coiling and stents (EPPICS)
<b>J Hocking, M Prior, A Coulthard</b>	Dept. Medical Imaging	Silent intracranial lesions in endovascular treatments (SILEnt)
<b>M Fielder, N Waters, M Prior, A Coulthard</b>	Dept. Medical Imaging	Verify Now Study – effect of collection technique on platelet inhibition results
<b>H Thalagala, M Fielder, M Prior, A Coulthard</b>	Dept. Medical Imaging	The effect of Grey Blanket Protocol on clot retrieval times
<b>R Gunasena, M Prior, K Steinke</b>	Dept. Medical Imaging Emergency and Trauma Centre	CT imaging requests in the Emergency Department (Radiology) – are we Choosing Wisely?
<b>A Bernard, M Fielder, R Bains</b>	Dept. Medical Imaging	The role of interventional radiology in splenic trauma
<b>N Mott</b>	<b>J Lee, D Ranganathan,</b> (Renal Medicine)	RadCath Study – randomised controlled trial to determine the appropriate time to initiate peritoneal dialysis after radiological insertion of catheters to minimise complications
<b>M Fielder, J Sommerville</b>	<b>R Sommerville</b> (ENT), HIRF, Centre for Advanced Imaging (CAI)	Perineural Spread of Head and Neck Cancers
<b>J Sommerville, M Fielder</b>	<b>R Sommerville</b> (ENT)	Utility of Black Blood MRI Sequence in Evaluating Perineural Spread in Head and Neck Cancers
<b>M Fielder, A Coulthard</b>	<b>N Surendran</b> (Neurosurgery)	Common Vertebral Artery Variants and their Clinical Implications
<b>M Prior, A Coulthard, T Rajah</b>	<b>R Jeffrey</b> (Neurosurgery), L Reid (CSIRO)	CONSULT – Predicting Surgery-induced Neurological Deficits using CONSULT
<b>M Lu, P Jenvey, M Prior</b>	<b>J van de Pol, J Kinyanjui, L Daniele</b> (Orthopaedics) HIRF	Prospective assessment of graft incorporation and ligamentisation after anterior cruciate ligament (ACL) reconstruction using two different hamstring tendon fixation techniques
<b>T Mason, N Newman, M Prior</b>	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?
<b>A Rao, S Gustafson, M Lu, F Sitheeque, M Prior</b>	Dept. Medical Imaging	MR Enterography – impact on image quality using split dose Buscopan

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Dr Simpson, Dr van der Mei, Dr Taylor (Menzies Institute for Medical Research, Tasmania), Prof Rose, Dr Fripp (CSIRO), Dr Lucas (ANU), and the Ausimmune AusLong Investigator Groups	<b>C Odenthal (DMI), A Coulthard (DMI)</b>	Midsagittal corpus callosum area and conversion to multiple sclerosis after clinically isolated syndrome: a multicentre Australian cohort study
Assoc. Prof. Yan (Royal Melbourne Hospital)	<b>N Waters (DMI), A Coulthard (DMI)</b>	Genetic Effects on Antiplatelet Response (GEAR)
Prof. Kwun Fong (TPCH)	<b>K Steinke (DMI)</b>	Low Dose Computed Tomography (LCDT) to diagnose lung cancer
Prof. Pender (Dept of Neurology, RBWH)	<b>A Coulthard (DMI)</b>	Adoptive immunotherapy for multiple sclerosis
Prof Colditz (UQCCR), Prof. Boyd (QLD Cerebral Palsy Rehabilitation and Research Centre, UQ)	<b>A Coulthard (DMI)</b>	Neurodevelopment of the preterm infant (PREterm Brain Outcomes – PREBO)
Sillagen – Global Trial	<b>S Davis (DMI), N Mott (DMI), R Skoien</b> (Dept of Gastroenterology and Hepatology)	A study comparing Pexa-Vec (Vaccinia GM-CSF/ Thymidine Kinase-deactivated virus) followed by Sorafenib versus just Sorafenib in patients with advanced hepatocellular carcinoma (HCC)
R Zivadinov, M Dwyer, Buffalo Neuroimaging Analysis Centre, University of Buffalo New York, USA	<b>J Roberts (DMI), P McCoombe</b>	NeuroSTREAM – creation of a multi-centre database to study real world brain and lesion volume changes in Multiple Sclerosis (MS)

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Rebekah Onsely</b>	ASMIRT International Travel Scholarship	
<b>DMI Clot Retrieval Team: Alan Coulthard, John Clouston, Ken Mitchell, Kate Mahady</b>	RBWH Staff Excellence Award	

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Ryan Sommerville, Jennifer Sommerville, Matthew Fielder</b>	<b>Dept. of E.N.T. Dept. Medical Imaging</b>	Perineural Spread of Head and Neck Cancers	RBWH Diamond Care	\$31,000	\$31,000 (1 year)
Lee Reid, <b>Marita Prior, Rosalind Jeffree, Alan Coulthard, Thulasi Rajah</b>	<b>Dept. Neurosurgery, Dept. Medical Imaging, CSIRO</b>	CONSULT – Predicting Surgery-induced Neurological Deficits using CONSULT	RBWH Diamond Care	\$15,000	\$15,000 (1 year)
Amanda Ullman, Patrick Harris, Andrew Bulmer, Rachael Walker, Naomi Runnegar, Tricia Kleidon, Paul Lee-Archer, Benjamin Pearch, <b>Alan Coulthard (AI)</b>	Griffith University, PAH, LCCH, <b>Dept. Medical Imaging RBWH</b>	PICNIC Trial	NHMRC	\$235,526	\$706,580 (3 years)
Joanne George, Alex Pagnozzi, Samudragupta Bora, <b>Jane Bursle (AI)</b>	University QLD, CSIRO, <b>Dept. of Medical Imaging RBWH</b>	Prebo-6 Trial – Prediction of Childhood Brain Outcomes in Infants born Preterm using Neonatal MRI and concurrent clinical biomarkers	NHMRC	\$277,333	\$832,000 (3 years)

## 2018 Research Publications

### Journal Articles:

- Lawrence N, Kyle S.** Ventilation perfusion single photon emission computed tomography: referral practices and diagnosis of acute pulmonary embolism in the quaternary clinical setting. *JMIRO.* (2018) 62: 777-780
- Jeavons C, Hacking C,** Beenen L, Gunn M. A review of split-bolus single-pass CT in the assessment of trauma patients. *Emergency Radiology.* (2018) doi.org/10.1007/s10140-018-1591-1
- Blazak P, **Hacking C,** Presneill J, Reade M. Early repeat computed tomographic imaging in transferred trauma and neurosurgical patients: incidence, indications and impact. *JMIRO.* (2018) 62: 480-486
- Pierot L, **Coulthard A,** et.al. Standards of Practice in Acute Ischemic Stroke Intervention: International Recommendations. *J NeuroIntervent Surg.* (2018) doi:10.1136/neurintsurg-2018-014287
- Alruwaili A, Pannek K, **Coulthard A,** Henderson R, Kurniawan N, McCombe P. A combined tract-based spatial statistics and voxel-based morphometry study of the first MRI scan after diagnosis of amyotrophic lateral sclerosis with subgroup analysis. *J Neuroradiol.* (2018) 45(1):41-48
- Halder A, **Sommerville J,** Gandhi M. Primary Lymphoepithelial Carcinoma of the Parotid Gland, a Pictorial Review of a Rare Entity. *JMIRO.* (2018) 62:355-360.



### Journal Articles: (cont):

7. Lee J, Mott N, Mahmood U, Clouston J, Ranganathan D. Radiological Tenckhoff catheter insertion for peritoneal dialysis: a cost-effective approach. *JMIRO*. (2018) 62:174-178
8. Campbell BCV, Coulthard A, Clouston J, Mitchell K, Mahady K, *et al*. Tenecteplase versus Alteplase before Thrombectomy for Ischemic Stroke. *The New England Journal of Medicine*. (2018). 378(17):1573-1582
9. Campbell BCV, Coulthard A, EXTEND-IA TNK investigators. Tenecteplase versus alteplase before endovascular thrombectomy (EXTEND-IA TNK): a multicentre, randomized, controlled study. *Int J Stroke*. (2018). 13(3):328-334
10. Campbell BCV, Coulthard A, *et al*. Effect of general anaesthesia on functional outcome in patients with anterior circulation ischaemic stroke having endovascular thrombectomy versus standard care: a meta-analysis of individual patient data. *Lancet Neurol*. (2018).17(1):47-53
11. Bolderston A, Watson J, Woznitza N, Westerink A, Di Prospero L, Currie G, Beardmore C, Hewis J. Twitter journal clubs and continuing professional development: an analysis of a MedRadJClub tweet chat. *Radiography (Lond)*. (2018). 24(1):3-8.

### Book Chapters / Letters:

1. Yip T, Reid D. Scoliosis and Stitching Images Manual. (2018). Ed 1, 1-80.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speakers:

1. Steinke K. 'Microwave ablation of lung; Principle and techniques'. Invited speaker BCIO Bangkok Conference in Interventional Oncology. 2017, Bangkok, Thailand
2. Steinke K. 'How to improve outcome of trans-thoracic needle biopsy'. Invited speaker BCIO Bangkok Conference in Interventional Oncology. 2017, Bangkok, Thailand
3. Steinke K. 'Combined SBRT and Microwave ablation for node-negative NSCLC'. Trial proposal at 2018 TROG ASM, 2018, Hobart, Australia
4. Steinke K. 'Interstitial Lung Disease'. Invited speaker. RANZCR Tasmanian Branch Meeting, 2018, Hobart, Australia
5. Steinke K. 'Lung Cancer/TNM8 update'. Invited speaker. RANZCR Tasmanian Branch Meeting, 2018, Hobart, Australia
6. Steinke K. 'Solitary Pulmonary Nodule'. Invited speaker. RANZCR Tasmanian Branch Meeting, 2018, Hobart, Australia
7. Steinke K. 'Cystic Lung Disease'. Invited speaker. RANZCR Tasmanian Branch Meeting, 2018, Hobart, Australia
8. Steinke K. 'RECIST Trial Reporting'. Invited speaker. RANZCR Tasmanian Branch Meeting, 2018, Hobart, Australia
9. Steinke K. 'CT Lung Biopsy/MWA'. Invited speaker. RANZCR Tasmanian Branch Meeting, 2018, Hobart, Australia
10. Steinke K. 'Dense Breasts. Invited speaker. RANZCR Tasmanian Branch Meeting, 2018, Hobart, Australia
11. Dobeli K. 'High heart rate is not necessarily a contraindication for prospective-triggered CT coronary angiography'. Australian Society of Medical Imaging and Radiation Therapy ASM. 2018. Canberra, Australia
12. Clouston J. 'Interventional Radiology and Control of ENT Bleeding'. Invited speaker. National ENT ASM. 2018. Cairns, Australia
13. Clouston J. 'Frontiers 2018'. National ENT ASM. 2018. Cairns, Australia
14. Sommerville J. 'Imaging the Post Treatment Neck'. ANZSNR ASM. 2018. Hobart, Australia.
15. Sommerville J. 'Imaging the Perineural Spread in Head and Neck Cancer'. Brisbane Cancer Conference. 2018. Brisbane, Australia
16. Sommerville J. 'Greater Occipital Nerve: radiological anatomy demonstrated by two cases of perineural tumour spread'. ASHNR. 2018. Georgia, U.S.A
17. Hacking C. 'Radiology Education FRANZCR Concurrent Session'. RANZCR ASM, 2018. Canberra, Australia.
18. Hacking C. 'Trauma in pregnancy'. RANZCR ASM, 2018. Canberra, Australia
19. Hacking C. 'Contrast injection techniques for trauma imaging'. American Society of Emergency Radiology conference, 2018. Washington, USA
20. Hacking C. 'High prevalence of inaccurate pelvic binder placement in major trauma'. American Society of Emergency Radiology conference, 2018. Washington, USA
21. Hacking C. 'A to Z of Acute Paediatric Radiology – Don't forget the Bubbles'. Acute Paediatric Conference, 2018. Melbourne, Australia
22. Hacking C. 'Trauma in Pregnancy radiology'. Australasian College of Emergency Medicine Autumn Symposium, 2018. Brisbane Australia
23. Hacking C. 'Brain haemorrhage radiology'. Australasian College of Emergency Medicine Autumn Symposium, 2018. Brisbane, Australia
24. Hacking C. 'Emergency Chest X-ray'. Australasian College of Emergency Medicine Autumn Symposium, 2018. Brisbane, Australia
25. Hacking C. 'What not to miss: AXR'. Keynote Speaker, Trauma and Acute Imaging Symposium, 2018. Gold Coast, Australia
26. Hacking C. 'Acute abdominal CT'. Keynote Speaker, Trauma and Acute Imaging Symposium, 2018. Gold Coast, Australia
27. Hacking C. 'What not to miss: Multitrauma CT'. Keynote Speaker, Trauma and Acute Imaging Symposium, 2018. Gold Coast, Australia
28. Hacking C. 'Vascular emergencies'. Keynote Speaker, Trauma and Acute Imaging Symposium, 2018. Gold Coast, Australia
29. Hacking C. 'Acute abdominal imaging'. Nurse Practitioner Symposium, RBWH, 2018. Brisbane, Australia
30. Coulthard A. 'Experience in using ATLAS Stents in Australia'. Society of NeuroInterventional Surgery, 2018, San Francisco, USA
31. Coulthard A. Invited panellist for workshop on ATLAS endovascular stents. Society of NeuroInterventional Surgery, 2018, San Francisco, USA.

### Oral Presentations:

1. Koi V. 'The Vital Signs of Facial Bone and OPG.' Trauma and Acute Imaging Symposium, 2018. Gold Coast, Australia
2. Miller P. 'Ultrasound Versus CT for the Liver'. ASA, 2018
3. Karunasena S. 'Diagnostic Imaging for Suspected Pulmonary Embolism in Pregnancy – 12 Month Tertiary Centre Audit' RANZCR ASM, 2018. Canberra, Australia

### Oral Presentations: (cont):

4. **Fielder M.** 'Catheter directed therapy for massive and submassive pulmonary embolism: a single centre Australian experience.' RANZCR ASM, 2018. Canberra, Australia
5. **Hocking J.** 'Therapeutic anticoagulation post elective intracranial aneurysm intervention in patients randomised to IV unfractionated heparin or subcutaneous enoxaparin.' RANZCR ASM, 2018. Canberra, Australia
6. **Hacking C.** 'Trauma in pregnancy.' RANZCR ASM, 2018. Canberra, Australia
7. **Robertson S.** 'Anti-platelet response and peri-procedural complications in elective endovascular treatment of intracranial aneurysms: comparison between clopidogrel and prasugrel.' RANZCR ASM, 2018. Canberra, Australia.

### Poster Presentations:

1. **Fielder M, Coulthard A.** 'Changing from Clopidogrel to Prasugrel: The Effect on Thromboembolic Complications for Stent-Assisted Coilings of Unruptured Intracranial Aneurysms.' RANZCR ASM, 2018. Canberra, Australia
2. **Fielder M, Surendran N.** 'Common Vertebral Artery Variants and their Clinical Implications.' RANZCR ASM, 2018. Canberra, Australia
3. **Fielder M, Coulthard A.** 'Platelet Reaction Unit (PRU) Response in Patients Presenting for Elective Endovascular Treatment of Intracranial Aneurysms: Comparison between Clopidogrel and Prasugrel.' RANZCR ASM, 2018. Canberra, Australia
4. **Pearson T, Fielder M, Coulthard A.** 'Peri-Procedural and Late Complications of Flow Diverting Stents for Intracranial Aneurysms and the Impact of Platelet Reaction Unit (PRU) Status.' RANZCR ASM, 2018. Canberra, Australia
5. **Pearson T, Fielder M, Coulthard A.** 'Assessing Vasospasm Risk Post Subarachnoid Haemorrhage with the Modified Fisher Scale.' RANZCR ASM, 2018. Canberra, Australia
6. **Marsh P, Fielder M, Cleland P.** 'Important Radiological Findings in Submersion Injuries.' RANZCR ASM, 2018. Canberra, Australia
7. **Lovell S, Sommerville J, Gandhi M.** 'Pictorial Review of Cephaloceles in Adults'. RANZCR ASM, 2018. Canberra, Australia
8. **Sommerville J.** Greater Occipital Nerve: Radiological anatomy demonstrated by two cases of perineural tumour spread. ASHNR. 2018. Georgia, U.S.A.
9. **Sommerville J.** Imaging Anatomy of the Distal Branches of the Trigeminal Nerve, as Demonstrated by Perineural Tumour Spread. ASHNR. 2018. Georgia, U.S.A.
10. **Tromp D, Mann J, Hacking C.** Optimising computer tomography imaging in investigation of suspected renal calculi. RANZCR ASM, 2018. Canberra, Australia
11. **Hapugoda S, Do S, Hacking C.** The inaccuracy of pelvic binder placement in major trauma. Queensland Trauma Symposium, 2018, Brisbane, Queensland
12. **Williamson F, Martin-Dines P, Coulthard L, Hacking C, Zheng O, Wall D.** The inaccuracy of pelvic binder placement in major trauma. Queensland Trauma Symposium, 2018, Brisbane, Queensland.



# MEDICAL SERVICES



# Medical Services

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**Dr 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 and Patient Safety 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 and Patient Safety Services

The Quality, Innovation and Patient Support Service (QIPSS) is a professional clinical service with expertise in Governance, Audit and Risk Management; Change Management and Sustainability; Patient Experience and Quality Improvement and Innovation. QIPSS utilises the combined knowledge and strengths of our staff, consumers, academic and research partners to optimise the transfer of knowledge into patient safety. QIPSS is committed to excellence in care. Our purpose is to make an impact that matters and our research agenda aligns with it. We are driven to create positive outcomes for our patients and supportive environments for our clinicians.

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Dr Mia McLanders	Adjunct Lecturer	School of Psychology	The University of Queensland (2018-current)
Dr Tara McCurdie	Honorary Research Fellow	School of Psychology	The University of Queensland (2017-current)

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Nicole Gavin (Cancer Care Services)	<b>Mia McLanders</b> (QIPSS)	Developing a CVAD Registry

### 2018 Conference Presentations – Invited Speaker, Oral and Poster

#### Oral Presentations:

- Fenn, M., De Looze, J., McLanders, M., & Webster, J.** (2018). UP LATE at RBWH Improves Staff Experience. RBWH Healthcare Symposium. September 2018. (Health Services Implementation Research Award)
- Ryan, C., Mitchell, L., Watson, D., James, F., & McLanders, M** (2018). Safety Partnerships in Action: Zero Hospital Acquired Pressure Injuries. RBWH Healthcare Symposium. September 2018. (Complex Health Challenges Research Award).

#### Poster Presentations:

- Battersby, C., Stewart, P., Shetty, R., Byskov, C., & McLanders, M.** (2018). Inconsistent electrocardiogram automated reporting – a potential barrier to recognising and escalating myocardial infarction. RBWH Healthcare Symposium. September 2018
- McCurdie, T.M., & Santomauro, C.M.,** (2018). Interactive Telepresence for Trauma Sub-Specialist Support (ITTSS). RBWH Healthcare Symposium. September 2018.

### Other Communications and Outputs:

#### Manuscripts under review

**De Looze, J., Fenn, M., Naidoo, S., McLanders, M., Baboolal, K., Devlin, L., & Barnett, A.** (Under Review) UP LATE at RBWH: a pre-post observational, mixed-methods protocol evaluating a model for after-hours hospital care. BMC Health Services Research.

**Mitchell, L., Lake, H., James, F., Suna, J., Lee, T., & McLanders, M.** (Under Review) Improving consumer representation in healthcare initiatives: A case study of a consumer-led audit of clinical handover. Australian Health Review.

**METRO NORTH**

**MENTAL HEALTH SERVICE**



# Metro North Mental Health Services



**Professor Brett Emmerson AM**  
**Executive Director**  
Mental Health

## Executive Director's Report

**As Executive Director of one of the largest mental health services in Australia, I am acutely aware of the interdependence of research and practice. With ever increasing demands on services, continually improving how we do business is an economic and ethical imperative. As evidenced by the research and related activity documented in this report, Metro North Mental Health staff are leading and actively working to ensure we provide the very best services to people affected by mental health conditions.**

It is an honour to oversee a service committed to full integration of research and clinical practice, and to share in the rewards of ongoing investment in infrastructure and people. Metro North Mental Health continues to support conjoint academic appointments, employ dedicated researchers, support clinicians to engage in post-graduate study and to promote access to a range of educational and training opportunities. The service hosts and collaborates with researchers from a range of organisations across the world and locally, and actively supports and supervises students undertaking research as part of their undergraduate or research higher degrees. The work presented in this report demonstrates strong growth in research capability and interest and the strength of our partnerships within the HHS and with a range of academic and non-government partners.

Staff across disciplines and service lines are working collaboratively to design and conduct research and support translation of evidence to practice. As you will see in the report the work undertaken by, and in collaboration with MNMH is world class and wide ranging. Research spans multiple spectrums – ranging from basic discovery science through interventional clinical studies, to health services and policy research. Diverse methodologies are used to develop and refine understandings of the ‘cosmically complex’ mind and the systems within which people live, seek treatment and recover from mental illness. 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 prevent mental illness and improve mental health across the lifespan. Within such a context highlights are difficult to identify but I take this opportunity to acknowledge two projects which have already had real world impact albeit on – internationally and locally.

Work led by Associate Professor/Consultant Psychiatrist James Scott’s team at the Faculty of Medicine University of Queensland examining the causes, correlates and experience of bullying has enabled bullying in schools to be recognised as a risk factor for disease by the Global Burden of Disease 2017 Study (GBD 2017). The Youth Mental Health research team, led by James conducted the analyses necessary to show that bullying in schools was causative of depression and anxiety in adolescents and adults. Bullying is only the third psychosocial risk factor to be recognised by GBD 2017, the other two being childhood sexual abuse and intimate partner violence.

GBD 2017 is enormously influential for the development of public health policies around the world. The inclusion of bullying in GBD 2017 will ensure that governments globally will be taking steps to fund and implement effective interventions that reduce bullying in schools, thereby preventing cases of anxiety and depression in the population.

A study into the work lives and wellbeing of non-clinical staff working at various sites across MNHHS completed in 2017 has underpinned development of a service improvement plan at RedCab Mental Health. With support from the Executive, Jordan Duncan has worked closely with stakeholders to design various initiatives collectively designed to develop enabling environments and improve workplace health. This work has received substantial attention across the HHS and will provide a guide for similar activities for all staff. It is particularly pleasing to see research readily translated into service improvement.

## Other highlights are outlined below by the leads of the various research streams:

### Neuroscience:

Metro North Mental Health partners with QIMR Berghofer Medical Research Institute to undertake a program of biomedical research into the causes, diagnosis and treatment of mental health disorders. In 2018, the program expanded with the addition of two new research teams, the Brain Modelling Group and the Clinical Brain Networks Group, bringing the total number of independent research groups to 10. These groups investigate a number of common and severe mental health disorders including dementia, major depression, schizophrenia, attention deficit disorder and obsessive-compulsive disorder. Major neurological disorders, such as epilepsy and Parkinson's disease, are also studied. Approaches vary from population health, genetics and neuroimaging, to molecular biology and stem cell techniques. In 2018, a new clinical trial was commenced, using brain stimulation to treat the symptoms of obsessive compulsive disorder. Mental Health Researchers, Sarah Medland and Jodie Painter were successful with over \$2.5 million of research funding to study autism, attention deficit disorder and brain changes associated with disease risk.

### Early Psychosis:

The Metro North Early Psychosis Service has been a principal site for the conduct of clinical trials. Young people afflicted by psychosis face a multitude of challenges. In addition to the distressing symptoms, they are often disadvantaged socially and vocationally. Better treatments for psychosis are urgently needed to improve outcomes. Clinical trials have been undertaken to investigate safe and potentially effective interventions. Sodium Benzoate, a food preservative which is safe and has minimal side effects has been shown to reduce symptoms in people with longstanding schizophrenia. Recruitment to a study comparing sodium benzoate to placebo as an adjunctive (add on) treatment was completed in October 2018. 100 young people with psychosis participated in this study. Analysis of results is currently underway. This is the first of many interventional studies which will be conducted in the early psychosis service in the quest to improve the outcomes for young adults who experience schizophrenia, bipolar disorder and other serious mental health conditions.

### Child and Youth Mental Health:

With increasing demand for specialist assessment and intervention, Redcliffe-Caboolture Child and Youth Mental Health Service have focused research and related activities on describing and understanding access to, and experience of the service. Work is also exploring the experiences of staff and examining the 'mechanisms of action' of various interventions and models of service. A highlight has been the completion of a collaborative inquiry examining the roles and activities of a team of specialist clinicians working with young people whose needs are not met by standard outpatient treatment. The findings of studies are informing ongoing quality improvement activities. The service has dedicated 0.2 of a position to research and established a working group tasked with identifying research opportunities and building capacity for research within team, and building partnerships with universities and other agencies providing services to children and youth.

### Nursing:

Mental Health Nursing Research continues to lead and participate in a range of service-based research programs. Mental Health Nursing was strongly represented at the 2018 ACMHN conference in Cairns with several posters and presentations. Kylie Hall presented Listening to Learn, a successful professional development tool that was developed here at RBWH. Helen Cartwright presented the three-year findings of supervising undergraduate and transition to mental nursing students. Helen won the 2018 Paul Spurr prize for best clinical supervision presentation for this work. The poster submissions reflected our ongoing work in practice improvement through the evaluation and use of evidence based methods. The Broset tool which has aided in the prediction of violence and aggression in the psychiatric emergency centre, and the Safewards program which has now been rolled out to all mental health clinical areas at RBWH. This has been shown to be a successful contributor to the reduction of seclusion use in our service. The Safewards program delivered our service a publication evaluating the nurse's perceptions of the program. Through this research we understand barriers to implementation and can now better respond to the staff needs to ensure successful programs that reduce aggression and seclusion. RBWH are researching the use of technology to monitor vital signs in high risk environments and clinical situations to maximise patient monitoring and safety. The ability to translate technology into practice and increase our clinical efficacy is an important contributor to our ongoing ability to optimise consumer care and outcomes.

We celebrate the continued growth in research capabilities across the service and look forward to focusing research and quality improvement activities on trauma informed care in the coming year.



## Queensland Eating Disorders Service:

The Queensland Eating Disorders Service (QuEDS) provides specialist state-wide consultation, training and treatment services. Consultation services include face-to-face and teleconference services to clinicians in inpatient and community settings, as well as an outpatient assessment and consultation service for GPs at the RBWH. QuEDS also provides training to more than 3000 clinicians per year. Treatment services include a Day Program based at Finney Rd, Indooroopilly, and evidence-based outpatient treatments including CBT-e and SSCM. QuEDS values the expertise of those with lived experience, both consumers and carers, and regularly draws on such expertise for its training of clinicians and development of treatment guidelines. QuEDS regularly engages with service directors throughout the state to assist them in providing better services to people with eating disorders and their families. Satellite eating disorder services ('hubs') have recently been established at the Sunshine Coast and Gold Coast, with a third hub in North Queensland to come on line in 2019. QuEDS' areas of research in 2018 have included service evaluation, evaluation of refeeding protocols, and investigations of novel treatments including intranasal oxytocin and deep brain stimulation. QuEDS has research partnerships with various research institutions including QIMR, QBI, HIRF, the University of Queensland, and the University of Sydney.

## Queensland Forensic Mental Health Services:

Queensland Health is the major provider of mental health services to people with a mental illness who are involved with, or at risk of entering, the criminal justice system. The Queensland Forensic Mental Health Service (QFMHS) is managed across the State from major groupings based in Brisbane (Metro North and West Moreton) and smaller hubs along the Queensland coast. The integrated services consist of Secure Inpatient Services, Prison Mental Health Services, Court Liaison Services, Community Forensic Outreach Services and Mental Health and Policing Programmes. The State-wide component of the service is led by the Director and Operations Manager, Queensland Forensic Mental Health Service (based in the Metro North HHS), with the support of the Service Managers, Clinical Directors, a Research and Evaluation Manager, and five State-wide positions coordinating Court Liaison Services, Prison Mental Health Services, District Forensic Liaison Network, Indigenous Forensic Mental Health, and the State-wide Community Risk Management program.

In 2017, research operations at QFMHS rapidly expanded with the appointment of two fixed term project managers for the research informed implementation focused project Partners in Prevention: Understanding and Enhancing First Responses to Suicide Crisis Situations. In addition, two research scientists were appointed to the Queensland Forensic Mental Health Group, a new research group at Queensland Centre for Mental Health Research (located in West Moreton HHS). These positions are co-located within QFMHS at Biala. The QFMHS-QCMHR collaboration has been further strengthened through the creation of several affiliate Principal Researcher positions for QFMHS staff.

## Research in 2018 has focussed on:

- The interfaces between police, ambulance and mental health services
- Understanding and enhancing first responses to suicide crisis situations
- National benchmarking of Forensic Mental Health Services
- The use of interactive technology in custodial settings for the delivery of culturally appropriate social and emotional wellbeing programs to Indigenous Queenslanders
- Enhancing partnerships with other government departments and the tertiary education sector to improve mental health outcomes.

QFMHS research informs service design and delivery and, ultimately, improves the experience of forensic consumers and other stakeholders. The service prioritises the sharing of research findings with stakeholders and the wider community through high impact publications, seminars and presentations.

## Older Persons Mental Health Service (OPMHS)

Led by Professor Gerard Byrne, the OPMHS has strong links with the University of Queensland Academic Discipline of Psychiatry and Centre for Clinical Research, and is actively engaged in teaching students of several disciplines (medical, nursing, psychology, occupational therapy, social work). OPMHS personnel are involved in clinical and health services research relevant to mental disorders affecting older people. The OPMHS has a popular research registrar post. The program of work has focussed on dementia, anxiety and depression in older people. Work spearheaded by Professor Byrne, including development of an instrument for assessing anxiety in older people has been translated into more than 20 languages and is widely used internationally. OPMHS researchers collaborate widely, with researchers from world leading universities and academics and clinicians from various disciplines within and beyond the RBWH, as well as with several laboratory-based neuroscientists. As reflected in publications 2018 was a productive and rewarding year for OPMHS researchers, with team members leading the way in development and testing of measures and treatments for anxiety and depression among people diagnosed with Parkinson's.

## Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Fiona Davidson</b>	PhD, The University of Queensland	Australian Mental Health Court Liaison Services, variation and common ground: performance measurement and evaluation	Philip Burgess, <b>Ed Heffernan</b> , David Greenberg, Tony Butler
<b>Melanie Mitchell</b>	PhD, Queensland University of Technology	Precursors to violence in people with mental illness who threaten violence	Gavin Palk, David Kavanagh
<b>Elke Perdacher</b>	PhD & Master of Clinical Psychology, The University of Queensland	Stay Strong custody project	David Kavanagh, Jeanie Sheffield
<b>Annette Vasey</b>	Master of Clinical Psychology	Coursework masters	TBC
<b>Bobbie Clugston</b>	PhD, The University of Queensland	Mental health support of police negotiators program	Ed Heffernan, Philip Burgess, Meredith Harris
<b>Carrick Anderson</b>	Master of Forensic Mental Health UNSW	Coursework masters	TBC
<b>Jessica Brownhalls</b>	PhD, Griffith University	Cross-gender contact as a predictor of intimate partner obsessive relational intrusions	Jennifer Wells
<b>Chrystal Van De Belt</b>	Master of Forensic Mental Health UNSW	Coursework masters	TBC
<b>Kim Baskin</b>	Master of Suicidology Griffith University	Coursework masters	TBC
Elnike Brand	PhD, The University of Queensland	Comprehending the sexual health and sexuality in men with chronic mental illness: an epidemiological study	<b>Ed Heffernan</b> , Angela Rasch
Katherine Moss	MPhil, The University of Queensland	Physical health and mental illness: can implementation science assist in the prescription of physical activity for forensic patients with severe mental illness in a secure facility?	<b>Ed Heffernan</b> , <b>Carla Meurk</b> , <b>Megan Steele</b>
<b>Lucianne Palmquist</b>	PhD, Griffith University (2013 – Current)	Adolescent Child/Youth Mental Health Service Users' experiences and expectations of 'recovery': a grounded theory	Analise O'Donovan; Graham Bradley; <b>Sue Patterson</b>
<b>Annaketurah Ralph</b>	PHD The University of Queensland	Pathway from adverse childhood experiences (ACE) to problematic substance use (PSU) in young adults, specifically looking at the role of emotional dysregulation and rash impulsivity	Matthew Gullo, Paul Harnett and Jason Connor
Rachael Brimelow	PHD The University of Queensland	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, <b>Gerard Byrne</b> and Judy Wollin
Emily Hielscher	PHD The University of Queensland	Non-accidental self-injury and suicidality in adolescents and young adults with psychotic experiences	<b>James Scott</b>
Alex Ryan	PhD	The aetiopathogenic role of autoantibodies against the M1 muscarinic acetylcholine receptor in patients with first episode of schizophrenia	<b>James Scott</b> , Judith Greer
Berihun Dachew	PhD The University of Queensland	Hypertension Disorders of Pregnancy and Offspring Mental and Behavioural Disorders	Rosa Alati, Abdullah Mamun, <b>James Scott</b>
Shuichi Suetani	PhD The University of Queensland	Physical Activity and Mental Disorders: Epidemiological Analyses using Australian datasets	John McGrath, <b>James Scott</b>
<b>Ashlea White</b>	Psychiatry Scholarly Project	Association of chronic physical illness and mental disorder in children and adolescents	Hannah Thomas, <b>James Scott</b>
<b>Charana Perera</b>	Psychiatry Scholarly Project	Therapeutic monitoring of Lithium in routine psychiatric care	George Bruxner, <b>Sue Patterson</b>
<b>Carmel Fleming</b>	PhD. School of Nursing, Midwifery and Social Work. University of Queensland (2017-2020)	Family Inclusive Treatment in Eating Disorders: a stepped care approach to working with families of adults affected by eating disorders	Robyne LeBrocq; Karen Healy

## Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
<b>Lisa Wright</b>	PhD The University of Queensland (2017-2022)	Investigating the factors influencing implementation of sensory modulation in inpatient mental health units	Sally Bennett, Pamela Meredith
<b>Rebecca Olling</b>	Masters in Mental Health (Family Therapy). The University of Queensland (2015-2018)	Independent Mental Health Research Project-Family involvement in treatment of adults with eating disorders	Matthew Bambling
Madeleine Gardener	Master of Epidemiology	Child Maltreatment	Hannah Thomas, Holly Erskine, <b>James Scott</b>
<b>Bridget Johnson</b>	Scholarly project, RCANZCP	Optimising Psychiatric After-Hours Duty: the Implementation and Impact of a Short Cycle After-Hours Roster	<b>George Bruxner, Sue Patterson</b>
<b>Joni Bennet</b>	Masters of Mental Health Nursing. The University of Queensland	TBC	
Ella Shinnars	Psychology Honours, QUT	The Impact of Alcohol and Methamphetamine Campaigns on Calls to Queensland's 24/7 Alcohol and Other Drug Helpline'	<b>Hollie Wilson, Anthony Bligh, Melanie White</b>
Madeleine Moore	Psychology Honours, QUT	Exploring Trends in Alcohol Use and Treatment Seeking via an Anonymous Alcohol and Drug Telephone Support Service: a Queensland Wide Study"	<b>Hollie Wilson, Anthony Bligh, Melanie White</b>
Elizabeth Ness McVie	PhD, The University of Queensland	The mental health court: Queensland's unique system for determination of the insanity defence for 25 years.	<b>Gerard Byrne</b>
Tim Lowry	PhD, The University of Queensland	Threats, harassment and other problematic behaviours towards public office holders: The contribution of mental disorder	<b>Gerard Byrne</b>
Rachael Brimelow	PHD The University of Queensland	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, <b>Gerard Byrne</b> and Judy Wollin
Ji Hyun (Julia) Yang	PhD, The University of Queensland	Markers and mechanisms of mild cognitive impairment in Parkinson's disease	<b>Gerard Byrne</b>
Philip Mosley	PhD, The University of Queensland (2015-2020)	Impulsivity and caregiver burden after deep brain stimulation for Parkinson's disease	<b>Michael Breakspear</b>
<b>Bjorn Burgher</b>	PhD, The University of Queensland (2016-2020)	Neuroinflammation and neurodegeneration in early psychosis: relationship to cognitive development in adolescence and early adulthood	<b>Michael Breakspear, James Scott and Gerard Byrne</b>
Megan Campbell	PhD, The University of Queensland (2015-2017)	Dynamic networks for neural resonance: task-dependent modulation of the human mirror system for action	<b>Michael Breakspear</b>
Jonathon Robinson	PhD, Queensland University of Technology (2015-2018)	Electroencephalographic responses to expectancy violation in object displays: intuitive physics predictions	<b>Michael Breakspear</b>
Saurabh Sonkusare	PHD The University of Queensland (2015-2018)	Examining cortical autonomic control using combined Transcranial Magnetic Stimulation (TMS) and Electroencephalography (EEG)	<b>Michael Breakspear</b>
Shrey Dutta	PhD, UQ, (2018-2021)	How brain dynamics emerge from energy constraints	<b>Michael Breakspear</b>
Thomas Dorfer	PhD, UQ (2018-2021)	Computational Models of Brain Network Dynamics	<b>Michael Breakspear</b>
Rhiannon Jeans	PhD, The University of Queensland (2016-2018)	Measures of whole-brain coherence during sleep and general anaesthesia in Drosophila	<b>Michael Breakspear</b>
Dagnachew Muluye Fetene	PhD	Maternal hypertension and child development outcomes	Rosa Alati, Abdullah Mamun, <b>James Scott</b>
Peter Carr	PhD, Griffith University (2013-2017)	Risk Factors for peripheral intravenous cannula insertion failure in the Emergency Department	Claire Rickard, Marie Cookevase, <b>Niall Higgins</b> , James Rippey
Jordan Laurie	PHD Queensland University of Technology	Non-contact vital signs assessment using robotic vision	Jonathan Roberts, Thierry Peynot, Oran Rigby, <b>Niall Higgins</b>
Leigh-Anne Ryan	Master of Clinical Psychology, USQ	Understanding frequent attendance to the emergency department: an investigation of psychological predictors in an Australian Hospital	Gavin Beccaria
Kate Gossip	PhD	Mental health services for young people with severe mental illness	<b>James Scott</b> , Holly Erskine
Matilda Mackay-Sim	Psychiatry Scholarly Project	Deficits in goal-directed action as a proxy marker for dopamine dysfunction in early psychosis and schizophrenia	<b>James Scott</b> , James Kesby

## Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Amy Wong	PhD	Does cognitive functioning distinguish subjects with dissociative identity disorder from those with schizophrenia	<b>James Scott</b>
Gyanna Foy	Scholarly Project	Does the lymphocyte CD4/CD8 ratio predict treatment response in First Episode of Psychosis?	<b>James Scott</b>
Fiona Fairbrother	Scholarly Project	The association between lithium and hyperthyroidism: a systematic review	<b>James Scott</b>
Catherine Moores	4 <sup>th</sup> Year Medical Student, Canada	Interventions for young people to support healthy relationships	<b>James Scott</b> , Emily Hielscher
Lori Matuschka	Master of Epidemiology	Help-Seeking Behaviour in Adolescents Who Experience Bullying Victimization	Hannah Thomas, <b>James Scott</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Elke Perdacher</b>	Lecturer	School of Criminology and Criminal Justice	Griffith University
<b>Edward Heffernan</b>	Associate Professor Stream Head	School of Medicine Forensic Mental Health Group	The University of Queensland, Qld Centre Mental Health Research
<b>Jane Phillips</b>	Senior Lecturer	School of Medicine	The University of Queensland
<b>Carrick Anderson</b>	Senior Lecturer	School of Medicine	The University of Queensland
<b>Carla Meurk</b>	Honorary Senior Fellow, Principal Researcher	School of Public Health, Forensic Mental Health Group	The University of Queensland, Queensland Centre for Mental Health Research
<b>Zara Samaraweera</b>	Associate Lecturer-Registrar	School of Medicine	The University of Queensland
<b>William Brennan</b>	Program Lead	Master of Mental Health Nursing, Faculty of Health and Behavioural Sciences	The University of Queensland
<b>Anna Jenkins</b>	Senior Lecturer	School of Medicine	The University of Queensland
<b>Bruce Hamilton</b>	Guest Lecturer	Forensic Psychology	ACU (Australian Catholic University)
<b>Elissa Waterson</b>	Principal Researcher	Forensic Mental Health Group	Queensland Centre for Mental Health Research
<b>Laura Ferris</b>	Principal Researcher	Forensic Mental Health Group	Queensland Centre for Mental Health Research
<b>Michael Breakspear</b>	Co-ordinator	Program Mental Health Research	QIMR Berghofer Medical Research Institute (2009 – current)
<b>Michael Breakspear</b>	Adjunct Professor	School of Biomedical Sciences	Queensland University of Technology (2017-2020)
<b>Michael Breakspear</b>	Adjunct Professor	School of Psychiatry	University of Queensland (2011-current)
<b>Michael Breakspear</b>	NHMRC Principal Research Fellow		QIMR Berghofer Medical Research Institute (2017-2020)
<b>Lisa Fawcett</b>	Clinical Assoc Professor	School of Nursing	ACU (2014 – current)
<b>Nathan Dart</b>	Clinical Academic Fellow	School of Nursing	ACU (2014 – current)
<b>Niall Higgins</b>	Conjoint Senior Research Fellow	School of Nursing	QUT (2015 – current)
<b>Sue Patterson</b>	Principal Research Fellow	Mental Health	Metro North Mental Health
<b>Sue Patterson</b>	Associate Professor	School of Dentistry	The University of Queensland
<b>Sue Patterson</b>	Associate Professor	Department of Applied Psychology	Griffith University
<b>Hollie Wilson</b>	Visiting Fellow	School of Psychology and Counselling	Queensland University of Technology
<b>Brett Emmerson</b>	Professor	School of Clinical Medicine	The University of Queensland
<b>James Scott</b>	Practitioner Fellowship	Prevention and Management of Youth Mental Illness	National Health and Medical Research Council

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions (cont)

Name	Type of Fellowship	Research Program	University (years)
Warren Ward	Associate Professor	School of Clinical Medicine	The University of Queensland
Gail Robinson	Associate Professor	Menzies Health Institute QLD	Griffith University
Gail Robinson	Senior Lecturer	School of Medicine	The University of Queensland
Andrew Teodorczuk	Associate Professor	Academic Lead Years 3 and 4 School of Medicine	Griffith University

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
Ed Heffernan	Bobbie Clugston (MHAODB)	Involuntary Treatment Order National Benchmarking
Ed Heffernan, Fiona Davidson, Carla Meurk, Luke Hearne, Elissa Waterson	Stuart Kinner (Griffith University), Kimina Andersen	Family Business – improving and understanding the treatment of PTSD among incarcerated Aboriginal and Torres Strait Islander Women
Ed Heffernan, Bob Green, Jane Phillips, Zara Samaraweera	Bobbie Clugston, Carolina Ceron (High Secure Inpatient Service), Adam Griffin (Forensic Medical Service), C Gardner (QPS)	Fitness for interview and fitness for trial – a retrospective chart audit of people found to be unsound of mind
Melanie Mitchell	Gavin Palk, David Kavanagh (QUT)	Mentally ill threateners: a review of mentally ill threateners; the characteristics of the threatener, the nature and context of the threat and the response of mental health staff to threats
Elke Perdacher, Ed Heffernan, Penny Dale	David Kavanaugh (UQ), Jeanie Sheffield (UQ)	Stay Strong Plan – an evaluation of android Stay Strong Plan app with Aboriginal and Torres Strait Islander women in custody
Fiona Davidson, Jane Phillips, Ed Heffernan	Tony Butler (UNSW), David Greenberg (UNSW), Peter Conroy (QPS), Philip Burgess (UQ)	Queensland Court Liaison Service – Pathways of Mental Health Service – a cohort study to explore the pathways of public mental health service care for people that received an assessment by SEQ CLS in 2015
Fiona Davidson, Jane Phillips, Ed Heffernan	Tony Butler (UNSW), David Greenberg (UNSW), Philip Burgess (UQ)	The National Court Liaison Services Benchmarking Project
Ed Heffernan, Michelle Perrin, Fiona Davidson	Stuart Kinner (Griffith University), Bobbie Clugston	The National Prison Mental Health Benchmarking Project
Fiona Davidson, Ed Heffernan, Velimir Kovacevic, Bruce Hamilton, Elissa Waterson	Tony Butler (UNSW), David Greenberg (UNSW), Philip Burgess (UQ), Marshall Watson (SA Hlth), Carolyn Dixon (J&FMHN NSW), Adam Brett (WA), Maraea Handley (NT FMHS), Marita O'Connell (Tas Courts MH Program), Narain Nambiar (SA FMHS), Owen Samuels (ACT FMHS), Patrick Seal (Forensicare)	National Court Liaison Service Key Performance Indicators – the establishment of a nationally agreed approach to performance measurement for Australian Court Liaison Services
Tim Lowry, Bruce Hamilton, Annette Vasey	Bruce Watt (Bond University)	High risk psychotic phenomena – elusions involving themes of sexual assault
Ed Heffernan, Elissa Waterson, Darren Neillie, Penny Dale, Yasmin Muller, Carla Meurk, Laura Ferris	Collaborating: Qld Health, Qld Police Service, Qld Ambulance Service, Qld Mental Health Commission, Roses in the Ocean, Brisbane North Primary Health Network, Qld Alliance for Mental health	Partners in Prevention: Understanding and Enhancing First Responses to Suicide Crisis Situations
Ed Heffernan, Elissa Waterson, Darren Neillie, Carla Meurk	Office of Industrial Relations	Persistent complainants: training and support needs of the Office of Industrial Relations
Tim Lowry, Darren Neillie, Fiona Davidson		CFOS reports: referrer feedback survey
Tim Lowry, Darren Neillie, Fiona Davidson		CFOS consumer snapshot
Ed Heffernan, Tim Lowry, Jane Phillips, Elissa Waterson	Bobbie Clugston (MHAODB)	Mental Health Support of Police Negotiators Program

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Ed Heffernan, Elissa Waterson</b>	Bobbie Clugston (MHAODB), Megan Steele (West Moreton HHSD)	Pathways for individuals with a mental illness who are the subject of police negotiator events
<b>Penny Dale, Yasmin Muller, Ed Heffernan, Elissa Waterson</b>	Megan Steele (West Moreton HHSD)	Indigenous Mental Health Intervention Project (IMHIP) evaluation
<b>Bob Green, Darren Neillie, Fiona Davidson</b>		Treatment pathways of persons found not criminally responsible due to mental disorder
<b>Jennifer Wells, Melanie Mitchell, Tim Lowry, Darren Neillie</b>		Evaluation of the Forensic Intervention Service
<b>Elke Perdacher, Carla Meurk, Lisa Wittenhagen</b>	Megan Steele, Andrew Aboud, Tamara Smith, Darryn Collins, (West Moreton HHSD), David Kavanagh (QUT), Ian Garton	e-Inside: Patient-facing e-Mental Health tools to support the wellbeing and mental health of male prisoners in a high security prison environment
<b>Victoria Cullity</b>	<b>Sunanda Ghosh, Sue Patterson, Shane Rebgetz</b>	Coping with change: a descriptive study of referral, access and care pathways to a Child and Youth Mental Health Service
<b>Amanda Gatti</b>	<b>Amanda Gatti, Susan Patterson, Shane Rebgetz</b>	Collaborative inquiry amongst AMYOS staff
<b>John Kelly, Michelle Taylor, A Morphett, Hollie Wilson</b>	Pamela Meredith	Analysis of the sensory profile of young people within an alcohol and drug treatment service
<b>Brett Emmerson, Lisa Fawcett, Niall Higgins</b>	Fiona Coyer (QUT)Jonathan Roberts (QUT)	Remote patient monitoring via non-invasive digital technology: a preliminary evaluation of a system for respiratory observations
<b>Lisa Fawcett, Nathan Dart, Niall Higgins</b>	Thomas Meehan (West Moreton HHS), Theresa Green (QUT), Michael Kilshaw (TPCH), Debra Anderson (Griffith University)	Implementation of Safewards and Brøset to Secure Mental Health Rehabilitation Units
<b>Niall Higgins</b>	Claire Rickard (Griffith University), Robert Ware (UQ), <b>Marcus Watson</b> (RBWH)	Near infrared venous analysis: a trial of vessel finders versus standard technique for peripheral placement of intravenous catheters
<b>Niall Higgins</b>	Jordan Laurie (QUT), Jonathan Roberts (QUT), Thierry Peynot (QUT), Oran Rigby (QUT)	Non-contact vital signs assessment using robotic vision
<b>Sue Patterson and Brett Emmerson</b>	<b>Nicole Brigg</b> , Archana Pradhan(UQ), Pauline Ford (UQ) et al	Let's Get Physical: an investigation of the current practice and expectations of specialist mental health, and drug and alcohol services in relation to monitoring and managing the physical and oral health of people using their services
<b>Sue Patterson, Jordan Duncan, Kylie Garrick</b>	Analise O'Donovan (Griffith), <b>Stephanie Donovan, Carmel Barry</b> (MNMH), Richard Ollie (Griffith)	Promoting sustainable engagement: a mixed methods study of the work-lives, engagement and health of clinical staff working in mental health care environments
<b>James Scott</b>	Stephen Stathis, Cathy Mihalopoulos, Tiffany Au	Child MAUI (Multi-attribute utility instrument) Comparison Study
<b>Sue Patterson and Brett Emmerson</b>	<b>Niall Higgins, Lisa Fawcett, Wilsen Drew</b> et al.,	Implementation of the Queensland Health Smoking Cessation Clinical Pathway: a mixed methods evaluation of process and outcomes within Metro North Mental Health Services
<b>Chris Randall, Sue Patterson, Warren Ward, Kylie Matthews</b>	Jeanie Sheffield. (The University of Queensland)	Clinical outcomes and experience of a three-month intensive outpatient program for people with Eating Disorders: a mixed methods study to inform systematic quality improvement
<b>Queensland Eating Disorders Service, Carmel Fleming</b>	School of Nursing, Midwifery and Social Work. (The University of Queensland)	Family Inclusive Treatment in Eating Disorders: a stepped care approach to working with families of adults affected by eating disorders
<b>Danielle Alchin, Sue Patterson, Brett Emmerson</b>		An observational study of a contingency management intervention for a smoking cessation group program for people with a mental illness

