

2018

# RBWH

## RESEARCH REPORT



# Contents

---

## Executive Director's Report

### RBWH Foundation

### Brisbane Diamantina Health Partners

### Griffith University

### Pathology Queensland

### QIMR Berghofer

### Queensland University of Technology

### The University of Queensland

### Successful PHD Candidates in 2018

## Research Services ..... 13

Research Executive Director's Report .....	14
Human Research Ethics Committee and Research Governance .....	15
RBWH and RBWH Foundation Research Advisory Committee .....	17
Symposium Research Award Winners .....	18
RBWH Research Output .....	19
Centre for Palliative Care Research and Education .....	20
Herston Imaging Research Facility .....	28
Jamieson Trauma Institute .....	32
Publications / Presentations Summary Table 2018 .....	36

## Allied Health Professionals ..... 39

Centre for Allied Health Research .....	40
Nutrition and Dietetics .....	44
Occupational Therapy .....	57
Physiotherapy .....	63
Psychology .....	72
Rehabilitation Engineering, Orthotics and Prosthetics .....	76
Social Work .....	77
Speech Pathology and Audiology .....	80

## Cancer Care Services ..... 86

Clinical Research .....	87
Haematology and Bone Marrow Transplant .....	88
Cancer Care Nursing Professorial Precinct .....	95
Medical Oncology .....	102
Radiation Oncology .....	118
Haemophilia Centre .....	127
Allied Health Professions .....	129

## Critical Care and Clinical Support Services ..... 135

Emergency and Trauma Centre .....	136
Genetic Health Queensland .....	143
Hyperbaric Medicine Services .....	147
Intensive Care Services .....	148
Nursing and Midwifery Services, Intensive Care Services – Professor Fiona Coyer .....	163
Professor Tess Cramond Multidisciplinary Pain Centre .....	166
Skin Integrity Services .....	169

## Internal Medicine Services ..... 172

Department of Cardiology .....	173
Department of Clinical Immunology and Allergy .....	181
Department of Clinical Pharmacology .....	182
Department of Endocrinology and Diabetes .....	185
Department of Gastroenterology and Hepatology .....	189
Department of Infectious Diseases Unit .....	196
Internal Medicine Research Unit/Internal Medicine and Aged Care .....	202
Kidney Health Services .....	208
Neurology – Epilepsy .....	219
Neurology Motor Neurone Disease Research .....	222
Neurology – Stroke .....	224
Nuclear Medicine and Specialised PET Services Qld .....	226
Palliative and Supportive Care .....	229
Pharmacy .....	231
Department of Rheumatology .....	239
Sexual Health and HIV Services .....	240
Qld State-wide Antimicrobial Stewardship Program .....	241
Department of Thoracic Medicine .....	242

## Medical Imaging Clinical Support Services ..... 245

## Medical Services ..... 251

Quality, Innovation and Patient Safety Services .....	252
---	-----

## Mental Health Services ..... 254

Metro North Mental Health Services .....	254
--	-----

## Nursing and Midwifery Services ..... 276

Nursing and Midwifery Research Centre .....	277
---	-----

## Surgical and Perioperative Services ..... 288

Department of Anaesthesia and Perioperative Medicine .....	289
Department of Ears, Nose and Throat .....	299
Department of General Surgery – Unit 2 Hepato-Biliary/Pancreatic .....	301
Department of General Surgery – Unit 3 Colorectal .....	302
Department of General Surgery – Unit 5 Acute Surgical Unit (ASU) .....	305
Department of Ophthalmology .....	306
Department of Orthopaedics .....	307
Department of Oral and Maxillofacial Surgery Unit .....	314
Department of Plastic and Reconstructive Surgery .....	316
Department of Vascular Surgery .....	317
Kenneth G Jamieson, Department of Neurosurgery .....	319
Professor Stuart Pegg Burns Centre .....	320
Trauma Service .....	322

## Women's and Newborn Services ..... 324

Grantley Stable Neonatal Unit .....	325
Obstetrics and Gynaecology .....	330
Obstetric Medicine .....	338
Perinatal Research Centre .....	343
Queensland Centre for Gynaecological Cancer .....	351



# 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. Huddlestone 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

---



**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

---



**Dr Peter Window**

## Allied Health

---

### Title of Project:

2D motion analysis measurements in low back pain

### Month Completed:

March 2018



**Dr James Hughes**

## Critical Care and Clinical Support Services

---

### 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

---

### Dr Julian Williams

### Title of Project:

Identifying Risk Factors for MRSA

### Month Completed:

December 2018

# Successful PHD Candidates in 2018

---



**Kate McCarthy**

## Internal Medicine Services

---

### Title of Project:

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

### Month Completed:

November 2018



**Patrick Harris**

## Internal Medicine Services

---

### Title of Project:

Multi-drug resistant Gram-negative bacterial infection

### Month Completed:

2018



**Craig Winter**

## Surgical and Perioperative Services

---

### Title of Project:

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

### Month Completed:

2018