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Julia Crilly, Stuart Kinner, Gerry Fitzgerald, Marianne Wallis	<b>Ed Heffernan</b>	Improving the outcomes for people with acute mental illness in emergency departments
Anderson J	<b>Niall Higgins, Gail Robinson</b>	Screening for obstructive sleep apnoea in inpatients with schizophrenia: a feasibility study
Lee Martinez (University of South Australia)	<b>Sue Patterson</b>	Impact of participation in 'Hearing Voices that are Distressing' simulation workshops for South Australian rural undergraduate health science students and health workforce
Hannah Thomas, Holly Erskine, <b>James Scott</b>	Damian Santomauro, Alize Ferrari, Harvey Whiteford, Theo Vos	The inclusion of bullying as a risk factor in the Global Burden of Disease Study 2017 (GBD 2017)
Hannah Thomas, <b>James Scott</b>	Jason Connor, Jason Coates	Application of BCS-A
Holly Erskine, <b>James Scott</b> , Madeleine Gardner	Shelby Marrington, Greg Shuttlewood, Jake Najman, David McIntyre, Gail Williams, Abdullah Al Mamun, Alexandra Clavarino, Rosa Alati,	Data linkage between MUSP and the National Death Index
Alex Ryan, <b>James Scott</b> , Judith Greer	Gail Robinson	Muscarinic antibodies in first episode psychosis
Holly Erskine, <b>James Scott</b>	Harvey Whiteford, Meaghan Enright, Bob Blum, Shoshanna Fine et al,	National Adolescent Mental Health Surveys (NAMHS), – Kenya – National Adolescent Mental Health Survey (K-NAMHS), – Indonesia – National Adolescent Mental Health Survey (I-NAMHS), – Vietnam – National Adolescent Mental Health Survey (V-NAMHS)
Holly Erskine, <b>James Scott</b>	Harvey Whiteford, George Patton	The natural history of disruptive behaviour disorders: trajectory, outcomes, and intervention
<b>James Scott</b> , Holly Erskine, Carina Capra, Madeleine Gardner	Harvey Whiteford	Adolescent Extended Treatment Facility Evaluation Framework
<b>James Scott</b> , Holly Erskine, Carina Capra, Madeleine Gardner	Harvey Whiteford	Evaluation of Youth Residential Rehabilitation Units (YRRUs)
Lori Matuschka, <b>James Scott</b>	Andrew Martin	tDCS in Schizophrenia
Holly Erskine, <b>James Scott</b> , <b>Hannah Thomas</b>	Harvey Whiteford, John McGrath	Collaboration with The Mary Foundation on bullying victimisation
<b>James Scott</b> , Holly Erskine, Hannah Thomas	Rosanna Pacella, Michael Dunne, David Finkelhor, Ben Matthews, Franziska Meinck, Daryl Higgins	The first national study of child maltreatment in Australia: prevalence, health outcomes, and burden of disease
<b>James Scott</b> , Judith Greer, CADENCE Group	Stefan Blum, Belinda Lennox, Brian O'Donoghue, Michael Benrol, Dan Siskind, Shuichi Suetani	Identifying and treating patients with psychosis who are positive to anti-neuronal antibodies
<b>James Scott</b> , Sarah Jhetam		Policy Considerations of E-Cigarette Availability in Australia

## 2018 Research Awards and Achievements

Recipient	Award	Event
(QFMH)Indigenous Mental Health Intervention Program	Winner – Complex Health Challenges	MNHHS Research Excellence Award
Laura Ferris	Travel Award	Margaret Foddy SASP
Justin Chapman	Winner – Individual Award	Queensland Mental Health Week Achievement Awards
Justin Chapman	Winner – Not-for-profit large award	Queensland Mental Health Week Achievement Awards
Philip Mosley	Winner – Postgraduate Student Award 2018	ASMR Queensland Health and Medical Research Awards

## 2018 Research Awards and Achievements (cont)

Recipient	Award	Event
James Roberts	Brain Sciences Award – best application in the field of Brain Sciences	Rebecca L. Cooper Foundation
James Scott	2018 Senior Research Award (March 2018)	Royal Australian and New Zealand College of Psychiatrists

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Ed Heffernan, Elissa Waterson, Fiona Davidson, Bobbie Clugston, Darren Neillie, John Tracey,</b> Rebecca Soole, Dee Taylor-Dutton, Emma Bosley, Lesley Van Schoubroeck, Carmel Ybarlucea	Queensland Forensic Mental Health Service	Partners in Prevention: Understanding and Enhancing First Responses to Suicide Crisis Situations	Suicide Prevention Health Taskforce	\$185,651	\$556,850.00 (2016-2019)
Julia Crilly, Stuart Kinner, Gerry Fitzgerald, <b>Ed Heffernan</b> , Marianne Wallis	Queensland Forensic Mental Health Service	Improving Outcomes for people with acute mental illness in the emergency department: a data linkage study	NHMRC Project Grant	\$62,867.50	\$251,470.00 (2017-2020)
<b>Elke Perdacher</b>	Queensland Forensic Mental Health Service	Evaluation of the Stay Strong Plan app with Aboriginal and Torres Strait Islander men in prison	M Health, Queensland Health	\$18,000	\$36,000 (2018-2019)
<b>Ed Heffernan</b>	Queensland Forensic Mental Health Service	Mental health and the criminal justice system. Developing the evidence base to improve mental health and criminal justice outcomes for people with mental illness	NHMCR ECF Grant	\$48,399	\$193,596 (2018-2022)
<b>Lisa Wright</b> and Pamela Meredith	Metro North Mental Health	Investigating the factors affecting implementation of sensory modulation in inpatient mental health units	TPCH Foundation	\$4,385.04	\$9,983.48 (2018-2019)
<b>Leigh Couch</b>	MNMH Alcohol and Drug Service	Exploring the characteristics and outcomes of clients undertaking detox in Queensland Health alcohol and drug treatment facilities	TPCH Foundation	\$4,906.66	9813.32 (2018-2019)
Luca Cocchi, Andrew Zalesky, P Fitzgerald, <b>Michael Breakspear</b>	Neuroscience	Personalised brain simulation for treatment of Obsessive-Compulsive Disorder	National Health and Medical Research Council Project Grant	\$222,042	\$666,128 (2018-2021)
<b>Michael Breakspear</b> and Christine Guo	Neuroscience	Commercialise multi-modal imaging and stimulation	Department of Science, Information Technology and Innovation	\$375,000	\$1,500,000.00 (2017-2020)
<b>Michael Breakspear</b>	Neuroscience	Brain Connectomics in Psychiatry	NHMRC Principal Research Fellowship	\$152,769	\$763,845 (2017-2021)
<b>Michael Breakspear, Nicholas Martin, Gerard Byrne</b> et al.,	Neuroscience/older persons	Prospective Imaging Study of Ageing: Genes, Brain and Behaviour (PISA)	NHMRC Grant	\$1,293,009	\$6,465,047 (2016-2020)



## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Michael Breakspear, Sue Patterson, Justin Chapman</b>	Metro North Mental Health/ QiMR	Trialling the feasibility and acceptability of physical activity self-monitoring and supervised exercise interventions for adults with severe mental illness'	RBWH and RBWH Foundation	\$39,771	\$39,771 (2018)
M Meinzer, A Martin, <b>Michael Breakspear</b> , L Cocchi, J Haeisen, A Hunold	Neuroscience	How does electrical stimulation affect brain networks	ARC Discovery Project	\$125,841	\$503,366.00 (2017-2020)
James Roberts, <b>Michael Breakspear</b> , Sampsa Vanhatalo, Paul Colditz	Neuroscience	Novel methods for early bedside detection and prognosis of preterm brain injury	National Health and Medical Research Council Project Grant	\$210,293	\$630,880.20 (2018-2020)
Christopher Rowe, Perminder Sachdev, Sharon Naismith, <b>Michael Breakspear</b> , et al.,	Neuroscience	The Australian Dementia Network (ADNeT): Bringing together Australia's dementia stakeholders	National Health and Medical Research Council Boosting Dementia Research Grant	\$3,600,000	\$18 million (2018-2023)
James Roberts, Leonardo Gollo, <b>Michael Breakspear</b>	Neuroscience	Beyond the connectome: Modelling large-scale brain dynamics	National Health and Medical Research Council Project Grant	\$139,949	\$419,847.00 (2018-2020)
<b>Kim Sander, Melissa Connell, John Kelly</b>	MNMH Alcohol and Drug	Trauma Informed Care and Practice Project	Mental Health Alcohol and Other Drugs Branch, Clinical Excellence Division	\$35,000	\$70,000 (2018-2019)
Holly Erskine, <b>James Scott</b> Harvey Whiteford	Metro North Mental Health	Adolescent Extended Treatment Facility Evaluation Framework	Queensland Health	\$109,486	AUD \$328,458 (2018-2019)
Harvey Whiteford, Holly Erskine, <b>James Scott</b> , Enright	Metro North Mental Health	Nationally-representative population surveys of adolescent mental disorders in Kenya, Indonesia, and Vietnam (NAMHS)	Pivotal Ventures gift	US \$980,844	US \$2,942,531 (2018-2020)

## 2018 Research Publications

### Journal Articles:

- Baker M. & Cave L.** Adventures in clinical facilitation: Supporting graduate mental health nurses in practice. *International Journal of Mental Health Nursing*, (2018) 27(S1),7
- Carr PJ, **Higgins NS**, Cooke ML, Mihala G & Rickard CM. Vascular access specialist teams for insertion of and prevention of vascular access device failure: a Cochrane Systematic Review' *The Journal of Vascular Access*, (2018) 19(S1),36
- Carr PJ, Rippey J, Cooke ML, **Higgins NS** et al. Three types of Peripheral Intravenous Catheter Failure happening in hospital right now; 1: Failure to appropriately use; 2: Failure to insert on the first attempt and 3: Post insertion failure', *The Journal of Vascular Access*, (2018) 19(S1), 26
- Carr PJ, Rippey J, Cooke ML, **Higgins NS**, et al. From insertion to removal of Emergency Department inserted peripheral intravenous catheters. A multi-centre survival analysis of an admitted cohort. *The Journal of Vascular Access*, (2018) 19(S1), 109
- Carr PJ, Rippey J, Cooke ML, **Higgins NS**, et al. Risk factors associated with first-time insertion success for peripheral intravenous cannulation in the Emergency Department. A multicentre analysis of patient, clinician, and product characteristics. *The Journal of Vascular Access*, (2018) 19(S1), 108
- Carr PJ, Rippey J, Trevenen M, Cooke ML, **Higgins NS**, Foale A & Rickard CM. Derivation of a tool for Justification of Emergency Department clinically indicated peripheral Intravenous (JEDI) catheters. Toward vessel health preservation with the JEDI PIVC tool. *The Journal of Vascular Access*, (2018) 19(S1) ,59
- Cartwright H & Turrell P.** Group supervision with undergraduates: a three-year experience. *International Journal of Mental Health Nursing*, (2018) 27(S1), 7
- Daglish M, Reilly S, Hayllar J.** Do Dependent Codeine Users Need Lower Doses of Buprenorphine Maintenance? *Drug & Alcohol Review*, (2018) 37(S3), S28
- Dark F, **Scott JG**, Baker A, Parker S, **Gordon A**, Newman E, Gore-Jones, V., Saha, S., Lim, C. C. W. and Penn, D. (2018). Randomized controlled trial of social cognition interaction training. *Australian and New Zealand Journal of Psychiatry* 52 (S1), 141-2

### Journal Articles: (cont):

10. Dark F, **Scott JG**, Baker A, Parker S, **Gordon A**, Newman E, Gore-Jones V et al . Randomised controlled trial of social cognition and interaction training. *Schizophrenia Bulletin*, (2018) 44 (1) S237-S238
11. **Hall K, Hatch K & Newell J**. Listening to learn: a unique opportunity to read, reflect and respond. *International Journal of Mental Health Nursing*, (2018) 27(S1),15
12. **Hatch K**. Quality or quantity? The Challenges of supporting access to nursing clinical supervision within a large metropolitan mental health service. Australian Clinical Supervision Conference 2018 Book of Abstracts, <http://clinicalsupervision.org.au/wp-content/uploads/2018/05/ACSA-Book-of-Abstracts-2018.pdf>, 30
13. Hielscher E, DeVylder J, **Connell M**, Hasking P, Martin G, Scott JG. Do hallucinations predict the transition from suicidal thoughts to attempts. Results from an Australian longitudinal cohort study. *Schizophrenia Bulletin*, (2018) 44 (1) S379-S379
14. **Higgins N, Dart N & Fawcett L**. Use of Safewards to increase therapeutic optimism and reduce seclusion rates (Poster). *International Journal of Mental Health Nursing*, (2018), 27(S1),20
15. **Higgins N, Robinson G**, Burke A, Anderson J & Curtin D. Screening for sleep disordered breathing in a mental health population (Poster). *International Journal of Mental Health Nursing*, (2018) 27(S1),18
16. Laurie J, **Higgins N**, Roberts J, **Fawcett L & Emmerson B**. Respiratory observations by optical technology (Poster). *International Journal of Mental Health Nursing*, (2018) 27(S1),19
17. **Petrie A**, Gallagher S & Lawrence P. Acute management plans: the clinician's perspective of the usefulness of this advanced planning tool (Poster). *International Journal of Mental Health Nursing*, (2018)27(S1),38
18. **Quarrel T**. The Mystery of Mental Health. *International Journal of Mental Health Nursing*, (2018) 27 (S1), 7
19. **Scott JG**, Gillis J, Ryan A, Hargovan H & Blum S. Prevalence of anti-neuronal antibodies in patients admitted with first episode of psychosis and their clinical outcomes. *Schizophrenia Bulletin*, (2018) 44 (s1) S61-S61
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1. Newman M, Airey C, Blum S, **Scott JG**, Wong R & Gillis D. (2018). Autoimmune Encephalitis: Clinical Features, Pathophysiology and Management in A Minagar (Ed) *Neuroinflammation* (2<sup>nd</sup> Edition). Elsevier
2. **O'Sullivan J** & Fitzgibbon C Changing how you feel through your senses – Sensory Modulation Resource Manual. Sensory Modulation: Brisbane
3. **Scott JG**, Hielscher E, & Nurcome B. (2018). Hallucinations. In R.G.R. Levesque (Ed). *Encyclopedia of Adolescence*. Springer International Publishing. [https://10.1007/978-3-319-32132-5\\_374-2](https://10.1007/978-3-319-32132-5_374-2)
4. **Scott JG & Burgher B**. (2018) Psychotic Disorders in The Encyclopedia of Child and Adolescent Development Jeremy Jewell (Ed). New York, Wiley (In Press Accepted 20 December).

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Davidson F**. Results of the national mental health court liaison services benchmarking project. NHMRC Centre for Research Excellence in Offender Health Annual Symposium. Sydney
2. Erskine H & **Scott JG**. (2018). Outcomes of ADHD and clinical implications. School Nurses Association of NSW 19<sup>th</sup> Annual Conference, Gold Coast, 13 July 2018
3. **Heffernan E**. Meeting Wider needs in a Mental Health Crisis. Australasian College for Emergency Medicine's (ACEM) first Mental Health in the Emergency Department Summit. Melbourne
4. **Heffernan E & Meurk C**. Partners in Prevention: Understanding and Enhancing First Responses to Suicidal Crisis Situations. Queensland Mental Health Commission. Brisbane
5. **Heffernan E & Meurk C**. Partners in Prevention: Understanding and Enhancing First Responses to Suicidal Crisis Situations. Suicide Prevention Taskforce. Brisbane
6. **Heffernan E & Meurk C**. Partners in Prevention: Understanding and Enhancing First Responses to Suicidal Crisis Situations. Queensland Health Data Linkage Symposium. Brisbane
7. **Heffernan, E**. Meurk, C. Partners in Prevention: Understanding and Enhancing First Responses to Suicidal Crisis Situations. Lived Experience Summit. Brisbane
8. **Power M**. Recent developments in supporting victims of serious violence in forensic mental health systems, Mental Health Review Tribunal Masterclass, Brisbane. 17 October 2018
9. **Power M**. International innovations in the use of restorative practice in forensic mental health, State-wide Forensic Psychiatrists Professional Development session, Brisbane, 22 May 2018
10. **Scott JG**. Does smoking tobacco cause schizophrenia? A review of the evidence. Physical Health and Smoking Cessation Mental Health Clinical Collaborative Forum, Brisbane

### Invited Speaker: (cont):

11. **Scott JG.** Managing Psychosis in Youth. Queensland Faculty of Child and Adolescent Psychiatry Conference Brisbane, Australia
12. **Scott JG.** Neuronal antibodies in psychosis: what psychiatrists need to know. Tasmanian Branch of the RANZCP, Hobart, Australia. 19 September 2018
13. **Scott JG.** Managing ADHD in patients with early psychosis. Diagnostic and clinical challenges. Queensland Early Psychosis Forum, Brisbane
14. **Scott JG.** Does prescribing stimulant medication for ADHD in children and adolescents cause psychosis? Clinical Insights: ADHD Networks, Brisbane, February 17, 2018
15. **Scott JG.** Child and adolescent suicides in Queensland: What lessons can we learn? Research in the Rounds: Queensland Family and Child Commission, Brisbane, Australia. 22 February 2018
16. **Scott JG.** Clinical dilemmas in anti-neuronal antibody positive patients with psychosis. Australian Psychosis Conference, Sydney, Australia. 14-16 September 2018
17. **Scott JG.** The clinical management of ADHD and psychosis. Australian ADHD Professionals Association 2<sup>nd</sup> Annual Conference, Sydney, Australia. 28 July 2018
18. **Scott JG.** The prevalence of anti-neuronal antibodies in patients admitted with first episode psychosis and their clinical outcomes. University of Queensland Centre for Clinical Research Seminar, Brisbane, Australia. 18 April 2018
19. **Scott JG.** Atypical antipsychotics and quality of life in people living with schizophrenia. Royal Australian and New Zealand College of Psychiatrist Congress, Auckland, New Zealand. May 13-17, 2018
20. **Scott JG,** Gillis D, Ryan A, Hargovan H & Blum S. The prevalence of anti-neuronal antibodies in patients admitted with first episode psychosis and their clinical outcomes. Schizophrenia International Research Society, Florence, Italy. 4 April 2018.

### Oral Presentations:

1. **Ayres A, Chen R, Mackle T, Bruxner G** & Kothari A. Barriers and facilitators affecting engagement of pregnant women with an Australian perinatal mental health service: a cross-sectional study. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress. Auckland, New Zealand. May 13-17, 2018
2. **Baker M & Cave L.** Adventures in clinical facilitation: Supporting graduate mental health nurses in practice. ACMHN 44<sup>th</sup> International Mental Health Nursing Conference, Cairns, Australia, 24-26 October 2018
3. **Bennet J & Loutitt T.** An Update on Eating Disorders: Evidence, Screening and Treatment. Consultation Liaison Workshop 16<sup>th</sup> National Consultation Liaison /Perinatal Infant Mental Health Nurses Annual Conference. Brisbane, Australia. June 6, 2018
4. **Bicker S & Holley S** Thriving in a challenging healthcare landscape: The role of mental health occupational therapy clinical practice collaborative. Occupational Therapy Australia NT-QLD Regional Conference, Surfers Paradise, Australia, 26-27 October 2018
5. **Bicker S.** Evaluation of the establishment of an occupational therapy assessment clinic in Metro North Mental Health Occupational Therapy Australia NT-QLD Regional Conference Occupational Therapy Australia NT-QLD Regional Conference, Surfers Paradise, Australia, 26-27 October 2018
6. **Breakspear M.** Neuronal models of dynamic functional connectivity: Linking scales and data modalities” Organisation of Human Brain Mapping (OHBM 2018) Singapore, 17-21 June 2018
7. **Breakspear M.** Failure to excite the second mode! Incomplete cortical phase transitions during active sleep in preterm neonates”, Brain Connectivity Workshop (BCW 2018), Stanford University, USA 22-29 June 2018
8. **Breakspear M.** Brain Dynamics: on Networks, Modes and Waves. Research Centre Translational Neuroscience Seminar, Department of Neurology, Johannes Gutenberg University, Mainz, Germany, September, 2018
9. **Breakspear M.** Failure to excite the second mode! Incomplete cortical phase transitions during active sleep in preterm neonates. Max Planck Institute for Metabolism Research Seminar, Cologne, Germany, September 2018
10. **Breakspear M.** Challenges and opportunities for human brain mapping/neuroimaging research in Australia” 1<sup>st</sup> Organisation Human Brain Mapping Australian Chapter Symposium, Florey Institute of Neuroscience and Mental Health, Melbourne, 12 October 2018
11. **Breakspear M.** Metastable brain waves. The 11<sup>th</sup> Australasian Workshop on Neuro-Engineering and Computational Neuroscience (NeuroEng 2018), University of Sydney, Sydney. 27-29 November 2018
12. **Breakspear M.** Computational Psychiatry The 38<sup>th</sup> Annual Scientific Meeting of the Australasian Neuroscience Society, Brisbane. 3-6 December 2018
13. **Bicker S.** Mercier S & Hubbard C A pilot project – dedicated occupational therapy advanced clinicians delivering personalised sensory interventions on adult inpatient mental health units. Occupational Therapy Australia NT-QLD Regional Conference, Surfers Paradise, Australia, 26-27 October 2018.
14. **Black F, Walford K, Ferris L, Beer N & Meurk C.** Understanding Insight: an exploratory study in a forensic psychiatric inpatient setting. West Moreton HHS Research Day Program. Brisbane
15. **Cartwright H & Turrell P.** Group supervision with graduates: A three year experience. ACMHN 44<sup>th</sup> International Mental Health Nursing Conference, Cairns, Australia, 24-26 October 2018
16. **Clugston B, Green B, Phillips J, Samaraweera Z. Ceron J, Meurk C & Heffernan E.** Fitness for Police Interview. Forensic Advanced Trainees Lecture Series. Wacol
17. **Connell M & Scott JG.** Voices and visions in the general population: exploring the influence of appraisals on distress. Australian Psychosis Conference, Sydney, Australia. 14-16 September 2018
18. **Connell M.** Beyond medication: Supporting people to live with their voices. Queensland Faculty of Child and Adolescent Psychiatry Conference, Brisbane. 8 September 2018

### Oral Presentations: (cont):

19. **Daglish MRC.** The Psychiatrist as accidental drug dealer. Australian & New Zealand Association of Psychiatry, Psychology & Law Qld Branch Annual Dinner, Brisbane, May 2018
20. **Daglish MRC.** Drugs of Abuse and Human Brain. DABIT-CL Connect Conference, Brisbane June 2018
21. **Daglish MRC.** An addiction psychiatry perspective on prescription opioids. Faculty of Pain Medicine Consultative Forum. Melbourne, June 2018
22. **Daglish MRC.** Rubin's Vase: treating alcohol and mental health co-morbidity. Lundbeck Institute: Schizophrenia Weekend Seminar. Melbourne, August 2018
23. **Daglish MRC.** Pregabalin & Opioids: Lethal Interaction? Focus on Pain Group, Pain Conference, Brisbane October 2018
24. **Daglish MRC.** Opioid Replacement Therapy & Pain: Addiction Psychiatry. Medicines Management 2018, 44<sup>th</sup> SHPA National Conference. Brisbane, Nov 2018
25. **Daglish MRC.** Optimising Treatment. Individior Sponsored Seminar. APSAD Conference, Auckland, New Zealand. 4-7 November 2018
26. **Dale P.** Indigenous Mental Health Intervention Program. June 2018. Statewide Clinical Networks' Combined Forum
27. **Dalton J.** Eating Disorders in Acute Care: Empowering Enrolled Nurses. Enrolled Nurses – Acute Care Conference, Brisbane, August 23-24, 2018
28. **Dalton J.** The diet that triggered an eating disorder? Discussing diet and exercise safely. Linking Diet with Disease AUSMED Conference, Brisbane June 18-19, 2018
29. **Dalton J.** The National Agenda for Eating Disorders. The Australian College of Mental Health Nurses Queensland Branch Therapy Bytes Workshop, Brisbane July 21, 2018
30. **Dark F, Scott JG, Baker A, Parker S, Gordon A, Newman, E., Gore-Jones, V., Saha, S., Lim, C. C. W. and Penn, D.** (2018). Randomized controlled trial of social cognition interaction training. Royal Australian and New Zealand College of Psychiatrist Congress, Auckland, 15 May 2018
31. **Davidson F.** Results of the national mental health court liaison services benchmarking project. NHMRC Centre for Research Excellence in Offender Health Annual Symposium. Sydney
32. **Davidson F, Perrin M, Clugston, B.** National Prison Mental Health Service Benchmarking Report. Prison Mental Health Service State-wide Forum. Brisbane. 21 June 2018
33. **Duncan S.** Out of the Clinic and Into the Paddock: Equine Psychotherapy. ACMHN's 16<sup>th</sup> Consultation Liaison Special Interest Group/7<sup>th</sup> Perinatal and Infant Mental Health Special Interest Group Annual Conference, Brisbane. 7 June 2018
34. **Ferris L, Meurk C, Waterson E, Heffernan E.** Understanding and enhancing first responses to suicide crises. In Ferris (Chair), 'Risk, mental health and social identity: New evidence from the lab to the field', Symposium. Society of Australasian Social Psychologists. Wellington, New Zealand. 5-7 May 2018
35. **Flaws D.** Reducing the burden of mental health – the role of doctors and research. AAHMS Clinical Sciences Forum: Foundations and Frontiers. Brisbane, 23 August 2018
36. **Flaws D.** Predicting delirium. Junior Doctor Conference, Brisbane, 24 June 2018
37. **Fleming C & Doyle C.** Carer Peer Mentor Support for Families Affected by Eating Disorders: establishment of a state-wide program in Queensland. Australia & New Zealand Academy for Eating Disorders Conference: Courageous Conversations: Furthering Understanding Embracing Change. Melbourne, Australia. 3-4 August 2018
38. **Gardiner G, Bellair R, Hannigan A & Patterson S.** Evaluation of Weight and BMI Data for Queensland Eating Disorder Service (QuEDS). ANZAED Conference. Melbourne, Australia, 3-4 August 2018
39. **Ghosh S, Bruxner G & Kothari A.** A tale of two teenage pregnancies: Medico-Legal and ethical complexities around termination of pregnancy for under 14 year old women. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress. Auckland, New Zealand. May 13-17,2018
40. **Green B.** Treatment pathways among persons found not criminally responsible. 38<sup>th</sup> Australian and New Zealand Association of Psychiatry, Psychology and Law Annual Congress. Tasmania, Australia. 21-24 November 2018
41. **Hall K, Hatch K & Newell J.** Listening to learn: A unique opportunity to read, reflect and respond. ACMHN 44<sup>th</sup> International Mental Health Nursing Conference, Cairns, Australia, 24-26 October 2018
42. **Hatch K & Boyle C.** Skill check your clinical supervision practice. Pre-conference workshop. Australian Clinical Supervision Conference, Melbourne, Australia. 22-24 May 2018
43. **Hatch K.** Quality or quantity? The Challenges of supporting access to nursing clinical supervision within a large metropolitan mental health service. Australian Clinical Supervision Conference, ANMF House Melbourne Victoria, 22-24 May 2018
44. **Heffernan E, Bosley E, Meurk C, Ferris L, Waterson E.** et al., Partners in Prevention: Understanding and Enhancing First Responses to Suicide Crises: People, Evidence, Services. Council of Ambulance Authorities Conference. Auckland, New Zealand 6-9 August 2018
45. **Higgins N, Dart N & Fawcett L.** Implementing Safe Wards: what factors should be considered? 2018 MNHHS Nursing and Midwifery Conference Leadership: a Voice at all Levels, Brisbane
46. **Hunt J.** Methamphetamine. Advanced practice nursing and vulnerability: a seminar for nurse practitioners and advanced practice nurses. Australian College of Nursing
47. **Kelman P & Boyle C.** Looking back-moving forward. Australian Clinical Supervision Association Inaugural Conference, Melbourne 22-24 May 2018.
48. **Kothari A, Williams S, Ballard E & Bruxner G.** Prescribing Antidepressants and Anxiolytic Medication To Pregnant Women: The Perception Of Risk Of Foetal Teratogenicity Among Australian Specialists And Trainees. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress. Auckland, New Zealand. May 13-17, 2018



## Oral Presentations: (cont):

49. **Louttit T.** Diabetes and Eating Disorders. AUSMED Nurses Conference, Brisbane, May 29, 2018
50. **Mackle T.** Anti-what? Common psychotropic prescribing practices. Australian College of Nurse Practitioners Prescribing Symposium, Brisbane, Australia. 16 February 2018
51. **Mackle T.** Anti-what? Common psychotropic prescribing practices. Australian College of Nurse Practitioners Prescribing Symposium Sydney, Australia. 11 May 2018
52. **Matthews K,** Hill J, Jeffrey S, Patterson S, Davis A, Ward W, Palmer M & Capra S. A higher energy refeeding protocol does not increase adverse outcomes in adult patients with eating disorders. Dietitians Association of Australia. May 2018
53. **Matthews K,** Hill J, **Jeffrey S,** **Patterson S,** Davis A, **Ward W,** Palmer M, Capra S. Medically compromised, extremely underweight adult patients with eating disorders can be safely refeed using a higher energy feeding protocol. Australia and New Zealand Academy for Eating Disorders National Conference, Melbourne. August 2018
54. **Meurk C.** Partners in Prevention: Understanding and Enhancing First Responses to Suicide Crisis Situations. Queensland Centre for Mental Health. Wacol. Brisbane. 31 May 2018
55. **Meurk C,** **Heffernan E,** **Ferris L & Waterson E.** Partners in Prevention: Understanding and Enhancing First Responses to Suicidal Crisis Situations. West Moreton HHS Research Day Program. Brisbane. 6 September 2018
56. **Mitchell, M.** Anything is possible: increasing the odds in forensic therapy part 1. 38<sup>th</sup> Australian and New Zealand Association of Psychiatry, Psychology and Law Annual Congress. Tasmania, Australia. 21-24 November 2018.
57. **Moss K,** **Meurk C,** **Steele M & Heffernan E.** The Physical Health, Activity and Self-Identified Barriers to Exercise of Patients with Severe Mental Illness Residing in a Secure Facility. West Moreton HHS Research Day Program. Brisbane. 6 September 2018
58. **Moudgil V.** Closing the gap for People with Mental Illness. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress. Auckland, New Zealand. May 13-17, 2018
59. **Moudgil V.** Reproductive and sexual health in women with mental disabilities. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress, Auckland, New Zealand, May 13-17, 2018
60. **Moudgil V,** Nolan-Isles F & Stockwell A. Atlas – Working with Community Mental Health. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress, Auckland, New Zealand, May 13-17, 2018.
61. **Perera C,** **Bruxner G & Patterson S.** Use of valproate and carbamazepine in childbearing age women with bipolar affective disorder. Routine practice in a large Australian Public mental health service district. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress. Auckland, New Zealand. May 13-17, 2018
62. **Perera C,** **Bruxner G & Patterson S.** Safe and on time: an Audit of Lithium prescribing practices across a major Australian mental health service district. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress. Auckland, New Zealand. May 13-17, 2018
63. **Scott JG.** Rational prescribing of antipsychotic medication in young people with early psychosis. Tasmanian Trainees in Psychiatry, Hobart, Australia. 19 September 2018
64. **Scott JG.** Testing for antineuronal antibodies in patients with psychosis. Statewide Senior Leadership Meeting for the Qld Mental Health, Alcohol and other Drug Services, Brisbane, 13 September 2018
65. **Scott JG.** A systematic review and critical appraisal of the association between prescribed stimulants for ADHD and risk of psychosis. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress. Auckland, New Zealand. May 13-17, 2018
66. **Scott JG.** Anti-neuronal antibodies and psychosis: what psychiatrists need to know. Royal Australian and New Zealand College of Psychiatrist Congress, Auckland, New Zealand. May 13-17, 2018
67. **Scott JG,** Kesby JP, Thio S & Erskine HE. A systematic review and critical appraisal of the association between pharmacotherapy for ADHD and risk of psychosis. Royal Australian and New Zealand College of Psychiatrist Congress, Auckland, New Zealand. May 13-17, 2018
68. **Scott JG.** The prevalence and treatment outcomes of anti-neuronal antibody positive patients admitted with first episode of psychosis. 14<sup>th</sup> International Congress of Neuroimmunology, Brisbane. 27-31 August 2018
69. Suetani S, Mamun A, Williams G, Najman J, McGrath J & **Scott JG.** Longitudinal association between physical activity engagement during adolescence and mental health outcomes in young adults: A 21-year birth cohort study. Royal Australian and New Zealand College of Psychiatrists Congress, Auckland, New Zealand. May 13-17, 2018
70. Suetani S, Mamun A, Williams G, Najman J, McGrath J & **Scott JG.** The association between adolescent psychopathology and subsequent physical activity in young adulthood: a 21-year birth cohort study. Royal Australian and New Zealand College of Psychiatrists Congress, Auckland, 17 May 2018
71. Thomas H, Ahmabadi Z, Najman J...**Scott JG.** Adolescent bullying victimisation and risk of intimate partner violence in early adulthood: A prospective follow-up study. 23<sup>rd</sup> World Congress of the International Association for Child and Adolescent Psychiatry and Allied Professionals, Prague. 23-27 July 2018
72. Thomas H, Erskine H, Santomauro D, Ferrari A, Whiteford A & **Scott JG.** The global prevalence of bullying victimization: A systematic review and meta-analysis. Society for Mental Health Research, Noosa, 29 November 2018
73. **Waterson E,** **Heffernan E,** **Steele, M.** et al. Translating Research into Practice: the Indigenous Mental Health Intervention Program. West Moreton HHS Research Day Program. Brisbane. 6 September 2018
74. **Wells J.** Anything is possible: increasing the odds in forensic therapy part 2. 38<sup>th</sup> Australian and New Zealand Association of Psychiatry, Psychology and Law Annual Congress. Tasmania, Australia. 21-24 November 2018
75. White A, **Scott JG,** Thomas H. Chronic physical illness in childhood and adolescence and the association with mental illness. Faculty of Child and Adolescent Psychiatry Conference of the Royal Australian and New Zealand College of Psychiatrists, Perth, Australia. 17 October 2018

### Oral Presentations: (cont):

76. White A, **Scott JG** & Thomas H. Chronic physical illness in childhood and adolescence and the association with mental illness. Royal Australian and New Zealand College of Psychiatrists Congress, Auckland. 17 May 2018
77. **Williams S, Ballard E, Bruxner G** & Kothari A. Prescribing antidepressants and anxiolytics to pregnant women: the perception of risk of fetal teratogenicity amongst Australian specialists and trainees. Royal College of Obstetricians and Gynaecologists World Congress, March 2018
78. **Wright L**, Bennett S & Meredith P. Sensory Modulation approaches in mental health care: investigating the factors influencing implementation in inpatient mental health units. Occupational Therapy Australia NT-QLD Regional Conference, Surfers Paradise, Australia, 26-27 October 2018
79. **Wright L**, Bennett S & Meredith P. Sensory Modulation More than Materials. Investigating the factors influencing implementation in inpatient mental health units. 12<sup>th</sup> National Towards Elimination of Restrictive Practice Forum, Hobart, Tasmania. 7-8 November 2018.

### Poster Presentations:

80. Carr PJ, **Higgins NS**, Cooke ML, Mihala G & Rickard CM. Vascular access specialist teams for insertion of and prevention of vascular access device failure: a Cochrane Systematic Review. 5<sup>th</sup> World Congress on Vascular Access, Copenhagen Denmark, June 20-22, 2018
81. **Daglish MRC**, Reilly S & Hayllar J. Do Dependent Codeine Users Need Lower Doses of Buprenorphine Maintenance? ASPAD, Auckland, New Zealand. 4-7 November 2018
82. **Dalton J**. A hopeful and helpful letter. Nursing and Midwifery Leadership Conference, Brisbane. 1 March 2018
83. **Ghosh S**. Tale of Two Pregnancies: Medico-legal and Ethical complexities around Termination of Pregnancy for under 14. RCOG World Congress 2018, Singapore. 21-24 March 2018
84. Hielscher E, DeVlyder J., **Connell M**, Hasking P, Martin G, & **Scott JG**. Do hallucinations predict the transition from suicidal thoughts to attempts? Results from an Australian longitudinal cohort study. Schizophrenia International Research Society, Florence, Italy. 4 April 2018
85. **Higgins NS, Robinson G**, Burke A, Anderson J & Curtin D. Screening for sleep disordered breathing in a mental health population. ACMHN 44<sup>th</sup> International Mental Health Nursing Conference, Cairns, Australia, 24-26 October 2018
86. Koussis N ...**Breakspear M**, Guo C. Dynamics on Epileptic Networks Informed by Stereotactic EEG, Imaging @ Brisbane Conference, Brisbane Convention Centre, Brisbane
87. Lv J, van der Meer J, **Breakspear M**, Guo C. N-way Decomposition: Towards Linking Concurrent EEG and fMRI Analysis during Natural Stimulus, Imaging @ Brisbane Conference, Brisbane Convention Centre, Brisbane
88. Martin R, **Ng G, Brewster C, Bruxner G** & Kothari A. Drowning Our Sorrows: Clinical, Ethical and Personal Considerations of Termination In Alcohol-affected Pregnancy. Royal College of Obstetricians and Gynaecologists World Congress, March 2018
89. **Matthews K**, Hill J, Jeffrey S, **Patterson S, Davis A, Ward W**, Palmer M & Capra S. A higher energy refeeding protocol does not increase adverse outcomes in adult patients with eating disorders. RBWH Healthcare Symposium. September 2018
90. **Matthews K, Hill J**, Jeffrey S, **Patterson S, Davis A, Ward W**, Palmer M & Capra S. A higher energy refeeding protocol does not increase adverse outcomes in adult patients with eating disorders. QLD Dietitian's Association of Australia Symposium. November 2018
91. **Perera C, Patterson S & Bruxner G**. Polypharmacy and Guidelines: An audit of prescribing patterns of psychotropics in a major Australian mental health services district. The Royal Australian and New Zealand College of Psychiatrists 2018 Congress. Auckland, New Zealand. May 13-17, 2018
92. Ryan A, **Scott JG** & Greer J. Anti-Muscarinic Acetylcholine Receptor Antibodies in Schizophrenia. 14<sup>th</sup> International Congress of Neuroimmunology, Brisbane, Australia. 27-31 August 2018
93. **Wilkinson N, Dart N & Crutchley C**. (2018). Implementing the Broset Violence Checklist to predict violence and aggression in the Psychiatric Emergency Department. ACMHN 44<sup>th</sup> International Mental Health Nursing Conference, Cairns, Australia, 24-26 October 2018.

### Other Communications and Outputs:

1. **Scott JG** <https://theconversation.com/what-should-i-do-if-my-child-is-a-cyberbully-90449>
2. Bramley S & **Baumgartner B** Flexible Housing Support for people with mental health disability. Parity, (2018) 31(8), 52
3. **Baumgartner B**. Taking it to the Streets: Psychiatric care by videoconference. Parity, (2018) 31(8), 33
4. **Bushing B** (2018) Service responses to homelessness: Jane in the concrete jungle. Parity, (2018) 31 (8), 39
5. **Myers E**. Breaking the cycle of homelessness for people who have serious mental illness. Parity, (2018) 31(8) 43
6. Erskine H, **Scott JG**, Enright M & Whiteford H. (2018). "Multi-million-dollar research project to target adolescent mental health". Press release by University of Queensland News (4 Dec). <https://www.uq.edu.au/news/article/2018/12/multi-million-dollar-research-project-target-adolescent-mental-health>
7. **Scott JG**. (2018). "ADHD children should be screened for psychotic symptoms, study suggests". Radio National ABC Health Report (21 May)
8. **Scott JG**. (2018). "ADHD Drugs Under a Cloud". Courier Mail, Queensland Times, Gladstone Times, Daily Mercury News, Newsmail, Gympie Times, Toowoomba Chronicle, Morning Bulletin, Lismore Northern Star, Warwick Daily News, The Daily Examiner, Fraser Coast Chronicle (17 May)
9. **Scott JG**. (2018). "Bullying researcher takes out prestigious health award". Queensland Times, Gladstone Times, Daily Mercury News, Newsmail, Gympie Times, Toowoomba Chronicle, Morning Bulletin, Lismore Northern Star, Warwick Daily News, The Daily Examiner, Fraser Coast Chronicle (22 May)
10. **Scott JG**. (2018). "Call for more care for kids with ADHD treatments". Morning Bulletin Rockhamptom (17 May)

## Other Communications and Outputs: *(cont)*

11. **Scott JG.** (2018). "Medical researchers fear ADHD drugs could lead to psychotic events". Brisbane Courier Mail (16 May)
12. **Scott JG.** (2018). "Psychotic Episodes Quadruple Suicide Risk". Medscape Psychiatry (4 December)
13. **Scott JG.** (2018). "Warning on Drugs for ADHD". Geelong Advertiser (17 May)
14. **Scott JG.** (2018). "What to do if your child is a cyberbully?". ABC Statewide Drive NSW, Interview with Fiona Wyllie (6 Feb)
15. **Scott JG,** Matuschka L, Niemela S, Miettunen J, **Emmerson B** & Mustonen A. (2018). "Smokers at greater risk of schizophrenia and psychotic disorders". News medical Life Sciences (21 Nov). <https://www.news-medical.net/news/20181121/Smokers-at-greater-risk-of-schizophrenia-and-psychotic-disorders.aspx>
16. **Scott JG,** Matuschka L, Niemela S, Miettunen J, **Emmerson B** & Mustonen A. (2018). "Smoking could increase risk of schizophrenia, psychosis". Health Minute (24 Nov). <https://healthminute.org/2018/11/smoking-could-increase-risk-of-schizophrenia-psychosis/>
17. Thomas H & **Scott JG.** (2018). "What should I do if my child is a cyberbully?". The Conversation. First published 6 Feb, republished on ABC and SBS. <https://theconversation.com/what-should-i-do-if-my-child-is-a-cyberbully-90449>.

### Reports:

1. **Clugston B, Perrin M, Davidson F, Heffernan E** & Kinner S. (2018). Prison Mental Health Services: A comparison of Australian Jurisdictions. [www.qcmhr.uq.edu.au](http://www.qcmhr.uq.edu.au) [https://qcmhr.uq.edu.au/wp-content/uploads/2018/06/PMHS\\_NATIONAL\\_SURVEY\\_FINAL\\_REPORT-23052018.pdf](https://qcmhr.uq.edu.au/wp-content/uploads/2018/06/PMHS_NATIONAL_SURVEY_FINAL_REPORT-23052018.pdf)
2. **Davidson F.** (2018) Benchmarking for Australian Mental Health Court Liaison Services 2017. <https://offenderhealth.net.au/news/new-benchmarking-australian-mental-health-court-liaison-services-2017-final-report>. Commissioned report
3. Doran C, Kinchin I & **Meurk C.** (2018) Developing an evaluation framework for suicide crisis response interventions. Report commissioned by Partners in Prevention, Metro North Mental Health Services
4. **Patterson S & Donovan S** (2018) Report on service use and outcomes. Commissioned report. Aftercare, Australia
5. **Scott JG,** Matuschka L, **Patterson S.** (2018) Preventing mental illness and promoting mental health in Australian Children. Commissioned Report for The Poppy Centre.



**NURSING AND**

**MIDWIFERY SERVICES**



# Nursing and Midwifery Services

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**Adj. Prof. Alanna Geary**  
**Executive Director**  
Nursing and Midwifery Services  
MNHHS

Nursing and Midwifery services are a shining example of the effort and commitment that is necessary to ensure high quality research outcomes. Our ongoing focus is to strengthen and grow a research culture, ensuring sustainability into the future. This is achieved through our mentorship opportunities including the employment of research nurses on clinical trials and studies; as well as the one-on-one ‘drop in’ research support to help nurses undertake their own research and work alongside world class researchers at Royal Brisbane and Women’s Hospital.

Nursing and Midwifery research continues to have a strong focus on improving patient outcomes by producing best evidence to support healthcare delivery. Nurse-led research projects conducted at the RBWH and in partnership with our collaborating institutions continue to shape evidence-based practice both nationally and internationally. This important research has been published in several high-quality nursing and medical journals, including the Lancet, the Journal of Hospital Medicine, and the Cochrane Library.

2018 saw the retirement of Professor Joan Webster, who has been the Director, Nursing Research since 1991. We would like to express our sincere gratitude to Joan for success in providing a strong foundation for our positive nursing and midwifery research culture. As a result of Joan’s leadership, mentorship, positive role modelling and education, many nurses and midwives have begun their own academic and research pursuits.

2018 was a fine example of the ongoing efforts of our researchers, and I am sure 2019 will continue to expand and embed research within Nursing and Midwifery. As the Executive Director Nursing and Midwifery, I would like to congratulate all our dedicated Nursing and Midwifery Researchers and all of those who assisted in making what we have achieved possible in 2018. I look forward to the next exciting chapter of our wonderful journey.



## Nursing and Midwifery Research Centre

We have again completed a very successful year in terms of research outputs with 26 published papers, 14 conference presentations and a total of \$1,312,107.46 in competitive grant funding. We currently have 37 active research projects, three of which are NHMRC funded (the Dressing trial, evaluating the effectiveness of negative pressure wound therapy on clean surgical wounds to prevent surgical site infection; and the PISCES trial, evaluating various central line dressings and devices to prevent catheter failure from any cause; and the ENCORE trial, Transforming nursing assessment in acute hospitals: A cluster randomised controlled trial of an evidence based core assessment protocol).

Research support is provided through the Evidence-Based Practice program; which continues to attract a great deal of backing from nurse/midwifery managers; who need to adjust rosters to enable staff to be released for 1-day/week for 12 weeks. Furthermore, the new 'mentoring' program, offers one-to-one research support for nurses and midwives who are keen to undertake a research study or a practice improvement project. Support is provided for the full spectrum of research activity, from refining a research idea into a researchable question; literature searching; protocol development; research design; obtaining Ethics approval; data collection and analysis; and publishing. A total of 19 higher research-degree students are being supervised, primarily by Professors Fiona Coyer and Theresa Green.

Staff from the unit have also won numerous awards for research excellence this year. For example, Professors Fiona Coyer and Theresa Green won QUT Vice Chancellors awards for Excellence for their research professorial units; Nicole Marsh won the Australian College of Nursing's Research award and the Menzies Health Institute Queensland 'Excellence in Publishing Award'. Other awards included 'Outstanding Leadership Award' (Professor Joan Webster); and the Cecelia Brazil Research Award (Nicole Marsh and Joan Webster).

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Hajar Alasmari	PhD, Queensland University of Technology (2012-2018)	Examining Intensive Care Nurses' Clinical decision-making associated with acute kidney injury and continuous renal replacement therapy in Saudi Arabia	Prof Ann Bonner, <b>Prof Fiona Coyer</b>
Sonia Hines	PhD, Queensland University of Technology	An educational intervention to improve nurses' research literacy	Prof Joanne Ramsbotham, <b>Prof Fiona Coyer</b>
Sandra Johnston	PhD, Queensland University of Technology	Effectiveness of high fidelity simulation as a teaching tool in undergraduate nursing education	<b>Prof Fiona Coyer</b> , Prof Robyn Nash
<b>Lizanne Dalglish</b>	PhD, Queensland University of Technology	The role of microcirculatory dysfunction and skin breakdown in the critically ill	<b>Prof Fiona Coyer</b> , <b>Dr Jill Campbell</b> , Dr Kathy Finlayson, <b>Prof Andre VanZundert</b>
Adrianna Hada	PhD, Queensland University of Technology (2017- 2021)	Transforming patient outcomes through improved and effective nursing clinical handover	<b>Prof Fiona Coyer</b> , Dr Leanne Jack
Paul Jarrett	PhD, Queensland University of Technology (2017-2021)	Administration of antibiotics in the intensive care unit	<b>Prof Fiona Coyer</b> , Prof Sam Keogh, Prof Jason Roberts
<b>Anthony Batterbury</b>	PhD, Queensland University of Technology (2018-2021)	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	<b>Prof Fiona Coyer</b> , A/Prof Clint Douglas
Hannah Rheault	Doctor Health Science, Queensland University of Technology (2014-2019)	Examining the health literacy and chronic disease self-management of remote Aboriginal Australians: a mixed method study	Prof Ann Bonner, <b>Prof Fiona Coyer</b>
Leanne Stone	Doctor Health Science, Queensland University of Technology (2014-2019)	Comparing "Magnet" attributes in nursing between Australia and the United States	<b>Prof Fiona Coyer</b> , Prof Ray Chan, Prof Alexandra McCarthy
<b>Bryan Gregory</b>	PhD, Queensland 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	<b>Prof Fiona Coyer</b> , Prof Jason Roberts, Prof Ann Bonner
Jessica Ingleman	Masters of Applied Science (Research), Queensland University of Technology (2016-)	Exploring tissue reperfusion in two body positions and varied load periods in critically ill patients (EXTREME 2 pressure study)	<b>Prof Fiona Coyer</b> , Dr Christina Parker

## Supervised Post-Graduate Research Students (cont)

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
David McIntyre	PhD, Queensland University of Technology (2016-)	Developing and validating haemodialysis nurse-sensitive indicators	Prof Ann Bonner, <b>Prof Fiona Coyer</b>
Tain Lloyd	Master of Applied Science (Research), Queensland University of Technology (2016-)	Investigation of Chronic Kidney Disease and Stroke Development	Prof Ann Bonner, <b>Prof Theresa Green</b> , Dr. Louise Purcell
Eric Tanlaka	PhD, University of Calgary (2016-)	The impact of wait times on outcomes of stroke rehabilitation	Prof Kathryn King-Shier, <b>Prof Theresa Green</b>
<b>Cheryl Blaber</b>	Masters of Applied Science (Research), Queensland University of Technology	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	<b>Prof Theresa Green</b> , Dr. John Rosenburg, Dr. Jenny Fox
Pauline Nicholas	Masters of Applied Science (Research), Queensland University of Technology	Using brain training to improve cognition of patients on dialysis	<b>Prof Ann Bonner</b> , <b>Prof Theresa Green</b> , Dr. Louise Purcell
Lan Van Huong	Doctor of Philosophy	Exploring of family support for people receiving haemodialysis therapy in Vietnam	Prof Ann Bonner, <b>Prof Theresa Green</b>
Nicole Marsh	PhD, Griffith University	Prevention of peripheral intravenous catheter failure	Prof Claire Rickard, Prof Marie Cooke, <b>Prof Joan Webster</b>
Amanda McKie	MPhil, QUT	Sexual dysfunction in patients with CKD	<b>Prof Ann Bonner</b> , <b>Prof Theresa Green</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Emily Larsen	Project Manager/ Honorary Research Fellow	Numerous Vascular Access Trials	Griffith University (2017-2020)
Julie Flynn	Project Manager	Numerous Vascular Access Trials	Griffith University (2011 – current)
Claire Rickard	Honorary Research Fellow	Numerous Vascular Access Trials	Griffith University (2017-2020)
Amy Spooner	Honorary Research Fellow	Cancer Care Research	QUT (2017-2020)
Amanda Ullman	Honorary Research Fellow	Numerous Vascular Access Trials	Griffith University (2017-2020)
Anne Bonner	Honorary Research Fellow	Numerous Renal projects – please refer to Internal Medicine Research Report	QUT (2017-2020)
Jo Wu	Honorary Research Fellow	Cardiac research	University of Sunshine Coast (2017-2020)
Samantha Keogh	Honorary Research Fellow	Numerous Vascular Access Trials	QUT (2016-2019)
Amanda Corley	Honorary Research Fellow	Critical Care Research; Vascular Access Trials	Griffith University (2017-2020)
Carol Reid	Honorary Research Fellow	No current active projects with Nursing Services	Griffith University (2016-2019)
Gillian Ray-Barruel	Honorary Research Fellow	Vascular Access Trials	Griffith University (2018-2021)
Carol Windsor	Honorary Research Fellow	Transforming nursing assessment in acute hospitals: A cluster randomised controlled trial of evidence-based nursing core assessment	QUT (2016-2019)
Monica Stankiewicz	Honorary Research Fellow	No current active projects with Nursing Services	Redcliffe Hospital (2017-2020)
Sonya Osborne	Honorary Research Fellow	Clinically-indicated replacement versus routine replacement of peripheral venous catheters – a Cochrane Systematic Review	QUT (2016-2019)

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions (cont)

Name	Type of Fellowship	Research Program	University (years)
Tiffany Harris-Brown	Honorary Research Fellow	Infection Control	UQ (2018-2021)
Karen New	Honorary Research Fellow	Women's and Newborn Services	UQ (2018-2021)
Jessica Ingleman	Project Manager	The effect of time spent in a position on critically ill patient's skin: the EXTREME pressure 2 study. Extreme pressure study: exploring pressures, tissue reperfusion and body positioning – a pilot evaluation among critically ill patients	QUT (2014-2018)
Jane-Louise Cook	Project Manager	Efficacy of nasogastric and endotracheal tube securement devices, preventative dressings and topical skin applications for reducing device-related pressure injuries in intensive care patients; the REMEDy study, a randomised controlled trial. Translating evidenced-based pressure injury prevention into the intensive care environment: the SUSTAIN trial	QUT (2014-2018)
Anna Doubrovsky	Project Manager	Efficacy of Incontinence-Associated Dermatitis interventions for critically ill patients in intensive care; the Distinct pilot randomised control trial.	QUT (2016-2018)
Fiona Coyer	Visiting Professor	Institute for skin integrity and infection prevention	University of Huddersfield (2016 – current)
Theresa Green	Adjunct Professor, Visiting Research Fellow, Fellow of the American Heart Association	Neurology/Neurosurgical Nursing Research	<ol style="list-style-type: none"> <li>1. University of Calgary, Faculty of Nursing (2015-present) and Hotchkiss Brain Institute Alberta Health Services, Department of Clinical Neurosciences (2013 – present)</li> <li>2. Gold Coast University Hospital (2017-2020)</li> <li>3. AHA (2017 – current)</li> </ol>
Joan Webster	Adjunct Associate Professor, Professor, Associate Professor, Honorary Visiting Professor	Nursing Research	<ol style="list-style-type: none"> <li>1. School of Nursing, UQ 2001 – current</li> <li>2. School of Nursing and Midwifery, Griffith University</li> <li>3. School of Nursing and Midwifery, University of Queensland</li> <li>4. The University of Manchester</li> </ol>
Alanna Geary	Adjunct Associate Professor, Adjunct Associate Professor, Adjunct Professor	Nursing Research ENCORE Trial	<ol style="list-style-type: none"> <li>1. School of Nursing Queensland University of Technology (2010 – current)</li> <li>2. School of Nursing and Midwifery Griffith University (2015 – current)</li> <li>3. School of Nursing and Midwifery University of Queensland (2017 – current)</li> </ol>
Robyn Fox	Adjunct Associate Professor, Adjunct Associate, Professor Clinical Associate Professor	Nursing Research ENCORE Trial	<ol style="list-style-type: none"> <li>1. School of Nursing Queensland University of Technology (2009 – current)</li> <li>2. School of Nursing and Midwifery University of Queensland (2017 – current)</li> <li>3. Australian Catholic University (2012 – current)</li> </ol>
Catriona Booker	Clinical Associate Professor, Clinical Fellow	Nursing Research ENCORE Trial	<ol style="list-style-type: none"> <li>1. Queensland University of Technology (2018 – current)</li> <li>2. Australian Catholic University (2012 – current)</li> </ol>



## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Prof Fiona Coyer (Nursing Research and Critical Care)	Jill Campbell (Skin Integrity)	Efficacy of incontinence-associated dermatitis interventions for critically ill patients in intensive care; The Distinct pilot randomised control trial
Prof Fiona Coyer (Nursing Research and Critical Care)	Tony Parker (QUT), Jill Campbell (Skin Integrity), Anna Doubrovsky (QUT)	BiocheMical characteristics and hEaling rates of medical device-related pressure Injuries (the MEDICI study); a prospective observational pilot study
Prof Fiona Coyer (Nursing Research and Critical Care)	Stacey Watts (ICU), Dr Jayesh Dhani (ICU), Prof Samantha Keogh, QUT	Intensive Care Point of Care Testing for Arterial Gas Analyses: the INCEPT audit
Prof Theresa Green (Nursing Research and Neuro)	Tara Hormann (Stroke), Dr Tony Parker (QUT), Dr Jonathon Peake (QUT), A/Prof Gregory Bix (USA)	Characteristics of physical activity required to elevate circulating neuroprotective LG3 peptide as a novel stroke therapy
Prof Theresa Green (Nursing Research and Neuro)	Dr David Rosengren (Emergency Medicine), Kevin Clarke (MNHHS Nsg Admin), Kerrie Gillespie (QUT), Bernd Ploderer (QUT)	Better Individualised Stroke Care Using Technology (BISCUT)
Prof Theresa Green (Nursing Research and Neuro)	Dr Anna Farrell (RBWH/SLP), Tara Hormann (RBWH/Stroke), Jennyfer Tayler (QUT), Bernd Ploderer (QUT)	An image-based tablet app to support communication of daily activity scheduling between patients with post-stroke aphasia, family and hospital staff
Theresa Green (Nursing Research and Neuro)	Bernd Ploderer (QUT), Anna Farrell (Speech Pathology), Tara Hormann (Neurology)	Aphasia Communication App
Theresa Green (Nursing Research & Neuro)	Andrew Wong (Internal Medicine), Sandy Jamieson (Internal Medicine)	Post-acute NP-led stroke service delivery model: managing residual neurological issues and multiple chronic conditions post discharge – a pilot project
Theresa Green (Nursing Research and Neuro)	B Ploderer (QUT)	StrokeAssist aphasia app evaluation
Nicole Marsh (Nursing Research)	Prof Joan Webster (Nursing Research), Prof Claire Rickard (Griffith), Marie Cooke (Griffith), Emily Larsen (Griffith), Sue Cadigan (Surgical)	RELIABLE (RELIable Intravenous Access By Line Experts)
Nicole Marsh (Nursing Research)	Emily Larsen (Griffith), Sam Tapp (HITH), Prof Claire Rickard (Griffith)	Hospital In The Home (HITH) – Management of Peripherally Inserted Central Catheters a retrospective cohort study
Prof Joan Webster (Nursing Research)	Brigid Gillespie (Griffith), Wendy Chaboyer (Griffith), David Ellwood (Griffith), Helen Stapleton (UQ), Jennifer Whitty (UQ), Lukman Thalib (Kuwait University), Nicky Cullum (Uni of Manchester), Margarete Somerville (Nursing Research), Deborah Birthisel (Nursing Research)	Adding negative pressure to improve healing (the DRESSING trial)
Nicole Marsh (Nursing Research)	Claire Rickard (Griffith), Amanda Ullman (Griffith), Tricia Kleidon (LCCH)	Secure My Intravascular Line Effectively (SMILE)
Nicole Marsh (Nursing Research)	Joan Webster (Nursing Research), Amanda Ullman (Griffith), Gabor Mihala (Griffith), Marie Cooke (Griffith), Claire Rickard (Griffith)	Peripheral intravenous catheter failure and complications in adults: a systematic review and meta-analysis. (a study)
Joan Webster (Nursing Research)	Sonya Osborne (QUT), Claire Rickard (Griffith), Nicole Marsh (Nursing Research/Griffith)	Clinically indicated replacement versus routine replacement of peripheral venous catheters
Joan Webster (Nursing Research)	Paul Scuffham (Griffith), Monica Stankiewicz (Redcliffe Hospital), Wendy P Chaboyer (Griffith), Zhenmi Liu (Manchester Uni), Jo C Dumville (Manchester Uni), Gill Norman (Manchester Uni)	Negative pressure wound therapy for surgical wounds healing by primary closure

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Alison Mudge	Adrian Barnett (PAH), <b>Merrilyn Banks (RBWH)</b> , Ruth Hubbard (PAH), Prof Nick Graves (QUT), Dr Nancye Peel (UQ), Assoc Prof Kwang Lim (Uni of Melbourne), Dr Irene Blackberry (La Trobe Uni), <b>Prof Theresa Green (Nursing Research and Neuro)</b> , Prue McRae (UQ), <b>Jessica Suna (RBWH)</b> , <b>Adrienne Young (RBWH)</b>	Collaborative for Hospitalised Elders: Reducing the Impact of Stays in Hospital (CHERISH)
<b>Margot LeesonSmith, (Nutrition and Dietetics)</b>	<b>Prof Theresa Green (Nursing Research and Neuro)</b> , Adrienne Young (RBWH), Rebecca Moore (TPCH)	Implementation and evaluation of a multi-site acute stroke nutrition care pathway
Rohan Grimley (Nambour Hospital)	<b>Theresa Green (Nursing Research and Neuro)</b> , <b>Ingrid Rosbergen (RBWH)</b> , Dr Suzanne Keys, Dr Louise Gustafsson, Dr Eleanor Horton, Dr Benjamin Chen (Gold Coast Hospital), <b>Greg Cadigan (Health Improvement Unit)</b>	Building efficient and equitable pathways to and through rehabilitation in stroke
Kathleen Finlayson (QUT)	Helen Edwards (QUT), <b>Prof Fiona Coyer (Nursing Research and Critical Care)</b>	Validity of laser speckle contrast imaging for assessment of superficial perfusion in the lower limb of patients with vascular leg and foot ulcers
Stijn Blot (Ghent Uni Belgium)	Sonia Labeau (Ghent Uni Belgium), <b>Prof Fiona Coyer (Nursing Research &amp; Critical Care)</b> , Wendy Chaboyer (Griffith), Frances Lin (Griffith)	DecubICUs one-day point-prevalence study on pressure injuries in ICUs
Helen Edwards (QUT)	<b>Kerrie Coleman (Skin Integrity)</b> , Patricia Sinasac (TPCH), Kathleen Finlayson (QUT), <b>Prof Fiona Coyer (Nursing Research and Critical Care)</b> , Christina Parker (QUT), Jessica Schluter (TPCH)	Reducing the prevalence and severity of wounds through implementation of the Champions for Skin Integrity Model – Protecting Skin Integrity (PSI)
Claire Rickard (Griffith)	<b>Nicole Marsh (Nursing Research)</b> , Peter Carr (Fiona Stanley Hospital), Gavin Jackson (Fiona Stanley Hospital), Marie Cooke (Griffith), Marianne Wallis (Griffith)	Integrated versus nOn-integrated Peripheral inTravenous catheter. Which Is the most clinical and cost-effective system for peripheral intravenoUs catheter Management? (The OPTIMUM trial)
Prof Claire Rickard (Griffith)	Li Zhang (Griffith), <b>Prof Joan Webster (Nursing Research)</b> , Marie Cooke (Griffith), Peter Mollee (PAH), Alexandra McCarthy (PAH), Samantha Keogh (QUT), Cindy Mervin (Griffith), <b>Nicole Marsh (Nursing Research)</b>	Prevention of central venous catheter infection and occlusion by needleless connector design and disinfection in haematology-oncology patients
Prof Claire Rickard (Griffith)	A McCarthy (Griffith), Tricia Kleidon (LCCH), Emily Larsen (Griffith), Li Zhang (Gold Coast Uni), Amanda Ullman (Griffith), <b>Nicole Marsh (Nursing Research)</b> , Rachel Edwards (LCCH), Melissa Arneil (PAH)	Controlling device Occlusion and infection by Connector Design And decontamination (The COCOA pilot trial)
Emily Larsen (Griffith)	<b>Nicole Marsh (Nursing Research)</b> , <b>Nicole Gavin (Cancer Care)</b> , Julie Flynn (Cancer Care/Nursing Research), <b>Prof Joan Webster (Nursing Research)</b>	Cancer caRE: The risk factors of vEnous access failuRe (CareTaKER study)
Prof Claire Rickard (Griffith)	<b>Prof Joan Webster (Nursing Research)</b> , Raymond Chan (QUT), Peter Mollee (PAH), Geoffrey Playford (PAH), Li Zhang (Griffith), Andrew Hallahan (LCCH), Evan Alexandrou (Liverpool Hospital)	Peripherally InSerted CEntral catheter Securement: the PISCES Trial
Zena Moore (Royal College of Surgeons in Ireland, Dublin)	<b>Joan Webster (Nursing Research)</b>	Dressings and topical agents for preventing pressure ulcers
Rachael Bailey (Caboolture Hospital, ICU)	Alexis Tabah (Redcliffe Hospital, ICU), Manesh Ramanen (Redcliffe Hospital, ICU), <b>Prof Fiona Coyer (Nursing Research and Critical Care)</b>	Survey of family visiting in ICU – WELCOME– ICU Study
Kate Kynoch (Mater Hospital)	<b>Prof Fiona Coyer (Nursing Research &amp; Critical Care)</b> , Marian Mitchell (PAH/GU), Gary Von Dohren (Redcliffe Hospital, ICU)	IvES family visiting study
Nicole Gavin (Cancer care)	Amanda Ullman (Griffith), Tricia Kleidon (LCCH), <b>Nicole Marsh (Nursing Research)</b> , Emily Larsen (Griffith), Jill Campbell (Skin Integrity), Prof Claire Rickard (Griffith)	Estimating prevalence of impaired skin surrounding DevicEs: the EPISODE study
Julie Flynn (Cancer Care/ Nursing Research)	Samantha Keogh (QUT), Amanda Ullman (QUT), Lee Zhang (Gold Coast Uni), Prof Claire Rickard (Griffith)	Evaluating effective decontamination methods for needleless connectors: a pilot randomised control trial

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Colette McIntyre (Women's and Newborns Services)	Amanda Ullman (Griffith), Karen New (UQ), Donna Hovey (RBWH), Deanne August (Townsville Hospital), Patricia Smith (RBWH), Pieter Koorts (RBWH), Katie Foxcroft (RBWH), <b>Nicole Marsh (Nursing Research)</b>	NeOnatal Vascular Access (NOVA) study: an observational study of neonatal vascular access complications
Hal Rice, Laetitia de Villiers (Dept of Medical Imaging, GCUH)	<b>Theresa Green (Nursing Research &amp; Neuro)</b> , Jason Wenderoth & Andrew Cheung (Prince of Wales Hospital Sydney), Will McAuliffe & Tim Phillips (Sir Charles Gardner Hospital, Perth), Justin Whitley (RBWH), Maame Owusu (GCUH)	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
H Tuffaha (Griffith)	<b>Nicole Marsh (Nursing Research)</b> , J Byrnes (Griffith Uni), <b>Prof Joan Webster (Nursing Research)</b> , Nicole Gavin (Cancer Care Services), Marie Cook (Griffith Uni), Claire Rickard (Griffith Uni)	The cost of vascular access devices in public hospitals in Queensland
Clint Douglas	<b>Cojoint Associate Prof Clint Douglas (QUT &amp; MNHHS)</b> , Prof Sandy Middleton (ACU Sydney), Emeritus Professor Glen Gardner (QUT), Prof Liz McInnes (Sydney ACU), A/Prof Patrick Kelly (University of Sydney), A/Prof Rachael Morton (University of Sydney), A/Prof Carol Wondor (QUT), <b>Adj Prof Alanna Geary (RBWH, MNHHS)</b> , <b>Adj Prof Robyn Fox (RBWH)</b> , <b>Clinical Assoc Prof Catriona Booker (RBWH)</b>	Transforming Nursing Assessment in Acute Hospitals: a Cluster Randomised Controlled Trial of an Evidence Based Core Assessment protocol (the ENCORE Trial)

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Nicole Marsh (Nursing Research/Griffith)</b>	Australian College of Nursing Research Award	The National Nursing Forum, 28-30 August 2018
<b>Nicole Marsh &amp; Joan Webster et al. (Nursing Research/Griffith)</b>	The Cecilia Brazil Nursing Research Award	27 <sup>th</sup> Annual RBWH Healthcare Symposium
<b>Nicole Marsh (Nursing Research/Griffith)</b>	Menzies Health Institute Queensland, Excellence in Publication Award	Menzies Health Institute Queensland
<b>Prof Fiona Coyer (Nursing Research/Intensive Care Services)</b>	Vice-Chancellor's Award for Excellence	2018 Vice-Chancellor's Award for Excellence ceremony, Queensland University of Technology, 20 July 2018
<b>Prof Theresa Green (Nursing Research/Internal Medicine)</b>	Vice-Chancellor's Award for Excellence	2018 Vice-Chancellor's Award for Excellence ceremony, Queensland University of Technology, 20 July 2018
<b>Prof Joan Webster (Nursing Research)</b>	Health Services Implementation	27 <sup>th</sup> Annual RBWH Healthcare Symposium
<b>Prof Joan Webster (Nursing Research)</b>	Extraordinary Leadership Award	QuARRIES, RBWH
<b>Prof Joan Webster (Nursing Research)</b>	Service Line Award	QuARRIES, RBWH

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Claire Rickard, Maria Cooke, Amanda Ullman, <b>Nicole Marsh</b> , Joshua Byrnes, A Bulmer, J Schults, Tricia Kleidon	Nursing and Midwifery Research Centre	Griffith-BD Catheter Choice Coalition	MHIQ Capacity Grants Scheme	\$15,000	\$50,000 (2018-2020)
Ullman AJ, Bulmer A, Runnegar N, Kleidon T, Lee-Archer, Pearch B, August D. Al: Biles C, Byrnes J, Chopra V, Coulthard A, Ware R, <b>Marsh N</b> , <b>Peter Mollee</b> , Rickard C, Wallis M	Nursing and Midwifery Research Centre, Haematology and Oncology Department	Peripherally inserted central catheter innovation to reduce infections and clots: the PICNIC trial	NHMRC New Investigator Grant	\$20,000	\$706,582 (2018-2020)

## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Bryan Gregory, Dwarakanathan Ranganathan, Fiona Coyer</b>	Renal Medicine, Nursing and Midwifery Research Centre, Department of Intensive Care Services	The effects of renal replacement therapy on immunosuppressive drug concentrations	Royal Brisbane and Women's Hospital Foundation	\$20,000	\$40,000 (2018-2019)
<b>Jill Campbell, Judith Eddy, Andrea Garrett, Kerri Coleman, Maree Grier, Cara Masterson, Fiona Coyer</b>	Skin Integrity, Gynaecology Department, Gynaecology Oncology Department, Psychology Department, Physiotherapy Department, Nursing and Midwifery Research Centre	A multidisciplinary pre-operative optimisation care bundle for women undergoing vulval surgery; a feasibility study	Royal Brisbane and Women's Hospital Foundation	\$13,332.66	\$39,998 (2017-2019)
Claire Rickard, Marie Cooke, Amanda Ullman, <b>Nicole Marsh</b> , Gillian Ray-Barruel, Tricia Kleidon, V Chopra	<b>Nursing and Midwifery Research Centre</b>	IMAGINE – Innovative Michigan and Griffith International Network	MHIQ Capacity Grants Scheme	\$50,000	\$100,000 (2018-2019)
<b>Nicole Marsh, Julie Flynn</b> , Claire Rickard	<b>Nursing and Midwifery Research Centre, Cancer Care Services</b>	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 (ACN) Project Grant	\$15,000	\$30,000 (2018-2019)
Kathleen Finlayson, Helen Edwards, <b>Fiona Coyer</b>	Critical Care and Clinical Support Services	Validity of laser speckle contrast imaging for assessment of superficial perfusion in the lower limb of patients with vascular leg and foot ulcers	QUT Institute of Health and Biomedical Innovation Mid-Career Research Grant	\$9,554	\$9,554 (2018)
<b>Theresa Green, David Rosengren</b> , Kerrie Gillespie, Bernd Ploderer	Neurology, Emergency Medicine	<b>Better Individualised Stroke Care Using Technology (BISCUT)</b>	MNHHS Link Grant	\$85,000	\$170,000 (2018-2019)
<b>Theresa Green</b> , Margot Leeson-Smith, Adrienne Young, Rebecca Moore	Neurology, Nutrition and Dietetics	Implementation and evaluation of a multi-site acute stroke nutrition care pathway	Health Research Practitioner Scheme	\$26,059	\$26,059 (2018)
<b>Theresa Green</b> , Bernd Ploderer, Anna Farrell, Tara Hormann	Neurology, Speech Language Pathology	Aphasia Communication App	QPACT, MHealth	\$35,700	\$35,700 (2018)
<b>Nicole Marsh</b> , Emily Larsen, Sam Tapp, Claire Rickard	Nursing and Midwifery Research Centre	<b>Hospital In The Home (HITH)</b> – Management of peripherally inserted central catheters a retrospective cohort study	School of Nursing and Midwifery Research Capacity Building Seed Funding Grant Round 2018	\$5,500	\$5,000 (2018)
Amanda Ullman, Karen New, Donna Hovey, Deanne August, <b>Patricia Smith</b> , Pieter Koorts, <b>Katie Foxcroft, Nicole Marsh</b>	Neonatology Women's and Newborn Services Nursing and Midwifery Research Centre	<b>NeONatal Vascular Access (NOVA)</b> study: an observational study of neonatal vascular access complications	RBWH and RBWH Foundation Research Project Grant	\$35,338.80	\$35,338.80 (2018)
<b>Fiona Coyer</b> , Tony Parker, <b>Jill Campbell</b> , Anna Doubrovsky	Nursing and Midwifery Research Centre, Critical Care and Clinical Support Services, Skin Integrity Services, Queensland University of Technology	Biochemical characteristics and healing rates of medical device-related pressure Injuries (the MEDICI study); a prospective observational pilot study	Queensland University of Technology, School of Nursing Pilot Grant	\$30,000	\$30,000 (2018)
<b>Fiona Coyer, Stacey Watts, Jayesh Dhani</b> , Samantha Keogh	Nursing and Midwifery Research Centre, Critical Care and Clinical Support Services, Queensland University of Technology	Intensive care point of care testing for arterial gas analyses: the INCEPT audit	Queensland University of Technology, New Professor Grant	\$25,000	\$25,000 (2018)
<b>Theresa Green, Andrew Wong, Sandy Jamieson</b>	Nursing and Midwifery Research Centre, Neurology/Stroke, Internal Medicine	Post-acute NP-led stroke service delivery model: Managing residual neurological issues and multiple chronic conditions post discharge: a pilot project	HADPC – Queensland University of Technology and Institute of Health and Biomedical Innovation	\$25,000	\$25,000 (2018)

## 2018 Research Grants – Awarded (cont)

Investigators (RBWH staff in bold)	RBWH Research Groups/Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Theresa Green, B. Ploderer	Nursing and Midwifery Research Centre, Neurology/Stroke, Internal Medicine	StrokeAssist aphasia app evaluation	QPAC, DOH	\$35,700	\$35,700 (2018)
<b>Clint Douglas</b> , Sandy Middleton, Glenn Gardner Patrick Kelly, Rachael Morton, Elizabeth McInnes, Carol Windsor, <b>Robyn Fox</b> , <b>Catriona Booker</b> , <b>Alanna Geary</b>	QUT School of Nursing and Metro North Hospital and Health Service	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	NHMRC funding \$865,923	\$2.1M (2018-2020)

## 2018 Research Publications

### Journal Articles:

- Marsh N, Webster J, Larsen E**, Cooke M, Mihala G, Rickard C. Observational study of peripheral intravenous catheter outcomes in adult hospitalized patients: a multivariate analysis of peripheral intravenous catheter failure. *Journal of Hospital Medicine* 2018;13(2):83-89
- Beeckman D, Van den Bussche K, Alves P, Arnold Long MC, Beele H, Ciprandi G, **Coyer F**, de Groot T, De Meyer D, Deschepper E, Dunk AM, Fourie A, Garcia-Molina P, Gray M, Iblasi A, Jelnes R, Johansen E, Karadağ A, Leblanc K, Kis Dadara Z, Meaume S, Pokorna A, Romanelli M, Ruppert S, Schoonhoven L, Smet S, Smith C, Steininger A, Stockmayr M, Van Damme N, Voegeli D, Van Hecke A, Verhaeghe S, Woo K & Kottner J. Towards an international language for Incontinence-Associated Dermatitis (IAD): design and evaluation of psychometric properties of the Ghent Global IAD Categorisation Tool (GLOBIAD) in 30 countries. *British Journal of Dermatology*. 2018. doi:10.1111/bjd.16327
- Coyer F**, Cook J-L, Doubrovsky A, Campbell J, Vann A, McNamara G. Understanding contextual barriers and enablers to pressure injury prevention practice in an Australian intensive care unit: an exploratory study. *Australian Critical Care*. <https://doi.org/10.1016/j.aucc.2018.02.008>
- Woods C**, Keogh S, Flynn J, **Marsh N, Larsen E**, Rickard CM: Nurses' and stakeholder perceptions of improving peripheral intravenous catheter dressing and securement. *Vascular Access*. 2018; 4(1)
- Takashima M, **Gavin NC, Larsen E, Northfield S**, Mihala G, Corely A, Ziegenfuss M, Rickard CM. Building a central vascular access device registry in an adult intensive care unit: feasibility study. *Vascular Access*. 2018; 4(1)
- Hoang, L., **Green, T.**, & Bonner, A. (2018). Informal caregivers' experiences of caring for people receiving dialysis: a mixed-methods systematic review. *J of Renal Care*. doi:10.1111/jorc.12235
- Johnson S, Fox A, **Coyer F**. Factors influencing nursing student off campus clinical performance: a retrospective audit study. *Journal of Nursing Education*. 2018; 57(6): 333-338
- Coyer F**, Campbell J. Incontinence-associated dermatitis in the critically ill patient: an intensive care perspective. *Nursing in Critical Care*. 2018; 23(4): 198-206
- Johnson S, **Coyer F**, Nash R. Kirkpatrick's Evaluation of Simulation and Debriefing in Health Care Education: a Systematic Review. *Journal of Nursing Education*. 2018;57(7):393-398
- Webster J**, Northfield S, **Larsen E, Marsh N**, Rickard CM, Chan R. Insertion site assessment of peripherally inserted central catheters: Inter-observer agreement between nurses and inpatients. *Journal of Vascular access* 2018;19 (4):370-374
- Mihala G, Ray-Barruel G, Chopra V, **Webster J**, Wallis M, **Marsh N**, McGrail M, Rickard CM. Phlebitis signs and symptoms in peripheral intravenous catheters: incidence and correlation study. *J Infus Nurs* 2018;41 (4):260-263
- Webster J**, Laws J, **Larsen E**, Booker C, **Marsh, N**: Prophylactic insertion of large bore peripheral intravenous catheters in maternity patients: A cohort study. *ANZ journal of Obstetrics and Gynecology*. December 2017. DOI: 10.1111/ajo.12759
- Castillo MI, Larsen E, Cooke M, **Marsh N**, Wallis M, Finucane J, Brown P, Mihala G, Carr P, Byrnes J, Walker R, Cable P, Zhang L, Sear C, Jackson G, Rowsome A, Ryan A, Humphries JC, Sivyer S, Flanigan K, Rickard CM. Integrated versus non-integrated Peripheral intravenous catheter. Which Is the most effective system for peripheral intravenous catheter Management? (The OPTIMUM study): A randomised controlled trial protocol. *BMJ Open*. 2018;8:e019916. doi:10.1136/bmjopen-2017-019916
- Tuffaha H, **Marsh N**, Byrnes J, **Gavin N, Webster J**, Cooke M, Rickard CM. Cost of vascular access devices in public hospitals in Queensland. *Australian Health Review*. 2018: doi.org/10.1071/AH18102
- Rickard CM, **Marsh N, Webster J**, Playford EG, McGrail MR, Larsen E, Dunster KR. Securing all intravenous devices effectively in hospitals – the SAVE trial: a multicentre randomised controlled trial. 2018; 392(10145): 419-430
- Kumta N, **Coyer F**, David M. Perioperative factors and pressure ulcer development in postoperative ICU patients: a retrospective review. *Journal of Wound Care*. 2018. 27(8):475-485
- Flynn J**, Slater K, Cooke M, Rickard CM. Needleless connector decontamination: To use, or not to use, chlorhexidine? *Am J Infect Control*. 2018. 46(8): 959-960
- Kynoch K, Chang A, **Coyer F**, McArdle A. Developing a model of factors that influence meeting the needs of family with a relative in ICU. 2018. *Int J Nurs Pract*. 8:e12693.

### Journal Articles: (cont):

19. Chaboyer WP, Thalib L, Harbeck EL, **Coyer FM**, Blot S, Bull CF, Nogueira PC, Lin FF. Incidence and prevalence of pressure injuries in adult intensive care patients: a systematic review and meta-analysis. *Critical Care Medicine*. 2018, 46(11): e1074-e1081
20. **Webster J**, McLeod K, O'Sullivan J, Bird L. 8-hour versus 12-hour shifts in an ICU. Comparison of nursing responses and patient outcomes. *Aust Critical Care*. 2018. pii: S1036-7314(18)30055-9. doi: 10.1016/j.aucc.2018.08.004. Epub ahead of print]
21. **Marsh N**, Larsen E, Genzel J, Mihala G, Ullman A, Kleidon T, Cadigan S, Rickard CM. A novel integrated dressing to secure peripheral intravenous catheters in an adult acute hospital: a pilot randomised controlled trial 2018. 19:596. <https://doi.org/10.1186/s13063-018-2985-9>
22. **Marsh N**, Webster J, Larsen E, Genzel J, Cooke M, Mihala G, Cadigan S, Rickard CM. Expert versus generalist peripheral intravenous catheter insertion: a pilot randomised controlled. 2018. 19:564. <https://doi.org/10.1186/s13063-018-2946-3>
23. Fullbrook P, Miles S, **Coyer F**. Prevalence of pressure injury in adults presenting to the emergency department by ambulance. *Australian Critical Care*. 2018. <https://doi.org/10.1016/j.aucc.2018.10.002>
24. Hughes JA, Cabilan CJ, Williams J, Ray M, **Coyer F**. The effectiveness of interventions to reduce peripheral blood culture contamination in acute care: a systematic review protocol. *BMC Systematic Reviews*. 2018. <https://doi.org/10.1186/s13643-018-0877-4>
25. Moureau N, **Marsh N**, Zhang L, Bauer MJ, Larsen E, Mihala G, Corley A, Lye I, Cooke M, Rickard CM. Evaluation of Skin Colonisation And Placement of vascular access device Exit sites (ESCAPE Study). *Journal of Infection Prevention*. 2018. DOI: 10.1177/1757177418805836
26. Barakat-Johnson M, Lai M, Gefen A, **Coyer F**. Evaluation of a fluidised positioner to reduce occipital pressure injuries in intensive care patients: a pilot study. *International Wound Journal*. 2018. <https://doi.org/10.1111/iwj.13051>.

### Book Chapters / Letter publications:

1. **Green, TL**. Decompressive Hemicraniectomy for Severe Stroke: an updated review of the literature. In Watson, R. & Zibadi (Eds). *Lifestyle and Heart Health and Disease*. 2018. Academic Press. Elsevier
2. **Green, TL**. (2018). Surgical Interventions for Severe Stroke: impact on quality of life, caregiver burden and family outcomes. In Watson, R. (Ed). *Lifestyle in Heart Health and Disease*
3. **Green, TL**. (2018). Chapter 10: Rehabilitation Nursing. In J. Hinkle and K. Cheever (Eds), *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*, 14<sup>th</sup> Ed. Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Marsh N**. 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. Australasia College for Infection Prevention and Control, 2018 conference, Brisbane Top poster abstract presentation, November 2018
2. **Marsh N**. PICCs at Home – A Retrospective Cohort Study. Hospital in the Home Society Conference. Brisbane, Australia. November 2018
3. **Green T**. Better individualised stroke care using technology (BISCUT). Statewide Stroke Network Forum. Cairns, Australia. November 2018
4. **Green T**.... Supporting relationships and intimacy with people affected by stroke. World Stroke Congress, Montreal, Canada. October 2018
5. **Green T**.... Empowering patients and families in shared decision-making: preferences and values across stroke transitions. WSC, Montreal, Canada. October 2018
6. Campbell J, Coleman K, Hocking K, **Coyer F**. Lack of recognition and treatment of pain for people with incontinence-associated dermatitis: a call for action. Wounds Australia National Conference. Adelaide, Australia. October 2018
7. **Coyer F**. Efficacy of Incontinence-Associated Dermatitis interventions for critically ill patients in intensive care: The Distinct pilot RCTI. Wounds Australia National Conference. Adelaide, Australia. October 2018
8. Chaboyer W, Thalib L, Harbeck E, **Coyer F**, Blot S, Bull C, Nogueira P and Lin F. Incidence and prevalence of pressure injuries in adult intensive care patients: a systematic review and meta-analysis. Australian and New Zealand Annual Scientific Meeting on Intensive Care. Adelaide, Australia. October 2018. Best nursing free paper (\$1,500)
9. **Coyer F**. Reducing intensive care medical device-related pressure injuries caused by nasogastric and endotracheal tubes: a pilot study. 20<sup>th</sup> Annual Meeting of the European Pressure Ulcer Advisory Panel. Rome, Italy. 12-14 September 2018
10. **Marsh N**, Rickard CM. Reliable intravenous access by line experts (the RELIABLE Pilot Trial) comparing PIV insertion by generalists with insertion by a vascular access specialist. Association for Vascular Access Annual Scientific Meeting. Columbus, Ohio. 15-18 September 2018
11. **Marsh N**, Rickard CM. Incidence, risks and outcomes of primary bloodstream and local infections: Prospective data from 12,936 peripheral intravenous catheters. Association for Vascular Access Annual Scientific Meeting. Columbus, Ohio. 15-18 September 2018
12. **Green T**. Nursing studies that impact on patient care, interpretation of recent publications in neuroscience nursing, and future directions for nursing research. 2<sup>nd</sup> International Neuroscience Nursing Research Symposium. Dallas, Texas. 10-12 August 2018
13. **Coyer F**. How to build nursing research in ICU. Queensland Critical Care Research Forum, Sunshine Coast, Australia. May 2018.

### Oral Presentations:

1. **Green T.** Overview of the current state of stroke survivors and their family carers. 2018 International Stroke Conference, Los Angeles, USA, January 2018.

### Poster Presentations:

1. **Green T.** Current state of online education for stroke survivors and family caregivers. 2018 World Stroke Conference. Montreal, Canada. October 2018
2. **Webster J,** Ray-Barruel G, Rickard C, **Marsh N,** Mihala G, Alexandrou E. Just in case: use of large bore intravenous catheters in parturient women: A global Study. 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018
3. **Marsh N, Webster J,** Ullman A, Mihala G, Cooke M, Rickard C. Peripheral intravenous catheter failure and complications in adults: A systematic review. 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018
4. **Marsh N,** Larsen E, Genzel J, Mihala G, Ullman A, Kleidon T, **Cadigan S,** Rickard C. Dressing and securing peripheral intravenous catheters: a pilot randomised controlled trial of a novel integrated dressing. 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018
5. **Marsh N, Webster J,** Larsen E, Genzel J, Cooke M, Mihala G, **Cadigan S,** Rickard C. Expert versus generalist inserters for peripheral intravenous catheter insertion: pilot randomised controlled trial. 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018
6. Tuffaha H, **Marsh N,** Byrnes J, **Webster J,** **Gavin N,** Cooke M, Rickard C. The cost of vascular access devices in Queensland. 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018
7. **Webster J,** McLeod K, O'Sullivan J, Bird L. 8-hour versus 12-hour shifts in an ICU: effect on nursing satisfaction and patient outcomes. 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018
8. **Larsen E.** The incidence and cumulative risk of primary bloodstream and venous infections in 12, 623 peripheral intravenous catheters in Australia, World Congress Vascular Access (WoCoVA), Copenhagen, June 2018
9. **Marsh N.** Different transparent dressings – different problems. World Congress Vascular Access (WoCoVA), Copenhagen June 2018
10. **Marsh N.** Securement of PIV. World Congress Vascular Access (WoCoVA), Copenhagen. June 2018.



A blue-tinted photograph of an operating room. In the foreground, there are several large, circular surgical lights with many small bulbs. In the background, a surgeon wearing a mask and cap is visible, working on a patient. The overall scene is brightly lit, typical of a surgical environment.

**SURGICAL AND**

**PERIOPERATIVE SERVICES**



# Surgical and Perioperative Services



**Dr Barry O'Laughlin**  
Executive Director  
Surgical and Perioperative Services

Surgical and Perioperative Services is made up of twelve speciality departments and the operating rooms service. 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.

## Some highlights for 2018 were:

The establishment of the Jamieson Trauma Institute (JTI) and the appointment of Professor Michael Scheutz, Trauma and Orthopaedic Surgeon, as its inaugural Director. The Jamieson Trauma Institute is a collaboration of service partners with a focus on research into trauma prevention, systems and clinical practice.

Dr Ben Green and associates from the Breast Endocrine Surgery unit and Dr Matt Peters from the Plastics and Reconstructive Surgery Department, showcased contemporary management of breast cancer and world class outcomes at the 27<sup>th</sup> Annual RBWH Healthcare Symposium in September. Staff of the Department of Anaesthesia and Perioperative Medicine produced 45 publications and were awarded more than \$500,000 of research funding.

The Department of Orthopaedic Surgery was responsible for more than 20 publications and Dr Kevin Tetsworth was an invited speaker and panellist at scientific meetings in 10 countries throughout the year. 18 publications and three book chapters were produced by the Colorectal and Hepatobiliary units in the Department of General Surgery.

Dr Craig Winter of the Kenneth Jamieson Department of Neurosurgery was awarded a PhD by the University of Cambridge for his work on hypoxia and the blood brain barrier.

Dr Geoff Coughlin, Dr John Yaxley, Professor RA. Gardiner et al. Department of Urology, published the two year follow up results of a randomised trial of Robot assisted laparoscopic prostatectomy versus open retropubic prostatectomy in Lancet Oncology. This trial was a world first study.

## Department of Anaesthesia and Perioperative Medicine

Our Research Interest Group in Anaesthesia (RIGA), is committed to providing relevant, up-to-date research for improving patient care that can be translated into practice. After the successful development and opening of the Centre for Excellence and Innovation in Anaesthesia in June 2017, we have continued to facilitate exceptional teaching, training and research with a strong focus on investigator lead research. In 2018, the department has produced a record number of publications (45); supervised post-graduate research students (9); participated in (25) departmental led research projects whilst also collaborating with national and international universities and research institutions (2); on clinical trials focusing on improving patient outcomes after surgery.

The department facilitates a research culture providing mentorship, group support and guidance with all research ideas, including clinical trial project management and execution, research requirements and publishing. One further initiative saw the emergence of new research and training possibilities, collaborating with a Brisbane based start-up company, investigating new technologies in training and education for departmental staff.

2018 saw the department awarded 8 scholarships and two grants equating to over \$548,615 of funding. Our research continues to grow in areas such as bariatric research and intraoperative cell salvage. The aim of research in anaesthetics is to advance optimal anaesthetic care for patients based on world class, research based clinical practice.



### 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>
<b>Julie Lee</b>	PhD (UQ 2015-2019)	ROTEM Thromboelastometry in Obstetrics	<b>Prof. André van Zundert, A/Prof Jeremy Cohen, A/Prof Kerstin Wyssusek, A/Prof. Victoria Eley</b>
<b>Michelle Roets</b>	PhD (UQ 2017-2021)	Intraoperative Cell-Salvage: a cost benefit analysis	A/Prof. David Sturgess, <b>Prof. André van Zundert, A/Prof Kerstin Wyssusek, Dr. Melinda Dean</b>
<b>Angela Tognolini</b>	MPhil (UQ 2018-2020)	Intraoperative lignocaine infusions – Development of an optimised infusion dosing regimen of obese patients	<b>A/Prof. Victoria Eley, Prof. Jason Roberts</b>
<b>Kersi Taraporewalla</b>	PhD (UQ 2017-2021)	Teaching and learning psychomotor skills in anaesthesia	<b>Prof. André van Zundert, Prof. Jeffrey Lipman</b>
<b>Louis Guy</b>	MPhil (UQ 2018-2020)	Oxygen delivery in obese patients undergoing bariatric surgery	<b>A/Prof. Victoria Eley, Prof. André van Zundert, Prof. Jeffrey Lipman</b>
<b>Cienwen Town</b>	PhD (UQ 2017-2021)	Regional Anaesthesia as an intervention for the treatment of burn related procedural pain	Haakan Strand, <b>Prof. André van Zundert, Dr. James Johnson</b>
<b>Lizanne Dalglish</b>	PhD (QUT 2016-2020)	Microcirculatory Dysfunction and Skin Failure in Critically Ill patients: an exploratory study	<b>Prof. Fiona Coyer, Dr. Kathleen Finlayson, Prof. André van Zundert, Dr. Jill Campbell</b>
<b>Sue Lawrence</b>	MPhil (2017-2019)	Lumbar interspinous ligament scussureL a detailed anatomical and imaging investigation	A/Prof. David Reutens, A/Prof. David Sturgess

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Andre van Zundert	Professor	Faculty of Medicine	University of Queensland
			Queensland University of Technology
		Faculty of Engineering and Sciences	Udayana University, Indonesia
			Victoria University, Melbourne
Kerstin Wyssusek	Associate Professor	Faculty of Medicine	University of Queensland
Victoria Eley	Associate Professor	Faculty of Medicine	University of Queensland
Kersi Taraporewalla	Adjunct Associate Professor	Faculty of Medicine	University of Queensland
Michael Steyn	Associate Professor	Faculty of Medicine	University of Queensland
Wally ABEYPALA	Senior Lecturer	Faculty of Medicine	University of Queensland
Peter CASEY	Associate Lecturer	Faculty of Medicine	University of Queensland
Rebecca CHRISTENSEN,	Associate Lecturer	Faculty of Medicine	University of Queensland
Sandra CONCHA BLAMEY,	Associate Lecturer	Faculty of Medicine	University of Queensland
Gerard EAMES	Associate Lecturer	Faculty of Medicine	University of Queensland
Christopher FUTTER,	Associate Lecturer	Faculty of Medicine	University of Queensland
Rebecca KAMP	Associate Lecturer	Faculty of Medicine	University of Queensland
Steven KLUPFEL	Associate Lecturer	Faculty of Medicine	University of Queensland
Annette LYE	Associate Lecturer	Faculty of Medicine	University of Queensland
Clair MANNING	Associate Lecturer	Faculty of Medicine	University of Queensland
Elizabeth MCLELLAN,	Associate Lecturer	Faculty of Medicine	University of Queensland
Ashlea MEEHAN	Associate Lecturer	Faculty of Medicine	University of Queensland
Leonie ROBERTS	Associate Lecturer	Faculty of Medicine	University of Queensland
Rochelle RYAN	Associate Lecturer	Faculty of Medicine	University of Queensland
Gemma SLYKERMAN,	Associate Lecturer	Faculty of Medicine	University of Queensland
Benjamin SNOW	Associate Lecturer	Faculty of Medicine	University of Queensland
Andrew SOUNESS	Associate Lecturer	Faculty of Medicine	University of Queensland
Angela TOGNOLINI	Associate Lecturer	Faculty of Medicine	University of Queensland
Zoe VELLA,	Associate Lecturer	Faculty of Medicine	University of Queensland
Amy KREPSKA	Lecturer	Faculty of Medicine	University of Queensland
Fayavar AJVADI	Senior Lecturer	Faculty of Medicine	University of Queensland
Linda BECKMANN	Senior Lecturer	Faculty of Medicine	University of Queensland
David BELAVY	Senior Lecturer	Faculty of Medicine	University of Queensland
Michael BOULES	Senior Lecturer	Faculty of Medicine	University of Queensland
Jeremy BRAMMER	Senior Lecturer	Faculty of Medicine	University of Queensland
Adrian CHIN	Senior Lecturer	Faculty of Medicine	University of Queensland
Daniel CLARKE	Senior Lecturer	Faculty of Medicine	University of Queensland
Gareth COLLINS	Senior Lecturer	Faculty of Medicine	University of Queensland
Stephen DAGLISH	Senior Lecturer	Faculty of Medicine	University of Queensland
David FUNG	Senior Lecturer	Faculty of Medicine	University of Queensland
Genevieve GOULDING	Senior Lecturer	Faculty of Medicine	University of Queensland
Anthony HADE	Senior Lecturer	Faculty of Medicine	University of Queensland

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions (cont)

Name	Type of Fellowship	Research Program	University (years)
Kylie HALL	Senior Lecturer	Faculty of Medicine	University of Queensland
Katherine HAMES	Senior Lecturer	Faculty of Medicine	University of Queensland
Annabelle HARROCKS	Senior Lecturer	Faculty of Medicine	University of Queensland
Dominique HOPKINS	Senior Lecturer	Faculty of Medicine	University of Queensland
Peter IU	Senior Lecturer	Faculty of Medicine	University of Queensland
James JOHNSON	Senior Lecturer	Faculty of Medicine	University of Queensland
Nadia KOEHLER VARGAS	Senior Lecturer	Faculty of Medicine	University of Queensland
Sue LAWRENCE	Senior Lecturer	Faculty of Medicine	University of Queensland
Julie LEE	Senior Lecturer	Faculty of Medicine	University of Queensland
Marc MAGUIRE	Senior Lecturer	Faculty of Medicine	University of Queensland
Kate MCCROSSIN	Senior Lecturer	Faculty of Medicine	University of Queensland
Martina MEYER-WITTING	Senior Lecturer	Faculty of Medicine	University of Queensland
Robert MISKELJIN	Senior Lecturer	Faculty of Medicine	University of Queensland
Wendy MORRIS	Senior Lecturer	Faculty of Medicine	University of Queensland
Gladness NETHATHE,	Senior Lecturer	Faculty of Medicine	University of Queensland
Stephen O'DONOGHUE	Senior Lecturer	Faculty of Medicine	University of Queensland
Nathan PETERS	Senior Lecturer	Faculty of Medicine	University of Queensland
Michelle ROETS	Senior Lecturer	Faculty of Medicine	University of Queensland
Helmut SCHOENGEN	Senior Lecturer	Faculty of Medicine	University of Queensland
Paul SCOTT	Senior Lecturer	Faculty of Medicine	University of Queensland
Tish SEARLES	Senior Lecturer	Faculty of Medicine	University of Queensland
Susannah SHERLOCK	Senior Lecturer	Faculty of Medicine	University of Queensland
Adam STOREY	Senior Lecturer	Faculty of Medicine	University of Queensland
Christopher TURNBULL	Senior Lecturer	Faculty of Medicine	University of Queensland
Rudolf VAN DER WESTHUIZEN	Senior Lecturer	Faculty of Medicine	University of Queensland
Yasmin WHATELY	Senior Lecturer	Faculty of Medicine	University of Queensland
Kellie WREN	Senior Lecturer	Faculty of Medicine	University of Queensland
Molly CLARRIS	Clinical Research Nurse	Anaesthetic Department	RBWH
Simon HOLZ	Clinical Research Nurse	Anaesthetic Department	RBWH
Heather REYNOLDS	Clinical Research Nurse	Anaesthetic Department	RBWH

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Andre Van Zundert	Kerstin Wyssusek, Anthony Hade	Positioning of supraglottic airway devices
Angela Tognolini	Dwane Jackson	Pain in Pelvic Exenteration
Cienwen Town	James Johnson, Julie Lee, Andre Van Zundert, Jason Brown	Ultrasound-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	James Johnson, Julie Lee, Andre Van Zundert, Jason Brown	Ultrasound-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
Gareth Collins	Gareth Collins, Lizanne Dagleish, Cienwen Town	Optic nerve sheath study to measure ICP

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Gladness Nethathe	Matthew Bright, Amy Krepska, Victoria Eley	Obstetric admission to the intensive care unit quality assurance audit
Julie Lee	Prof Andre van Zundert, A/Prof Jeremy Cohen, Kerstin Wyssusek, Victoria Eley, Amy Krepska, Clare Manning	ROTEM® and platelet function in pre-eclamptic obstetric patients
Julie Lee	Julie Lee, Victoria Eley, Rebecca Kimble, Andre van Zundert, John Rowell, Kerstin Wyssusek	ROTEM® thromboelastometry in obstetrics: baseline parameters in normal and complicated pregnancies. A prospective observational study on labour ward inpatients
Julie Lee	Joel Thomas, Prof Van Zundert	Tongue Morphology on MRIs as predictor of difficult intubation
Kersi Taraporewalla	A/Prof Kersi Taraporewalla, Penelope Sanderson, Marcus Watson, Heather Reynolds, Prof Andre Van Zundert	Respiratory Sonification Trial
Kerstin Wyssusek	Cienwen Town, Michelle Roets, Prof Andre Van Zundert	Pre-existing Iron Deficient Anaemia and patient Blood Management practices at RBWH
Kerstin Wyssusek	Cienwen Town, 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 7
Kerstin Wyssusek	Matthew Wagner, Julie Lee, Michelle Roets, Andre Van Zundert	Ten Year Review of Transfusion Practises During Rapid Transfer in Urgent Trauma Cases (RUPTURE)
Lizanne Dalglish	Fiona Coyer, Jill Campbell, Kathleen Finlayson, Andre Van Zundert	Microcirculatory dysfunction and Skin Failure in Critically ill patients. An exploratory study
Louis Guy	Rebecca Christensen, Victoria Eley, Ben Dodd, Kerstin Wyssusek, Andre Van Zundert	Transnasal humidified Rapid-insufflation ventilator exchange (THRIVE) in obese adults: a randomised controlled trial
Michelle Roets	Kerstin Wyssusek, Prof 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)
Michelle Roets	Kerstin Wyssusek, Andre Van Zundert, David Sturgess, Louisa Gordon	COSTOMICS (The Cost of Missed Intraoperative Cell Salvage)
Niall Higgins	Kersi Taraporewalla, David Belavy, Michael Boules, Andre Van Zundert	NIRVANA (Near Infra Red Vascular ANALysis)
Rebecca Christensen	Rebecca Christensen, Victoria Eley, Dwane Jackson, Rochelle Ryan, Prof Van Zundert, Prof Jason Roberts, Prof Jeffrey Lipman	Therapeutic concentrations cephazolin in bariatric Caesarean section patients
Rebecca Christensen	Victoria Eley, Leonie Callaway, Kerstin Wyssusek, Andre Van Zundert, Ben Dodd, Michael Stowasser	Validation of Clearsite finger-cuff in patients with problematic non-invasive blood pressure measurement undergoing elective bariatric surgery
Sandra Concha Blamey	Kerstin Wyssusek, Kate Taylor	A prospective audit of Patient Blood Management knowledge in a subgroup of junior doctors at the Royal Brisbane and Women's Hospital
Victoria Eley	Rochelle Ryan, Dwane Jackson, Victoria Eley, Rebecca Christensen, Prof Van Zundert, Prof Jason Roberts, Prof Jeffrey Lipman	Therapeutic concentrations cephazolin in bariatric surgical patients
Victoria Eley	Gunjan Chawla, Matthew Bright, Leonie Callaway	Maternal, neonatal and anaesthesia outcomes of severely obese women
Victoria Eley	Steven Kloprogge, Rebecca Christensen	Analysis of post-caesarean section wound infection rates
Victoria Eley	Rebecca Christensen, Helen Barret, Prof Andre Van Zundert, 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
Angela Tognolini	Dwane Jackson, Victoria Eley, Jason Roberts, Jeffery Lipman, Kerstin Wyssusek, Prof Andre Van Zundert	Intraoperative Lignocaine Infusions: development of an optimised infusion dosing regimen for obese patients

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
A/Prof Timothy Short (University of Auckland)	<b>Michael Edwards, David Belavy, Victoria Eley</b>	The BALANCED Anaesthesia Study: a prospective, randomised clinical trial of two levels of anaesthetics depth in patient outcomes after major surgery
Prof Tomás Corcoran (University of Western Australia)	<b>Julie Lee, Gareth Collins, Victoria Eley</b>	The Perioperative Administration of Dexamethasone and Infection

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Prof André van Zundert</b>	Best Research Support Award – Highly recommended	Metro North Research Excellence Awards 2018
<b>Prof André van Zundert</b>	Honorary Fellow Royal College of Anaesthetists	Royal College of Anaesthetists, London, UK
<b>Christine Pirrone Gerard Eames, Rebecca Christensen, Holly Rowell</b>	Second place in the best poster prize session	ASA NSC Adelaide October 2018
<b>Adrian Chin, Luke Heywood and Peter lu</b>	Health Services and Implementation Research Award finalist	Metro North Research Excellence Awards 2018
<b>Julie Lee</b>	2018 Australian Society of Anaesthetists (ASA) Kevin McCaul Prize	Australian Society of Anaesthetists National Scientific Congress
<b>Julie Lee, Victoria Eley, Kerstin Wyssusek, Jeremy Cohen, Rebecca Kimble, John Rowell, Mandy Way, Andre van Zundert</b>	Open ePoster Prize	Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, Sydney 2018
<b>Roets M, Wyssusek K, Raniga H, Town C</b>	Oral presentation, Best Posters- presentations and awards. One of best 8 International posters	19 <sup>th</sup> Annual Symposium on Patient Blood Management (NATA), Haemostasis and Thrombosis, Lisbon, Portugal, April 12-13, 2018

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Julie Lee</b>	RIGA/Anaesthetic Department	Rotational Thromboelastometry (ROTEM®) in Obstetrics	RBWH scholarships (renewed)	\$44,977.62	\$44,977.62 (2018)
<b>Julie Lee</b>	RIGA/Anaesthetic Department	ROTEM® and platelet function in pre-eclamptic obstetric patients	CSL Behring ANZCA Research Award	\$70,000	\$70,000 (2018)
<b>Angela Tognolini</b>	RIGA/Anaesthetic Department	Intraoperative lignocaine infusions: development of an optimised infusion dosing regimen for obese patients	RBWH scholarships	\$44,977.62	\$44,977.62 (2018)
<b>Louis Guy</b>	RIGA/Anaesthetic Department	Effect of high flow nasal oxygen during sedation for gastroenterological endoscopic procedures in bariatric patients	RBWH scholarships	\$44,977.62	\$44,977.62 (2018)
<b>Michelle Roets</b>	RIGA/Anaesthetic Department	Intraoperative cell salvage as an alternative to avoid allogeneic (donated) blood transfusion, comparing usage potential and cost effectiveness	RBWH scholarship (renewed)	\$44,977.62	\$44,977.62 (2018)
<b>Michelle Roets</b>	RIGA/Anaesthetic Department	Does transfusion-related modulation occur following intraoperative cell salvage: a pilot study	ANZCA scholarship	\$20,000	\$20,000 (2018)
<b>Lizanne Dagleish</b>	RIGA/Anaesthetic Department	The microcirculatory dysfunction and skin breakdown in the critically ill patient	RBWH scholarships (renewed)	\$38,082.52	\$38,082.52 (2018)
<b>Lizanne Dagleish</b>	RIGA/Anaesthetic Department	Incidental dark field imaging to examine microcirculation changes in trauma, critical care and surgical patients	Capital Funding PPTF research and training grant	\$41,540.40	\$41,540.40 (2018)

## 2018 Research Grants – Awarded (cont)

Investigators ( <i>RBWH staff in bold</i> )	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Cienwen Town</b>	RIGA/Anaesthetic Department	Regional Anaesthesia as an intervention for the treatment of burn related procedural pain	RBWH scholarships (renewed)	\$38,082.52	\$38,082.52 (2018)
<b>Victoria Eley</b>	RIGA/Anaesthetic Department	Improving the accuracy of perioperative blood pressure monitoring in obese patients	Robert and Janelle Bird Postdoctoral research fellowship	\$50,000	\$50,000 (2018)
<b>Kerstin Wyssusek</b>	RIGA/Anaesthetic Department	Pre-existing Iron Deficient Anaemia and patient Blood Management practices at RBWH	MNHS Innovation Grant	\$181,000	\$181,000 (2018-2019)

## 2018 Research Publications

### Journal Articles:

- Canty D, Barth J, Yang Y, **Peters N**, Palmer A, Royse A, Royse C. Comparison of learning outcomes for teaching focused cardiac ultrasound to physicians: A supervised human model course versus an eLearning guided self- directed simulator course. *Journal of Critical Care*. 2019; 49: 38-44
- Eley V, 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. *International journal of obstetric anaesthesia*. 2018. <https://doi.org/10.1016/j.ijoa.2018.10.005>
- Eley V, Chin A, Sekar R, 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 caesarean delivery: a prospective cohort study. *Acta Obstetrica et Gynecologica Scandinavica*. 2018 doi: 10.1111/aogs.13486
- Lee J**. "A case report of pre-eclampsia causing severe hyponatremia. Rare or rarely reported?" *A & A Practice*. 2018 doi: 10.1213/XAA.0000000000000904
- Gatt D, **van Zundert A**, Gatt S. Abstract and Comments on: a randomized trial of phenylephrine infusion versus bolus dosing for nausea and vomiting during caesarean delivery in obese women, *Can J Anesth* 2018;65:254-262. *Obstet Anesth Digest* 2018; 38:224-225
- Reina MA, Puigdemívol-Sánchez A, Gatt SP, De Andres J, Prats-Galino A, **van Zundert A**. Electronic microscopy of dural and arachnoid disruptions after subarachnoid block. *Obstet Anesth Digest* 2018; 38:135-136
- 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* 2018. 37 (1):3-19
- 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*. 2018 Dec 11. doi: 10.1097/AJP.0000000000000680
- van Zundert A, Nethathe G**. Abstract and Comments on: Kilpatrick SJ. Trauma in Pregnancy: an underappreciated cause of maternal death, *Am J Obstet Gynecol* 2017;217:499-500. *Obstet Anesth Digest* 2018; 38:127-128
- Chin A, Croke B, Heywood L, Brijball R, Pelecanos AM, Abeyapala W**. A randomised controlled trial comparing needle movements during combined spinal-epidural anaesthesia with and without ultrasound assistance. *Anaesthesia*. 2018; 734:466-473. doi: 10.1111/anae.14206
- Eley VA, Chin A**, Tham I, Poh J, Aujla P, Glasgow E, Brown H, Steele K, Webb L, **van Zundert A**. Epidural extension failure in women obese women is comparable to that of non-obese women. *Acta Anaesth Scand*. 2018;62(6):839-847. doi: 10.1111/aas.13085
- Eley VA, Christensen R**, Kumar S, **Callaway L**. A review of blood pressure measurement in obese pregnant women. *International Journal of Obstetric Anesthesia* 2018 (Online) doi: 10.1016/j.ijoa.2018.04.004
- Kumar CM, **van Zundert A**, 2018. Intraoperative Valsalva maneuver: a narrative review. *Canadian Journal of Anesthesia/Journal Canadien d'Anesthésie*. 2018; 65:578-585
- Pieters BM, Theunissen M, **van Zundert A**. Macintosh blade videolaryngoscopy combined with rigid Bonfils intubation endoscope offers a suitable alternative for patients with difficult airways. *Anesth Analg*. 2018; 126:988-994
- Pieters BM, Theunissen M, **van Zundert A**. In Response to Reflections on combining the Bonfils Intubation Endoscope, the Macintosh Videolaryngoscope and the difficult airway. *Anesth Analg* 2018; 127:304-305
- Reina MA, Gatt SP, Puigdemívol-Sánchez A, de Andrés JA, Prats-Galino A, **van Zundert A**. Comment on arachnoid and dura mater lesions – In Reply. *Reg Anesth Pain Med* 2018; 43:332-334
- Reynolds H**, Ullman AJ, **Culwick MD**, Mihala G, Alexandrou E, Schults JA, Rickard CM. Dressings and securement devices to prevent complications for peripheral arterial catheters. *Cochrane Database of Systematic Reviews* 2018, Issue 5. Art. No.: CD013023.DOI: 10.1002/14651858.CD013023
- Eley VA, Christensen R**, Kumar S, **Callaway L**. Response to correspondence regarding article: "A review of blood pressure measurement in obese pregnant women". *International Journal of Obstetric Anesthesia* 2018; 35: 64-74
- Eley VA, Roberts L, Rickards L**, Blackie A, Zhang C, **Christensen R**, Barrett H. Arm and finger measurements in the third trimester: implications for blood pressure measurement. *Pregnancy Hypertension* 2018; 14:105-109
- van Zundert A J, Wyssusek K H**. Epiglottis folding double with supraglottic airway devices. *Br J Anaesth*. 2018; 120:884-885

### Journal Articles: (cont):

21. **Van Zundert A, Wyssusek K H**, Greenland KB. (2018) In reference to: is multidisciplinary team care for head and neck cancer worth it? And Does a Multidisciplinary Approach to voice and Swallowing Disorders Improve Therapy Adherence and Outcome? The Laryngoscope 2018. doi:10.1002/lary.27177
22. **Van Zundert A, Wyssusek K H**, Greenland KB. Benefits of recording images during videolaryngoscopy for early detection of oropharyngeal and laryngeal lesions: Implications for “inattentive blindness”. Can J Anesth 2018. April 2. <https://doi.org/10.1007/s12630-018-1116-0>.
23. **Van Zundert A, Wyssusek K H**. Only with an optimal position of the supraglottic airway in situ, valid conclusions can be drawn about oropharyngeal airway pressure. Ind J Anaesth 2018; 62:241-242
24. **Van Zundert A, Wyssusek K**. Postoperative sore throat: the importance of the position of the airway device. Otorhinolaryngol Head Neck Surg 2018; 3:1-3
25. **Wyssusek K H**, Keys MT, **van Zundert A**. Operation room greening initiatives – the old, the new, and the way forward: a narrative review. Waste Manag Res 2018:1-17
26. **Eley V, Christensen R, Guy L**, Dodd B. Perioperative Blood Pressure Monitoring in Patients With Obesity. Anaesthesia & Analgesia, 2018. doi: 10.1213/ANE.0000000000003647
27. **Eley V A**, Roberts L, Rickards L, Blackie A, Zhang C, **Christensen R**, Barrett H. Arm and finger measurements in the third trimester: implications for blood pressure measurement. Pregnancy Hypertension 2018 doi: 10.1016/j.preghy.2018.09.002
28. **Goulding G**. The silence of our friends. Anaesthesia and Intensive Care. 2018;46(5)
29. **McLellan EJ, Hade AD, Pelecanos A**, Okano O. Introduction of a mandatory pre-block safety checklist into a regional anaesthesia block room service: a quality improvement project. Anaesthesia and Intensive Care. 2018; 46(5)
30. **Eley VA, Chin A**, Tham I, Poh J, Aujla P, Glasgow E, Brown H, Steele K, Webb L, van Zundert A. Epidural extension failure in obese women is comparable to that of non-obese women. Acta Anaesthesiol Scand. 2018; 62:839-847
31. **Eley VA, Chin A**, Sekar R, Donovan T, **Krepeska 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 2018; <https://doi.org/10.1016/j.ijoa.2018.10.005>
32. Booth AWG, **Wyssusek K H**, Lee PK, **Pelecanos A M**, Sturgess D, **van Zundert A**. Evaluation of the D-FLECT® deflectable-tip bougie in a manikin with a simulated difficult airway. Br J Anaesth 2018; 121:1180-1182
33. **Wyssusek K H**, Keys MT, **van Zundert A**. Operating Room Greening Initiatives – the old, the new, and the way forward: a Narrative Review. Waste Management Research 2018; 1-17
34. **Van Zundert A, Wyssusek K**. Postoperative sore throat: the importance of the position of the airway device. Otorhinolaryngol Head Neck Surg 2018; 3:1-3 doi:10.15761/OHNS.1000166
35. Pieters BM, Theunissen M, **van Zundert A**. Reflections on Combining the Bonfils Intubation Endoscope, the Macintosh Videolaryngoscope, and the Difficult Airway – In Response. Anesth Analg. 2018; 127:304-305
36. **Van Zundert A, Wyssusek K H**. Epiglottis folding double with supraglottic airway devices. Br J Anaesth 2018; 120:884-5
37. Reina MA, Gatt SP, Puigdellívol-Sánchez A, De Andrés JA, Prats-Galino A, **van Zundert A**. Comment on Arachnoid and Dura Mater lesions – In Reply. Reg Anesth Pain Med 2018; 43:332-4
38. **Van Zundert A, Wyssusek K H**, Greenland KB. Benefits of recording images during videolaryngoscopy for early detection of oropharyngeal and laryngeal lesions: implications for “inattentive blindness”. Can J Anesth 2018, Apr 2. doi: 10.1007/s12630-018-1116-0
39. **Van Zundert A, Wyssusek K H**. Only with an optimal position of the supraglottic airway in situ, valid conclusions can be drawn about oropharyngeal airway pressure. Ind J Anaesth 2018; 62:241-2
40. **Van Zundert A, Wyssusek K H**, Greenland KB. In reference to: is multidisciplinary team care for head and neck cancer worth it? And Does a multidisciplinary approach to voice and swallowing disorders improve therapy adherence and outcome? Laryngoscope. 2018 Mar 14. doi: 10.1002/lary.27177; Laryngoscope 2018; 128: E348
41. **Van Zundert A, Wyssusek K**. In reference to Review of videolaryngoscopy pharyngeal wall injuries. Laryngoscope. 2018 Feb;128(2): E83
42. Pieters BM, Theunissen M, **van Zundert A**. Macintosh Blade Videolaryngoscopy Combined with Rigid Bonfils Intubation Endoscope Offers a Suitable Alternative for Patients With Difficult Airways. Anesth Analg. 2018; 126:988-994
43. Kumar CM, **van Zundert A**. Intraoperative Valsalva maneuver: a narrative review. Can J Anesth 2018; 65:578-585. doi: 10.1007/s12630-018-1074-6
44. **Van Zundert A, Nethathne G**. Comments on: Kilpatrick SJ. Trauma in Pregnancy: an underappreciated cause of maternal death, Am J Obstet Gynecol 2017;217:499-500. Obstet Anesth Digest 2018; 38:127-8
45. Gatt D, **van Zundert A**, Gatt S. Comments on: A randomized trial of phenylephrine infusion versus bolus dosing for nausea and vomiting during caesarean delivery in obese women, Can J Anesth 2018;65:254-262. Obstet Anesth Digest 2018; 38:224-225
46. Reina MA, Puigdellívol-Sanchez A, Gatt SP, De Andres J, Prats-Galino A, **van Zundert A**. Electronic microscopy of dural and arachnoid disruptions after subarachnoid block. Obstet Anesth Digest 2018; 38:135-136.

### Book Chapters:

1. **Van Zundert A**. Operating theatre management in Australia. In: Practical Operating Theatre Management. J.J. Pandit (ed.). 2018, Cambridge University Press, UK, pp. 159-165
2. **Van Zundert A**, Sieber T. Operating theatre management in two European Nations: The Netherlands and Switzerland. In: Practical Operating Theatre Management. J.J. Pandit (ed.). 2018, Cambridge University Press, UK, pp. 151-158.
3. Gatt S, Sturgess DJ, Samedani L, **van Zundert AA**. Chapter 40. Future of advanced hemodynamic monitoring devices in obstetric critical care. In: Monitoring in Anesthesia and Critical Care. Eds. Trikha A & Sing PM. The Health Sciences Publisher, New Delhi, London, 2018.pp. 414-424.



## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Lee J.** Obstetric Haemorrhage at the Midwifery Challenges. Medicines Management Conference, 2018. Brisbane
2. **Lee J.** Anatomy and Ultrasound for Peripheral Nerves. Braun Anatomy and Ultrasound for Peripheral Nerves Blockade Workshop, 2018. Brisbane
3. **Lee J.** ROTEM® in obstetrics. The ROTEM®/TEG® workshop 2<sup>nd</sup> Perioperative Patient Blood Management Symposium, 2018. Brisbane
4. **Van Zundert A.** A new flow chart for supraglottic airway devices and Physical differences in supraglottic airway devices, 2018. Indo-Anaesthesia Meeting, Jakarta Indonesia
5. **Van Zundert A.** A new flow chart for insertion of SADs and Challenges in Anaesthesia: the morbidly obese patient, 2018. University of Udayana, Indonesia
6. **Van Zundert A.** Failed airway management – does it still exist? Videolaryngoscopy – a masterpiece in airway management. Vision-guided insertion of SADs, 2018. University of Kuala Lumpur, Malaysia
7. **Van Zundert A.** Spinals in difficult spine anatomy, 2018. Pune Regional Anaesthesia Course, Pune India
8. **Van Zundert A.** Vision-guided insertion of SADs. ASM – ANZCA Annual Meeting, 2018. Sydney
9. **Van Zundert A.** Malpositioning of Supraglottic Airway Devices. World Congress Nurse Anaesthetists, 2018. Budapest
10. **Van Zundert A.** State-of-the Art Lecture on Airway Management. PAN Anaesthesia meeting, Princess Alexandra Hospital Scientific Annual Meeting, 2018. Brisbane
11. **Van Zundert A.** Principles of Anaesthesia and Trauma Care. University of Queensland – Medical Students, 2018. Brisbane
12. **Van Zundert A.** Videolaryngoscopy for all: a masterpiece in airway management. PANANAESTHESIA Meeting, Princess Alexandra Hospital, 2018. Brisbane
13. **Van Zundert A.** Dr. Vaes Award Lecture: Early contributions of Belgian Anaesthetist Dr. Leo Vaes. International Symposium on Automated Low Flow Anesthesia & Visual Drug Display Systems, 2018. Aalst Belgium.
14. **Eley V A.** Obstetric Masterclass and Regional Anaesthesia. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, Expert Panel, 2018. Sydney
15. **Eley V A.** Managing obstetric emergencies – Focus on maternal cardiac arrest and anaphylaxis. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018. Sydney
16. **Roets M.** Anaesthetic strategies to reduce blood loss. The 2<sup>nd</sup> Royal Brisbane & Women's Hospital Perioperative Patient Blood Management Symposium, 2018. Brisbane
17. **Roets, M.** Troubleshooting and research on Intraoperative Cell Salvage. The 2<sup>nd</sup> Royal Brisbane & Women's Hospital Perioperative Patient Blood Management Symposium, 2018. Brisbane
18. **Nethathe G.** Obstetric Critical Care Admissions. ANZICS Safety and Quality Conference, 2018. Melbourne.

### Oral Presentations:

1. **Victoria Eley.** Blood pressure measurement in obese pregnant women - can we do better. Australian Society of Anaesthetists National Scientific Congress, 2018. Adelaide
2. **Michelle Roets.** Cell Salvage in Modern Anaesthesia. Australian Society of Anaesthetists National Scientific Congress, 2018. Adelaide
3. **Bright M, Chawla G, Callaway L, Eley V.** Maternal and fetal outcomes in super-obese women. Society of Obstetric Medicine of Australia and New Zealand ASM, 2018
4. **Eley V, Chin A, Sekar R, Donovan T, Krepska A, Bell S, Lawrence M, McGrath S, Webb L, Robinson A, Ralfe K, van Zundert A, Marquart L.** Skin-to-epidural space distance in pregnancy: stronger association with body mass index than abdominal subcutaneous fat thickness. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018. Sydney
5. **Eley V, Roberts L, Rickards L, Blackie A, Zhang C, Christensen R, Barrett H.** Arm and finger circumference in the third trimester: Implications for blood pressure measurement. Australian and New Zealand College of Anaesthetists Obstetric Anaesthesia Special Interest Group Satellite Meeting, 2018. Sydney
6. **Lee J Eley V, Wyssusek K, Way M, Cohen J, Rowell J, van Zundert A.** Rotational thromboelastometry (ROTEM®) in obstetrics: baseline parameters in uncomplicated and complicated pregnancies. A prospective observational study on elective Caesarean section patients. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting 2018 (Gilbert Brown Prize Presentation)
7. **Roets M, Raniga H, Town C, Wyssusek K.** Intraoperative Cell Salvage: the cost of missed opportunity. 19<sup>th</sup> Annual Symposium on Patient Blood Management (NATA), Haemostasis and Thrombosis, Best Posters- presentations and awards session, 2018. Lisbon, Portugal
8. **Newington D, Tyson N.** Haemoglobin rise during separation from cardiopulmonary bypass in adults: a prospective observational study. Australian and New Zealand College of Anaesthetists ASM, 2018
9. **Hade A.** Preventing peri-operative central venous catheter (CVC) tip malpositioning. RBWH Healthcare Symposium, 2018. Brisbane
10. **Martin Culwick, Yasmin Endlich, Julie Lee.** The Bowtie Diagram as a method for providing knowledge about critical Incident incidents. ASA NSC 2018 (Adelaide)
11. Yasmin Endlich, **Martin Culwick, Julie Lee.** The Triple A project (Airway incidents in anaesthesia audit – Australia and New Zealand) ASA NSC 2018 (Adelaide)
12. Yasmin Endlich, **Martin Culwick, Julie Lee.** What we have learnt from the webAIRS airway data. ASA NSC 2018 (Adelaide)
13. **Holmes T.** Difficult airway alert notifications – improving communication and patient safety through increased electronic alerts. RBWH Healthcare Symposium, 2018. Brisbane

### Oral Presentations: (cont):

14. **Roets M.** Intraoperative cell salvage: the cost of missed opportunity. RBWH Healthcare Symposium, 2018. Brisbane
15. **Gray P.** Pelvic pain management initiatives. Professor Tess Cramond Multidisciplinary Pain centre RBWH Healthcare Symposium, 2018. Brisbane
16. **Wyssusek K.** Interview techniques. Australian Society of Anaesthetists, Part 3 course, 2018. Brisbane.

### Poster Presentations:

1. **Wyssusek K, Coonan E, Roets M.** Whose care can we optimise? Incidence of perioperative anaemia in elective general surgical patients who required perioperative blood transfusions. Australian Society of Anaesthetists National Scientific Congress, 2018. Adelaide
2. **Christine Pirrone, Holly Rowell, Rebecca Christensen, Gerard Eames.** Intraoperative systolic blood pressure in traumatic brain injured patients. Australian Society of Anaesthetists National Scientific Congress, 2018. Adelaide
3. **Webb R, Thistlewaite K, Sherlock S, Kramer D, Storey A, Atkinson P, King D, Janes J, Adams V, Abbey J, Cruikshank S, Arno de Jong, Halpin J, Leslie M, Magee R, Munda K, Rooke K, Woodhouse B, Bismire R, Smith P, Dagge S, Irwin D.** RBWH Hyperbaric Medicine Service Turns Three! Gilbert Troup Prize Session, Australian Society of Anaesthetists National Scientific Congress, 2018. Adelaide
4. **Gunjan Chawla, Louisa Kippin, Usha Gurunathan.** Preoperative fasting- assessing compliance with guidelines and patient understanding at a tertiary referral centre. Australian Society of Anaesthetists National Scientific Congress, 2018. Adelaide
5. **Eley VA, Roberts L, Rickards L, Blackie A, Zhang C, Christensen R, Barrett H.** Arm and finger circumference in the third trimester: implications for blood pressure measurement. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018. Sydney
6. **Eley VA, Chin A, Sekar R, Donovan T, Krepska A, Bell S, Lawrence M, McGrath S, Webb L, Robinson A, Ralfe K, van Zundert A, Marquart L.** Skin-to-epidural space distance in pregnancy: stronger association with body mass index than abdominal subcutaneous fat thickness. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018. Sydney
7. **Eley VA, Roberts L, Rickards L, Blackie A, Zhang C, Christensen R, Barrett H.** Arm and finger circumference in the third trimester: implications for blood pressure measurement. Australian and New Zealand College of Anaesthetists Obstetric Anaesthesia Special Interest Group Satellite Meeting, 2018. Sydney
8. Epstein C, **Forbes J, Futter C, Hosegood I, Brown R, Preswick D, Smith M, Professor Andre van Zundert.** Is there a doctor on board? Yes – YOU. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018. Sydney
9. Forbes J. **Eley VA.** Clinical audit of the uptake of programmed intermittent bolus as a delivery technique for labour epidurals. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018. Sydney
10. **Fawkes W, Swaine V, Cullingham D, Prasad A, Hohnke C, Streatfeild A, Stapleton R, Long Y, Elliott B, Bushell T, Mithi S, Wyssusek K, Roets M.** Intraoperative cell salvage: Celebrating 25 years at the RBWH! 2nd annual Patient Blood Management Symposium, 2018. Brisbane
11. **Guy L, Pincus J, Wyssusek K.** Audit of postoperative critical care admissions after bariatric surgery. Australian Society of Anaesthetists National Scientific Congress ASM, 2018. Adelaide
12. **Reynolds H, Gowardman J.** Implementing a new procedure: insertion and maintenance care of intra-arterial catheters using bundled intervention. IVNNZ Annual Scientific Meeting, 2018
13. **Lee J, Eley V, Wyssusek K, Way M, Cohen J, Rowell J, van Zundert A.** Rotational thromboelastometry (ROTEM®) in obstetrics: baseline parameters in uncomplicated and complicated pregnancies. A prospective observational study on elective Caesarean section patients. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018 (Gilbert Brown Prize Presentation). Sydney
14. **Lee J, Eley V, Wyssusek K, Way M, Cohen J, Rowell J, Kimble R, van Zundert A.** Rotational thromboelastometry (ROTEM®) in obstetrics: baseline parameters in uncomplicated and complicated pregnancies. A prospective observational study on parturients. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018 (Open Poster Prize Presentation). Sydney
15. **Nethathe G, Bright M, Krepska A, Eley VA.** Obstetric critical care admissions at the Royal Brisbane and Women's Hospital. Society of Obstetric Medicine of Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018. Sydney
16. **Pietzsch A.** Does ondansetron prophylaxis reduce intrathecal opioid induced itch post caesarean section? Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018. Sydney
17. **Reynolds H, Newman F, Meeusen V, Lloyd J, Jorgensen K, Seib E, Murray M, Foran P.** Australian College of Perianaesthesia Nurses (ACPAN): Our Professional Practice Standards Journey. ACORN International Conference, 2018. Adelaide
18. **Roets M, Raniga H, Town C, Wyssusek K.** Intraoperative Cell Salvage: the cost of missed opportunity. Best Posters- presentations and awards session, 19<sup>th</sup> Annual Symposium on Patient Blood Management (NATA), Haemostasis and Thrombosis, 2018. Lisbon, Portugal
19. **Tognolini A, Raniga H, Roets M, Wyssusek K.** Experiences, conceptions and barriers to the use of intraoperative cell salvage in a large tertiary teaching hospital. 19<sup>th</sup> Annual Symposium on Patient Blood Management (NATA), Haemostasis and Thrombosis, 2018. Lisbon, Portugal
20. **Wyssusek K, Roets M, Raniga H, Town C.** Intra-operative transfusion – pre-operative illusion. 19<sup>th</sup> Annual Symposium on Patient Blood Management (NATA), Haemostasis and Thrombosis, 2018. Lisbon, Portugal
21. **Tognolini A, Raniga H, Roets M, Wyssusek K.** The use of intraoperative cell salvage during obstetric anaesthesia at the Royal Brisbane and Women's Hospital: an interdisciplinary survey. 2<sup>nd</sup> annual Patient Blood Management Symposium, 2018. Brisbane
22. **Tognolini A, Raniga H, Roets M, Wyssusek K.** Experiences, conceptions and barriers to the use of intraoperative cell salvage in a large tertiary teaching hospital. Australian Society of Anaesthetists National Scientific Congress ASM conference, International Convention Centre, 2018. Sydney
23. **Bright, M, Chawla, G, Eley, V.** Anaesthetic and peripartum care outcomes in women with extreme obesity. RBWH Healthcare Symposium, 2018. Brisbane
24. **Chawla, G, Peters, N, Messer, G.** Perioperative Normothermia in Major Vascular Surgery. RBWH Healthcare Symposium, 2018. Brisbane

### Poster Presentations (cont):

25. **Eley, V, Chin, A**, Sekar, R, Donovan T, **Krepska, A**, Bell, S, Lawrence, M, McGrath, S, Webb, L, Robinson, A, Marquart, L. Increased maternal abdominal subcutaneous fat thickness and body mass index are associated with increased caesarean delivery: a prospective cohort study. RBWH Healthcare Symposium, 2018. Brisbane
26. **Eley, V, Chin, A**, Sekar, R, Donovan T, **Krepska, A**, Bell, S, Lawrence, M, McGrath, S, Webb, L, Robinson, A, Ralfe, K, **Van Zundert, A**, Marquart, L. Skin-to-epidural space distance in pregnancy: stronger associational with body mass index than abdominal subcutaneous fat thickness. RBWH Healthcare Symposium, 2018. Brisbane
27. **Eley, V**, Roberts, L, Rickards, L, Blackie, A, Zhang, C, **Christensen, R**, Barrett, H. Arm and finger circumference in the third trimester: implications for blood pressure measurements. RBWH Healthcare Symposium, 2018. Brisbane
28. **Lee, J, Eley, V, Wyssusek, K**, Way, M, Cohen, J, Rowell, J, **Kimble, R, Van Zundert, A**. Rotational thromboelastometry (ROTEM®) in obstetrics: Baseline parameters in uncomplicated and complicated pregnancies: a prospective observational study on parturients. RBWH Healthcare Symposium, 2018. Brisbane
29. **Lee, J, Eley, V, Wyssusek, K**, Way, M, Cohen, J, Rowell, J, **Kimble, R, Van Zundert, A**. Rotational thromboelastometry (ROTEM®) in obstetrics: Baseline parameters in uncomplicated and complicated pregnancies. A prospective observational study on elective caesarean section patients. RBWH Healthcare Symposium, 2018. Brisbane
30. **Nethathe, G, Bright, M, Krepska, A, Eley, V**. Obstetric Critical Care Admissions at the Royal Brisbane and Women's Hospital. RBWH Healthcare Symposium, 2018. Brisbane
31. Ryan, R, **Jackson, D, Hopkins, G, Eley, V, Christensen, R**, Parker, S, **Van Zundert, A**, Wallis, S, **Lipman, J, Roberts, J**. A Pharmacokinetic Model Describing Total and Unbound Cefazolin Concentrations Following a Single Prophylactic Two Gram Dose in Patients Undergoing Elective Bariatric. RBWH Healthcare Symposium, 2018. Brisbane
32. **Town C, Dalgleish L**, Ferguson E, Brown J. Post-operative Pain Management for Burns patients who require Split Skin Grafting for Upper Limb Burns <15% TBSA: a two year retrospective Audit at the RBWH. RBWH Healthcare Symposium, 2018. Brisbane
33. **Nethathe G, Bright M, Krepska A, Eley VA**. Obstetric critical care admissions at the Royal Brisbane and Women's Hospital. Society of Obstetric Medicine of Australian and New Zealand College of Anaesthetists RBWH Healthcare Symposium, 2018. Brisbane
34. **Nethathe G, Bright M, Krepska A, Eley VA**. Obstetric critical care admissions at the Royal Brisbane and Women's Hospital. Society of Obstetric Medicine of Australian and New Zealand College of Anaesthetists Pullman Cairns International, 2018. Cairns
35. **Nethathe G**. Frailty in per-operative patients in three South African Academic Hospitals. Faculty of Medicine, University of the Witwatersrand Research Day, 2018.

### Other Communications and Outputs:

**Eley V**. Opening Plenary Session: Australian and New Zealand College of Anaesthetists Obstetric Anaesthesia Special Interest Group Satellite Meeting. Session Chair: Obstetric Special Interest Group Concurrent Session: Australian and New Zealand College of Anaesthetists Annual Scientific Meeting, 2018. Sydney



## Department of Ears, Nose and Throat

- Completed 2 trials under 2018. Dupilumab, an IL-4 and IL-13 antagonist, in patients with Nasal Polyps and a pilot trial on a drug eluting nasal stent in chronic sinusitis
- The project on characterising the microbiome of otitis media has been concluded. The research has prompted a clinical trial where the application was successful and our research group was awarded \$374 000
- Treating chronic sinusitis with a nasal probiotic spray has been approved by HREC
- Two clinical trials in Hereditary Haemorrhagic Teleangiectasia has been developed and are up for ethics application
- Our clinical evaluation on using outpatient radiofrequency reduction of inferior turbinates. The Royal Brisbane and Women's Hospital New Technology Funding and Evaluation Program has calculated the cost of RFA of inferior turbinates at the ENT outpatients to AUD 184 per patient compared to the surgical procedure where the cost has been estimated at AUD 4500 to 6000. Of our cohort of 189 patients only 6 were referred to surgery of the turbinates under general anaesthesia.

### 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	The microbiome of otitis media and development of a probiotic to prevent otitis media in Australian Indigenous children	<b>Prof Anders Cervin</b> , Dr Seweryn Bialasiewicz, Dr Eva Grahn-Hakansson
Sinead Ahern		Cytokines in chronic rhinosinusitis	<b>Prof Anders Cervin</b>
Dr Sarah Chaudry		Outcomes of radiofrequency reduction of inferior turbinates in an outpatient setting	<b>Prof Anders Cervin</b>
Dr Anders Martensson	PhD	Microbiome Therapy of Chronic Rhinosinusitis	<b>Prof Anders Cervin</b> , Prof Lennart Greiff

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Prof Anders Cervin</b>	Claire Hopkins (Guys Hospital, London)	Core Outcome Dataset in chronic rhinosinusitis
<b>Prof Anders Cervin</b>	Dr Anders Martensson, Lund University Sweden	Microbiome transplant in Chronic Rhinosinusitis
<b>Prof Anders Cervin</b>	Rhinology Fellow	iPro8 A nasal Probiotic spray for purulent chronic rhinosinusitis
<b>Dr James Earnshaw</b>	<b>Prof Anders Cervin</b>	Avastin nasal spray in Hereditary Haemorrhagic Teleangiectasia
<b>Dr James Earnshaw</b>	<b>Prof Anders Cervin</b>	Propranolol in Hereditary Haemorrhagic Teleangiectasia

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Christine Cong Guo (QUT)	<b>Prof Anders Cervin</b>	Developing early biomarkers for Alzheimer's disease using olfactory mucosa
Dr Robyn Marsh, Menzies Darwin, Dr Rachel Lappan, Telethon Inst. Perth	<b>Prof Anders Cervin</b>	The Australian Microbiota in Otitis Media Network
Prof Phil Hugenholtz, Dr Seweryn Bialasiewicz	<b>Prof Anders Cervin</b>	Microbiome in Otitis Media and Metagenomics of the upper airway microbiome
Kirsten Spann (UQ)	<b>Prof Anders Cervin</b>	Defects in antiviral defence in the upper airways of children susceptible to ear infections and/or lower respiratory tract infections
Dr Annika Antonsson QIMR	<b>Prof Anders Cervin</b>	Natural history of oral HPV infection – what risk factors are associated with persistent oral HPV infections?

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Prof Anders Cervin, Dr Andrea Coleman	Dep of ENT	Probiotics to prevent otitis media in Australian Indigenous Infants	The Garnett Passe & Rodney Williams Memorial Foundation	\$124,755.00	\$374,263 (3 years)
Dr Annika Antonsson	Prof Anders Cervin	Natural history of oral HPV infection – what risk factors are associated with persistent oral HPV infections?	Australian Infectious Disease Research Centre (AID)	\$50,000	

## 2018 Research Publications

### Journal Articles:

1. Coleman A, Wood A, Marsh RL, **Cervin A**. The unsolved problem of otitis media in indigenous populations: a systematic review of upper respiratory and middle ear microbiology in indigenous children with otitis media. *Microbiome*; 2018 Nov 6;6(1):1–15
2. Coleman A, **Cervin A**. Probiotics in the treatment of otitis media. The past, the present and the future. *Elsevier*; 2018 Nov 1; 116:135–40
3. Tsang CLN, Nguyen T, Sivesind T, **Cervin A**. Long-term patient-related outcome measures of septoplasty: a systematic review. *2018 May*;275(5):1039–48
4. T L, Liu T, Cooper T, of ACAJ, 2018. Disease burden and productivity cost of chronic rhinosinusitis patients referred to a tertiary centre in Australia. *Theajocom* 2018 Jan 25; 1:5–5
5. **Cervin A**. The Potential for Topical Probiotic Treatment of Chronic Rhinosinusitis, a Personal Perspective. *2018 Jan 12*; 7:151r–6
6. Hopkins C, **Cervin A**, Hettige R, Soni-Jaiswal A, Lakhani R, Douglas R, Harvey R, Leunig A, et al. **CH**ronic **R**hinosinusitis **O**utcome **ME**asures (CHROME), developing a core outcome set for trials of interventions in chronic rhinosinusitis. *Rhinology* 2018 Jan 7.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. Invited; ASOHNS Perth 2018, Probiotic treatment of upper airway disease. **Cervin**
2. Invited; European Rhinologic Society London 2018, Safe sinus surgery. **Cervin**
3. Invited; 4<sup>th</sup> Microbiome R&D & Business Collaboration Congress & 3<sup>rd</sup> Probiotics Congress, Singapore. Topical Probiotics in airway disease. **Cervin**
4. Invited; Frontiers Meeting, Cairns. Treating sinusitis with bacteria **Cervin**.

## Department of General Surgery – Unit 2 Hepato-Biliary / Pancreatic

### 2018 Research Publications

#### Journal Articles:

1. Miller GC, Campbell CM, Manoharan B, **Bryant R, Cavallucci D, O'Rourke N**, et al. Subclassification of hepatocellular adenomas: Practical considerations in the implementation of the Bordeaux criteria. *Pathology*. 2018;50: 593–599
2. **Patel B, Leung U, Lee J, Bryant R, O'Rourke N, Cavallucci D**. Laparoscopic pancreaticoduodenectomy in Brisbane, Australia: an initial experience. *ANZ J Surg*. 2018;88: E440–E444
3. Cho, J. Y., Han, H.-S., Wakabayashi, G., Soubrane, O., Geller, D., **O'Rourke, N.**, Cherqui, D. (2018). Practical guidelines for performing laparoscopic liver resection based on the second international laparoscopic liver consensus conference. *Surgical Oncology*, 27(1), A5–A9. <https://doi.org/10.1016/j.suronc.2017.12.003>
4. **Bell-Allen, N., O'Rourke, H., Hong, L., & O'Rourke, N.** (2017). Laparoscopic ventral hernia repair using only 5-mm ports. *ANZ Journal of Surgery*, 88(7–8), 718–722. <https://doi.org/10.1111/ans.13985>
5. **James Carroll, Michael Kwok, Bhavik Patel and George Hopkins**, Revision gastric bypass after laparoscopic adjustable gastric band: a ten-year experience at a public teaching hospital, *ANZ Journal of Surgery*. 88 (2018) E361–E365.

#### Book Chapter / Letters:

1. **O'Rourke NA, van Rensburg AJ**. Post Cholecystectomy Symptoms. In: Cox MR, Eslick GD, Padbury R, editors. *The Management of Gallstone Disease: A Practical and Evidence-Based Approach*. Cham: Springer International Publishing; 2018. pp. 205–219.

### 2018 Conference Presentations – Invited Speaker, Oral and Poster

#### Invited Speaker:

1. **Cavallucci David**. Robotic resection of 2cm adenocarcinoma in the pancreatic head. ANZHPBA Annual Scientific Meeting, Wellington, New Zealand 2018
2. **O'Rourke Nicholas**. Laparoscopic resection of solitary colorectal liver metastasis Segment 7. ANZHPBA Annual Scientific Meeting, Wellington, New Zealand 2018.

#### Oral Presentations:

1. **Bryant, R., Cavallucci, D., & O'Rourke, N.** (2018). The “Dorsal” approach to laparoscopic major hepatectomy enables expanded indications for laparoscopic liver resection. *HPB*, 20, S267
2. **Kermond, A., O'Rourke, N., Cavallucci, D., & Van Rensburg, A. J.** (2018a). Biliary angina: the nature of biliary pain reviewed. *HPB*, 20, S719
3. **Kermond, A., O'Rourke, N., Cavallucci, D., & Van Rensburg, A. J.** (2018b). Cirrhosis post selective internal radiation therapy-risk factors and prevention. *HPB*, 20, S346.

## Department of General Surgery – Unit 3 Colorectal

The Brisbane Colorectal Research Unit (CRU) was established in 2016, to support and facilitate colorectal research at the RBWH and surrounding hospitals. The unit is a closely aligned association of interested colorectal surgeons and specialists, aiming to deliver high quality research and ultimately provide better outcomes for patients. In addition, the unit focuses on the development and dissemination of minimally invasive techniques for the treatment of colorectal disorders.

The CRU has secured funding to appoint a Research Coordinator to facilitate and centralise the colorectal research activity at RBWH. To date, the CRU represents over 30 active research projects, networks and collaborations, established both locally, nationally and internationally. Our research includes retrospective investigations of patient outcomes following surgery, observational studies assessing best surgical practice, multicentre national and international collaborative projects and early phase clinical trials.

The CRU supports three higher degree scholars, contributing to important research in the following areas; “Theranostics for metastatic colorectal cancer”, “Identification of biomarkers for early detection of anastomotic leaks” and “Investigation of the nutritional status and care of older patients on two general surgical wards”. In addition, the CRU has provided the opportunity for junior personnel to experience colorectal research during medical training by offering supervision and exposure to research during Year 4 elective blocks. This is a great opportunity for junior researchers to be introduced to research methodology and participate in active projects along-side experience researchers.

The CRU forward-looking research agenda continues to develop high quality internationally recognised research, as we reflect and consider how best to direct our resources.

### 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>
<b>Angela Byrnes</b>	Ph.D, UQ (2015-2018)	Investigating the nutritional status and care of older ( $\geq 65$ years) patients on two general surgical wards: a multiphase, action research study	<b>David Clark, Adrienne Young, Alison Mudge, Merrilyn Banks, Judy Bauer</b>
Tahleesa Cuda	Ph.D, UQ (2018 – current)	Theranostics for metastatic colorectal cancer	<b>Andrew Stevenson, David Clark, Paul Thomas, Damian Petersen,</b> Andrew Riddell, John Hooper, Simon Puttick

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University <i>(years)</i>
<b>Aleksandra Edmundson</b>	Honorary Fellow	Colorectal Research Unit (CRU)	The University of Queensland – Dept. Surgery (2016 – current)
<b>Aleksandra Edmundson</b>		Research coordinator for Colorectal Research Unit (CRU)	(2016 – current)

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Craig Harris, David Taylor (CRU), Paul Thomas (HIRF)</b>	Frank Frizells, Andrew McCombie	10-Ten Study: quality of life after surgery for recurrent rectal cancer
<b>Andrew Stevensen, David Clark (CRU)</b>	Tahleesa Cuda, Andrew Riddell, Simon Puttick, John Hooper	Theranostics for metastatic colorectal cancer
<b>David Clark (CRU)</b>	<b>Andrew Stevensen, Damien Petersen, Andrea Warwick, Monica Ding, John Lumley,</b>	Total colectomy for constipation
<b>Andrew Stevensen (CRU)</b>	David Clark	ADIPOSE Study
David Clark (CRU)	<b>Carina Chow, Damien Petersen, John Lumley, Joseph Kong, Nicholas Lutton</b>	Drain fluid amylase as a sensitive biomarker for anastomotic leak following ileal pouch surgery, a multi-centre study

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
David Clark (CRU)	Andrew Riddell, Ehsan Panahi, Julie Moore, Shoni Philpot	Management of malignant polyps in QLD
David Clark, Damien Petersen, Andrew Stevenson (CRU)	John Lumley, Tony McGiffin	Long term consequences of anastomotic leak following laparoscopic restorative surgery with low pelvic colorectal anastomosis
David Clark (CRU),	David James, Tom Snow, Edward Yeoh, Jit Pratrapp, Stephen Allison	Gastrografin rectal flushes for the evaluation of anastomotic leak
Andrew Stevenson (CRU), Matthew Burge, Paul Thomas	David Clark, Craig Harris, Carina Chow, Damien Petersen, David Taylor	A pilot study of CXCR-PET scanning in operable rectal cancer
David Clark (CRU)	Joanna Yu, David Sidhom	Functional outcomes of anastomotic leak after restorative proctectomy and ileal pouch surgery
David Clark (CRU), Graham Radford-Smith	Anton Lord, Lisa Simms	Pre-diagnostic signature for colorectal
David Clark (CRU), Bree Stephensen	NA	Transanal tubes, pelvic drains and defunctioning ileostomies: a surgeons' preference survey

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Cherry Koh, Michael Solomon	Craig Harris, David Taylor, David Clark	Localised recurrent rectal cancer QoL study (Phase-III)
Doug Roche, James Davidson, Neal Martin	David Clark	Petrospective review of surgical outcomes for patients managed in regional area pre- and post establishment of an IBD clinic
Stephen Smith	Bree Stephenson, David Clark, David Westwood	CRP validation study in predicting anastomotic leak

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
David Clark	Colorectal Research Unit (CRU)	Research Fund	Johnson & Johnson (Australia)	\$45,000	\$180,000 (2015-2018)
David Clark	Colorectal Research Unit (CRU)	Research Fund	Olympus (Australia)	\$30,000	\$120,000 (2015-2018)
David Clark, Graham Radford-Smith, Lisa Simms, Anton Lord	Colorectal Research Unit/ Surgery/ Gastroenterology	Pre-diagnostic signature for colorectal cancer: Defining a pre-diagnostic biomarker signature	RBWH Foundation	\$20,000	\$20,000 (2018)

## 2018 Research Publications

### Journal Articles:

- Clark, D. A., 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. (2018). Colorectal Disease: The Official Journal of the Association of Coloproctology of Great Britain and Ireland, doi:10.1111/codi.14536
- Campbell B, Reid A, Clark D, Harvey J. A case study of ileal metaplasia and neoplasia in a patient with an ileal-rectal anatomosis. J Coloproctology Dec 2017Volume 38, Issue 2, April–June 2018, Pages 151-153
- Cuda T, Riddell A, Clark D. Giant faecolith as an unusual cause of small bowel obstruction: a case report. International Journal of Case Reports and Images, Vol. 9, 2018. ISSN: 0976-3198. 2018
- Byrnes A, Young A, Mudge A, Banks M, Clark D, and Bauer J. Prospective application of an implementation framework to improve postoperative nutrition care processes: Evaluation of a mixed methods implementation study. Nutrition and Dietetics 2018; 75: 353–362.
- Adamina M, Buchs NC, Penna M, Hompes R; St.Gallen Colorectal Consensus Expert Group (inc. Stevenson ARL). St.Gallen consensus on safe implementation of transanal total mesorectal excision. Surg Endosc. 2018 Mar;32(3):1091-1103



### Journal Articles: (cont):

6. Dickfos M, Tan SBM, **Stevenson ARL, Harris CA, Esler R, Peters M, Taylor DG**. Development of a pelvic exenteration service at a tertiary referral centre. *ANZ J Surg*. 2018 Mar 6. doi: 10.1111/ans.14427. [Epub ahead of print]
7. Abbott SC, **Stevenson ARL, Bell SW, Clark D**, Merrie A, Hayes J, Ganesh S, Heriot AG, Warriar SK. An assessment of an Australasian pathway for the introduction of transanal total mesorectal excision (taTME). *Colorectal Dis*. 2018 Jan;20(1): O1-O6
8. Penna, Marta; Hompes, Roel; Arnold, Steve; Wynn, Greg; Austin, Ralph, FRCS; Warusavitarne, Janindra; Moran, Brendan; Hanna, George B; Mortensen, Neil J; Tekkis, Paris P; (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*: January 5, 2018 – Volume Publish Ahead of Print – Issue
9. **Hamilton AER, Warren C and Stevenson ARL**. Neurovascular-Sparing during Anterior Resections for Diverticular Disease: the Century-long Debate. *Col Diseases* – accepted for publication 7/2018 (*CDI-00506-2018*)
10. Sakata S, Klein K, **Stevenson ARL**, Hewett DG. Measurement Bias of Polyp Size at Colonoscopy. *Dis Colon Rectum*. 2017 Sep;60(9):987-991
11. Sakata S, McIvor F, Klen K, **Stevenson AR**, Hewett DG. Measurement of Polyp Size at Colonoscopy: a Proof-of-Concept Simulation Study to Address Technology Bias *Gut*. 2018 Feb;67(2):206-208
12. **Westwood, D. A., Cuda, T. J., Hamilton, A. E. R., Clark, D., & Stevenson, A. R. L.** Trans-anal total mesorectal excision for rectal cancer: State of the art. *Techniques in Coloproctology*, (2018). 22(9), 649-655
13. Hamilton AER, **Stevenson ARL, Warren CD, Westwood DA**. Colorectal surgeons should be open to modern surgical technologies for challenging cases. *ANZ J Surg*. 2018 Sep;88(9):831-835.

### Book Chapters / Letters:

1. **ARL Stevenson**. Zen and the Art of the Purse-string: In-Transanal Minimally Invasive Surgery (TAMIS) & Transanal Total Mesorectal Excision (taTME) – Ed. S. Atallah (in press)
2. D'Hoore A and **Stevenson ARL**. Endometriosis: In-Keighley & Williams' Surgery of the Anus, Rectum and Colon, Fourth Edition (2018).

## Conference Presentations – Invited Speaker, Oral and Poster

### Oral Presentations:

1. **Clark D**: GESAQ Noosa “Timing is Everything: Colectomy in Acute and Chronic Colitis” July 2018. QLD, Australia
2. **Clark D**: AGW. “Optimizing the IBD patient for surgery”. September 2018. Brisbane, Australia
3. **Clark D**: CSSANZ Spring Meeting. “Omitting Loop Ileostomy in ULAR and Ileo-anal Pouch Surgery”. October 2018. Fremantle, Australia
4. **Stevenson ARL**: Global Perspective TaTME. American Society of Colon & Rectal Surgeons. Annual Scientific Meeting, May 2018. Nashville, Tennessee, USA
5. **Stevenson ARL**: Top Ten Tips for Ventral Rectopexy – Biologics. American Society of Colon & Rectal Surgeons Annual Scientific Meeting, May 2018 Nashville, Tennessee, USA
6. **Stevenson ARL**: Expanding MIS Capabilities with Robotic Assistance – Robotic Exenteration, TaTME and TAMIS. Sydney Robotics Summit. 23 June 2018. Sydney Australia
7. **Stevenson ARL**: How I Do: Robotic Ultra Low Anterior Resection. Sydney Robotics Summit. 23 June 2018. Sydney Australia
8. **Stevenson ARL**: Hot Topics in Surgical Robotics Today and Tomorrow – Panel Discussion. Sydney Robotics Summit. 23 June 2018. Sydney Australia
9. **Stevenson ARL**: Fluorescence Imaging via ICG Injection and the Insertion of Lighted Stents. Advanced Imaging in General Surgery 27 March 2018. Brisbane Australia Brisbane
10. **Stevenson ARL**: Robotic Ventral Rectopexy da Vinci Colorectal Workshop. Peter MacCallum Cancer Centre, 2-3 March 2018. Melbourne Australia.

### Poster Presentations:

1. **David Clark**: Clinical factors associated with chronic inflammatory outcomes following ileal pouch-anal anastomosis for ulcerative colitis. AGW Brisbane 2018
2. David Theile, **David Clark, David Taylor**, John Hansen, Mark Doudle, Nicholas Lutton, Pieter Prinsloo, John Harrington, Nathan Dunn, Neal Rawson: The safety and efficacy of colorectal cancer surgery in Queensland. Clinical Oncology Society of Australia (COSA) Perth 2018
3. David Theile, **David Clark, David Taylor**, John Hansen, Mark Doudle, Nicholas Lutton, Pieter Prinsloo, John Harrington, Nathan Dunn, Neal Rawson: Quality of care and quality of life for Queensland colorectal cancer patients. Clinical Oncology Society of Australia (COSA) Perth 2018.

## Other Communications and Outputs:

Dr Sarah Abbott, **A/Prof Andrew RL Stevenson, Mr Stephen W Bell, A/Prof David Clark**, Mr Arend Merrie, Mr Julian Hayes, Mr Shanthan Ganesh, Mr Satish K Warriar. Assessment of a formalised structured pathway for training and accreditation for transanal total mesorectal excision (taTME).

## Department of General Surgery – Unit 5 Acute Surgical Unit (ASU)

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### 2018 Research Publications

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#### Journal Articles

1. **Lucas Wheatley, Matthew Lonne, James Bennett, Bhavik Patel** Actinomycosis of the Appendix, Arch Surg Clin Res. 2018; 2: 029-030.



# Department of Ophthalmology

## 2018 Research Awards and Achievements

Recipient	Award	Event
Newman, A., Cranstoun, M., Chow, S., Sullivan, T., 2018	Best Surgical Video and Best Overall Video	2018 RANZCO National Conference
Cranstoun, M., Schlect, D., Henden, A., Brennan, S., Pratt, G., Sullivan, T., 2018	Dermot Roden Prize for Best Oculoplastics Paper Presented.	2018 RANZCO National Conference

## 2018 Research Publications

### Journal Articles:

1. Optic disc pit maculopathy. Fraenkel A, Lee LR, Todd B. Clin Exp Optom. 2018 May;101(3):422-423. doi: 10.1111/cxo.12611. Epub 2017 Oct 9. No abstract available. PMID: 28994138
2. Recurrent intraocular haemorrhage due to pars plana Baerveldt glaucoma drainage device. Fraenkel A, Lee LR, Lee GA. Clin Exp Ophthalmol. 2018 Jan;46(1):90-92. doi: 10.1111/ceo.13004. Epub 2017 Jun 23. No abstract available. PMID: 28603883.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Oral Presentations:

1. Cranstoun, M., Schlect, D., Henden, A., Brennan, S., Pratt, G., Sullivan, T., 2018, Low-doses Radiotherapy in the treatment of Ocular Andexal Lymphoma, An Australian Cohort. RANZCO 2018
2. Newman, A., Cranstoun, M., Chow, S., Sullivan, T., 2018. Video: Management of Post-Operative Orbital Emphysema. RANZCO 2018.

### Poster Presentations:

1. Park, J. Central acute middle maculopathy following routine vitrectomy for vitreomacular traction syndrome and epiretinal membrane. APVRS Meeting in Seoul 14<sup>th</sup>-16<sup>th</sup> December 2018.

## Department of Orthopaedics

The RBWH Department of Orthopaedic Surgery has a long tradition of innovation, clinical excellence, and high-quality research. Local, national, and international collaboration continues to be the hallmark of our research initiatives, fostering relationships that generate synergies. Once again, more than 20 formal publications from our Department appeared in 2018, marking the fourth consecutive year this milestone has been reached.

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, and are looking forward to working there together with our academic and industry partners.

The key achievement for the year 2018 was that more than 10 individuals from within our Department published at least one article, and more people are involved in active research projects than ever before. This is encouraging, and suggests a culture of clinical research and investigation now imbues the Department. The FAITH study group had another paper published, as part of an important international effort to investigate alternatives for fixation of displaced femoral neck fractures. Dr Brett Halliday and co-authors published their results following a 20-year single-surgeon cohort of joint arthroplasty performed in patients with haemophilia, an impressive series. Finally, preliminary results began to be realised regarding our extensive investigations into the biology of the Masquelet induced membrane, used to reconstruct post-traumatic long bone defects. 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 publications expected to debut in the coming year.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Bilal Zahoor	PhD – University of Queensland	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	<b>Kevin Tetsworth</b> , Daryl Wall
Min Tri Phan	PhD – QUT	Femoral morphology variations and relevant implant fit in relation to peritrochanteric and distal femur fractures	<b>Kevin Tetsworth</b> , Beat Schmutz (QUT)
Antony Rapisarda	PhD – UNSW	Identification of serum biomarkers for the diagnosis of orthopaedic infections and sepsis	<b>Kevin Tetsworth</b> , <b>Jeff Lipman</b> , Ross Crawford (TPCH)
Naomi Paxton	PhD – QUT	The future of clinical biofabrication: creating patient-specific melt-electrospun scaffolds for bone regeneration	<b>Kevin Tetsworth</b> , Mia Woodruff (QUT)
Chris Conyard	PhD – University of Queensland	Knee pain after IM nailing of tibial shaft fractures: randomised controlled trial of infra-patellar vs supra-patellar insertion techniques	<b>Kevin Tetsworth</b> , Ross Crawford (TPCH)

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Nick Green</b>	Orthopaedic 3D Medical Modeller	3D Modelling and Printing in Orthopaedic Surgery	MNHHS (2015 – current)

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Richard Hanly</b>	<b>Luca Daniele</b> , <b>James Powell</b>	Prospective case-controlled series using ankle arthroscopy in trauma
<b>Andrew Mayo</b>	<b>Luca Daniele</b>	The effect of scaphoid reduction on carpal kinematics in scaphoid nonunion

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Paul McEniery	Luca Daniele	Assessment of biomechanical stability and kinematics using a novel anatomic distal radio-ulnar joint reconstruction
Jerry van de Pol	John Kinyanjui, Marita Prior, Macy Lu	Randomised controlled trial comparing short vs long tunnels for anterior cruciate ligament knee reconstructions: Clinical and radiographic characteristics
Kevin Tetsworth, Jerry van de Pol	Steven Kent	Validation of a classification scheme for malunions and nonunions of the proximal tibia and tibial plateau
Kevin Tetsworth, Jerry van de Pol	Tom Crookes, Marita Prior	Clinical and radiographic outcomes after internal fixation of glenoid neck fractures through a modification of the modified Judet approach
Kevin Tetsworth, Jerry van de Pol, A/Prof Michael Doran (QUT)	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
Kevin Tetsworth, Jerry van de Pol	Timothy Wong, Vaida Glatt, (Univ of Texas, San Antonio)	Clinical outcomes in a clinical series of massive femoral bone defects using custom 3D printed titanium cages placed into a Masquelet induced membrane
Kevin Tetsworth, Jerry van de Pol	Luca Daniele, Gurpreeth Singh	Tension band wiring vs cannulated screw augmented fixation for patella fractures
Kevin Tetsworth, Prof Michael Schuetz (JTI)	Marita Prior, Vaida Glatt (Univ of Texas, San Antonio), Molly Ann Purdon Hulbert	Proposed classification scheme for post-traumatic skeletal defects, with a validation study in a clinical series of long bone fractures
Kevin Tetsworth	Nick Green, Steve Kent, George Patterson, Vaida Glatt, Joyce Antony, George Banic	Statistical shape modelling from CT scans to assess the morphology and morphometry of adult human cadaveric tali: gender-specific differences
Kevin Tetsworth	Nick Green, Luke Visscher, Marita Prior	Statistical shape modelling from CT scans to assess the morphology and morphometry of the adult human scapula: design considerations for implants for surgical stabilisation
Kevin Tetsworth	Nick Green, Luke Visscher, Marita Prior	Statistical shape modelling from CT scans to assess the morphology and morphometry of the adult human humerus
Kevin Tetsworth	Nick Green, Luke Visscher, Marita Prior, Erik Hohmann	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
Kevin Tetsworth	Luke Visscher, Marita Prior	The natural history of post-traumatic malalignment: radiographic correlation between varus/valgus and medial/lateral degenerative arthritis
Kevin Tetsworth	Miran Stubican, Marita Prior	Clinical and radiographic characteristics of combined pilon and talus/talar dome injuries
Kevin Tetsworth	Rajendra Shetty	Clinical series using the Masquelet induced membrane technique for long bone reconstruction
Kevin Tetsworth	Rishi Narasimhan	Meta-synthesis of outcomes after anterior minimally invasive plating for stabilization of humeral shaft fractures – The first 1,000 cases published globally
Kevin Tetsworth	Luke Visscher, Nick Green	Design considerations for an implant specific for percutaneous anterior minimally invasive plating of humeral shaft fractures
Kevin Tetsworth	Luke Visscher, Nick Green	Design considerations for an implant specific for stabilisation of scapular fractures
Kevin Tetsworth	Ishwar Bhattarai, Elliott D'Costa	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
Kevin Tetsworth	Alexey Borshch	Analysis of failure of surgical treatment for adult chronic osteomyelitis
Kevin Tetsworth	Daryl Wall, Bilal Zahoor, 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
Kevin Tetsworth	Jeff Lipman, Antony Rapisarda, Sara Martinez-Martos	Identification of serum biomarkers for the diagnosis of orthopaedic infections and sepsis
Kevin Tetsworth	Chris Conyard, Ross Crawford	Knee pain after intra-medullary nailing of tibial shaft fractures: randomised controlled trial of infra-patellar vs supra-patellar insertion techniques

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Kevin Tetsworth</b>	Molly Ann Purdon Hulbert, Sara Martinez-Martos	Delays in coverage of open fractures: clinical outcomes and incidence of deep infection with type 4 open tibial fractures
<b>Kevin Tetsworth</b>	<b>Nick Green</b>	Geographical mapping of injuries to the talar dome and talus associated with distal tibial pilon fractures
<b>Kevin Tetsworth</b>	Liz Hines, Samantha Dowling	Infections associated with fasciotomy wounds
<b>Kevin Tetsworth</b>		Temporal evolution of the microbiome in Type 4 (neglected) open fractures
<b>Kevin Tetsworth</b>	Rishi Narasimhan, Minoo Patel (Melbourne), Australian Limb Lengthening and Reconstruction Society	Clinical implications of patients returning to Australia after undergoing complex limb reconstruction and elective lengthening procedures overseas
<b>Kevin Tetsworth</b>	Travis Parkulo (Marshall University, West Virginia), Erik Hohmann (Dubai), Julian Tetsworth	Triangular antiprisms: The geometry of hexapod external fixators and the etiology of paradoxical accelerated lengthening
<b>Kevin Tetsworth</b>	<b>Nick Green</b>	Design of a unique class of 3D structures that combine features of gyroids and lattices (hybrid triply periodic hyperbolic surface)
<b>Kevin Tetsworth</b>	<b>Luca Daniele, Matt Davis, Owen O'Neill, Nick Green</b>	In vitro validation study of a technique using a measured volume of saline to determine bone volume loss intra-operatively

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Vaida Glatt, Anna Woloszyk (Univ of Texas, San Antonio)	<b>Kevin Tetsworth</b>	Genomic analysis of growth factors associated with human induced (Masquelet) membranes: differential gene expression specific to osteogenesis, chondrogenesis, angiogenesis, and stem cell recruitment
Vaida Glatt, Anna Woloszyk (Univ of Texas, San Antonio)	<b>Kevin Tetsworth</b>	Genomic analysis of growth factors associated with early fracture healing under different mechanical conditions
Vaida Glatt (Univ of Texas, San Antonio), Steve Block	<b>Kevin Tetsworth, Nick Green</b>	Design of biomimetic 3D printed titanium cages
Ian Harris (Sydney), Mithun Joshi, John Limbers, Zsolt Balogh (Newcastle)	<b>Kevin Tetsworth</b>	SOFIE (Surgery for Olecranon Fractures In the Elderly): randomized controlled trial of operative vs non-operative treatment of olecranon fractures in the elderly
Ajay Pandey (QUT), Ross Crawford	<b>Kevin Tetsworth, Nick Green, Richard Hanly</b>	Robotic-assisted reduction and stabilisation of intra-articular calcaneal fractures
Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu	<b>Kevin Tetsworth</b>	Transcutaneous endo-prosthetic reconstruction of wheelchair bound transfemoral amputees
Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu	<b>Kevin Tetsworth</b>	Transcutaneous endo-prosthetic reconstruction of military blast injuries
Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu	<b>Kevin Tetsworth</b>	Transcutaneous endo-prosthetic reconstruction of trans-tibial amputees
Munjed Al Muderis (University of Notre Dame, Sydney), Seamus Thompson, William Lu	<b>Kevin Tetsworth</b>	Osseointegrated implants for transfemoral amputees: radiographic evaluation of bone remodeling
Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu	<b>Kevin Tetsworth</b>	Osseointegrated implants for transfemoral amputees: temporal evaluation of changes in bone mineral density in the femoral residuum and the adaptive response to loading
Munjed Al Muderis (University of Notre Dame, Sydney), William Lu	<b>Kevin Tetsworth</b>	Morphology and morphometry of the residual femur after trans-femoral amputation – implications for the design of implants used for osseointegration to reconstruct amputees
Paul Tuckett, Matthew Hope (Princess Alexandra)	<b>Kevin Tetsworth, Arvind Puri</b>	Transarticular tibio-talo-calcaneal nailing versus open reduction and internal fixation for treatment of the elderly ankle fracture: protocol for a multi-centre, prospective, randomised controlled trial

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Pablo Corona (Barcelona)	<b>Kevin Tetsworth</b> , Vaida Glatt (Univ of Texas, San Antonio)	Using 3D printed models to preoperatively plan for the application of circular fixators for gradual deformity correction
Cengiz Sen (Istanbul)	<b>Kevin Tetsworth</b>	Supracondylar nail augmented acute shortening/lengthening for the treatment of infected nonunion of the distal femur with bone loss
Matthew Hope (Princess Alexandra), <b>Cliff Pollard</b> , <b>Kirsten Vallmuur</b> , <b>Cate Cameron</b> , <b>Jacelle Lang</b> (Jamieson Trauma Institute)	<b>Kevin Tetsworth</b> , <b>Jerry van de Pol</b>	The economic impact of lower extremity injuries at two major trauma centres in Brisbane, Australia
Gunnar Norstedt (Karolinska Institute, Stockholm), (Per Prisell (Burnie), Mark Wilson (Sunshine Coast))	<b>Kevin Tetsworth</b>	Genomic analysis of hip muscles for biomarkers specific to heterotopic ossification: comparison of gluteus minimus and medius muscles

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Luca Danielle</b>	Bill Crawford Award for Best Registrar Scientific Paper	2018 Australian Orthopaedic Association Queensland Branch Annual Scientific Meeting

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
A/Prof Michael Doran (QUT/TRI), <b>Kevin Tetsworth</b> , Cameron Cooke, Kathryn Futegra, Kate Campbell, Mark Young, Jodie Robinson	Department of Orthopaedic Surgery	Using placenta-derived mesenchymal stem/stromal cells (pMSC) to repair non-union bone fractures	2018/19 Cord Blood Research Grant (Inner Wheel Australia Foundation Trust)	\$65,000	\$65,000 (2018)

## 2018 Research Publications

### Journal Article:

- Anderson JA, Mason JA, **Halliday B**. Clinical outcomes and patient satisfaction following total hip and knee arthroplasty in patients with inherited bleeding disorders: a 20-year single-surgeon cohort. *Haemophilia* 2018; 24:786–791; DOI: 10.1111/hae.13559
- Hanly RJ**, Marvi SK, Whitehouse SL, Crawford RW. Morbid obesity in total knee arthroplasty: joint-specific variance in outcomes for operative time, length of stay, and readmission. *J Arthroplasty* 2017;32-9:2712
- Hanly RJ**, Sokolowski S, Timperley AJ. The SPAIRE technique allows sparing of the piriformis and obturator internus in a modified posterior approach to the hip. *Hip Int* 2017;27-2:205-9
- Robinson PW, **Hanly RJ**, Senthil S, Nall A, Hepple S, Harries W, Winson I. The results of arthroscopic and open flexor hallucis longus tendon transfers. *Orthopaedic Proceedings* 2017;99-B-SUPP\_21:22
- Piercey J, **McEnery P**, **Green N**. Deep Transverse Metacarpal Ligament Reconstruction Using Suture Button and A1 Pulley. *Techniques in Hand & Upper Extremity Surgery* 2017; 21(4): 128–130; doi: 10.1097/BTH.000000000000169
- van de Pol GJ**, Bonar F, Salmon LJ, **Roe JP**, Pinczewski LA. Supercritical Carbon Dioxide-Sterilized Bone Allograft in the Treatment of Tunnel Defects in 2-Stage Revision Anterior Cruciate Ligament Reconstruction: A Histologic Evaluation. *Arthroscopy*. 2018; 34(3): 706-713
- Hohmann E, Glatt V, **Tetsworth K**. Orthopaedic academic activity in the United States: Bibliometric analysis of Publications by City and State. *J Am Acad Orthop Surg (JAAOS) Global Research Reviews* 2018; 2(7): e027. Published 2018 Jul 23. doi:10.5435/JAAOSGlobal-D-18-00027
- Hohmann E, Glatt V, **Tetsworth K**. Swimming induced pulmonary oedema in athletes—a systematic review and best evidence synthesis. *BMC Sports Science, Medicine and Rehabilitation* 2018; 10(1): 18
- Corona PS, Vicente M, **Tetsworth K**, Glatt V. Preliminary results using patient-specific 3D printed models to improve preoperative planning for correction of post-traumatic tibial deformities with circular frames. *Injury* 2018; 49: S51-9
- Hohmann E, Myburgh J, Keough N, **Tetsworth K**, Glatt V. Inter-and intraclass correlations for three standard foot radiographic measurements for plantar surface angles. Which measure is most reliable? *Foot and Ankle Surgery* 2018; Jul 26 (in press, corrected proof). <https://doi.org/10.1016/j.fas.2018.07.007>

### Journal Articles: (cont):

11. Hohmann E, Glatt V, **Tetsworth K**, Cote M. Arthroscopic partial meniscectomy versus physical therapy for degenerative meniscus lesions: How robust is the current evidence? A critical systematic review and qualitative synthesis. *Arthroscopy* 2018; 34(9): 2699-708. <https://doi.org/10.1016/j.arthro.2018.04.018>
12. Hohmann E, **Tetsworth K**. Fellowship exit examination in orthopaedic surgery in the commonwealth countries of Australia, UK, South Africa and Canada. Are they comparable and equivalent? A perspective on the requirements for medical migration. *Medical Education Online*. 2018 Jan 1; 23(1): 1537429
13. Baldini A, Blevins K, Del Gaizo D, Enke O, Goswami K, Griffin W, Indelli F, Jennison T, Kenanidis E, Manner P, Patel R, Puhto T, Sancheti P, Sharma R, Sharma R, Shetty R, Sorial R, Talati N, Tarity TD, **Tetsworth K**, Topalis C, Tziridis E, W-Dahl A, Wilson M. General assembly, prevention, operating room - personnel: Proceedings of International Consensus on Orthopedic Infections. *The Journal of Arthroplasty* 2018; in press. DOI: <https://doi.org/10.1016/j.arth.2018.09.059>
14. Hohmann E, König A, Kat CJ, Glatt V, **Tetsworth K**, Keough N. Single-versus double-row repair for full-thickness rotator cuff tears using suture anchors. A systematic review and meta-analysis of basic biomechanical studies. *Eur J Orthop Surg Traumatol*. 2018; 2:859-68. doi:10.1007/s00590-017-2114-6. PMID: 29270867
15. McKinley TO, D'Allyrande JC, Valerio I, Schoebel S, **Tetsworth K**, Elster EA. Management of mangled extremities and orthopaedic war injuries. *Journal of Orthopaedic Trauma*: 2018; 32(3): S37–S42. doi: 10.1097/BOT.0000000000001121
16. Muderis MA, Lu W, Glatt V, **Tetsworth K**. Two-stage osseointegrated reconstruction of post-traumatic unilateral transfemoral amputees. *Mil Med*. 2018; 183 (supplement 1):496-502. doi: 10.1093/milmed/usx185. PMID: 29635590
17. Molepo M, Barnard AC, Birkholtz F, **Tetsworth K**, Glatt V, Hohmann E. Functional outcomes of failed plate fixation in distal tibial fractures salvaged by hexapod external fixator. *Eur J Orthop Surg Traumatol* 2018. <https://doi.org/10.1007/s00590-018-2231-x>
18. **Tetsworth K**, Hohmann E, Glatt V. Minimally invasive plate osteosynthesis of humeral shaft fractures: Current state of the art. *JAAOS - Journal of the American Academy of Orthopaedic Surgeons*. 2018 Sep 15;26 (18): 652-61. doi: 10.5435/JAAOS-D-17-00238. PMID: 30113346
19. Sprague S, Schemitsch EH, Swiontkowski M, Della Rocca GJ, Jeray KJ, Liew S, Slobogean GP, Bzovsky S, Heels-Ansdell D, Zhou Q, Bhandari M; **FAITH Investigators**. Factors associated with revision surgery after internal fixation of hip fractures. *J Orthop Trauma* 2018; 32(5): 223-230. doi: 10.1097/BOT.0000000000001162. PMID: 29677091. (Including **Annette Flynn, Bret Halliday, Michael Holt, Kevin Tetsworth, Steven Yang, Paul Pincus, and Trevor Gervais**)
20. 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* 2018; pp 1-8. <https://doi.org/10.1007/s00402-018-3000-3>.

### Book Chapter:

1. **Tetsworth K**, Glatt V: "Amputations", in *Synopsis of Orthopaedic Trauma Management*. Edited by Mullis B and Gaski G. Thieme Medical Publishers, Inc., 333 Seventh Avenue, New York, NY 10001, USA. (2018).

## 2018 Conference Presentations – Invited Speaker, Oral, and Poster

### Invited Speaker:

1. **McEniery P**. Principles of management of adult brachial plexus injuries. Queensland Hand Surgery Society Annual Meeting 24-25 November 2018
2. **McEniery P**. Volar Plating proximal interphalangeal joint pilon fractures. Queensland Hand Surgery Society Annual Meeting 24-25 November 2018
3. **Tetsworth K**. What's new in hip fractures? (literature review). Proximal Femoral Fracture Management Experts Forum, Dubai, United Arab Emirates (UAE) – 6-7 April 2018
4. **Tetsworth K**. Interesting clinical cases – proximal femur fractures. Proximal Femoral Fracture Management Experts Forum, Dubai, UAE – 6-7 April 2018
5. **Tetsworth K**. Unstable hip fractures: how do we improve outcomes? Proximal Femoral Fracture Management Experts Forum, Dubai, UAE – 6-7 April 2018
6. **Tetsworth K**. Stable hip fractures: best techniques for fixation. Proximal Femoral Fracture Management Experts Forum, Dubai, UAE – 6-7 April 2018
7. **Tetsworth K**. Informed principles: our guide to better outcomes. Proximal Femoral Fracture Management Experts Forum, Dubai, UAE – 6-7 April 2018
8. **Tetsworth K**. Pre-operative planning of lower extremity deformity: Malalignment test, CORA method, and osteotomy rules. 4<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 16-19, 2018
9. **Tetsworth K**. Taylor Spatial Frame: How does it differ from Ilizarov? 4<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 16-19, 2018
10. **Tetsworth K**. Options for management of traumatic segmental skeletal defects. 4<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 16-19, 2018
11. **Tetsworth K**. Advantages of the Masquelet technique. 4<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 16-19, 2018
12. **Tetsworth K**. Extra articular deformity: Implications for total knee arthroplasty. 4<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 16-19, 2018



### Invited Speaker: (cont):

13. **Tetsworth K.** Combined techniques for the safe correction of very large tibial rotational deformities in adults. 4<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 16-19, 2018
14. **Tetsworth K, Al Muderis M.** Osseointegration: The ultimate post-traumatic limb reconstruction? 4<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 16-19, 2018
15. **Tetsworth K.** Bone loss and total knee arthroplasty. 11<sup>th</sup> Meeting of the International Musculoskeletal Society, Beirut, Lebanon 8-10 July 2018
16. **Tetsworth K.** Case discussion: infected total knee replacement. 11<sup>th</sup> Meeting of the International Musculoskeletal Society, Beirut, Lebanon 8-10 July 2018
17. **Tetsworth K.** High-energy injuries of the upper extremity with bone loss. 11<sup>th</sup> Meeting of the International Musculoskeletal Society, Beirut, Lebanon 8-10 July 2018
18. **Tetsworth K.** Introduction to planning a patient specific cage to reconstruct a major bone defect. 11<sup>th</sup> Meeting of the International Musculoskeletal Society, Beirut, Lebanon 8-10 July 2018
19. **Tetsworth K.** Case discussion: shoulder instability. 11<sup>th</sup> Meeting of the International Musculoskeletal Society, Beirut, Lebanon 8-10 July 2018
20. **Tetsworth K.** Case discussion: difficult revision THA. 11<sup>th</sup> Meeting of the International Musculoskeletal Society, Beirut, Lebanon 8-10 July 2018
21. **Tetsworth K.** Lower extremity injuries with significant bone loss. 11<sup>th</sup> Meeting of the International Musculoskeletal Society, Beirut, Lebanon 8-10 July 2018
22. **Tetsworth K.** Talus injuries and AVN with infection. 11<sup>th</sup> Meeting of the International Musculoskeletal Society. Beirut, Lebanon 8-10 July 2018
23. **Tetsworth K.** Case discussion: shoulder infection. 11<sup>th</sup> Meeting of the International Musculoskeletal Society, Beirut, Lebanon 8-10 July 2018
24. **Tetsworth K.** Osteotomy rules: the geometry of deformity correction. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
25. **Tetsworth K.** Percutaneous osteotomy techniques. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
26. **Tetsworth K.** Distal femoral replacement for complex acute fractures in the elderly. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
27. **Tetsworth K.** Osseointegration in PVD and wheel chair bound amputees. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
28. **Tetsworth K.** Translation deformity planning. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
29. **Tetsworth K.** Evolution of limb salvage: 1950 through 2025. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
30. **Tetsworth K.** Introduction to planning a patient-specific cage to reconstruct a major bone defect. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
31. **Tetsworth K.** Management of prosthetic joint infection: antibiotic elution from PMMA spacers. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
32. **Tetsworth K.** New alternatives for bone segment transport. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
33. **Tetsworth K.** Biology of the Masquelet induced membrane. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
34. **Tetsworth K.** Bone transport: docking site management. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
35. **Tetsworth K.** Chronic osteomyelitis: optimising debridement in the 21<sup>st</sup> Century Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
36. **Tetsworth K.** Extra-articular deformity and TKA: strategies for management. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
37. **Tetsworth K.** Global experience with minimally invasive plate osteosynthesis for the stabilization of humeral shaft fractures: Systematic review and quantitative evidence synthesis of clinical results. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
38. **Tetsworth K.** Osseointegration update. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
39. **Tetsworth K.** Neglected open fractures Grade 4. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
40. **Tetsworth K.** Clinical cases: non-union reconstruction. Supersemana Académica (Academic Super Week) Colombian Orthopedic Association, Medellin, Colombia, 29 October to 1<sup>st</sup> November 2018
41. **Tetsworth K.** Biology of the Masquelet induced membrane. Joint American Academy of Orthopedic Surgeons (AAOS) and Saudi Orthopaedic Association Meeting, Jeddah, Saudi Arabia – 8-11 December 2018
42. **Tetsworth K.** Minimally invasive plate osteosynthesis (MIPO) for the stabilization of humeral shaft fractures. Joint AAOS and Saudi Orthopaedic Association Meeting, Jeddah, Saudi Arabia – 8-11 December 2018
43. **Tetsworth K.** Current alternatives for managing segmental defects. Joint AAOS and Saudi Orthopaedic Association Meeting, Jeddah, Saudi Arabia – 8-11 December 2018
44. **Tetsworth K.** Introduction to planning a patient specific cage to reconstruct a major bone defect. Joint AAOS and Saudi Orthopaedic Association Meeting, Jeddah, Saudi Arabia – 8-11 December 2018

### Invited Speaker: (cont):

45. **Tetsworth K.** Chronic osteomyelitis: mastering debridement in the 21<sup>st</sup> Century. Joint AAOS and Saudi Orthopaedic Association Meeting, Jeddah, Saudi Arabia – 8-11 December 2018
46. **Tetsworth K.** Osseointegration: Current state of the art, Queensland Trauma Symposium, Brisbane, QLD, 23 February 2018
47. **Tetsworth K.** 3D printed custom titanium scaffolds for the management of segmental bone defects, 3<sup>rd</sup> Complex Revision and Limb Salvage Meeting, Noosa, QLD, 23-25 February 2018
48. **Tetsworth K.** Complex case discussion: simultaneous reconstruction of segmental femoral defect and total hip replacement, 3<sup>rd</sup> Complex Revision and Limb Salvage Meeting, Noosa, QLD, 23-25 February 2018
49. **Tetsworth K.** Distal femoral replacement for complex acute fractures in the elderly, 3<sup>rd</sup> Complex Revision and Limb Salvage Meeting, Noosa, QLD, 23-25 February 2018
50. **Tetsworth K.** Symptomatic hip abductor deficiency: technique of reconstruction, 3<sup>rd</sup> Complex Revision and Limb Salvage Meeting, Noosa, QLD, 23-25 February 2018
51. **Tetsworth K.** New alternatives for bone transport, Australian Limb Lengthening and Reconstruction Society Annual Scientific Meeting, Noosa, QLD, 1-3 June 2018
52. **Tetsworth K.** Biology of the Masquelet induced membrane, Australian Limb Lengthening and Reconstruction Society Annual Scientific Meeting, Noosa, QLD, 1-3 June 2018
53. **Tetsworth K.** Musculoskeletal sepsis: classification and management strategies, Australian Limb Lengthening and Reconstruction Society Annual Scientific Meeting, Noosa, QLD, 1-3 June 2018
54. **Tetsworth K.** Demonstration: reamer irrigator aspirator bone graft harvest, and PMMA antibiotic spacer fabrication, Australian Limb Lengthening and Reconstruction Society Annual Scientific Meeting, Noosa, QLD, 1-3 June 2018
55. **Tetsworth K.** Quantitative evidence synthesis of MIPO for humeral shaft fractures: global clinical experience 2007-17, Australian Orthopaedic Trauma Society 1<sup>st</sup> Annual Scientific Meeting, Noosa, QLD, 22-24 June 2018
56. **Tetsworth K.** Case discussion: failed humeral fixation, Australian Orthopaedic Trauma Society 1<sup>st</sup> Annual Scientific Meeting, Noosa, QLD, 22-24 June 2018
57. **Tetsworth K.** Debate: infected internal fixation must be removed – in the affirmative, Australian Orthopaedic Trauma Society 1<sup>st</sup> Annual Scientific Meeting, Noosa, QLD, 22-24 June 2018
58. **Tetsworth K.** Complex case discussion: reconstruction of traumatic segmental defect distal femur with a patient-specific titanium cage into a Masquelet membrane, Taylor Spatial Frame Limb Restoration Forum, Dallas, Texas, 28 September 2018.

### Oral Presentations:

1. **Daniele L, Rebgetz P, Underhill I, Ochsner A, Taylor F.** Biomechanical stability of radial head fracture fixation with headless compression screws. 2018 Australian Orthopaedic Association Queensland Branch Annual Scientific Meeting, 8 June 2018
2. **Tetsworth K, Al Muderis M, Lu W.** Osseointegration for the reconstruction of devastating military and terrorist blast injuries. 2<sup>nd</sup> International Symposium on Innovations in Amputation Surgery and Prosthetic Technologies (IASPT) Vienna, Austria May 10-12, 2018
3. **Tetsworth K, Rosenblatt S, Al Muderis M, Lu W.** Are All Femurs Equal? Design Considerations for Femoral Osseointegration Implants. 2<sup>nd</sup> International Symposium on Innovations in Amputation Surgery and Prosthetic Technologies (IASPT) Vienna, Austria May 10-12, 2018
4. **Tetsworth K** Using custom 3D printed scaffolds together with the Masquelet technique for the reconstruction of massive femoral bone defects, 34<sup>th</sup> Annual Meeting of the Orthopedic Trauma Association, Orlando, Florida, 17-20 Oct 2018
5. **Tetsworth K.** Case-match controlled comparison of anterior MIPO and ORIF for the stabilization of humeral shaft fractures, 38<sup>th</sup> Meeting of the Israeli Orthopaedic Association, Tel Aviv, Israel 12-13 December 2018
6. **Tetsworth K.** Preliminary results using patient-specific 3D printed titanium cages for the reconstruction of massive femoral bone loss, 38<sup>th</sup> Meeting of the Israeli Orthopaedic Association, Tel Aviv, Israel 12-13 December 2018.

### Other Communications and Outputs:

- (a) **Dennis Hartig** Google Scholar Profile: <https://scholar.google.com.au/citations?user=VY5f5jAAAAAJ&hl=en>
- (b) **Jerry van de Pol** Google Scholar Profile: <https://scholar.google.com.au/citations?user=hp0pFGMAAAAJ&hl=en>
- (c) **Royal Brisbane and Women's Hospital / Kevin Tetsworth** on the AOA Research Networking Map: <https://www.aoa.org.au/research/researchmap>
- (d) **Kevin Tetsworth** Google Scholar Profile: <https://scholar.google.com.au/citations?user=bx9ktUgAAAAJ&hl=en>
- (e) **Kevin Tetsworth** ResearchGate Profile: [https://www.researchgate.net/profile/Kevin\\_Tetsworth](https://www.researchgate.net/profile/Kevin_Tetsworth)
- (f) **Kevin Tetsworth** PubMed/NCBI: <https://www.ncbi.nlm.nih.gov/sites/myncbi/1nUyisHnhkQe/bibliography/53341976/public/?sort=date&direction=ascending>.

## Department of Oral and Maxillofacial Surgery Unit

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 (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Benjamin Fu	MPhil	CT scanning in odontogenic infections of the head and neck	<b>Martin Batstone</b>
Michael Hurrell	PhD	Treatment delay in Facial Trauma	<b>Martin Batstone</b>
Timothy Liu	PhD	Intermediate risk Oral Cavity SCC	<b>Martin Batstone</b>
Kelly McGowan	PhD	Risk factors for Medication- Related Osteonecrosis of the jaws: a Case control Study in Queensland, Australia	Saso Ivanowski, Newell Johnson, Robert Ware, <b>Caroline Acton</b>

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Martin Batstone</b>	QIMR	Immune biomarkers in Oral Cavity SCC

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
	Carline Acton	Risk factors for Medication – Related Osteonecrosis of the jaws: a case control study in Queensland, Australia
Kelly McGowan (UQ), Saso Ivanowski (Griffith), Newell Johnson (Griffith), Robert Ware (Griffith), Caroline Acton (RBWH Maxillofacial Surgery Unit)	Caroline Acton (Maxillofacial Surgery Unit)	

## 2018 Research Publications

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### Journal Articles:

1. Liu T, Chua B, **Batstone M**. Postoperative radiotherapy for Oral Squamous cell carcinoma with histologic risk factors: are we over-treating? *J Oral Maxillofac Surg* 2018 Jul;76(7):1565-1570
2. **Batstone MD**. Reconstruction of major defects of the jaws. *Aust Dent J*. 2018 Mar;63. Suppl 1: s108-113
3. Hurrell MJL, David MC, **Batstone MD**. A prospective study examining the effects of treatment timing in the management of mandible fractures. *Int J Oral and Maxillofac Surg* 2018 Sep;47(9):1126-1131
4. Oztel M, Rahmel B, Van Genechten, M, **Batstone MD**. A tip for the reconstruction of larger maxillary defects in complicated cleft patients. *Cleft Pal craniofacial journal*. 2018
5. Pateman KA, Cockburn NL, **Batstone MD**, Ford PJ. Quality of life of head and neck cancer patients in urban and regional areas: an Australian Perspective. *Aust J Rural health* 2018 Jun;26(3):157-164
6. Fu B, McGowan K, Sun H, **Batstone M**. Increasing use of intensive care unit for odontogenic infection over one decade: incidence and predictors. *J Oral Maxillofac Surg* 2018
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. *Int J Dent Hyg*. 2018 Dec 3. Epub
8. McGowan, K., Ivanovski, S., **Acton, C.**, 2018. Osteonecrosis of the jaws: a 14-year retrospective survey of hospital admissions. *Australian Dental Journal*, 63(2), 202-207
9. McGowan, K., **Acton, C.**, Ivanovski, S., Johnson, N.W., Ware, R., 2018. Systemic risk factors predict medication-related osteonecrosis of the jaw. *Oral Diseases*. (In press)
10. McGowan, K., Ware, R., **Acton, C.**, Ivanovski, S, Johnson, N.W., 2018. Both non-surgical dental treatment and extractions increase the risk of medication-related osteonecrosis of the jaw: case-control study. *Clinical Oral Investigations*. (In press)
11. McGowan, K., Ware, R., **Acton, C.**, Ivanovski, S, Johnson, N.W., 2018. Full blood counts are not predictive of the risk of medication-related osteonecrosis of the jaws: case-control study. *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*. (In preparation).

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. **Batstone M**. Oral Cavity Cancer survival in Australia. Time for some modern data. ANZHNC/ISMR 2018, Melbourne.

### Oral Presentations:

1. **Batstone M**. Free flap monitoring. ANZHNC/ISMR 2018 Melbourne.

# Department of Plastic and Reconstructive Surgery

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Darryl Dunn</b>	Michael Wagels, Raja Sawhney	A multicentre trial of lymph node metastatic disease in lip squamous cell carcinoma
<b>Shireen Senewiratne</b>	<b>Henry Beem</b> , Luke Watson, <b>Noah Betar</b>	Bilateral pectoralis major myocutaneous advancement flap reconstruction for complicated median sternotomy wounds

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Poster Presentations:

- Robert Calvisi, Caitlin O'Hare, Jessica Van Den Heuvel, and Darryl Dunn.** Lymph node metastasis in Squamous Cell Carcinoma of the lip. Australian New Zealand Head and Neck Cancer Society and International Society for Maxillofacial Rehabilitation Annual Scientific Meeting 2018, Melbourne
- Katie-Beth Webster, Darryl Dunn, and Sue Ferredo.** Outcomes of octagenarian patients following head and neck cancer. Australian New Zealand Head and Neck Cancer Society and International Society for Maxillofacial Rehabilitation Annual Scientific Meeting 2018, Melbourne
- Luke Watson and Ryan Livingston.** Use of vascularised plantaris and achilles tendon in the reconstruction of knee extensor mechanism loss with overlying fasciocutaneous tissue defect. Royal Australian College of Surgeons 87<sup>th</sup> Annual Scientific Congress, Sydney
- Jeannine McManus, Ryan Livingston, and Darryl Dunn.** A case of Kaposi Sarcoma in a young, HIV-negative, immunocompetent patient. Royal Australian College of Surgeons 87<sup>th</sup> Annual Scientific Congress, Sydney
- Karissa Graham and Roman Mykula.** Clostridial myonecrosis following injection into the sacroiliac joint. Royal Australian College of Surgeons 87<sup>th</sup> Annual Scientific Congress, Sydney
- Luke Watson and Darryl Dunn.** Extensive combined lip reconstruction using an inverted latissimus dorsi free flap to restore dynamic lip function. Royal Australian College of Surgeons 87<sup>th</sup> Annual Scientific Congress, Sydney
- Karissa Graham.** Frey's Syndrome post-radiation to nose for Merkel Cell Carcinoma. Royal Australian College of Surgeons 87<sup>th</sup> Annual Scientific Congress, Sydney
- Alicia Heald, Vedella Hinckley, Matthew Peters, and Kieran Rowe.** Metastatic Infiltrating Basal Cell Carcinoma responsive to Vidmodegib: a case report. Royal Australian College of Surgeons 87<sup>th</sup> Annual Scientific Congress, Sydney.

## Department of Vascular Surgery

Dr Jenkins is the Principle Investigator on two clinical trials aimed at improving the management of vascular disease, and has significant research collaborations with Professor Jon Golledge's group at James Cook University. During 2018, under the supervision of Dr Jenkins and in collaboration with Dr Rowbotham of the University of Queensland, the Department of Vascular Surgery participated in a variety of research projects in the area of vascular disease. Research ranged from basic science investigation into the aetiology of aortic aneurysmal disease, through to studies of devices for endoluminal management of aortic pathology. The department played a key role in the recruitment of participants to multicentre clinical trials assessing medical therapies for the management of abdominal aortic aneurysm (AAA), as well as a behavioural intervention trial for patients with peripheral artery disease (PAD).

Under the supervision of Dr Jenkins, Dr Pinto and Dr Iyer, Mr Dally-Watkins, a student of the University of Queensland, completed a successful honours project for his BSc degree. Mr Dally-Watkins investigated the applications of 3D printing specifically in the preoperative planning of endovascular aortic repair. The research demonstrated that a 3D model of an abdominal aneurysm could be produced to a dimensional standard that is comparable to a CT scan. This promising research bolstered the feasibility of utilising 3D printing technology in the replication of complex pathological anatomy for various applications in vascular surgery, including preoperative familiarisation for clinicians, patient education, and for use in surgical simulation.

Research carried out by the Vascular Department has the potential to significantly improve the management of patients with vascular disease.

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Jason Jenkins</b>	Senior lecturer	Faculty of Medicine	University of Queensland (XXXX – current)
<b>Simon Quinn</b>	Senior lecturer	Faculty of Medicine	University of Queensland (2013 – current)
<b>Danella Favot</b>	Senior lecturer	Faculty of Medicine	University of Queensland (XXXX – current)
<b>Murray Ogg</b>	Senior lecturer	Faculty of Medicine	University of Queensland (XXXX – current)
<b>Nigel Pinto</b>	Senior lecturer	Faculty of Medicine	University of Queensland (XXXX – current)

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Dr Jason Jenkins, Dr Nigel Pinto		Advanced manufacturing and simulation of vascular anatomy, novel endovascular devices, medical applications of graphene
Dr Jason Jenkins	Sr. Julie Jenkins (RBWH)	The Endurant Stent Graft Natural Selection Post-market Registry (ENGAGE)
Dr Jason Jenkins, Dr Nigel Pinto, Dr Vikram Iyer	Matthew Dally-Watkins (University of Queensland)	Applications of 3D printing in preoperative planning of endovascular aortic repair
Dr Vikram Iyer	Prof Jon Golledge (James Cook University)	Coding and non-coding circulating RNAs associated with the presence and rapid expansion of abdominal aortic aneurysm

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Prof Jon Golledge (James Cook University)	Dr Jason Jenkins	Effect of a dietary supplement on abdominal aortic aneurysm growth (IMAGEN)
Prof Jon Golledge (James Cook University)	Dr Jason Jenkins	Brief behavioural counselling intervention for peripheral arterial disease (BIP)

## 2018 Research Awards and Achievements

Recipient	Award	Event
Vikram Iyer	Foundation for Surgery Professor Philip Walker RACS Vascular Research Scholarship	N/A

## 2018 Research Grants – Awarded

Investigators ( <i>RBWH staff in bold</i> )	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Dr Jason Jenkins, Dr Nigel Pinto</b>	Vascular	Advanced manufacturing and simulation of vascular anatomy, novel endovascular devices, medical applications of graphene	The Herston Biofabrication Institute	\$175,000	\$1,600,000 (2018 – 2024)
BURTON, Nicola W; Golledge, J.; <b>Jenkins, J</b> ; Norman, P.; Fiatarone Singh, M.; Leicht, A. & Ademi, Z.	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	\$ 50,000	\$131,257.26 (2014-2018)

## 2018 Research Publications

### Journal Articles:

1. Pinchbeck JL, Moxon JV, **Rowbotham SE**, Bourke M, Lazzaroni S, Morton SK, Matthews EO, Hendy K, Jones RE, Bourke B, Jaeggi R, **Favot D**, Quigley F, **Jenkins JS**, Reid CM, Velu R, Golledge J. Randomized Placebo-Controlled Trial Assessing the Effect of 24-Week Fenofibrate Therapy on Circulating Markers of Abdominal Aortic Aneurysm: Outcomes From the FAME -2 Trial. *J Am Heart Assoc*. 2018 Oct 2;7(19):e009866
2. Golledge J, Morris DR, Pinchbeck J, **Rowbotham S, Jenkins J**, Bourke M, Bourke B, Norman PE, Jones R, Moxon JV. 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*. 2018 Aug 30. pii: S1078-5884(18)30509-4
3. Golledge J, Moxon JV, **Rowbotham S**, Pinchbeck J, Yip L, Velu R, Quigley F, Jenkins J, Morris DR. Risk of major amputation in patients with intermittent claudication undergoing early revascularization. *Br J Surg*. 2018 May;105(6):699-708
4. **Rowbotham SE**, Krishna SM, Moran CS, Golledge J. Fenofibrate and Telmisartan in the Management of Abdominal Aortic Aneurysm. *Curr Drug Targets*. 2018;19(11):1241-1246
5. Aaron Lim, Gursimran Kaur, Paul Poyck, Vipul Vyas, Andrew Redmond, **Simon Quinn**. Bacillus Calmette-Guérin immunotherapy: A rare cause for a ruptured common femoral artery. *ANZ J Surg*. 2018 Sep;88(9):931-933
6. **Stacie Hodge**, Sebastian Helliard, Hamish Ian Macdonald, and Paul Mackey. Using an original triage and on call management tool aids identification and assessment of the acutely unwell surgical patient. *BMJ Open Qual*. 2018; 7(2): e000235
7. Garg AX, Devereaux PJ, Hill A, Sood M, Aggarwal B, Dubois L, Hiremath S, Guzman R, **Iyer V**, James M, McArthur E, Moist L, Ouellet G, Parikh CR, Schumann V, Sharan S, Thiessen-Philbrook H, Tobe S, Wald R, Walsh M, Weir M, Pannu N; Curcumin AAA AKI Investigators. Oral curcumin in elective abdominal aortic aneurysm repair: a multicentre randomized controlled trial. *CMAJ*. 2018 Oct 29;190(43): E1273-E1280.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Oral Presentations:

1. **Simon Quinn**. Self-expanding covered stents for salvage in infection of the aorto-iliac segment. Visionary Endovascular & Vascular Education (VERVE) symposium 2018. Sydney, Australia
2. **Alison McGill**. Outcomes from our model for a nurse led Vascular Renal Access Surveillance Clinic. ANZ Society for Vascular Surgery Annual Scientific Conference 2018. Auckland, New Zealand
3. **Vikram Iyer**. Geniculate artery embolization for recurrent hemarthrosis post total knee replacement. Global Embolization Symposium and Technologies 2018. Miami Beach, USA
4. **Vikram Iyer**. Serum miRNAs associated with the presence and rapid expansion of abdominal aortic aneurysms. International Vascular Biology Meeting 2018. Helsinki, Finland.

## Kenneth G Jamieson, Department of Neurosurgery

Further progress was made towards completion of Drs Winter and Nichols' clinical research project into MMP biomarkers in TBI, with recruitment of patients, and significant progress with development of appropriate assays. They anticipate completion of the project later in 2019.

Dr McMillen published two further operative technical videos in Operative Neurosurgery, with further publications in this area to come.

Dr Jeffrey continued to be involved in recruitment for multi-centre neuro-oncology trials.

Dr McMillen and Dr Liam Coulthard have applied for funding to commence recruitment for a study of complement activation in CSF in aneurysmal subarachnoid haemorrhage

Dr McMillen is one of the lead investigators in a circulating cell free DNA biomarker in TBI study that commenced planning in late 2018, with a view to commencing recruitment at a number of sites in 2019

Dr Craig Winter was awarded a PhD from the University of Cambridge in the United Kingdom for his body of research work into hypoxia and the blood brain barrier.

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
Dr Paul Nichols, Dr Craig Winter		Serum biomarker correlation with dynamic contrast enhanced MRI for matrix metalloproteinases (1, 2, 7, 9, 10) in traumatic brain injury

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Jamieson Trauma Institute – TBI Advisory Group	Dr Jason McMillen	The sensitivity and specificity of brain-origin circulating cell free DNA (ccfDNA) for the diagnosis of concussion and prediction of intracranial injuries

### 2018 Research Awards and Achievements

Recipient	Award	Event
Dr Craig Winter	PhD, University of Cambridge	For body of research work into hypoxia and the blood brain barrier

### 2018 Research Publications

#### Journal Articles:

1. Exophytic Brainstem Cavernoma in the Floor of the Fourth Ventricle Midline Suboccipital Approach: 3-Dimensional Operative Video. Bulstrode HJC, **McMillen J**, Patel K, Correia J, Guilfoyle M, Young A, Santarius T, Kirolos R, Trivedi R. Oper Neurosurg (Hagerstown). 2018 Dec 19 doi: 10.1093/ons/opy384
2. Type I Spinal Dural Fistula Treated Using a Minimally Invasive Approach With a 20-mm Nonexpandable Tubular Retractor: 3-Dimensional Operative Video. Patel K, **McMillen J**, Kirolos RW, Budohoski KP, Santarius T, Trivedi RA. Oper Neurosurg (Hagerstown) 2018 Nov 1;15(5): E52 doi: 10.1093/ons/opy032
3. Incidence and outcome of subarachnoid haemorrhage in the general and emergency department populations in Queensland from 2010 to 2014. Chu KH, Mahmoud I, Hou XY, **Winter CD**, **Jeffree RL**, Brown NJ, Brown AF. Emerg Med Australas. 2018 Aug;30(4):503-510. doi: 10.1111/1742-6723.12936.



## Professor Stuart Pegg Burns Centre

2018 has been a very good year for moving research forward in burns. While continuing to innovate and provide the highest quality up to date burns care, we have also taken huge steps forward to deliver research outcomes over the whole multidisciplinary spectrum of burns care.

One of the biggest highlights was the successful project application to the Herston Biofabrication Institute. Partnering RBWH clinicians with QUT, the Institute promises to deliver access to cutting edge therapies and technologies for burns patients while focusing research on real clinical problems to hopefully deliver rapidly translatable outcome to further improve patient care.

We continue to partner with industry with the final stages of the Burn 2 Study sponsored by Polynovo and using cutting edges Australian developed biodegradable polymers to treat burn wounds, and not only save lives, burn improve their quality of life after major burn trauma.

We have also been working closely with the newly established Jamieson Trauma Institute, working on developing research projects spanning the whole spectrum of the burn patient journey. Hopefully this is just the beginning of a new era of research aimed at improving burn patient care.

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Jason Brown	Jason Miller, Carl Lisec	A prospective, non-controlled evaluation of the synthetic NovoSorb™. Biodegradable Temporising Matrix (BTM) for dermal repair after deep burn injury
Jason Brown	Michelle Donovan, Zephania Tyack, Steven Mcphail	Feasibility, acceptability, costs and preliminary effect of an innovative ablative fractional CO2 laser service for people with burn scars
Andrea Mc Kittrick	Amber Jones, Jason Brown	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
Anita Plaza	Michelle Cottrell, Jennifer Paratz	Evaluating the effectiveness of a home based telerehabilitation model for the delivery of physiotherapy exercise programs following burn injury
Jennifer Strong	Sarah O'Reilly, Dale Trevor, Jodie Copley, Tammy Aplin, Joanna Mollison, Nicole Coghlan, Sue Laracy, 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
Zephania Tyack	M.E. Carrière, L.B. Mokkink2, M.J. Westerman, P.P.M. van Zuijlen, H.C.W. de Vet, Jason Brown	POSAS 3.0: refinement of the patient scale using focus groups in Australia and the Netherlands (Australian study arm)
Sarah O'Reilly	Jenny Ziviani, Jenny Strong, Jason Brown	Investigating the use of elastic based tapes for management of hypertrophic scar formation to the upper limb post burn injury
Jason Brown	Mathilde Desselle, Sean Powell, Maureen Ross, Mia Woodruff, Liela Cuttie, Peter Gillies	Herston Biofabrication Institute Burns Program

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
<b>Jason Brown</b> , Michelle Donovan, Zephania Tyack, Steven Mcphail	Professor Stuart Pegg Burns Centre		Royal Brisbane and Women's Hospital Foundation		\$39,944 (2018-2019)
Jenny Strong, Sarah O'Reilly, Dale Trevor, Jodie Copley, Tammy Aplin, <b>Joanna Mollison</b> , Nicole Coghlan, <b>Sue Laracy</b> , <b>Jason Brown</b>	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	\$7,482.40	\$14,964.80 (2018-2019)
<b>Jason Brown</b> , Peter Gillies, Michelle Donovan, <b>Sue Laracy</b>	Professor Stuart Pegg Burns Centre, Herston Biofabrication Institute	Burns Program	Herston Biofabrication Institute	\$500,000.00	\$2499,645 (2018-2023)
Sarah O'Reilly, Jenny Ziviani, Jenny Strong, <b>Jason Brown</b>	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	\$2,500	\$5,000 (2018-2019)

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Jason Brown** Acelity Surgical Wound Forum. Innovations in burns wound care. Dubai 2018.

### Oral Presentations:

1. **Michelle Donovan**. Interim Pressure Garment Therapy: an investigation into the use of low level pressure therapy for burns donor site support and scar reduction. ANZBA 2018 Brisbane
2. **Megan Grigg, Cienwen Town, Jason Brown**. Donor site dressings: how much do they affect pain? ANZBA 2018 Brisbane
3. **Cienwen Town**, Anaesthetic Block for donor sites, ANBA 2018 Brisbane
4. **Martha Druery**, Psychosocial management to optimise quality of life ANZBA Scientific Meeting 2018, Brisbane
5. **Nicole Coghlan**. The experiences of wearing compression garments post burn injury ANZBA 2018 Brisbane
6. **Mikaela Seymour** The cost of Self Immolation – 20 years of data from RBWH. ANZBA 2018 Brisbane
7. **Jacelle Warren**, Epidemiology of burns patients admitted to the State-wide Adults Burns Service in Queensland: a 10-year Review ANZBA 2018 Brisbane
8. **Amber Jones**. Immersive virtual reality in occupational therapy practice as a non-opioid analgesic during burn wound care procedures. ANZBA 2018 Brisbane
9. **Andrea Mc Kittrick**, a systematic review to investigate outcome tools currently used for patients who have sustained hand burn injuries and to map the psychometric properties of the outcome measures identified from the literature across the ICF. ANZBA 2018 Brisbane
10. **Grace Brownlee**. Best practice management of burns during pregnancy, and our experience over 20 years at a tertiary burns unit. ANZBA 2018 Brisbane.

## Trauma Service

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/ Department Lead Researchers	Collaborative Researchers	Research Project Title
Dr Cameron Ashurst (Trauma, ETC)	Dr Michael Tuppin (DMI)	Injuries following ladder falls presentations to the ED: a retrospective review

### 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Bhavik Patel	Michael Rudd, Cliff Pollard	Management of splenic injuries in Qld: Retrospective trend analysis over five years and one-year prospective evaluation of clinical practice guideline implementation

### 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
James Winnearls, <b>Catherine Hurn</b> , Martin Wullschleger, <b>Anthony Holley</b>	Trauma, ETC, ICU	Fibrinogen Early in Severe Trauma Study (FEISTY)	Emergency Medicine Foundation, Gold Coast Health, National Blood Authority	\$3,000	\$3,000 (2018)

### 2018 Research Publications

#### Journal Articles:

- Ryan, Glenn; Swift, Kate; **Williamson, Frances; Zheng, Olivia**; Scriven, Elissa; Eley, Robert. Feasibility of REBOA (Resuscitative Endovascular Balloon Occlusion of the Aorta) in trauma-related non-compressible torso haemorrhage across two South-East Queensland (Brisbane) metropolitan Major Trauma Centres (The Ochsner Journal).

### 2018 Conference Presentations – Invited Speaker, Oral and Poster

#### Invited Speaker:

- Williamson F**, Hacking C, Coulthard L, Wall D. ASER 30<sup>th</sup> Anniversary Annual Meeting, September 2018, Virginia, USA.

#### Oral Presentations:

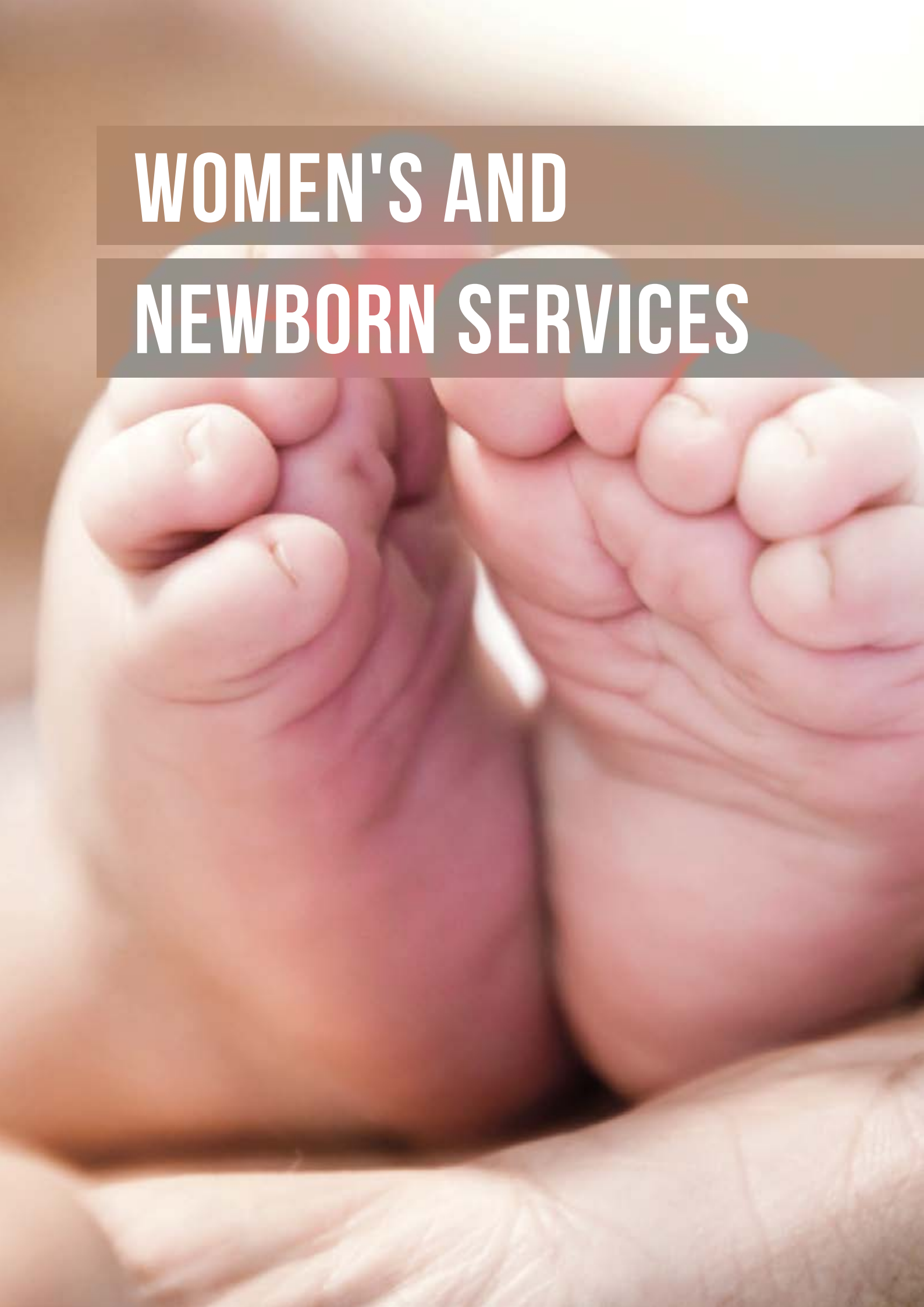
- Handy M, Williamson F, Jackman K**. Performing the tertiary survey: a comparison of medical officer and trauma nurse. Queensland Trauma Symposium. Brisbane, February 2018
- Handy M**, Wullschleger M, Cleland P, Wall D. Delayed diagnosis: impact on patient management and quality improvement. Nursing and Midwifery Conference. Brisbane, March 2018
- Jackman K, Williamson F, Handy M**. Performing the tertiary survey: a comparison of medical officer and trauma nurse. Nursing and Midwifery Conference. Brisbane, March 2018
- Patel B, Handy M, Wall D**. Eleven-year experience with management of Thoracic injuries at a non-cardiac centre. Singapore Trauma and Acute Care Conference. Singapore, April 2018
- Rudd M**. Murray Clark Oration. Australian and New Zealand Burn Association Annual Scientific Meeting. Brisbane, 16-19 October 2018.

#### Poster Presentations:

- Bodnar D, Stevens Z, Williams S, **Handy M**, Rashford S. A description of the first hospital laboratory test results of the trauma patients administered packed red blood cells in the civilian pre-hospital environment, Poster Number: PP01. Queensland Trauma Symposium. Brisbane, February 2018
- Bodnar D, Rashford S, **Handy M**, Bosley E. Trauma Ultrasound in the Pre-Hospital Environment (TUPHEN Study). Poster Number: PP03. Queensland Trauma Symposium. Brisbane, February 2018
- Handy M, Wall D**, Cleland P. Injury severity of Kite surfers attending hospitals in Metro North Hospital and Health Service. Poster Number: PP05. Queensland Trauma Symposium. Brisbane, February 2018
- Wake E, Czuchwicki S, Walters K, Tallott M, Judge C, Meyer J, **Handy M**, Jones L. FEISTY recruitment of patients in a Multi-centre study. Poster Number: PP07. Queensland Trauma Symposium. Brisbane, February 2018
- Patel B, Handy M, Pollard C, Wall D, Muller M**. Category Zero – The Red Blanket Protocol. Reducing the transfer delay of the trauma patient from the Emergency Department to the operating Room. Poster Presentation. Singapore Trauma and Acute Care Conference. Singapore, April 2018.

**WOMEN'S AND**

**NEWBORN SERVICES**



# Women's and Newborn Services



**Jessica Toleman**  
Acting Executive Director  
Women's and Newborn Services

Women's and Newborn Services (WNS) offer a wide and diverse range of healthcare services to women and their babies across Queensland and beyond. We are dedicated to quality multidisciplinary healthcare which is evident in our commitment to expanding research within the service line.

WNS continues to maintain an active interest in research activities as well as the provision of multiple education programs for undergraduate and postgraduate health service professionals. To that end we maintain a strong connection with universities and colleges including the University of Queensland, Queensland University of Technology, James Cook University, Central Queensland University, Australian Catholic University and the Royal Australian and New Zealand College of Obstetrics and Gynaecology (RANZCOG).

The Queensland Centre for Gynaecological Cancer (QGC) 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 2018 we continued our studies of exercise in ovarian cancer; a trial of non-surgical treatment for early stage endometrial cancer; and the IMAGINE Study which aims to implement and evaluate a model of training for practising gynaecologists in Total Laparoscopic Hysterectomy

The Perinatal Research Centre's (PRC) multidisciplinary research team 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, 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.

The Grantley Stable Neonatal Unit (GSNU) continues to have an interest in a varying number of research opportunities and looks to further enhance collaborations between universities and internal departments. Dr Mark Davies, an eminent staff specialist in the neonatology department was promoted to Clinical Professor in October 2018, a testament to his dedication towards supporting and promoting clinical research to improve neonatal outcomes. GSNU's close collaboration with the PRC continues to translate research into clinical practice with a number of innovative projects in addition to active engagement in building research capacity.

Obstetric Medicine continues to add to the research program with a focus on women with complex pregnancies and improving the outcomes for both mother and infant. There is currently a strong focus on breastfeeding outcomes in mothers with type 1 and type 2 diabetes mellitus. In addition, the department continues to be involved in a number of collaborative research projects including a large NHMRC funded study evaluating the guided treatment of asthma in pregnancy.

The Department of Obstetrics and Gynaecology continues to increase its research and clinical activity and provides tertiary and quaternary obstetrics and gynaecology services for Metro North Hospital and Health Service and Queensland. Both departments and its subdivisions are involved in multidisciplinary research to ensure the management of the women we care for is contemporary and evidenced based. Significant research contributions continued in 2018 in the Maternal Fetal Medicine Unit, Paediatric and Adolescent Gynaecology, Urogynaecology, and Reproductive Endocrinology and Infertility specialities in Women's and Newborn Services with a number of national and international presentations and publications.



## Grantley Stable Neonatal Unit (GSNU)

In 2018, the Grantley Stable Neonatal Unit Research Group formally changed their name to RBWH Neonatal Research valuing the need to be locally and internationally recognised as originating from the largest service provider of exceptional healthcare for women and babies on Australia's eastern seaboard. It continues to expand research capacity by collaborating with the Perinatal Research Centre, the University of Queensland and Griffith University as well as participating in several multi-centred NHMRC funded clinical trials which aim to improve significant short- and long-term neonatal outcomes.

In October 2018, Dr Mark Davies, a dedicated Neonatologist and current co-chair of RBWH Neonatal Research was promoted to Clinical Professor, commemorating a significant milestone in his distinguished career and inspiring trainee clinician researchers to follow his research leadership example.

Developing a strategic plan for the near future in line with the Metro North Research Strategy has been the focus for the group this year, including a determined effort towards prioritising research agendas and securing much needed research funds to improve resources. Challenging clinical questions have inspired exciting projects bringing together multi-disciplinary neonatal clinicians and scientists who are passionate about enhancing care through high quality translational research. Research priorities include optimising proficiency of service provision through systematic service evaluation and improving outcomes in neurodevelopment, nutrition and neonatal retrieval medicine.

### Supervised Post-Graduate Research Students

Name (RBWH staff in bold)	Current Studies (e.g. PhD, Masters etc.) University (duration)	Research Project Title	Supervisors (RBWH staff in bold)
Donna Franklin	PhD, University of Queensland	Nasal High flow therapy in infants with bronchiolitis	John Fraser, <b>Mark Davies</b>
Luke Jardine	PhD, University of Queensland	Development of early predictors of long-term neurodevelopmental outcome in preterm infants	<b>Mark Davies, Paul Colditz</b>
<b>Michelle Paliwoda</b>	PhD, University of Queensland	Standardisation of neonatal physiological parameters and development of neonatal early warning tools	Karen new, Fiona Bogossian, <b>Mark Davies</b>
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, <b>Mark Davies</b>
<b>Jasmine Antoine</b>	FRACP, Royal Australasian College of Physicians	Bacterial colonisation of endotracheal tube (ETT) in infants less than 32 weeks gestation	<b>Mark Davies, Garry Inglis</b>
Nada Al-Theyab	PhD, University of Queensland	Body Composition in Very Preterm Infants During Their Hospital Stay	<b>Tim Donovan</b> , Barbara Lingwood, Yvonne Eiby, <b>Paul Colditz</b>
Alison D'Souza	MPhil, University of Queensland	The impact of macronutrient intake and growth on neurodevelopmental outcome in preterm infants	<b>Tim Donovan</b> , Barbara Lingwood, Yvonne Eiby, <b>Paul Colditz</b>
Ms Nur Abu Kassim	PhD, University of Queensland (2015-2017)	To investigate vitamin D and vitamin D analogues levels in human plasma	<b>Karen Whitfield</b> , N Shaw, A Hewavitharana
<b>Melissa Lai</b>	PhD, University of Queensland	Towards Optimizing Neurodevelopmental Outcomes of Very Preterm Infants; the Effects of Infant Massage by the Mother	<b>Paul Colditz</b> , Simon Finnigan, Jurgen Fripp
Abirami Ratnasingham	PhD, University of Queensland	Long-term consequences of altered neonatal adiposity	Barbara Lingwood, <b>Tim Donovan</b> , Yvonne Eiby, Marloes Dekker, Peter Davis
Annice Kong	PhD, University of Queensland	Brain structure assessed using diffusion MRI and function assessed using dense array EEG of very preterm infants and the ability to predict neurodevelopmental outcomes	<b>Paul Colditz</b> , Simon Finnigan, Stephen Rose, Roslyn Boyd

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Deborah Gilmour	Mark Davies	What sound/light/vibration/acceleration are babies experiencing on retrievals?
Jasmine Antoine	Mark Davies	Bacterial colonisation of endotracheal tube (ETT) in infants less than 32 weeks gestation
Janet Sharpe	Mark Davies	Does earlier arrival of the retrieval team improve short-term outcomes in outborn extremely premature infants?
Janet Sharpe	Mark Davies	The availability of probiotics and donor human milk improves mortality and morbidity in very preterm infants
Didier Tshamala	Mark Davies	Does pasteurised donor human milk availability affect breast feeding
Didier Tshamala	Adam Hoellering, Mark Davies	Study of movement of umbilical venous catheters over time
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
Tim Donovan	Anndrea Flint, Donna Hovey, Stephanie Webster, Dr Helen Donovan	Special Care Nursery Feeding Study
Pieter Koorts	William Tarnow-Mordi, Kei Lui, Roger Soll, Paolo Manzoni, Deborah Schofield	LIFT (Lactoferrin Infant feeding trial)
Pieter Koorts	Mark Davies, Katherine White, Garry Inglis, Adam Hoellering	Propofol compared to Morphine and Midazolam for sedation for intubation in infants
Kristin O'Connor	Mark Davies	Determining the criteria for predicting successful extubation with systemic dexamethasone in premature infants
Gill Noreiks	Melissa Lai, Mark Davies	RCT – Incubator humidity for 1 or 2 weeks for ELBW babies
Mark Davies	Andrew Hutchinson	An Audit of Nutritional Intake in Infants Less Than 1000g or 28 Weeks Gestation Following change in parenteral nutrition formulations
Mark Davies	Deborah Gilmour	NeoSTRESS: Study of Transfer and Retrieval Environmental StressorS upon neonates via a smartphone application – ACCELERATION/VIBRATION
Mark Davies	Deborah Gilmour	NeoSTRESS: Study of Transfer and Retrieval Environmental StressorS upon neonates via a smartphone application – LIGHT
Mark Davies	Deborah Gilmour	NeoSTRESS: Study of Transfer and Retrieval Environmental StressorS upon neonates via a smartphone application – SOUND
Karen Whitfield	Kristin O'Connor, Mark Davies	Micronutrient levels in Infants
Tim Donovan	Paul Colditz	PEACH: Long-term Outcome of Neonatal Adiposity
Adam Hoellering	Mark Davies	Does CVP in preterm infants predict IVH?
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, Nidhi Bansal	Pasteurised Donor Human Milk in late preterm and term infants: a Randomised Controlled Trial

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Julie Wixey, Jany Pienaar, Paul Colditz, Ian Wright, Melissa Lai	Jany Pienaar	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

## 2018 Collaborative Research Activity involving RBWH Research Group / Department (cont)

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Michelle Paliwoda	<b>Michelle Paliwoda</b>	Determining reference ranges for well late-preterm and term neonate's vital signs
Anndrea Flint	<b>Mark Davies</b>	Determining reference ranges for well term neonate's overnight oximetry
Roslyn Boyd	<b>Pieter Koorts</b>	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	<b>Colette McIntyre</b>	NeOnatal Vascular Access (NOVA) study: an observational audit of neonatal vascular access complications
Peter Dargaville	<b>Tim Donovan, Melissa Lai</b>	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
Omar Kamlin, Brett Manley	<b>Pieter Koorts</b>	RCT – PLUS TRIAL. Multicentre Randomised Controlled Trial of Surfactant Plus Budesonide to Improve Survival Free of Bronchopulmonary Dysplasia in Extremely Preterm Infants
Elsa Wynd	<b>Melissa Lai, Adam Hoellering</b>	AIM-PREM: Assessing the Impact of Prematurity on REnal Medulla development
Paul Dawson	<b>Pieter Koorts, Paul Colditz, Nadia Badawi, Roslyn Boyd, Vicki Flenady, Elizabeth Hurrion, Francis Bowling, Sailesh Kumar</b>	Neuroprotective role of sulphate among preterm babies (SuPreme Study)
Katie Groom, Glenn Gardiner	<b>Pieter Koorts, Renuka Sekar</b>	RCT – Childhood Outcomes of STRIDER NZ Aus: a randomised controlled trial of sildenafil therapy in dismal prognosis early-onset intrauterine growth restriction (New Zealand and Australia)
Iona Novak	<b>Paul Colditz</b>	RCT – GAME: Harnessing Neuroplasticity to Improve Motor Performance in Infants with Cerebral Palsy: a Pragmatic Randomized Controlled Trial
William Tarnow-Mordi	<b>Pieter Koorts</b>	RCT – LIFT Does lactoferrin improve survival free from morbidity in very low birth weight infants? Lactoferrin Infant Feeding Trial: a randomised controlled trial
Helen Liley	<b>Paul Colditz</b>	RCT – PAEAN – Preventing Adverse Outcomes of Neonatal Hypoxic Ischaemic Encephalopathy with Erythropoietin: a Phase III Randomised Placebo Controlled Multicentre Clinical Trial
Roslyn Boyd	<b>Paul Colditz</b>	RCT – REACH: Randomised trial of Rehabilitation very Early in Congenital Hemiplegia
William Tarnow-Mordi	<b>Pieter Koorts</b>	RCT – APTS Should very preterm babies receive a placental transfusion at birth? A RCT Study – long term outcomes
Rod Hunt	<b>Paul Colditz</b>	RCT – NEST-A randomized controlled trial comparing the treatment of electrographic and clinical seizures, to the treatment of clinical seizures alone, in term or near-term encephalopathic infants and measuring the impact on death and neurodevelopment at 2 years. Neonatal Electrographic Seizure Trial (NEST)
Anndrea Flint	<b>Mark Davies</b>	A systematic review of the use of overnight oximetry in neonates
William Tarnow-Mordi	<b>Pieter Koorts</b>	RCT – APTS Should very preterm babies receive a placental transfusion at birth? A RCT Study – short term outcomes
Angela Berkhout	<b>Melissa Lai</b>	Paediatric cohort study of Herpes Simplex Infection in early infancy and meningoencephalitis in Queensland
Alicia Spittle	<b>Pieter Koorts, Melissa Lai</b>	Early identification of infants with cerebral palsy: implementation of evidence-based guidelines into practice

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Colette McIntyre</b>	Best New Presenter Award	Australian College of Neonatal Nurses (ACNN) National Conference August 2018
<b>Colette McIntyre</b>	Best Poster Award	ANZNN Clinical Practice Improvement conference, Sept 2018
Abi Ratnasingham, Yvonne Eiby, <b>Tim Donovan</b> , Barbara Lingwood	Best Clinical Research Award	27 <sup>th</sup> RBWH Health Symposium, Sept 2018
<b>Donna Hovey</b>	National Presenters Award	Australian College of Neonatal Nurses (ACNN) National Conference August 2018



## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Paul Colditz</b> , K Khosrotehrani, Tracey Bjorkman, J Patel, Julie Wixey	Perinatal Research Centre	Stem cell treatment for neonatal hypoxic ischaemic encephalopathy	NHMRC	\$318,065	\$954,195 (2018-2020)
<b>Paul Colditz</b> , Barbara Lingwood, Tracey Bjorkman, P Dawson, Roslyn Boyd, Yvonne Eiby	Perinatal Research Centre	A pre-clinical intensive care facility to research long-term outcomes in neonates	UQ Major Equipment and Infrastructure (MEI) & NHMRC Equipment Grant	\$200,343	\$200,343 (2018)
<b>Paul Colditz</b> , K Khosrotehrani, Julie Wixey	Perinatal Research Centre	Improving brain outcomes in the growth restricted newborn using placental stem cell treatment	Financial Markets Foundation for Children Research Grant	\$46,666	\$140,000 (2018-2020)
<b>Paul Colditz</b> , Julie Wixey, <b>Melissa Lai</b> , Tracey Bjorkman	Perinatal Research Centre	Stem cell treatment to protect the growth restricted newborn brain	RBWH Foundation	\$40,000	\$40,000 (2018)
<b>Melissa Lai</b> , Tracey Bjorkman, Julie Wixey, <b>Paul Colditz</b>	Perinatal Research Centre	CO2 gas as an adjunctive neuroprotective therapy for hypoxic-ischaemic encephalopathy (HIE)	RBWH Foundation	\$40,000	\$40,000 (2018)
Paul Dawson, Elizabeth Hurron, Francis Bowling, Nadia Badawi, Roslyn Boyd, <b>Pieter Koorts</b> , <b>Paul Colditz</b>		Neuroprotective role of sulphate among preterm babies (SuPreme study)	NHMRC	\$149,867.60	\$749,338.08 (2015-2019)
<b>Paul Colditz</b> , Roslyn Boyd, A Malhotra, Stephen Rose, B Boashash, M Ditchfield, M Fahey, K Pannek, R Moldrich	Perinatal Research Centre	PREBO: The Preterm Brain Outcomes	NHMRC	\$329,028.20	\$1,645,141 (2015-2019)
<b>Paul Colditz</b> , K Khosrotehrani, Tracey Bjorkman, J Patel, Julie Wixey	Perinatal Research Centre	Stem cell treatment for neonatal hypoxic ischaemic encephalopathy	NHMRC	\$318,065	\$954,195 (2018-2020)

## 2018 Research Publications

### Journal Articles:

1. Flint A, **Davies MW**. The use of overnight oximetry in neonates: a literature review. *J Paediatr Child Health* 2018. In press
2. **Paliwoda M**, **New K**, Bogossian F, **Davies M**. Physiological vital sign ranges in newborns from 34 weeks gestation: a systematic review. *Int J Nurs Stud* 2018; 77:81-90
3. Roberts C, Khanna P, Rigby L, Llewellyn A, Gustavs J, Bartle E, Newton L, Newcombe J, **Davies M**, Thistlethwaite J, Lynam J. Utility of selection methods for specialist medical training: A BEME (best evidence medical education) systematic review: BEME guide no. 45. *Medical Teacher* 2018;40(1):3-19
4. **Tshamala D**, **Pelecanos A**, **Davies MW**. Factors associated with infants receiving their mother's own breast milk, on discharge from hospital, in a unit where pasteurised donor human milk is available. *J Paediatr Child Health* 2018. In press
5. Yu T, **Donovan T**, Armfield N, Gole G. The high cost of screening regional and remote infants for Retinopathy of Prematurity. *Clinical and Experimental Ophthalmology* 2018; doi:10.1111/ceo13160
6. **Sharpe J**, Way M, **Koorts PJ**, **Davies MW**. The availability of probiotics and donor human milk is associated with improved survival in very preterm infants. *World J Pediatr* 2018. In press: DOI: 10.1007/s12519-018-0168-0
7. **Hoellering AB**, Tshamala D, **Davies MW**. Study of movement of umbilical venous catheters over time. *J Paediatr Child Health* 2018. In press: doi:10.1111/jpc.14073
8. **Sharpe J**, **Davies MW**. Does earlier arrival of the retrieval team improve short-term outcomes in outborn extremely premature infants? *J Paediatr Child Health* 2018. In press: doi:10.1111/jpc.14064
9. Flint A, **Davies MW**. The use of overnight oximetry in neonates: a literature review. *J Paediatr Child Health* 2018. In press: doi:10.1111/jpc.13935
10. Tshamala D, **Pelecanos A**, **Davies MW**. Factors associated with infants receiving their mother's own breast milk, on discharge from hospital, in a unit where pasteurised donor human milk is available. *J Paediatr Child Health* 2018. In press: doi:10.1111/jpc.14062
11. Wixey JA, Lee KM, Miller SM, Goasdoue K, **Colditz PB**, Bjorkman ST, Chand KK. Neuropathology in intrauterine growth restricted newborn piglets is associated with glial activation and proinflammatory status in the brain. *J Neuroinflamm*. 2019 In press. DOI: 10.1186/s12974-018-1392-1
12. Kong A, **Lai MM**, Finnigan S, Ware RS, Boyd RN, **Colditz PB**. Background EEG features and prediction of cognitive outcomes in very preterm infants: a systematic review. *Early Hum Dev*. 2018 Dec; 127:74-84. doi: 10.1016/j.earlhumdev.2018.09.015. Epub 2018 Oct 16. Review

### Journal Articles: (cont):

13. Winter L, Sanders MR, N Boyd R, Pritchard M, Gray PH, Whittingham K, Forrest K, Webb L, Marquart L, **Colditz PB**. Predicting attendance of a preventative parenting intervention for very preterm infants. *Infant Ment Health J*. 2018 Nov;39(6):699-706. doi: 10.1002/imhj.21749. Epub 2018 Oct 19
14. Al-Theyab NA, **Donovan TJ**, Eiby YA, **Colditz PB**, Lingwood BE. Fat trajectory after birth in very preterm infants mimics healthy term infants. *Pediatr Obes*. 2018 Sep 26. doi: 10.1111/ijpo.12472
15. Popat H, Galea C, Evans N, Lingwood B, **Colditz PB**, Halliday R, Osborn D. Effect of Delayed Cord Clamping on Cerebral Oxygenation in Very Preterm Infants. *Neonatology*. 2018 Sep 10;115(1):13-20. doi: 10.1159/000492712
16. Eiby YA, Shrimpton NY, Wright IMR, Lumbers ER, **Colditz PB**, Duncombe GJ, Lingwood BE. Reduced blood volume decreases cerebral blood flow in preterm piglets. *J Physiol*. 2018 Dec;596(23):6033-6041. doi: 10.1113/JP275583. Epub 2018 Jul 2
17. Pannek K, Fripp J, George JM, Fiori S, **Colditz PB**, Boyd RN, Rose SE. Fixel-based analysis reveals alterations in brain microstructure and macrostructure of preterm-born infants at term equivalent age. *Neuroimage Clin*. 2018 Jan 11; 18:51-59. doi: 10.1016/j.nicl.2018.01.003. eCollection 2018
18. Baboukani PS, Azemi G, Boashash B, **Colditz P**, Omidvarnia A. A novel multivariate phase synchrony measure: application to multichannel newborn EEG analysis. *Digital Signal Processing*. 2018 Jan. 84: 59-68. doi: 10.1016/j.dsp.2018.08.019
19. Wixey JA, Chand KK, Pham L, **Colditz PB**, Bjorkman ST. Therapeutic potential to reduce brain injury in growth restricted newborns. *J Physiol*. 2018 Apr 27. doi: 10.1113/JP275428
20. Winter L, **Colditz PB**, Sanders MR, Boyd RN, Pritchard M, Gray PH, Whittingham K, Forrest K, Leeks R, Webb L, Marquart L, Taylor K, Macey J. Depression, posttraumatic stress and relationship distress in parents of very preterm infants. *Arch Womens Ment Health*. 2018 Mar 3. doi: 10.1007/s00737-018-0821-6
21. George JM, Fiori S, Fripp J, Pannek K, Guzzetta A, David M, Ware RS, Rose SE, **Colditz PB**, Boyd RN. Relationship between very early brain structure and neuromotor, neurological and neurobehavioral function in infants born <31 weeks gestational age. *Early Hum Dev*. 2018 Feb;117:74-82. doi: 10.1016/j.earlhumdev.2017.12.014. Epub 2018 Jan 23.

### 2018 Conference Presentations – Invited Speaker, Oral and Poster

#### Oral Presentations:

1. **Deborah Gilmore**. NeoSTRESS. 27<sup>th</sup> Annual RBWH Healthcare Symposium, Sept 2018
2. **Anndrea Flint**. Overnight Oximetry in Neonates – a Literature Review. ACNN National Conference, August 2018
3. **Donna Hovey**. Transcutaneous Bilirubin Meters – are they safe? ACNN National Conference, August 2018
4. **Jasmine Antoine**. Looks in the mirror and what does she see. Don't Forget the Bubbles Conference. August 2018
5. **Karen Hose**. Green Shoots of Quality Improvement. ANZNN CPI Conference, Sept 2018.

#### Poster Presentations:

1. **Colette McIntyre**. Moisture blisters, the who, what, when, where, why and how? ANZNN CPI Conference, Sept 2018
2. **Melissa Lai**. Vitamin K Refusal. ANZNN CPI Conference, Sept 2018.

### Other Communications and Outputs:

#### Journal Abstracts:

1. Dawson, P. A., **Colditz**, P. B., Boyd, R. N., Badawi, N., **Koorts, P. J.**, Kumar, S., Flenady, V. J. and Hurriion, E. M. (2018). *Supreme Study: Investigating the Neuroprotective Role of Sulphate Among Preterm Babies*. 22<sup>nd</sup> Annual Congress of the Perinatal Society of Australia and New Zealand (PSANZ), Auckland, New Zealand, 25–28 March 2018.



# Obstetrics and 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 very active in undertaking enhancing its research activities in the area of antenatal care, general obstetrics as well as endometriosis research under the guidance of Dr Akwasi Amoako (Conjoint O & G Specialist UQ and RBWH) and Thangeswaran Rudra. The Maternal Fetal Medicine unit provides a comprehensive and competitive environment for prospective and retrospective research and audits as well as undertaking collaborative research with other centres in Australia and New Zealand. The unit has published extensively in on fibronectin and cervical length in predicting labour, reduced fetal movements, etc. The unit has also collaborated internationally in the STRIDOR trial.

The Paediatric and Adolescent Gynaecology State-wide Service is active in research and presents and publishes internationally. Associate Professor Kimble was an invited keynote speaker in Zurich at the International conference in O & G on reproductive outflow tract disorders in PAG patients. A/P Kimble and her team were also awarded the prize for the oral presentation, "Severe Perineal tear among primiparous women in the early 21<sup>st</sup> Century:" in the Urogynaecology category at RCOG World Congress. 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.

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 newly established "Fertility" research theme at UQCCR and an Associate Editor for the Australian and New Zealand Journal of O&G. His research is funded by 3 CIA NHMRC Grants worth over \$2M. He is also a co-investigator on a unique large-scale genome-wide association study investigating genetic associations with miscarriage awarded funding in 2018 (NHMRC APP1163040). 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. Another major objective of this research is to develop novel and less invasive approaches for female fertility preservation. Increasing cancer survivorship has increased the numbers of reproductively-aged women who survive their disease and are desirous of 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). In 2018, Prof Homer's lab published the highest resolution analyses of chromosome segregation in mammalian oocytes to-date in the highly prestigious journal, Nature Communications, setting his lab apart as the only one in Australia with this capability and one of only a handful in the world.

The Obstetrics and Gynaecology department collaborates with numerous other departments within Metro North Hospital and Health Service (MNHHS) as well as with UQ, UQCCR, Mater Hospital, interstate hospitals and New Zealand.

## 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> )
Goutham Subramanian	PhD, UQ (2016-2019)	Role of DNA damage response proteins in oocyte development	<b>Hayden Homer</b> , Kum Kum Khanna
Jessica Greaney	PhD, UQ (2017-2020)	Asymmetric cell division in mammalian oocytes	<b>Hayden Homer</b> , Carlos Salomon-Gallo
Juvita DeLancy	PhD, UQ (2017-2019)	Sirtuin regulation of oocyte quality in obesity and during ageing	<b>Hayden Homer</b> , Carlos Salomon-Gallo
Sara Pagliarani	PhD, UQ (2018-2020)	Chlamydia infection in the ovary: effects on fertility in female koalas	Chiari Palmieri, Steve Johnston, <b>Hayden Homer</b>
Minh Cao	Honours, UQ (2018) – <i>completed</i> – <i>First Class Honours</i>	Understanding SAC arrest during G2-arrest in mouse oocytes	<b>Hayden Homer</b> , David Simmons
Pia Astbury	Honours, UQ (2017-2018) – <i>completed</i> – <i>First Class Honours</i>	Oxidative stress in human oocytes	<b>Hayden Homer</b>
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, <b>Gregory Duncombe</b> , Martha Lappas
Rosemary Stoke	PHD, UQ	Maternal, obstetric and perinatal outcomes of pregnancies complicated by socio-demographic medical, surgical or intapartum risk factors	<b>Silesh Kumar</b> , <b>Gregory Duncombe</b>
Grace Boyd	PHD, UQ	Maternal, obstetric and perinatal outcomes of pregnancies complicated by socio-demographic medical, surgical or intapartum risk factors	<b>Silesh Kumar</b> , <b>Gregory Duncombe</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University ( <i>years</i> )
Hayden Homer	Christopher Chen Chair of Reproductive Medicine	Director of Christopher Chen Oocyte Biology Research Laboratory, UQCCR, Faculty of Medicine	UQ (2016-current)
Rebecca Kimble	Associate Professor	Faculty of Medicine	University of Queensland 2007 – current
Rebecca Kimble	Adjunct Associate Professor	Faculty of Health Sciences	Queensland University of Technology
Karin Lust (2018 research under Obstetric Medicine section)	Associate Professor	Faculty of Medicine	University of Queensland 2014 – current
Akwasi Amoako	Doctor	Faculty of Medicine	University of QLD 2017 – ongoing
Christopher Maher	Professor	Faculty of Medicine	University of QLD 2017 – ongoing
Gregory Duncombe	Associate Professor	Faculty of Medicine	University of Queensland

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
Thangeswaran Rudra, Akwasi Amoako, Pinar Cingiloglu		Classical Caesarean Section vs Lower Segment Caesarean Section Outcome – 5 years' experience
Thangeswaran Rudra, Priyanka Kosanam		Trend analysis and Outcome Peripartum Hysterectomy for 15 years
Thangeswaran Rudra, Jessica Phillips Yelland	Karin Lust, Penny Wolski. Dayae Lah	Pregnancy outcome following Diabetic Ketoacidosis in Pregnancy for 20 years
Chris Lehner, Renuka Sekar, Akwasi Amoako	Cathy Z Liu, Nicole Ho, Chris Lehner, Renuka Sekar, Akwasi Amoako (RBWH), Anh Nguyen (PA)	The Efficacy of Quantitative Fetal Fibronectin in Predicting Spontaneous Preterm Birth in Symptomatic Women
Chris Lehner, Renuka Sekar, Akwasi Amoako	Cathy Z Liu, Nicole Ho, Chris Lehner, Renuka Sekar, Akwasi Amoako (RBWH), Anh Nguyen (PA)	Role of Fetal Fibronectin and Cervical Length Measurement in Predicting Preterm Labour
Thangeswaran Rudra, Akwasi Amoako	Umesha Pathmanathan, Rachel Wilkinson, Thangeswaran Rudra, Akwasi Amoako	Maternal and Fetal Outcomes in Pregnancies Complicated by Reduced Fetal Movements
Matthew Smith, Yogesh Chadha & Akwasi Amoako	Angela Ng, Janine Farquharson, Matthew Smith, Yogesh Chadha & Akwasi Amoako	Water Versus Land Birth: a 5-Year Retrospective Study of Obstetric and Neonatal Outcomes
Chris Lehner, Renuka Sekar, Akwasi Amoako	Cathy Z Liu, Nicole Ho, Chris Lehner, Renuka Sekar, Akwasi Amoako (RBWH), Anh Nguyen (PA)	Prediction of Time of Delivery Using Cervical Length Measurement in Women with Threatened Preterm Labour
Thangeswaran Rudra, Akwasi Amoako	Pinar Cingiloglu, Thangeswaran Rudra, Akwasi Amoako	Have Rising Classical Caesarean Section Rates Improved the Outcome in Tertiary Centre?
Thangeswaran Rudra, Akwasi Amoako	Pinar Cingiloglu, Thangeswaran Rudra, Akwasi Amoako	A Comparison Between Classical Caesarean Section and Lower Uterine Segment Caesarean Section in Preterm Foetuses: a 10-Year Retrospective Review from a Single Tertiary Obstetric Centre
Akwasi Amoako	Cathy Liu, Mariano Mascarenhas, Oybek Rustamov, Akwasi Amoako	The Impact of Chemotherapy Drugs on The Ovarian Function: a Systematic Review of Specific Agents and Regimens
Akwasi Amoako	Cathy Liu, Mariano Mascarenhas, Oybek Rustamov, Akwasi Amoako	IVF And Ethnicity Systematic Review and Meta-Analysis
Stacey Davie, Akwasi Amoako	Stacey Davie, Akwasi Amoako	Sleep Quality and Endometriosis: a Group Comparison Pilot Study
Philip Chi Kwong Chung, William Song, Thangeswaran Rudra	Philip Chi Kwong Chung, William Song, Thangeswaran Rudra	Outcome following Placenta Previa and Accreta – 10-year review
RMN Kimble	B O'Brien, J Mason	Bleeding Disorders in adolescents with Heavy menstrual bleeding in the Paediatric and adolescent age group; a ten-year cohort Study
RMN Kimble	B O'Brien, B Sutton	MRI concordance with surgical and clinical diagnosis of complex congenital reproductive tract anomalies; a 15-year retrospective cohort study
RMN Kimble	B O'Brien, R Dahiya	Extreme presentations of the HAIR-AN syndrome in the paediatric and adolescent population; a review of literature and case study
RMN Kimble	M Khatun, C Martin, M Findlay, B Farthing	Severe perineal tear among primiparous women in the early 21 <sup>st</sup> Century: time trend, changing risk factors and clinical practice in maternity care
Keisuke Tanaka, Renuka Sekar, Akram Khalil, David Baartz	Keisuke Tanaka, Elise Coghill, Emma Ballard, Renuka Sekar, Akram Khalil, David Baartz	Management of caesarean scar pregnancy with intravenous methotrexate infusion therapy
Keisuke Tanaka, Akwasi Amoako, Akram Khalil, David Baartz	Keisuke Tanaka, Stephanie Zhu, Akwasi Amoako, Akram Khalil, David Baartz	Management of tubo-ovarian abscess: Single tertiary centre 5-year experience

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
<b>Thangeswaran Rudra, Akwasi Amaoko, Umeha Pathmanathan</b>	Rachel Wilkinson	Reduced Foetal Movements – Outcome following PSANZ Guidelines (Ongoing)
Fatema B Almughlliq, Yong Qin Koh, Hassendrini N Peiris, Kanchan Vaswani, and Murray D Mitchell (QUT)	<b>Renuka Sekar, Akwasi A Amoako, Sailesh Kumar (WNS)</b>	Chronic maternal/fetal inflammation differentially regulates eicosanoid enzyme gene expression in endometrium and trophoblast
Fatema B Almughlliq, Yong Qin Koh, Hassendrini N Peiris, Kanchan Vaswani, and Murray D Mitchell (QUT)	<b>Renuka Sekar, Akwasi A Amoako, Sailesh Kumar (WNS)</b>	Eicosanoid enzyme gene expression profiling in an in vitro co-culture model of maternal-fetal communication
Fatema B Almughlliq, Yong Qin Koh, Hassendrini N Peiris, Kanchan Vaswani, and Murray D Mitchell (QUT)	<b>Renuka Sekar, Akwasi A Amoako, Sailesh Kumar (WNS)</b>	Effect of 2-Arachidonoylglycerol on the production of prostaglandins by human amnion explants
Fatema B Almughlliq, Yong Qin Koh, Hassendrini N Peiris, Kanchan Vaswani, and Murray D Mitchell (QUT)	<b>Renuka Sekar, Akwasi A Amoako, Sailesh Kumar (WNS)</b>	The effect of interleukin 1 $\beta$ on eicosanoid enzyme gene expression in endometrium and trophoblast cells in a co-culture model
Beckmann, M et al	Baker, K; Kirkman, A; Foxcroft, K	Prostaglandin Inpatient iNduction of labour Compared with BALLOon Outpatient iNduction of labour: a randomised controlled trial HREC Ref: HREC/14/MHS/20
Tarnow-Mordi, W et al (University of Sydney)	Baker, K; Shipton, E; Foxcroft, K	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
Katie Groom	<b>Renuka Sekar/ Pieter Koorts</b>	Childhood Outcomes of STRIDER NZAus: a randomised controlled trial of sildenafil therapy in dismal prognosis early-onset intrauterine growth restriction (New Zealand and Australia)
Jodie Painter (QIMR; CIA), Cecelia Lindgren (Oxford; CIB)	<b>Hayden Homer (CIC)</b>	Large-scale genome-wide analyses to investigate the genetic aetiology of miscarriage (NHMRC funded)

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>RMN Kimble</b>	Prize winner Urogynaecology Category “Severe Perineal tear among primiparous women in the early 21 <sup>st</sup> Century: Time trend, changing risk factors and clinical practice in maternity care”	RCOG World Congress March 2018 Singapore
<b>RMN Kimble</b>	Invited Keynote speaker Reproductive Outflow Tract Disorders in the paediatric and adolescent gynaecology population: Clinical Presentation, Diagnostic Complexities, Imaging, surgical and non-surgical management.”	5 <sup>th</sup> International Gynaecology and Obstetrics Conference, Zurich, Switzerland October 2018
<b>Karin Lust</b>	MNHHS Staff Excellence Award – Leadership Category	2018 Staff Excellence Awards
<b>Akwasi Amoako</b>	Most Valued Teacher	Royal Brisbane Clinical Unit, University of Queensland Medical School
<b>Akram Khalil</b>	Award for Excellence in Teaching – Clinical Years	University of Queensland Medical Society
<b>Hayden Homer</b>	UQCCR PhD student of the Year 2018	Award to one of Prof Homer’s PhD students
<b>David Baartz</b>	Doctor of the Year Awards	RBWH Consultant of the Year
<b>Keisuke Tanaka</b>	Doctor of the Year Awards	RBWH Registrar of the Year
<b>Amanda Harry</b>	Doctor of the Year Awards	RBWH PHO of the Year
<b>Hayden Homer</b>	UQCCR ECR Paper of the month Award (October 2018)	Awarded for high-impact paper from Prof Homer’s team in Nature Communications

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Jodie Painter (QIMR; CIA), Cecelia Lindgren (Oxford; CIB), <b>Hayden Homer (CIC)</b>	WNS RBWH – Oocyte Biology Research Lab	Large-scale genome-wide analyses to investigate the genetic aetiology of miscarriage	NHMRC APP 1163040	\$97,664	2018-2019 \$195,328
Jessica Greaney and <b>Hayden Homer</b>	WNS RBWH – Oocyte Biology Research Lab	Asymmetric division in mammalian oocytes	Australian Government RTP Scholarship	\$28,000	2018-2019 \$56,000

## 2018 Research Publications

### Journal Articles:

1. Zhe Wei, Jessica Greaney, Chenxi Zhou and **Hayden Homer**. Cdk1 inactivation induces post-anaphase-onset spindle migration and membrane protrusion required for extreme asymmetry in mouse oocytes. *Nature Communications* 2018; 9: 4029
2. Jessica Greaney, Zhe Wei Z & **Hayden Homer**. Regulation of chromosome segregation in oocytes and the cellular basis for female meiotic errors. *Human Reproduction Update* 2018; 24: 135-161
3. Jessica Greaney, Zhe Wei Z & **Hayden Homer**. Immunofluorescence Staining of K-Fibers in Mouse Oocytes Using Cold Fixation. *Methods in Molecular Biology* 2018; 1818: 77-87
4. **Hayden Homer**. Modern management of recurrent miscarriage. *Australian and New Zealand Journal of Obstetrics & Gynaecology* 2018 Nov 4. doi.org/10.1111/ajo.12920
5. **Hayden Homer**. Preimplantation genetic testing for aneuploidy (PGT-A): The biology, the technology and the clinical outcomes. *Australian and New Zealand Journal of Obstetrics & Gynaecology* (in Press)
6. **Keisuke Tanaka**, Jackie Chua, Robert Cincotta, Emma Ballard, **Gregory Duncombe**. Hysterosalpingo foam sonography (HyFoSy): Tolerability, safety and the occurrence of pregnancy post-procedure. *Aust N Z J Obstet Gynaecol* 2018; 58(1): 114-118
7. Nair, S., Jayabalan, N., Guanzon, D., Palma, C., Scholz-Romero, K., Elfeky O., Zuñiga, F., Ormazabal, V., Diaz, E., Rice, G.E., **Duncombe, G.**, Jansson, T., McIntyre, H.D., Lappas, M. and Salomon, C. HUMAN PLACENTAL EXOSOMES IN GESTATIONAL DIABETES MELLITUS CARRY A SPECIFIC SET OF miRNAs ASSOCIATED WITH SKELETAL MUSCLE INSULIN SENSITIVITY *Clinical Science* Sep 25, 2018, CS20180487; DOI: <https://doi.org/10.1042/CS20180487>
8. Eiby, Y.A., Shrimpton, N.Y., Wright, I.M.R., Lumbers, E.L., **Colditz, P.B.**, **Duncombe, G.J.** and Lingwood, B.E. REDUCED BLOOD VOLUME DECREASED CEREBRAL BLOOD FLOW IN PRETERM PIGS. *J Physiol* (2018) accepted online <https://doi.org/10.1113/JP275583>
9. Jauniaux, E., Ayres-de-Campos, D. FIGO CONSENSUS GUIDELINES ON PLACENTA ACCRETA SPECTRUM DISORDERS: INTRODUCTION. and for the FIGO Placenta Accreta Diagnosis and Management Expert Consensus Panel (2018), *Int J Gynecol Obstet*, 140: 261–264. doi:10.1002/ijgo.12406
10. Jauniaux, E., Chantraine, F., Silver, R. M., Langhoff-Roos, J. FIGO CONSENSUS GUIDELINES ON PLACENTA ACCRETA SPECTRUM DISORDERS: EPIDEMIOLOGY. and for the FIGO Placenta Accreta Diagnosis and Management Expert Consensus Panel (2018), *Int J Gynecol Obstet*, 140: 265–273. doi:10.1002/ijgo.12407
11. Jauniaux, E., Bhide, A., Kennedy, A., Woodward, P., Hubinont, C., Collins, S. FIGO CONSENSUS GUIDELINES ON PLACENTA ACCRETA SPECTRUM DISORDERS: PRENATAL DIAGNOSIS AND SCREENING. and for the FIGO Placenta Accreta Diagnosis and Management Expert Consensus Panel (2018), *Int J Gynecol Obstet*, 140: 274–280. doi:10.1002/ijgo.12408
12. Allen, L., Jauniaux, E., Hobson, S., Papillon-Smith, J., Belfort, M. A. FIGO CONSENSUS GUIDELINES ON PLACENTA ACCRETA SPECTRUM DISORDERS: NONCONSERVATIVE SURGICAL MANAGEMENT. and for the FIGO Placenta Accreta Diagnosis and Management Expert Consensus Panel (2018), *Int J Gynecol Obstet*, 140: 281–290. doi:10.1002/ijgo.12409
13. Sentilhes, L., Kayem, G., Chandraran, E., Palacios-Jaraquemada, J., Jauniaux, E. FIGO CONSENSUS GUIDELINES ON PLACENTA ACCRETA SPECTRUM DISORDERS: CONSERVATIVE MANAGEMENT, and for the FIGO Placenta Accreta Diagnosis and Management Expert Consensus Panel (2018), *Int J Gynecol Obstet*, 140: 291–298. doi:10.1002/ijgo.12410
14. H Brown, HL Barrett J Lee, JM Pincus, **RM Kimble**, VA Eley; Successful Resuscitation of Maternal Cardiac Arrest with Disseminated Intravascular Coagulation Guided by Rotational Thromboelastometry and Transesophageal Echocardiography: a Case Report. *A&a Practice* 10 (6), 139 2018
15. **O'Brien B**, Mason J, **Kimble R**. Bleeding Disorders in Adolescents with Heavy Menstrual Bleeding: the Queensland Statewide Paediatric and Adolescent Gynaecology Service. *J Pediatr Adolesc Gynecol*. 2018 Nov 22 Full article
16. **B O'Brien**, B Sutton, E Borg, **RMN Kimble**; Use of MRI for diagnosis of congenital vaginal anomalies and concordance with clinical and surgical findings: a study from the Queensland Paediatric and Adolescent Gynaecology Service. *Bjog-An International Journal of Obstetrics and Gynaecology* 125, 135-136 2018
17. **R Kimble**, **B O'Brien**; Management of reproductive outflow track disorders: Classification, varying presentations, diagnostic complexities, appropriate surgical and non-surgical management, and recognition of life threatening situations: extensive experience from a Quaternary Paediatric and Adolescent Gynaecology (PAG) Service in Australia over 15 years. *Bjog-An International Journal of Obstetrics and Gynaecology* 125, 135-135 2018

### Journal Articles: (cont):

18. **B O'Brien, R Dahiya, RM Kimble;** HAIR-AN syndrome: An extreme subphenotype of polycystic ovary syndrome. Be aware of the adolescent with extremely high androgen levels and severe hyperinsulinaemia. Queensland Paediatric and Adolescent Gynaecology Service. *Bjog-An International Journal of Obstetrics and Gynaecology* 125, 134-135 2018
19. **B O'Brien, J Mason, RMN Kimble;** Bleeding Disorders in adolescents with heavy menstrual bleeding: a 10 year experience of Queensland Paediatric and Adolescent Gynaecology Service. *BJOG- An International Journal of Obstetrics and Gynaecology* 125,18-18, 2018
20. M Khatun, C Martin, M Findlay, B Farthing, **R Kimble;** Severe perineal tear among primiparous women in the early 21<sup>st</sup> Century: time trend, changing risk factors and clinical practice in maternity care. *BJOG-AN INTERNATIONAL JOURNAL OF OBSTETRICS AND GYNAECOLOGY.* 125, 21-21 2018
21. Mikhail, S.M., **Maher, C.** 2018 Surgical pathway for the treatment of pelvic organ prolapse. *Obstetrics, Gynaecology and Reproductive Medicine* 28(4), pp. 105-109
22. Mowat, A., **Maher, C.**, Baessler, K., Christmann-Schmid, C., Haya, N., Maher, C. 2018 Surgery for women with posterior compartment prolapse *Cochrane Database of Systematic Reviews* 2018(3)
23. **Maher C.** The way forward after the transvaginal mesh decade. *The Obstetrician & Gynaecologist.* 2018;20(1):7-9
24. Abrams P, Andersson KE, Apostolidis A, Birder L, Bliss D, Brubaker L, et al. 6th International Consultation on Incontinence. Recommendations of the International Scientific Committee: EVALUATION AND TREATMENT OF URINARY INCONTINENCE, PELVIC ORGAN PROLAPSE AND FAECAL INCONTINENCE. *Neurourology and urodynamics.* 2018
25. Baessler K, Christmann-Schmid C, **Maher C,** Haya N, Crawford TJ, Brown J. Surgery for women with pelvic organ prolapse with or without stress urinary incontinence. *The Cochrane database of systematic reviews.* 2018;8: Cd013108
26. Baessler K, **Mowat A, Maher CF.** The minimal important difference of the Australian Pelvic Floor Questionnaire. *International urogynecology journal.* 2018
27. Haya N, Feiner B, Baessler K, Christmann-Schmid C, **Maher C.** Perioperative interventions in pelvic organ prolapse surgery. *The Cochrane database of systematic reviews.* 2018;8: Cd013105
28. **Maher C,** Buttini M. To the Editor. *Menopause (New York, NY).* 2018;25(8):951
29. **Maher CF,** Baessler KK, Barber MD, Cheon C, Consten ECJ, Cooper KG, et al. Summary: 2017 International Consultation on Incontinence Evidence-Based Surgical Pathway for Pelvic Organ Prolapse. *Female pelvic medicine and reconstructive surgery.* 2018
30. **Maher CF,** Baessler KK, Barber MD, Cheong C, Consten ECJ, Cooper KG, et al. Surgical management of pelvic organ prolapse. *Climacteric: The journal of the International Menopause Society.* 2018:1-7
31. Buttini MJ, **Maher C.** The first published randomised controlled trial of laser treatment for vaginal atrophy raises serious questions. *The Medical journal of Australia.* 2018;209(9):376-7
32. **Lehner C, Harry A,** Pelecanos A, Wilson L, Pink K and **Sekar R:** The feasibility of a clinical audit tool to investigate stillbirth in Australia – A single centre experience: *ANZJOG* 2018; 1-7. Doi: 10.1111/ajo.12799.

### 2018 Conference Presentations – Invited Speaker, Oral and Poster

#### Invited Speaker:

1. **Hayden Homer.** Invited Keynote Speaker: Dividing with extreme asymmetry. Cell and Developmental Biology Meeting 2018 of the Australian and New Zealand Society for Cell and Developmental Biology (ANZSCDB)
2. **Hayden Homer.** Keynote Speaker at sold-out UQ public lecture series. Preconception and IVF – ensuring the healthiest start to conception. UQ Health Matters Lecture Series 2018: Nature vs. Nurture – how the first 1000 Days affect lifelong health. <https://medicine.uq.edu.au/event/session/9381>
3. **Hayden Homer.** Invited Speaker: Is the PCO oocyte the same as a non-PCO oocyte? MSD SEED (Specialists Sharing Expertise, Education and Data) Meeting 2018: simply the best! What makes a good oocyte and embryo?
4. **Hayden Homer.** Invited Symposium Plenary. Challenges and interventions for improving egg quality. Fertility Society of Australia MSD Symposium 2018: the ovary and oocytes in dialogue: getting enough good eggs
5. **Hayden Homer.** Fertility & ART in the 21<sup>st</sup> century. Fertility Nurses of Australia Annual Meeting 2018
6. **Prof Hayden Homer,** Christopher Chen Chair in Reproductive Medicine: can new developments in Assisted Reproductive Technology (ART) address current threats to fertility? RBWH Symposium, September 2018
7. **C Lehner,** A Nguyen, C Liu, **A Amoako** and **R Sekar.** Retrospective cohort study evaluating quantitative fetal fibronectin in predicting spontaneous preterm birth in symptomatic women. 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018
8. **RMN Kimble** Invited Keynote speaker 5<sup>th</sup> International Conference of Obstetrics and Gynaecology, Zurich, Switzerland, 8-10 October “Reproductive Outflow Tract Disorders in the paediatric and adolescent gynaecology population: Clinical Presentation, Diagnostic Complexities, Imaging, surgical and non-surgical management.”
9. **RMN Kimble** Invited speaker, RBWH Symposium 2018; Management of Reproductive Track Disorders: Classification, varying presentations, diagnostic complexities, appropriate surgical and non-surgical management, and recognition of life-threatening situations: extensive experience from a Quaternary Paediatric and Adolescent Gynaecology (PAG) Service in Australia over the 15 years
10. Rudra T. Invited Speaker at the 51<sup>st</sup> Annual Scientific Sessions Sri Lanka College of Obstetricians and Gynaecologists in Colombo Sri Lanka on “Pre- Term Labour Current Concepts”. August 2018.



### Oral Presentations:

1. **Rebecca Kimble, Brooke O'Brien:** State-wide Paediatric and Adolescent Gynaecology Service – Management and developments in diagnosis of complex congenital reproductive tract – RBWH Symposium September 2018
2. **Keisuke Tanaka, Lars Eriksson, Andreas Obermair.** Incidence of adverse events in gynaecological hospital admissions: a systematic review. Chairman's choice session, Australasian Gynaecological Endoscopy and Surgery (AGES) Annual Scientific Meeting 2018
3. **Brooke O'Brien, J Mason, RMN Kimble:** Prevalence and Management of bleeding disorders in Adolescents presenting with Heavy Menstrual Bleeding. The Queensland Quaternary Paediatric and Adolescent Gynaecology Centre (HREC/17/QRBW/487). RCOG World Congress Singapore March 2018
4. **Rudra T,** Meconium stained Liquor. Golden Jubilee Congress of SLCOG- FIGO- SAFOG, Colombo, Sri Lanka. August 2017
5. **P Cingilogu, T Rudra, A Amoako.** Have rising classical caesarean section rates improved the outcome in a tertiary centre? 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018
6. **Angela Ng, Matthew Smith, Yogesh Chadha & Akwasi Amoako** Water versus land birth: a five-year retrospective cohort study of obstetric and neonatal outcomes at RBWH. 27<sup>th</sup> Annual RBWH Healthcare Symposium. September 2018
7. **RMN Kimble,** M Khatun Severe perineal tear among primiparous women in the early 21<sup>st</sup> Century: Time trend, changing risk factors and clinical practice in maternity care. RCOG World Congress, Singapore March 2018 Oral presentation and **prize winner Urogynaecology**
8. **Rudra T** <sup>\*\*</sup> Preterm Labour – Current Concepts<sup>™</sup>. SLCOG Annual Scientific Conference, Colombo, Sri Lanka, Aug18
9. **Dr Christoph Lehner:** Fostering a neglected child; RBWH Symposium, September 2018
10. Jessica Greaney, Zhe Wei & **Hayden Homer.** Asymmetric division in oocytes. European Molecular Biology Laboratory (EMBL) Australia Postgraduate Symposium 2018.

### Poster Presentations:

1. **O'Brien, B, Sutton B, Borg E, Kimble RMN.** Use of MRI for diagnosis of Congenital Vaginal Anomalies: a Study from an Australian Quaternary Paediatric and Adolescent Gynaecology Service (HREC/17/QRBW/485). RCOG World Congress Singapore March 2018. Top Scoring Abstract, Poster Category K: Paediatric and Adolescent Gynaecology
2. **Brooke O'Brien, J Mason, RMN Kimble:** Prevalence and Management of bleeding disorders in Adolescents presenting with Heavy Menstrual Bleeding. The Queensland Quaternary Paediatric and Adolescent Gynaecology Centre (HREC/17/QRBW/487). NASPAG Florida April 2018
3. **O'Brien, B, Dihaya R, Kimble RMN.** HAIR-AN Syndrome: an extreme subphenotype of polycystic ovary syndrome. Be aware of the adolescent with extremely high androgen levels and severe hyperinsulinaemia. Queensland Paediatric and Adolescent Gynaecology Service. NASPAG Florida April 2018
4. **O'Brien, B, Dihaya R, Kimble RMN.** HAIR-AN Syndrome: an extreme subphenotype of polycystic ovary syndrome. Be aware of the adolescent with extremely high androgen levels and severe hyperinsulinaemia. Queensland Paediatric and Adolescent Gynaecology Service. RCOG World Congress Singapore March 2018 Top Scoring Abstract, Poster Category K: Paediatric and Adolescent Gynaecology
5. **Kimble RMN, O'Brien B.** Management of Reproductive Track Disorders: Classification, varying presentations, diagnostic complexities, appropriate surgical and non-surgical management, and recognition of life-threatening situations: extensive experience from a Quaternary Paediatric and Adolescent Gynaecology (PAG) Service in Australia over the 15 years. (HREC/17/QRBW/488). RCOG World Congress Singapore March 2018 Top Scoring Abstract, Poster Category K: Paediatric and Adolescent Gynaecology
6. **K Strawson, RMN Kimble** Vaginal disorders in the paediatric and adolescent gynaecology population: a 10-year study from the Queensland Paediatric and Adolescent Gynaecology Service, RCOG World Congress Singapore March 2018
7. **S Davie,** Y Hamilton, L Webb and **A Amoako.** Sleep Quality and Endometriosis: a Group Comparison Pilot Study. Australian & New Zealand Journal of Obstetrics & Gynaecology 2018; 58 (Suppl. 1): Page 49
8. **G Cham, C Lehner, R Sekar,** P Mcgrath and **A Amoako.** Non-Invasive Prenatal Testing: An Audit of its Indications and Uptake in a Tertiary Hospital. Australian & New Zealand Journal of Obstetrics & Gynaecology 2018; 58 (Suppl. 1): Page 45 Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018 & In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
9. **C Lehner, A Nguyen, C Liu, A Amoako and R Sekar.** Retrospective Cohort Study Evaluating Quantitative Fetal Fibronectin in Predicting Spontaneous Preterm Birth in Symptomatic Women. Australian & New Zealand Journal of Obstetrics & Gynaecology 2018; 58 (Suppl. 1): Page 62 In: proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
10. **T Rudra, A Amoako, P Cingilogu** and **V Ampornanai.** Is Lower Segment Superior to Classical CS for Extreme Prematurity? Australian & New Zealand Journal of Obstetrics & Gynaecology 2018; 58 (Suppl. 1): Page 72
11. **A Harry, K Baker, N Mitchell, K Whitfield** Improving Maternal Morbidity Associated with Postpartum Haemorrhage: Potential Role of Non-Blood Products
12. **Brooke O'Brien, Jane Mason, RMN Kimble:** Prevalence and Management of bleeding disorders in Adolescents presenting with Heavy Menstrual Bleeding. The Queensland Quaternary Paediatric and Adolescent Gynaecology Centre (HREC/17/QRBW/487). Accepted for poster NASPAG Florida April 2018
13. **T Rudra, T Athikari,** Maternal and perinatal outcomes following HELLP syndrome – Australian & New Zealand Journal of Obstetrics & Gynaecology 2018; 58 (Suppl. 1): Page 78
14. **T Rudra, D Lah, J Phillips Yelland, P. Wolloski, K. Lust:** DKP Predictors – SOMANZ Conference – Cairns – July 2018
15. **T Rudra, A. Craven** Renal angioliipoma in pregnancy Case report and review – SOMANZ Conference – Cairns – July 2018
16. **T Rudra, P Cingilogu** Has rising classical caesarean section rate influenced the maternal and perinatal outcome in a tertiary centre? – Presented at the RCOG World Congress – Singapore – March 2018

### Poster Presentations (cont):

17. **P. Kosanam, T Rudra** Is Modern Obstetric Practice the cause of rising Peripartum Hystrectomy? – Presented at the RCOG World Congress – Singapore – March 2018
18. **T Rudra** Classical caesarean section in the 21<sup>st</sup> century – Presented at the RCOG World Congress – Singapore – March 2018
19. **T Rudra, D Lah, J Phillips Yelland, P. Wolski** Diabetic Ketoacidosis in T1DM in pregnancy: a case series? – Presented at the RCOG World Congress – Singapore – March 2018
20. **A Harry, T Rudra** Anaemia Management In Pregnancy: a health service improvement project – presented at the RCOG World Congress – Singapore – March 2018
21. **P Chung, T Rudra** Outcome following Placenta Previa in a Tertiary Centre: presented at the RBWH Symposium – Brisbane – August 2018
22. Green K, **Wolski P** and **Baker K** – Critical Hyponatraemia in the Context of Maternal Mirror Syndrome; Presented SOMANZ Annual Scientific Meeting, July 2018
23. **Cingiloglu P, Thangeswaran R, Amoako, A.** A Comparison between Classical Caesarean Section and Lower Uterine Segment Caesarean Section in Extreme Preterm Fetuses: a 10-year retrospective review from a single tertiary obstetric centre. In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
24. **Cingiloglu P, Rudra T.** HAVE RISING CLASSICAL CAESAREAN SECTION RATES IMPROVED THE OUTCOME IN A TERTIARY CENTRE? In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
25. **Asy NG, Smith M, Farquharson J, Chadha Y, David M, Amoako A.** WATER VERSUS LAND BIRTH: A 5-YEAR RETROSPECTIVE COHORT STUDY OF OBSTETRIC AND NEONATAL OUTCOMES AT RBWH. In: proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
26. **Pathmanaathan U, Wilkinson R, Amoako A, Rudra T.** DECREASED FOETAL MOVEMENTS – IMPACT OF NEW GUIDANCE In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
27. **O'Brien B, Mason J, Kimble R.** Bleeding disorders in Adolescents with Heavy Menstrual Bleeding. In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
28. **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. In: proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia.



## Obstetric Medicine

The department of Obstetrics medicine conducts research focussed on the health care of women with complex pregnancies. The aim is to improve outcomes for these women and their babies. The department is involved in a number of collaborative research projects including a large NHMRC funded study evaluating the guided treatment of asthma in pregnancy. Other research studies focus on maternal metabolism, in particular breastfeeding in women with type I and type II diabetes, ketones in pregnancy and diabetes and dietetic interventions for pregnant women.

The department has been active in presenting its work at multiple conferences with twelve oral (8 invited) and 22 poster presentations conducted throughout the year. In addition to this, the department has also published 18 journal articles and won two poster prizes at the Annual SOMANZ Scientific Meeting for Best Clinical Poster and 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>
Angela North	Masters, UQ (2016 – ongoing)	Therapeutic heparin antenatal and peripartum	<b>Karin Lust, Karen Whitfield, Helen Barrett</b>
Naomi Achong	PhD	Breastfeeding in Type 1 Diabetes	<b>Leonie Callaway, Emma Duncan, David McIntyre</b>
Alka Kothari	PhD	Forgotten Fathers	<b>Leonie Callaway, Joel Dulhunty</b>
Helen Robinson	PhD	Ketosis in Pregnancy	<b>Leonie Callaway, Helen Barrett, Marloes Dekker</b>
Fiona Britten	MPhil	Breastfeeding in Type 2 Diabetes	<b>Leonie Callaway, Emma Duncan</b>
Shipton E	PhD	Models of care and breastfeeding	<b>Leonie Callaway, Susan de Jersey, Katie Foxcroft</b>

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
<b>Katie Foxcroft</b>	Adjunct Fellow	WNS and Perinatal Research Centre	University of Qld (2016 – current)
<b>Annelise Kirkham</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Felicity Stalley</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Karen Taylor</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Lisa McKeown</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Gill Lack</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Kellie McGroary</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Kylie Smart</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Emma Shipton</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Neroli Mack</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Bonnie McNeill</b>	Research Nurse	WNS and Perinatal Research Centre	
<b>Linda Cobbald</b>	Research Nurse	WNS and Perinatal Research Centre	

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	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

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
Mike Beckmann	<b>Karen Baker</b>	Prostaglandin Inpatient iNduction of labour Compared with BALLOon Outpatient iNduction of labour: a randomised controlled trial
Vicky Flenady	<b>Yogesh Chada</b>	My Baby's Movements: a stepped wedge cluster randomised controlled trial to raise maternal awareness of fetal movements during pregnancy
Katie Groom	<b>Renuka Sekar/ Pieter Koorts</b>	Childhood Outcomes of STRIDER NZAus: a randomised controlled trial of sildenafil therapy in dismal prognosis early-onset intrauterine growth restriction (New Zealand and Australia)
Murphy V, Gibson P, Hensley M, Mattes J, Giles W, Peek M, Bisits A, McCaffery K	<b>Callaway L, Colditz P, Barrett H</b>	Breathing for Life Trial
EURObservational research programme	<b>Lust K, Parsonage W</b>	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	<b>Lust K, Parsonage W</b>	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,	<b>Lust K</b>	Links2HealthierBubs: influenza and pertussis vaccine effectiveness in pregnancy

## 2018 Research Awards and Achievements

Recipient	Award	Event
<b>Madeline Duke</b>	Poster Prize for Best Clinical Poster	SOMANZ Annual Scientific Meeting Cairns July 2018
<b>Kate Poulsen</b>	Poster Prize for Best Scientific Poster	SOMANZ Annual Scientific Meeting Cairns July 2018

## 2018 Research Grants – Awarded

Investigators ( <i>RBWH staff in bold</i> )	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
Simmons D, <b>Callaway L</b> , Dekker M, Ng D	Obstetric medicine	Trophoblast cell-cell fusion in preeclampsia	National Health and Medical Research Council	\$162,424.33	\$487,273 (2017-2019)
Murphy V, Gibson P, Hensley M, Mattes J, Giles W, Peek M, Bisits A, <b>Callaway L</b> , 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	\$28,500	\$1,647,906 (2014-2018)
Graves N, Hillman K, Willmott L, White B, Harvey G, <b>Callaway L</b> , Cardona-Morrell M, Barnett A, Lee X	Obstetric Medicine	Reducing Non-Beneficial Treatment at the End-of-Life	NHMRC Partnership Project	\$504,107.50	\$1,008,215 (2018-2020)
Hague W, Dodd J, Morris J, Stark M, Peek M, Middleton P, Shand A, Newnham J, <b>Callaway L</b> , Walker S	Obstetric Medicine	Treatment of Severe Early Onset Intrahepatic Cholestasis of Pregnancy	MRFF – Research Grant	\$595,884.50	\$1,191,769 (2018-2020)
<b>Shipton E</b>	Obstetric Medicine	PhD models of care and Breastfeeding	RBWH Foundation	\$38082.52	\$3808.52 (2018)
Sullivan E, Cordina R, Simmons L, Pollock W, <b>Lust K</b> , <b>Parsonage W</b> , 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 CVRN Women and Heart Disease Grant	\$75 000	\$150 000 (2017-2018)
Regan AK, Andrews RM, Moore HC, Binks MJ, McHugh L, Pereira G, Blyth CC, Van Buynder PG, <b>Lust K</b>	Obstetric Medicine	Links2HealthierBubs: influenza and pertussis vaccine effectiveness in pregnancy	National Health and Medical Research Council Grant	\$16,9083.30	\$676 333.20 (2017-2020)

## 2018 Research Publications

### Journal Articles

- Achong N, Duncan EL, McIntyre HD, **Callaway L**. The physiological and glycaemic changes in breastfeeding women with type 1 diabetes mellitus. *Diabetes Res Clin Pract.* 2018. Jan 135; 93-101
- Kilgour C, Bogossian FE, **Callaway L**, Gallois C. Postnatal gestational diabetes mellitus follow-up: perspectives of Australian hospital clinicians and general practitioners. *Women Birth.* 2018. May 4
- Robin AL, Jensen ME, Gibson PG, Powell H, Giles WB, Clifton VL, Mattes J, Peek MJ, **Barrett HL**, Seeho SK, **Callaway LK**, Abbott A, Attia J, Wark PA, Murphy VE. Trends in asthma self-management skills and inhaled corticosteroid use during pregnancy and postpartum from 2004-2017. *J Asthma.* 2018 May 2:1-22
- Ellwood DA, **Callaway LK**. Maternal overweight and obesity: where to from here? *Med J Aust.* 2018-19; 208(3)
- Callaway L**, **Eley V**. Obesity and Complications from Neuraxial Analgesia – We Need to Know More. *Paediatr Perinat Epidemiol.* 2017. Nov 31 (6): 506-508
- Barrett HL**, Gomez-Arango LF, Wilkinson SA, McIntyre HD, **Callaway LK**, Morrison M, Dekker Nitert M. A Vegetarian Diet Is a Major Determinant of Gut Microbiota Composition in Early Pregnancy. *Nutrients.* 2018 Jul 12;10(7). pii: E890. doi: 10.3390/nu10070890
- Robinson HL**, **Barrett HL**, **Foxcroft K**, **Callaway LK**, Dekker Nitert M: prevalence of maternal urinary ketones in pregnancy in overweight and obese women. *Obstet Med.* 2018 Jun;11(2):79-82. doi: 10.1177/1753495X17743163. Epub 2017 Dec 5

## Journal Articles (cont):

8. **Eley VA**, Christensen R, Kumar S, **Callaway LK**: a review of blood pressure measurement in obese pregnant women. *Int J Obstet Anesth*. 2018 Apr 22. pii: S0959-289X (17)30461-2. doi: 10.1016/j.ijoa.2018.04.004. [Epub ahead of print] Review
9. Dekker Nitert M, Gomez-Arango LF, **Barrett HL**, McIntyre HD, Anderson GJ, Frazer DM, **Callaway LK**: iron supplementation has minor effects on gut microbiota composition in overweight and obese women in early pregnancy. *Br J Nutr*. 2018 May 23:1-7. doi: 10.1017/S0007114518001149. [Epub ahead of print]
10. Robijn AL, Jensen ME, Gibson PG, Powell H, Giles WB, Clifton VL, Mattes J, Peek MJ, **Barrett HL**, Seeho SK, **Callaway LK**, Abbott A, Attia J, Wark PA, Murphy VE. J: Trends in asthma self-management skills and inhaled corticosteroid use during pregnancy and postpartum from 2004 to 2017. *Asthma*. 2018 May 2:1-9. doi: 10.1080/02770903.2018.1471709
11. Rigg, J, Gilbertson E, **Britten F, Barrett H, Lust K**: Primary Hyperparathyroidism in Pregnancy 2000-2015 at RBWH' JCEM
12. Holland OJ, Cuffe JSM, Dekker Nitert M, **Callaway L**, Kwan Cheung KA, Radenkovic F, Perkins AV: Placental mitochondrial adaptations in preeclampsia associated with progression to term delivery. *Cell Death Dis*. 2018 Nov 19;9(12):1150. doi: 10.1038/s41419-018-1190-9
13. Schroder WA, Le TT, Gardner J, Andrews RK, Gardiner EE, **Callaway L**, Suhrbier A.: SerpinB2 deficiency in mice reduces bleeding times via dysregulated platelet activation. *Platelets*. 2018 Nov 2:1-6. doi: 10.1080/09537104.2018.1535702. [Epub ahead of print]
14. Schoenaker DAJM, Vergouwe Y, Soedamah-Muthu SS, **Callaway LK**, Mishra GD: preconception risk of gestational diabetes: Development of a prediction model in nulliparous Australian women. *Diabetes Res Clin Pract*. 2018 Oct 5; 146:48-57. doi: 10.1016/j.diabres.2018.09.021. [Epub ahead of print]
15. Mamun AA, McIntyre DH, Najman JM, Williams GM, Khatun M, Finlay J, **Callaway L.**: young adult pregnancy status and the risk of developing overweight and obesity among women and men. *Clin Obes*. 2018 Oct;8(5):327-336. doi: 10.1111/cob.12262. Epub 2018 Jul 25
16. Kilgour C, Bogossian FE, **Callaway L**, Gallois C.: postnatal gestational diabetes mellitus follow-up: perspectives of Australian hospital clinicians and general practitioners. *Women Birth*. 2018 May 4. pii: S1871-5192(17)30641-8. doi: 10.1016/j.wombi.2018.04.011. [Epub ahead of print]
17. Dawson AJ, Krastev Y, Parsonage WA, Peek M **Lust KM**, Sullivan EA. Experiences of women with cardiac disease in pregnancy: a systematic review and metasynthesis. *BMJ Open* 2018;8:e022755. doi:10.1136/bmjopen-2018-022755
18. Angela M. North, BSc, BPharm, MPhil Candidate MPS AACPA1, **Helen L. Barrett**, BSc MBBS FRACP PhD2,3, **Karin M. Lust**, MBBS FRACP2,3, **Karen M. Whitfield**, BSc (Hons): Therapeutic heparin during the peripartum period – challenges associated with safe use. *Journal of Pharmacy Practice and Research* (2017). doi: 10.1002/jppr.1399.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Helen Robinson**: Low-value interventions in obstetric medicine; Invited oral SOMANZ Cairns July 2018
2. Prof Shaun Brennecke, Dr David Williams, **Prof Leonie Callaway**, Prof Annemarie Hennessy, Prof Michael Peek: debate on first trimester screening for preeclampsia. Invited oral talk SOMANZ Cairns July 2018
3. **Dr Karin Lust**, Dr Samantha Scherman, Dr James Sartain, A/Prof Leeanne Grigg, A/Prof Dorothy Radford: interactive case discussion including cardiology and stroke. Invited panellist SOMANZ Cairns July 2018
4. Sandra Lowe, Amanda Beech, Lucy Bowyer, Catherine Marnoch, **Helen Robinson**: Development of the SOMANZ Guideline for management of nausea and Vomiting in Pregnancy and Hyperemesis Garvidarum. Invited oral talk SOMANZ Cairns July 2018
5. **Helen Robinson**, Irena Idel, Karin Lust, Catherine Marnoch, Mark Morton, Joanne Siad, Jason Soon: low-value interventions in obstetric medicine. Invited oral talk SOMANZ Cairns July 2018
6. **Karin Lust**, Timing and control managing gestational diabetes, Medicines Management 2018 44<sup>th</sup> SHPA National Conference, Brisbane 24 Nov 2018
7. **Karin Lust**, Pregnancy and heart failure, Statewide Heart failure services course, Managing heart failure from hospital to home RBWH 31 August 2018
8. **Karin Lust**, Helen Barrett, **Kellie Tathem**, Obstetric Medicine Speaker & Chair, RANZCOG, Pre-examination Course, Brisbane May 2018.

### Oral Presentations:

1. **Matthew Bright, Gunjan Chawla, Leonie Callaway, Victoria Eley**: Maternal and fetal outcomes in super-obese women. Accepted for oral talk RCOG March 2018
2. **Matthew Bright, Gunjan Chawla, Leonie Callaway, Victoria Eley**: Maternal and fetal outcomes in super-obese women. Accepted for oral talk RCOG March 2018
3. Bond, S, Young, L, **Poulsen, K**, Barrett, H, Taylor, A and Barrett, C. Vaccination decisions and incidence of neonatal infections in mothers exposed to biological DMARDs during pregnancy. Oral abstract (New Investigator Free Papers) presented (by Bond, S) at Australian Rheumatology Association (ARA) 58<sup>th</sup> Annual Scientific Meeting, Melbourne, 2018 May
4. **Thomas Basso, Christopher Lehner, Annabelle Lamprecht, Karin Lust, William Parsonage**, Harris Haqqani, **Renuka Sekar**: Nadolol use in pregnancy and Small for Gestational Age (SGA) newborns at term: a case series. Accepted for oral talk SOMANZ Cairns July 2018.

## Poster Presentations:

1. **Michelle Cole, Leonie Callaway, Ann-Maree Craven, Karin Lust, Penny Wolski**, Amanda Beech: Hyperemesis Gravidarum and association with Helicobacter Pylori. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
2. **Michelle Cole, Penny Wolski, Leonie Callaway**, Amanda Beech, **Ann-Maree Craven**: Case Report of Cyclosporin Levels in Breast Milk. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
3. **Ann-Maree Craven**: Tacrolimus nephrotoxicity imitating pre-eclampsia – a case series. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
4. Karmen Lim, **Penny Wolski, Renuka Sekar, Ann-Maree Craven**: NSAID-Induced acute kidney injury in the post-partum period – a case series. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
5. Juliana C Ding, **Karin Lust**: Live Pregnancy in a heart, Lung, and Liver transplant patient: a case report. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
6. **Madeline Duke, Helen Barrett**, Carel Pretorius, **Fiona Britten, Peter Donovan**: Maternal metyrapone use during breastfeeding: safe for the breastfed infant. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
7. **Madeline Duke, Leonie Callaway**, Caroline Tallis: steroid refractory acute cellular rejection of a liver transplant in pregnancy: a case report. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
8. **Dr Thangeswaran Rudra, Dr Jessica Philips-Yelland, Dr Dayae Lah, Dr Penny Wolski, A/Prof Karin Lust**: has modern management of DKP improved the outcome? Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
9. **Fallon Noon, Fiona Britten**: Heparin induced liver failure in pregnancy: a case report. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
10. Stephanie Bond, Laurel Young, **Katherine Poulsen, Helen Barrett**, Andrew L Taylor, Claire Barrett: Vaccination Decisions and Incidence of Serious Neonatal Infections in Mothers Exposed to Biologicals and Targeted Synthetic Drugs During Pregnancy. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
11. **Dr Thangeswaran Rudra, Anne-Maree Crave**: Real angioliopoma in pregnancy – case report and review. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
12. **Archee Singh, Leonie Callaway, Penny Wolski**: Intracranial meningioma in pregnancy presenting with Visual Field Defects. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
13. **Archee Singh, Leonie Callaway, Penny wolski**, Fiona Britten, Winifred Lee: An Itch You Can't Scratch. Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
14. **Keeri Young, Michael d'Emden, Katherine Poulsen, Penny Wolski, Annabelle Lamprecht, Michelle Cole**: morbid insulin resistance in a pregnant patient with Type 1 Diabetes mellitus (T1DM). Accepted for poster SOMANZ Annual Scientific Meeting Cairns July 2018
15. North A, **Barrett H, Lust K and Whitfield K**. Therapeutic anticoagulation during the postnatal peripartum period: a survey of clinical practice. In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
16. North A, **Barrett H, Lust K and Whitfield K**. Therapeutic anticoagulation during the postnatal peripartum period: a survey of clinical practice. In: proceedings of The Society of Hospital Pharmacists of Australia (SHPA) National Conference. 2018 22-25 November; Brisbane, Australia
17. **Dr Matthew Bright, Dr Gunjan Chawla, Prof Leonie Callaway**, Assoc Prof Victoria Eley. Maternal and fetal outcomes in super-obese women. In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
18. Faisal Altemani, **Helen L. Barrett**, Luisa Gomez-Arango, H. David McIntyre, **Leonie K. Callaway**, Marloes Dekker Nitert. Women who develop preeclampsia have lower abundance of the butyrate-producer Coprococcus in their gut microbiota. In: proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
19. **Duke M, Britten F**, Pretorius C J, McWhinney B C, Ungerer J, **Barrett H**, Donovan P. Maternal metyrapone use during breastfeeding: Safe for the breastfed infant. . In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
20. **Keeri Young, Kate Poulsen, Michael d'Emden, Penny Wolski, Fiona Britten, Michelle Cole, Annabelle Lamprecht**. Morbid subcutaneous Insulin Resistance in a Pregnant Patient with Type 1 Diabetes Mellitus. In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
21. **Madeline Duke**, Caroline Tallis **Leonie Callaway**. Steroid refractory acute cellular rejection of a liver transplant in pregnancy: a case report. In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia
22. **Thomas Basso, Dr Christoph Lehner, Dr Annabelle Lamprecht, A/Professor Karin Lust, Professor William Parsonage, A/Professor Haris Haqqani, Dr Renuka Sekar**. Nadolol use in pregnancy and Small for Gestational Age (SGA) newborns at term: a case series. In: Proceedings of the RBWH (RBWH) Healthcare Symposium; 2018 September 11-13; Brisbane, Australia.

## Other Communications and Outputs:

### Abstracts

Schoenaker DA, Mishra G, **Callaway L**. Women with childhood trauma who develop depression prior to pregnancy are at increased risk of developing gestational diabetes. ADIPS Annual Scientific Meeting, Adelaide, August 2018

**Duke M, Callaway L**. Complex Case Presentation – Preconception Care in a Woman Following Pancreas/Kidney Transplant. ADIPS Annual Scientific Meeting, Adelaide, August 2018.

## 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, 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.

With the support of our national and international collaborators we achieved much towards our goals in 2018. We were pleased to be awarded research grants in 2018 from RBWH Foundation, Financial Markets Foundation for Children and two NHMRC project grants. Prof Colditz' NHMRC study will examine placental stem cell treatment to protect babies' brains. This novel project uses the baby's own placenta to source the stem cells. The use of human cells has the merit of being immediately relevant to translate to clinical trials. Dr Wixey's NHMRC project will study the role of inflammation and brain injury in the growth restricted baby. Growth restriction during pregnancy can damage the baby's brain and result in poor outcomes. This study will examine whether a readily available and safe anti-inflammatory treatment can reduce brain injury following intrauterine growth restriction.

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 Tracey Bjorkman continues her NHMRC project to evaluate a novel therapy for neonatal seizures. The growth of the neonatal brain injury team has led to a number of significant publications and conference presentations in 2018. 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.

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.

The Joie De Vie RBWHF Butterfly Ball, held at the Hilton, was a great success and enjoyed by many. 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>
MD Abdul Awal	PhD, UQ – Awarded 2018	Classification and localization of neonatal EEG abnormalities using time-frequency image processing based neural network and support vector machine	<b>Paul Colditz</b> , Boualem Boashash
Ms Nada Al-Theyab	PhD, UQ – Awarded 2018	Preterm infant body composition	Barbara Lingwood, <b>Timothy Donovan</b> , <b>Paul Colditz</b>
Ms Rebecca Caesar	PhD, UQ (2012-2018)	Early predictors for neurodevelopmental outcome and prioritisation of service delivery for at risk premature infants	Roslyn Boyd, <b>Paul Colditz</b>
<b>Mr Matthew Fielder</b>	MPhil, UQ (2014-2018)	Novel therapies for seizures following hypoxic-ischaemic injury in neonates	Stella Tracey Bjorkman, <b>Paul Colditz</b>
Ms Elizabeth Forbes	MPhil, UQ (2013-2018)	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 (2015-2018)	A novel therapy for neonatal seizures	Stella Tracey Bjorkman, Julie Wixey
Dr Luke Jardine	PhD, UQ (2015-2018)	Development of early predictors of long term neurodevelopmental outcome for preterm infants	<b>Paul Colditz</b> , <b>Mark Davies</b>
Ms Ji Yeon Kim	PhD, UQ (2015-2018)	Understanding how remote application of near infrared light induces neuroprotection	<b>Paul Colditz</b> , Jonathon Stone



## 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>
Ms Annice Kong	PhD, UQ – <i>Awarded 2018</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	<b>Paul Colditz</b> , Simon Finnigan, Roslyn Boyd, Stephen Rose
<b>Dr Melissa Lai</b>	PhD, UQ (2015-2018)	Environmental manipulation of the very preterm infant: can dense array EEG detect developmental differences at term equivalent age	<b>Paul Colditz</b> , Simon Finnigan, Jurgen Fripp
<b>Dr Norman Ma</b>	MPhil, UQ (2011-2018)	Brain injury severity in a neonatal model of hypoxic ischemia following potential neuroprotective interventions	Stella Tracey Bjorkman, <b>Craig Winter, Paul Colditz</b>
Ms Stephanie Miller	PhD, UQ – <i>Awarded 2018</i>	Examining the maturation of the GABA system in the neonatal brain and its role in hypoxic-ischaemic brain injury	Stella Tracey Bjorkman, Peter Noakes
Mr James Morong	MPhil, UQ – <i>Awarded 2018</i>	A comparative study of in-hospital maternal mortality ratio (MMR) between the United States of America and Australia	<b>Paul Colditz</b> , Alfred Robichaux
Ms Abirami Ratnasingham	PhD, UQ (2016-2019)	Long term consequences of altered neonatal adiposity	Barbara Lingwood, <b>Timothy Donovan</b> , Marloes Nitert Dekker, Peter Davies
<b>Ms Sonia Sam</b>	PhD, UQ (2011-2018)	Cardiovascular factors associated with poor outcome in preterm infants	Barbara Lingwood, <b>Paul Colditz</b>
Mr Timothy Sherry	PhD, UQ (2015-2018)	Identification of brain events via electroencephalogram EEG through blind source separation	<b>Paul Colditz</b>
Dr Karen Barlow	PhD, UQ (2017-2020)	Melatonin in improving outcome after acquired brain injury	Ros Boyd, <b>Paul Colditz</b>
Mr Caleb Stewart	MPhil, UQ (2017-2019)	Modelling the impact of preterm birth on neurodevelopmental trajectories via neonatal MRI maturation index	<b>Paul Colditz</b> , Kerstin Pannek
Mr Elliot Teo	PhD, UQ (2017-2020)	Novel adjunctive therapies for the treatment of neonatal hypoxic-ischemic encephalopathy	Tracey Bjorkman, <b>Paul Colditz</b>
Ms Lara Jones	PhD, UQ (2018-2021)	Effect of placental stem cells on the blood brain barrier in a model of hypoxic-ischemic encephalopathy	<b>Paul Colditz</b> , Tracey Bjorkman

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University <i>(years)</i>
<b>Paul Colditz</b>	Professor of Perinatal Medicine	Clinical neonatology, neuroscience, biomedical signal processing	University of Queensland (current)
Tracey Bjorkman	Lions Senior Medical Research Fellow	Hypoxic-ischemic brain injury and seizures in the neonate	University of Queensland (current)
Nigel Barnett	Honorary Senior Fellow	The effects of hypoxia/ischaemia in visual development and disease	University of Queensland (current)
Boualem Boashash	Professor	Time-frequency signal analysis, biomedical signal processing, spectral estimation, signal detection and classification	University of Queensland (current)
Kirat Chand	Research Officer	Hypoxic-ischaemic brain injury, growth restriction, inflammation and seizures in the neonate	University of Queensland (current)
<b>Timothy Donovan</b>	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 (current)
Yvonne Eiby	Research Fellow	The cardiovascular system of preterm infants	University of Queensland (current)
Christine East	Honorary Professor	Fetal monitoring	Monash University (current)
<b>Simon Finnigan</b>	Senior Research Fellow	Brain monitoring techniques to improve outcomes for critically ill patients (e.g. extremely premature babies; stroke patients)	University of Queensland (current)

## 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions (cont)

Name	Type of Fellowship	Research Program	University (years)
<b>Katie Foxcroft</b>	Adjunct Fellow	Clinical Trial Coordinator	University of Queensland (current)
Janet Hammill	Honorary Senior Fellow	Collaboration for Alcohol Related Developmental Disorders	University of Queensland (current)
<b>Annelise Kirkham</b>	Research Nurse	Clinical Trials	University of Queensland (current)
Aven Lee	Postdoctoral Research Fellow	Molecular biology and protein biology of the brain	University of Queensland (current)
<b>Melissa Lai</b>	Senior Lecturer	EEG in preterm babies	University of Queensland (current)
<b>Gillian Lack</b>	Research Nurse	Clinical Trials	University of Queensland (current)
<b>Barbara Lingwood</b>	Senior Research Fellow	Cardiovascular function in the preterm infant, infant body composition	University of Queensland (current)
Penny Love	Honorary Fellow	Preterm massage study	University of Queensland (current)
John Luff	Senior Research Assistant	Neuroprotective strategies for the newborn	University of Queensland (current)
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 (current)
<b>Kellie McGroary</b>	Research Nurse	Clinical Trials	University of Queensland (current)
Lipsa Mohanty	Senior Research Technician	Neuroprotective strategies for the newborn	University of Queensland (current)
Randal Moldrich	Honorary Fellow	Preterm brain outcomes	University of Queensland (current)
<b>Lisa McKeown</b>	Research Nurse	Clinical Trials	University of Queensland (current)
Stephanie Miller	Research Officer	Hypoxic-ischaemic brain injury and seizures in the neonate	University of Queensland (current)
Kym Morris	Research Assistant	Clinical Trials	University of Queensland (current)
Margo Pritchard	Honorary Senior Fellow	Child health surveillance and intervention	Australian Catholic University (current)
Stephen Rose	Honorary Professor	Development and application of advanced MRI techniques to aid the detection and monitoring of disease processes	University of Queensland (current)
<b>Kylie Smart</b>	Research Nurse	Clinical Trials	University of Queensland (current)
<b>Karen Taylor</b>	Research Nurse	Clinical Trials Group supporting: Enhanced parenting to improve developmental outcomes in preterm infants	University of Queensland (current)
Leanne Winter	Project Coordinator	Prem Baby Triple P	University of Queensland (current)
Julie Wixey	Research Fellow	Hypoxic-ischaemic brain injury, intrauterine growth restriction and inflammation in the neonatal brain	University of Queensland (current)

## 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Paul Colditz</b>	Tracey Bjorkman, Julie Wixey	Inflammation in the growth restricted newborn
<b>Paul Colditz</b>	Barbara Lingwood, Tracey Bjorkman, Julie Wixey, Paul Dawson, Roslyn Boyd, Yvonne Eiby	A pre-clinical intensive care facility to research long-term outcomes in neonates
<b>Paul Colditz</b>	Wixey J, Lai M, Bjorkman ST	Stem cell treatment to protect the growth restricted newborn brain
<b>Mel Lai</b>	Bjorkman ST, Wixey J, Colditz P	CO2 gas as an adjunctive neuroprotective therapy for hypoxic-ischemic encephalopathy (HIE)
<b>Paul Colditz</b>	Khosrotehrani K, Julie Wixey	Improving brain outcomes in the growth restricted newborn using placental stem cell treatment
<b>Paul Colditz</b>	Khosrotehrani K, Bjorkman T, Patel J, Wixey J	Stem cell treatment for neonatal hypoxic ischemic encephalopathy

## 2018 Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Paul Colditz</b>	Kiarash Khosrotehrani	Stem cell treatment for neonatal brain injury
<b>Paul Colditz</b>	Julie Wixey, Stella T Bjorkman	Reducing inflammation in growth restricted newborn brains
<b>Paul Colditz</b>	Kiarash Khosrotehrani, Stella T Bjorkman, Nick Fisk, <b>Barbara Lingwood</b> , Julie Wixey	Improving brain oxygen levels in babies using stem cell treatment
<b>Tim Donovan</b>	<b>Barbara Lingwood</b> , <b>Paul Colditz</b> , Marloes Dekker-Nitert	Long-term consequences of altered neonatal adiposity
<b>Barbara Lingwood</b>	Michael Stark, <b>Paul Colditz</b> , Ian Wright, Yvonne Eiby	A pre-clinical trial of early blood transfusion for improving cerebral oxygen delivery in very preterm neonates
<b>Paul Colditz</b>	<b>Melissa Lai</b> , Stella T Bjorkman, Kirat Chand	Novel approaches to protecting the newborn brain
<b>Paul Colditz</b>	<b>Barbara Lingwood</b> , Marloes Dekker-Nitert, <b>Tim Donovan</b> , Peter Davies, Chong	Long-term consequences of altered neonatal adiposity
<b>Katie Foxcroft</b>	Katie Groom	STRIDER (NZAus): a randomised controlled trial of sildenafil therapy in dismal prognosis early-onset intrauterine growth restriction (New Zealand and Australia) (led by the University of Auckland)
<b>Katie Foxcroft</b>	<b>Pieter Koorts</b> , William Tarnow-Mordi	Does lactoferrin improve survival free from morbidity in very low birth weight infants? Lactoferrin Infant Feeding Trial: a randomised controlled trial
<b>Paul Colditz</b>	Roslyn Boyd, Atul Malhotra, Stephen Rose, Boualem Boashash, Michael Ditchfield, Michael Fahey, Kerstin Pannek, Randal Moldrich	Neurodevelopment of the preterm infant
<b>Paul Colditz</b>	Matthew Sanders, Roslyn Boyd, Margo Pritchard, Peter Gray, Michael O'Callaghan, Virginia Slaughter, Koa Whittingham	Enhanced parenting capacity to improve developmental outcomes in preterm infants
<b>Paul Colditz</b>	<b>Barbara Lingwood</b> , Kathryn Buller	BRAIN – Brain Research Advances in Newborns

## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	Research Project Title
James Roberts	Michael Breakspear, Sampsa Vanhatalo, <b>Paul Colditz</b>	Novel methods for early bedside detection and prognosis of preterm brain injury
Julie Wixey	Kirat Chand, Tracey Bjorkman, <b>Paul Colditz</b>	Contribution of systemic inflammatory response to brain injury in growth restricted newborns
Roslyn Boyd	I Novak, E Wallace, N Badawi, M Fahey, S Rose, <b>P Colditz</b> , 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	<b>Paul Colditz</b> , S Rose, M Karunanithi, A Smith, A Scuffham, P Edwards, I Novak, C Morgan, N Badawi	Advancing Cerebral Palsy in Queensland
Stella Tracey Bjorkman	<b>Paul Colditz</b> , Sampsa Vanhatalo	Carbon dioxide as a treatment for seizures in the newborn
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
Paul Dawson	E Hurrion, Vicki Flenady, <b>Barbara Lingwood</b> , Yvonne Eiby, <b>Paul Colditz</b> , <b>Pieter Koorts</b> , Kumar	Improving health outcomes for preterm infants using a preclinical Pig Translational model (PigTail study)
Stella Tracey Bjorkman		Seizures and injury in the newborn hypoxic-ischemic brain

## 2018 Research Awards and Achievements

Recipient	Award	Event
Yvonne Eiby	Publication of the Month, June and September	UQCCR
Elliot Teo	Student Poster Winner	UQCCR 10-year Symposium
Elliot Teo	Top 10 short listing for the translational relevance prize	Translational Research Symposium 2018
Elliot Teo	Travel Award	Neuroimmunology Australia
Abirami Ratnasingham	Best Oral Presentation	Queensland Perinatal Consortium (QPact) Conference
Abirami Ratnasingham	Clinical Research Award	Royal Brisbane and Women's Hospital (RBWH) Healthcare Symposium
Abirami Ratnasingham	Three Minute Thesis (3MT) Competition Northside Heat: Winner	UQ Faculty of Medicine
Tracey Bjorkman	Fellowship	UQ Faculty of Medicine
Tracey Bjorkman	LMRF Ian Fraser Human Award	Lions Medical Research Foundation
Kirat Chand	Publication of the Month, February	UQCCR
Kirat Chand	ECR Oral presentation award – runner up	Fetal and Neonatal Workshop of Australia and New Zealand, Queenstown, New Zealand
Julie Wixey	Lions Dunning-Orlich NHMRC New Investigator Award	The University of Queensland
Julie Wixey	Early Career Researcher Poster Winner	UQCCR 10-year Symposium
Julie Wixey	Collaboration Travel Grant	UQCCR
Julie Wixey	Publication of the Month April	UQCCR
Julie Wixey	Early Career Investigator Prize for best oral presentation	Fetal and Neonatal Workshop of Australia and New Zealand, Queenstown, New Zealand

## 2018 Research Grants – Awarded

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount <i>(years)</i>
Lai M, Bjorkman ST, Wixey J, Colditz P	Perinatal Research Centre	CO2 gas as an adjunctive neuroprotective therapy for hypoxic-ischemic encephalopathy (HIE)	RBWH and RBWH Research Project Grant	\$40,000	\$40,000 (2018)
<b>Colditz P</b> , Wixey J, Lai M, Bjorkman ST	Perinatal Research Centre	Stem cell treatment to protect the growth restricted newborn brain	RBWH and RBWH Research Project Grant	\$40,000	\$40,000 (2018)
Wixey J, Chand K	Perinatal Research Centre	Contribution of systemic inflammatory response to brain injury in growth restricted newborns	NHMRC Project Grant	\$179,185	\$358,371 (2018-2019)
<b>Colditz P</b> , Khosrotehrani K, Bjorkman T, Patel J, Wixey J	Perinatal Research Centre	Stem cell treatment for neonatal hypoxic ischemic encephalopathy	NHMRC Project Grant	\$318,065	\$954,195 (2018-2020)
James Roberts, Michael Breakspear, Samps Vanhatalo, <b>Paul Colditz</b>	Perinatal Research Centre	Novel methods for early bedside detection and prognosis of preterm brain injury	NHMRC Project Grant	\$210,293	\$630,880 (2018-2020)
<b>Colditz P</b> , Lingwood B, Bjorkman T, Wixey J, Dawson P, Boyd R, Eiby Y	Perinatal Research Centre	A pre-clinical intensive care facility to research long-term outcomes in neonates	2018 UQ MEI andfmr 2017 NHMRC Equipment Grant	\$200,343	\$200,343 (2018)
<b>Colditz P</b> , 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	\$46,666	\$140,000 (2018-2020)
<b>Colditz P</b> , Bjorkman T, Wixey J	Perinatal Research Centre	Inflammation in the growth restricted newborn brain	RBWH HIRF Research Project	In kind	In kind
<b>Wong A, Finnigan S</b>		Acute stroke endovascular treatment: expediting identification of eligible patients	RBWH and RBWH Research Project Grant	\$39,887	\$39,887 (2018)

## 2018 Research Publications

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### Journal Articles:

1. 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
2. Wood K, Mantzioris E, Lingwood B, Couper J, Makrides M, Gibson RA, et al. The effect of maternal DHA supplementation on body fat mass in children at 7 years: follow-up of the DOMInO randomized controlled trial. *Prostaglandins Leukot Essent Fatty Acids*. 2018;139:49-54
3. Wixey JA, Reinebrant HE, Chand KK, Buller KM. Disruption to the 5-HT<sub>7</sub> Receptor Following Hypoxia-Ischemia in the Immature Rodent Brain. *Neurochem Res*. 2018;43(3):711-20
4. Wixey JA, Chand KK, Pham L, **Colditz PB**, Bjorkman ST. Therapeutic potential to reduce brain injury in growth restricted newborns. *J Physiol*. 2018;596(23):5675-86
5. Winter L, Sanders MR, R NB, Pritchard M, Gray PH, Whittingham K, et al. Predicting Attendance of a Preventive Parenting Intervention for Very Preterm Infants. *Infant Ment Health J*. 2018;39(6):699-706
6. Winter L, **Colditz PB**, Sanders MR, Boyd RN, Pritchard M, Gray PH, et al. Depression, posttraumatic stress and relationship distress in parents of very preterm infants. *Arch Womens Ment Health*. 2018;21(4):445-51
7. Poortvliet PC, Tucker KJ, **Finnigan S**, Scott D, Hodges PW. Experimental Pain Decreases Corticomuscular Coherence in a Force – But Not a Position-Control Task. *The Journal of Pain : official journal of the American Pain Society*. 2018
8. Pannek K, Frupp J, George JM, Fiori S, **Colditz PB**, Boyd RN, et al. Fixel-based analysis reveals alterations in brain microstructure and macrostructure of preterm-born infants at term equivalent age. *NeuroImage Clinical*. 2018;18:51-9
9. Mudge AM, Douglas C, Sansome X, Tresillian M, Murray S, S F, et al. Risk of 12-month mortality among hospital inpatients using the surprise question and SPICT criteria: a prospective study. *BMJ Support Palliat Care*. 2018;8(2):213-20
10. Miller SM, Pelly S, Kalanjati VP, Lee A, **Colditz PB**, Bjorkman ST. Identification and expression of a unique neonatal variant of the GABAA receptor alpha3 subunit. *Brain structure & function*. 2018;223(2):1025-33
11. Lingwood BE, Eiby YA, Bjorkman ST, Miller SM, Wright IMR. Supporting Preterm Cardiovascular Function. *Clin Exp Pharmacol Physiol*. 2018
12. Kong AHT, **Lai MM**, **Finnigan S**, Ware RS, Boyd RN, **Colditz PB**. Background EEG features and prediction of cognitive outcomes in very preterm infants: A systematic review. *Early Hum Dev*. 2018;127:74-84
13. George JM, Pannek K, Rose SE, Ware RS, **Colditz PB**, Boyd RN. Diagnostic accuracy of early magnetic resonance imaging to determine motor outcomes in infants born preterm: a systematic review and meta-analysis. *Dev Med Child Neurol*. 2018;60(2):134-46
14. George JM, Fiori S, Frupp J, Pannek K, Guzzetta A, David M, et al. Relationship between very early brain structure and neuromotor, neurological and neurobehavioral function in infants born <31 weeks gestational age. *Early Hum Dev*. 2018;117:74-82
15. **Finnigan S**, **Colditz PB**. What is the optimal frequency range for quantifying slow EEG activity in neonates? Insights from power spectra. *Clin Neurophysiol*. 2018;129(1):143-4
16. Eiby YA, Shrimpton NY, Wright IMR, Lumbers ER, **Colditz PB**, Duncombe GJ, et al. Reduced blood volume decreases cerebral blood flow in preterm piglets. *J Physiol*. 2018;596(23):6033-41
17. 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*. 2018.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speaker:

1. **Paul Colditz**. Keynote. Preconception healthcare and primary prevention. Improving outcomes: Queensland mothers and babies. TRI, Brisbane, 26 February 2018
2. **Paul Colditz**. Invited speaker, Best practice in research translation utilising new technologies to improve outcomes in maternity and infant specialty hospitals. 42<sup>nd</sup> World Hospital Congress. Brisbane. 10-12 October 2018
3. **Finnigan S**. EEG changes in stroke, aging and cognitive decline. Applied Neuroscience Society of Australasia Annual Conference. 2018
4. Hammill J. Keynote. “Fetal Alcohol Spectrum Disorders (FASD) is a lifelong brain-based disorder that carries a transgenerational burden of addictions in tandem with physical, mental and cognitive disabilities”. Addictions Conference, QT Hotel, Gold Coast. 29<sup>th</sup> May 2018
5. Hammill J. Seminar. “Transgenerational Trauma associated with Perinatal Brain Injury”, Ausmed Midwifery“. Fetal Alcohol Spectrum Disorders” Challenges CPD Conference, Mercure Hotel, Brisbane. 17<sup>th</sup> May 2018.

### Oral Presentations:

1. Kong AHT, Lai MM, Finnigan S, Ware RS, Boyd RN, **Colditz PB**. Using EEG and MRI at term equivalent age in very preterm infants to predict cognitive outcome. 22<sup>nd</sup> Annual Congress of the Perinatal Society of Australia and New Zealand (PSANZ); Auckland, New Zealand: *Journal of Paediatrics and Child Health* 2018;54(S1):28
2. J Wixey, K Sukumar, S Miller, K Goasdoue, **P Colditz**, ST Bjorkman, K Chand. Ibuprofen treatment to reduce inflammation and neuronal injury in the growth restricted neonatal brain. 32<sup>nd</sup> Annual Fetal and Neonatal Workshop of Australia and New Zealand, Queenstown, New Zealand. March 2018 – *International Oral*
3. K Chand, S Miller, K Goasdoue, **P Colditz**, ST Bjorkman, J Wixey. Neuropathology in the IUGR piglet model. 32<sup>nd</sup> Annual Fetal and Neonatal Workshop of Australia and New Zealand, Queenstown, New Zealand. March 2018 – *International Oral*
4. K Goasdoue, S Miller, K Chand, E Teo, **P Colditz**, J Wixey, ST Bjorkman. A time-course of blood-brain barrier disruption in a large animal model of neonatal hypoxic-ischemic encephalopathy. 32<sup>nd</sup> Annual Fetal and Neonatal Workshop of Australia and New Zealand, Queenstown, New Zealand. March 2018 – *International Oral*

### Oral Presentations: (cont):

5. Kong, Finnigan, Pannek, Fripp, Ware, George, Rose, Boyd, **Colditz**. Using EEG and MRI at term equivalent age in very preterm infants to predict visual and cognitive outcome. 38<sup>th</sup> ANS Annual Scientific Meeting. Brisbane, Australia. Dec 4-6, 2018
6. Elliot Teo, Tracey Bjorkman, Kirat Chand, Julie Wixey, Stephanie Miller, Seen-Ling Sim Jatin Patel, Kiarash Khosrotehrani, **Paul Colditz**. Stem cells for hypoxic-ischaemic encephalopathy. 32<sup>nd</sup> Annual Fetal and Neonatal Workshop of Australia and New Zealand, Queenstown, New Zealand. March 2018 – *International Oral*
7. Abirami Ratnasingham, **Timothy Donovan**, Yvonne Eiby, Marloes Dekker Nitert, Barbara Lingwood (2018) Reduced fat-free mass at birth is a predictor of childhood obesity. Third annual meeting of the Queensland Perinatal Consortium, Brisbane, Australia
8. Ratnasingham, Abirami, Eiby, Yvonne A., Dekker Nitert, Marloes, Donovan, Timothy and Lingwood, Barbara E. Reduced fat-free mass at birth is a predictor of childhood obesity. UQ Faculty of Medicine Clinical and Public Health Postgraduate Symposium, Brisbane, Australia. 22-23 November 2018
9. Eiby YA, Shrimpton NY, Wright IMR, Lumbers ER, **Colditz PB**, Duncombe GJ, Lingwood BE. Reduced blood volume decreases cerebral blood flow in preterm neonates. Twenty-Second Annual Congress of the Perinatal Society of Australia and New Zealand, Auckland, New Zealand. March 25-28, 2018
10. Kong, Finnigan, Pannek, Ware, George, Boyd, **Colditz**. Using EEG and MRI at term equivalent age in very preterm infants to predict cognitive outcome. 2018 Clinical and Public Health Symposium. Brisbane, Australia. Nov 22-23, 2018
11. Abirami Ratnasingham, **Timothy Donovan**, Yvonne Eiby, Marloes Dekker Nitert, Barbara Lingwood. Reduced fat-free mass at birth is a predictor of childhood obesity. 26<sup>th</sup> Annual Royal Brisbane Women's Hospital Healthcare Symposium, Brisbane, Australia. 11-13 September 2018
12. Lingwood BE, Al-Theyab NA, Donovan TJ, Eiby YA, **Colditz PB**. Predictors of adiposity in very preterm infants before term corrected age. (2018) Twenty-Second Annual Congress of the Perinatal Society of Australia and New Zealand, Auckland, New Zealand
13. Dawson PA, Eiby YA, Barnes SK, Boyd RN, Badawi N, Koorts PJ, Kumar S, Flenady VJ, Hurrion EM, **Colditz PB**, Lingwood BE (2018) Preterm piglets are a model of human preterm infant sulphate deficiency. Twenty-Second Annual Congress of the Perinatal Society of Australia and New Zealand, Auckland, New Zealand
14. Kong, Finnigan, Pannek, Ware, George, Boyd, Colditz. Using EEG and MRI at term equivalent age in very preterm infants to predict cognitive outcome. 27<sup>th</sup> annual RBWH Healthcare Symposium. Brisbane, Australia. Sep 11-13, 2018.

### Poster Presentations:

1. Loudon W, Finnigan S, Tippett V, **Wong A**. Pre-hospital identification of stroke patients eligible for clot retrieval: investigating the value of EEG. Council of Ambulance Authorities Annual Congress. 2018
2. Dawson PA, Eiby YA, Barnes SK, Boyd RN, Badawi N, Koorts PJ, Kumar S, Flenady VJ, Hurrion EM, **Colditz PB**, Lingwood BE. Preterm piglets are a model of human preterm infant sulphate deficiency. Twenty-Second Annual Congress of the Perinatal Society of Australia and New Zealand, Auckland, New Zealand. March 25-28, 2018
3. Kong, Finnigan, Pannek, Ware, George, Rose, Boyd, **Colditz**. Brain microstructure assessed using MRI predicts cognitive function at 12 months of age in very preterm infants. 38<sup>th</sup> ANS Annual Scientific Meeting. Brisbane, Australia. Dec 4-6, 2018
4. Yvonne A Eiby, S. Tracey Bjorkman, Stephanie M Miller, Kirat K Chand, **Paul B Colditz**, Barbara E Lingwood. (2018) Volume expansion using saline fails to support blood pressure and is associated with white matter injury in preterm piglets. Third annual meeting of the Queensland Perinatal Consortium, Brisbane, Australia
5. Al-Theyab NA, Donovan TJ, Eiby YA, **Colditz PB**, Lingwood BE (2018) When and why do preterm infants become fat? Third annual meeting of the Queensland Perinatal Consortium, Brisbane, Australia
6. Ratnasingham, Abirami, Eiby, Yvonne A., Dekker Nitert, Marloes, **Donovan, Timothy** and Lingwood, Barbara E. Reduced fat-free mass at birth is a predictor of childhood obesity. UQ Centre for Clinical Research 10 Year Anniversary Symposium, Brisbane, Australia. 10 September 2018
7. Lingwood BE, Al-Theyab NA, Donovan TJ, Eiby YA, **Colditz PB**. (2018) Predictors of adiposity in very preterm infants before term corrected age. Third annual meeting of the Queensland Perinatal Consortium, Brisbane, Australia
8. Yvonne A Eiby, S. Tracey Bjorkman, Stephanie M Miller, Kirat K Chand, **Paul B Colditz**, Barbara E Lingwood. (2018) Volume expansion using saline fails to support blood pressure or reduce white matter injury in preterm piglets. UQCCR 10 year anniversary open day, Brisbane, Australia
9. Yvonne A Eiby, S. Tracey Bjorkman, Stephanie M Miller, Kirat K Chand, **Paul B Colditz**, Barbara E Lingwood. (2018) Volume expansion using saline fails to support blood pressure in preterm piglets. Annual Royal Brisbane Women's Hospital Healthcare Symposium, Brisbane, Australia
10. Lingwood BE, Al-Theyab NA, Donovan TJ, Eiby YA, **Colditz PB**. (2018) Predictors of adiposity in very preterm infants before term corrected age. Twenty-Second Annual Congress of the Perinatal Society of Australia and New Zealand, Auckland, New Zealand. March 25-28, 2018
11. Al-Theyab NA, Donovan TJ, Eiby YA, **Colditz PB**, Lingwood BE (2018) When and why do preterm infants become fat? The Twenty-Sixth Annual Royal Brisbane Women's Hospital Healthcare Symposium, Brisbane, Australia
12. Kong, Pannek, Finnigan, Ware, George, Rose, Boyd, **Colditz**. Brain microstructure assessed using MRI predicts cognitive function at 12 months of age in very preterm infants. UQCCR 10-year symposium. Brisbane, Australia. Sep 10 2018
13. Rinaldi Pretorius, Kirat Chand, Stephanie Miller, Kate Goasdoue, **Paul Colditz**, Tracey Bjorkman, Julie Wixey. Microglial activation phenotypes in intrauterine growth restricted newborns. SBMS International Postgraduate Symposium, St Lucia, Brisbane. November 2018
14. Lara Jones, Elliot Teo, Stephanie Miller, Kirat Chand, Julie Wixey, **Paul Colditz**, Tracey Bjorkman. Investigating the effect of placental stem cells on the blood brain barrier in a model of hypoxic-ischemic encephalopathy. SBMS International Postgraduate Symposium, St Lucia, Brisbane. November 2018
15. Kate Goasdoue, Kirat Chand, Stephanie Miller, **Paul Colditz**, Tracey Bjorkman. Seizures are associated with blood-brain barrier disruption in an animal model of neonatal hypoxic-ischaemic encephalopathy. RBWH Symposium, Brisbane. September 2018

## Poster Presentations (cont):

16. Julie Wixey, Kishen Sukumar, Stephanie Miller, K Goasdoue, **P Colditz**, ST Bjorkman, K Chand. Ibuprofen administration to the growth restricted newborn reduces neuroinflammation and neuronal and white matter injury. RBWH Symposium, Brisbane. September 2018
17. Rinaldi Pretorius, Kirat Chand, Stephanie Miller, Kate Goasdoue, **Paul Colditz**, Tracey Bjorkman, Julie Wixey. Microglial activation phenotypes in the intrauterine growth restricted neonatal brain. RBWH Symposium, Brisbane. September 2018
18. J Wixey, S Miller, K Goasdoue, **P Colditz**, ST Bjorkman, K Chand. Microglial and astrocytic response is associated with cell death and decreased cellular proliferation in the intrauterine growth restricted newborn brain. 4<sup>th</sup> International Society of Neuroimmunology Conference, Brisbane, Australia. August 2018
19. Qiao Ding, Kaamini Kesevan, T. Tracey, K-M Lee, K.K. Chand, P. Thakre, E. Wimberger, A. Russell, R. Kanjhan, L. Jeffree, M. Colditz, R. Henderson, P. McCombe, K. Forrest, M. Devine, M. Hilliard, M.C. Bellingham, N. Lavidis, E. Wolvetang, S. T. Ngo, and Peter G Noakes. The neuromuscular junction the hidden player in ALS. 29<sup>th</sup> International Symposium on MND/ALS
20. Elliot Teo, Tracey Bjorkman, Kirat Chand, Julie Wixey, Stephanie Miller, Seen-Ling Sim, Jatin Patel, Kiarash Khosrotehrani, **Paul Colditz**. Placental-derived stem-cells as a treatment for newborn hypoxic-ischemic encephalopathy. 14<sup>th</sup> International Congress of Neuroimmunology, Brisbane, Australia. August 2018
21. Elliot Teo, Tracey Bjorkman, Kirat Chand, Julie Wixey, Stephanie Miller, Seen-Ling Sim, Jatin Patel, Kiarash Khosrotehrani, **Paul Colditz**. Human mesenchymal and endothelial progenitor cells from the placenta to the hypoxic ischemic brain. Translational Research Symposium, Translational Research Institute, Brisbane, Australia. July 2018
22. ST Bjorkman, J Patel, JA Wixey, KK Chand, SM Miller, E Teo, K Khosrotehrani, **PB Colditz**. Stem cells for the treatment of neonatal hypoxic ischemic encephalopathy. 11<sup>th</sup> Hershey Conference on Developmental Brain Injury. California, US. June 2018
23. Elliot Teo, Tracey Bjorkman, Kirat Chand, Julie Wixey, Stephanie Miller, Seen-Ling Sim Jatin Patel, Kiarash Khosrotehrani, **Paul Colditz**. Stem-cells as a treatment for newborn hypoxic-ischemic encephalopathy. Queensland Postgraduate Medical Research Student Conference. Brisbane, Australia. May 2018
24. Elliot Teo, Tracey Bjorkman, Kirat Chand, **Julie Wixey**, Stephanie Miller, Seen-Ling Sim Jatin Patel, Kiarash Khosrotehrani, **Paul Colditz**. From vein to brain: Homing of placental-derived human stem cells in piglet model of hypoxic-ischemic encephalopathy. RBWH Symposium, Brisbane. September 2018
25. Kate Goasdoue, Kirat K Chand, Stephanie M Miller, Julie A Wixey, **Paul B Colditz**, S Tracey Bjorkman. Blood-brain barrier disruption is associated with seizure in a pre-clinical model of neonatal Hypoxic-Ischaemic Encephalopathy. UQCCR 10 years Symposium. Brisbane, Australia. September 2018
26. Elliot Teo, Tracey Bjorkman, Kirat Chand, Julie Wixey, Stephanie Miller, Seen-Ling Sim Jatin Patel, Kiarash Khosrotehrani, **Paul Colditz**. From vein to brain: homing of placental-derived human stem cells in piglet model of hypoxic-ischemic encephalopathy. UQCCR 10 years Symposium. Brisbane, Australia. September 2018.

## Other Communications and Outputs:

1. Hammill J. Symposium. "Fetal Alcohol Spectrum Disorders (FASD), a preventable lifelong brain-based disorder that carries a transgenerational burden physical, mental and cognitive disabilities". Synapse, Brisbane. 25<sup>th</sup> October 2018
2. Hammill J, Webinar. "Fetal Alcohol Spectrum Disorders as an Indigenous Human Rights Issue". Queensland Health Insight Clinical Support Services, Biala, Brisbane. 17<sup>th</sup> October 2018
3. Hammill J. Seminar. "FASD Awareness Day". Lady Cilento Children's Hospital, Brisbane. 7<sup>th</sup> September 2018
4. Cullen J, Hammill J, Livecast. "Neurocognitive Disability & the Criminal Justice System", Queensland Law Society, Brisbane. 19<sup>th</sup> May 2018
5. Hammill J. Seminar. "Fetal Alcohol Spectrum Disorders", Lady Cilento Children's Hospital, Brisbane. 2<sup>nd</sup> May 2018
6. Hammill J. Seminar. "Foetal Programming of Poor Life Outcomes, Lady Cilento Children's Hospital, Brisbane. 21<sup>st</sup> February 2018
7. Hammill J. & Cullen J. Seminar. Qld Law Society Reconciliation Committee. QLS House, Brisbane, 21<sup>st</sup> February 2018
8. Hammill J. Seminar. "Mums and Bubs", Institute for Urban Indigenous Health, Caboolture, 15<sup>th</sup> February 2018
9. Hammill J. Seminar. "Healthy Options", Mon Komo Hotel, Redcliffe, 7<sup>th</sup> February 2018
10. Hammill J. Minister for Resources, Champion Cherbourg Aboriginal Community, Dr Anthony Lynham, Stafford. 27<sup>th</sup> July 2018
11. Hammill J. Youth Justice Strategy, Amnesty International & Parliamentary Roundtable, Queensland Parliament, Brisbane. 19<sup>th</sup> September 2018
12. K.K Chand. Neuropathology in the Intrauterine Growth Restricted Newborn Piglet. Pathology Grand Rounds Seminar – Pathology Queensland
13. K.K Chand. Under the microscope – Neuropathology in growth restricted newborns. UQCCR Seminar Series. December 2018
14. Loudon W, Finnigan S, Tippett V, Wong A. Pre-hospital identification of stroke patients eligible for clot retrieval: investigating the value of EEG. Presentation to QAS Clinical Managers
15. J Wixey. Neuroprotective strategies to protect the growth restricted newborn brain. UQCCR Seminar Series, Brisbane. September 2018
16. J Wixey. Presentation. 'Stem cell treatment in the Newborn'. Year 8 students at The Gap State High School. December 2018.

## 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 2018 we completed training at two 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, continued recruitment in 2018.

### 2018 Research Positions: Coordinators, Fellow, Adjunct and Honorary Positions

Name	Type of Fellowship	Research Program	University (years)
Nigel Armfield	Research Fellow	Gynaecological Oncology	The University of Queensland (current)
Trudi Cattley	Clinical Research Manager	Gynaecological Oncology	The University of Queensland (current)
Vanessa Behan	Clinical Trial Manager	Laparoscopic Approach to Cervical Carcinoma	The University of Queensland (current)
Vanessa Taylor	Clinical Trial Manager	Improving the treatment for women with early stage cancer of the uterus	The University of Queensland (current)
Kerry Millgate	Clinical Trial Coordinator	Gynaecological Oncology	The University of Queensland (current)
Anne Hughes	Project Manager	The Implementation of Minimally Invasive Hysterectomy Trial	The University of Queensland (current)

### 2018 Current RBWH Research Group / Department Led Research Activity

RBWH Research Group/Department Lead Researchers	Collaborative Researchers	Research Project Title
<b>Prof Andreas Obermair</b>	Monika Janda (QUT)	A stepped wedge cluster trial to implement and evaluate a model of training for practising gynaecologists in Total Laparoscopic Hysterectomy
<b>Prof Andreas Obermair</b>	Monika Janda (QUT), Peta Forder (Uni of Newcastle), <b>Jim Nicklin</b> (Gyn Onc), Lewis Perrin (Mater), Tom Manolitsas (Monash), Yee Leung (KEMH), Russell Hogg (Westmead), Rhonda Farrell (Royal Hosp Women), Martin Oehler (Royal Adelaide Hosp), Peter Sykes (Christchurch), Merran Williams (Bloomhill Cancer Care), Val Gebiski (Uni of Sydney)	Long-term follow-up of the Laparoscopic Approach to Carcinoma of the Endometrium (LACE) Trial-survival outcomes.
<b>Prof Andreas Obermair</b>	<b>Jim Nicklin</b> (Gyn Onc), <b>Russell Land</b> (Gyn Onc), <b>Andrea Garrett</b> (Gyn Onc), <b>Amy Tang</b> (Gyn Onc), Lewis Perrin (Mater), Marcelo Nascimento (GCUH), Jonathan Carter (Chris O'Brien), Orla McNally (The Women's), Kym Reid (Monash), Yee Leung (KEMH), Stuart Salfinger (SJOG), Peter Sykes (Christchurch), Cecile Bergzoll (Wellington), Lois Eva (Auckland)	A Phase II Randomised Clinical Trial of Mirena® ± Metformin ± Weight Loss Intervention in Patients with Early Stage Cancer of the Endometrium
<b>Prof Andreas Obermair, Paul Thomas</b>	<b>Jim Nicklin</b> (Gyn Onc), <b>Russell Land</b> (Gyn Onc), <b>Andrea Garrett</b> (Gyn Onc), <b>Amy Tang</b> (Gyn Onc)	Impact of gated PET/CT on the diagnosis of distant metastases of advanced epithelial ovarian, fallopian tube, and primary peritoneal cancer



## 2018 Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Lead Researchers	RBWH Researchers	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

## 2018 Research Grants – Awarded

Investigators (RBWH staff in bold)	RBWH Research Groups/ Departments	Project Title	Granting Body	Amount in 2018	Total Amount (years)
<b>Obermair A</b> , Quinn M, Brennan D, Armes J, Janda M, GebSKI V, Carter J, Leung Y, Perrin L, Bunting M, Oehler M, <b>Nicklin J</b> , Strakosch C, Williams M	<b>QCGC Research</b>	A phase II randomised clinical trial of Mirena ± metformin ± weight loss intervention in patients with early stage cancer of the endometrium	Cancer Australia	\$85,000	\$540,000 (2015-2018)
<b>Obermair A</b> , Janda M, Forder P, <b>Nicklin J</b> , Perrin L, Manolitsas T, Leung Y, Hogg R, Farrell R, Oehler M, Sykes P, Williams M, GebSKI V.	<b>QCGC Research</b>	Long-term follow-up of the Laparoscopic Approach to Carcinoma of the Endometrium (LACE) Trial-survival outcomes	Cancer Australia	\$127,000	\$380,674 (2016-2018)
Janda M, <b>Obermair A</b> , GebSKI V, Graves N, Armfield N	<b>QCGC Research</b>	The Implementation of Minimally Invasive hysterectomy (IMAGINE) trial	NHMRC Partnership Grant	\$265,180	\$893,854 (2018-2020)

## 2018 Research Publications

### Journal Articles:

- Janda, M.; **McGrath S.**; **Obermair A.** Challenges and controversies in the conservative management of uterine and ovarian cancer *Best Pract Res Clin Obstet Gynaecol* (2018)
- Nagle, C. M.; O'Mara, T. A.; Tan, Y.; Buchanan, D. D.; **Obermair A.**; Blomfield, P.; Quinn, M. A.; Webb, P. M.; Spurdle, A. B. Endometrial cancer risk and survival by tumor MMR status *J Gynecol Oncol* (2018) 29 3
- Smith D, Stewart CJR, Clarke EM, Lose F, Davies C, Armes J, **Obermair A**, Brennan D, Webb PM, Nagle CM, Spurdle AB. ER and PR expression and survival after endometrial cancer. *Gynecol Oncol.* (2018) 148 2 258-266
- Janda M, Armfield NR, Page K, Kerr G, Kurz S, Jackson G, Currie J, Weaver E, Yazdani A, **Obermair A.** Factors influencing women's decision making in hysterectomy. *Patient Educ Couns* (2018) 101 3 504 - 510
- Sanjida S, Janda M, McPhail SM, Kissane D, Couper J, Scott J, **Obermair A.** How many patients enter endometrial cancer surgery with psychotropic medication prescriptions, and how many receive a new prescription perioperatively? *Gynecol Oncol* (2018)
- Celentano, V.; Smart, N.; McGrath, J.; Cahill, R. A.; Spinelli, A.; **Obermair A.**; Hasegawa, H.; Lal, P.; Almoudaris, A. M.; Hitchins, C. R.; Pellino, G.; Browning, M. G.; Ishida, T.; Luvisetto, F.; Cingiloglu, P.; Gash, K.; Harries, R.; Harji, D.; Di Candido, F.; Cassinotti, E.; McDermott, F. D.; Berry, J. E. A.; Battersby, N. J.; Platt, E.; Campaign, N. J.; Keeler, B. D.; Boni, L.; Gupta, S.; Griffith, J. P.; Acheson, A. G.; Cecil, T. D.; Coleman, M. G. LAP-VEGaS Practice Guidelines for Reporting of Educational Videos in Laparoscopic Surgery: A Joint Trainers and Trainees Consensus Statement *Ann Surg* (2018) 268 6 920-926
- Ramirez, P. T.; Frumovitz, M.; Pareja, R.; Lopez, A.; Vieira, M.; Ribeiro, R.; Buda, A.; Yan, X.; Shuzhong, Y.; Chetty, N.; Isla, D.; Tamura, M.; Zhu, T.; Robledo, K. P.; GebSKI, V.; Asher, R.; Behan, V.; **Nicklin J. L.**; Coleman, R. L.; Obermair A. Minimally Invasive versus Abdominal Radical Hysterectomy for Cervical Cancer *N Engl J Med* (2018) 379 20 1895-1904
- Steele, M. L.; Janda, M.; Vagenas, D.; Ward, L. C.; Cornish, B. H.; Box, R.; Gordon, S.; Matthews, M.; Poppitt, S. D.; Plank, L. D.; Yip, W.; Rowan, A.; **Reul-Hirche H.**; **Obermair A.**; Hayes, S. C. Normative Interlimb Impedance Ratios: Implications for Early Diagnosis of Uni- and Bilateral, Upper and Lower Limb Lymphedema *Lymphat Res Biol* (2018)

### Journal Articles: (cont):

9. Armfield, N. R.; Janda, M.; **Obermair A.** Obesity in total laparoscopic hysterectomy for early stage endometrial cancer: health gain and inpatient resource use *Int J Qual Health Care* (2018)
10. Higgs P, Janda M, Asher R, GebSKI V, Forder P, **Obermair A.** Pelvic floor functional outcomes after total abdominal versus total laparoscopic hysterectomy for endometrial cancer. *Am J Obstet Gynecol.* (2018) 218 4 419
11. Janda M, Armfield NR, Kerr G, Kurz S, Jackson G, Currie J, Page K, Weaver E, Yazdani A, **Obermair A.** Surgical approach to hysterectomy and barriers to using minimally invasive methods. *Aust N Z J Obstet Gynaecol* (2018) 58(6): 690-695
12. Nagle, C. M.; Crosbie, E. J.; Brand, A.; **Obermair A.**; Oehler, M. K.; Quinn, M.; Leung, Y.; Spurdle, A. B.; Webb, P. M. The association between diabetes, comorbidities, body mass index and all-cause and cause-specific mortality among women with endometrial cancer *Gynecol Oncol* (2018) 150 1 99-105
13. Asher R, **Obermair A**, Janda M, GebSKI V. Disease-Free and Survival Outcomes for Total Laparoscopic Hysterectomy Compared with Total Abdominal Hysterectomy in Early-Stage Endometrial Carcinoma: A Meta-analysis. *Int J Gynecol Cancer* (2018) 28 3 529-538
14. **Obermair A.**; Janda, M.; GebSKI, V. All-cause death in young women with endometrial cancer who receive progesterone therapy *Am J Obstet Gynecol* (2018) 219 1 119
15. Robertson JA, **Sanday K**, **Nicklin J.** Malignant ovarian germ cell tumours in the post-menopausal population. *Aust N Z J Obstet Gynaecol.* 2018 Oct 2.

## 2018 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speaker:

1. **Obermair A**, Ramirez P. Incidence of adverse events comparing abdominal vs. minimally invasive radical hysterectomy in patients with early-stage cervical cancer: LACC trial. 17<sup>th</sup> Biennial Meeting of the International Gynecologic Cancer Society; September 14-16, 2018; Kyoto, Japan
2. Ramirez P, **Obermair A.** Unexpected outcome in LACC study – are there any potential alternative explanations for the declining survival and to confirm the association with MIS? 17<sup>th</sup> Biennial Meeting of the International Gynecologic Cancer Society; September 14-16, 2018; Kyoto, Japan.

### Oral Presentations:

1. **Obermair A.**; Graves N.; Coleman M.; et al. The Implementation of a standardized training program for specialist gynaecologists to decrease the rate of open, abdominal hysterectomy. Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) 2018 Annual Scientific Meeting; September 2018; Adelaide, Australia
1. **Obermair A.** Management of Endometrial Cancer. Indonesian Society of Gynecologic Oncology (INASGO) – Biennial Meeting. November 2018; Indonesia
1. **Obermair A.** A critical appraisal of laparoscopic surgery in gynaecological cancer treatment: the LACC and LACE trials revisited. European Society for Gynaecological Endoscopy (ESGO) State of the Art Conference; October 2018; Lyon, France.

### Poster Presentations:

1. **Obermair A**, Armfield N, Forder P, Janda M. Achieving a healthy weight after endometrial cancer surgery – Results from 10-year follow-up of the Laparoscopic Approach to Cancer of the Endometrium (LACE) randomised controlled trial. 17<sup>th</sup> Biennial Meeting of the International Gynecologic Cancer Society; September 14-16, 2018; Kyoto, Japan.

Royal Brisbane and Women's Hospital  
Metro North Hospital and Health Service

+61 7 3646 8111  
[www.health.qld.gov.au/rbwh](http://www.health.qld.gov.au/rbwh)