

2017

RBWH

RESEARCH REPORT

RBWH RESEARCH SERVICES

RBWH

celebrating

150
years

1867-2017



Queensland
Government

RESEARCH EXECUTIVE DIRECTOR'S REPORT

The inaugural RBWH Research Council commenced in 2017. The primary aim of the RBWH Research Council is to provide a forum for expert consultation, collaboration and communication regarding issues relating to research with the aim of enhancing research capabilities and outputs of the RBWH.

The objectives of the RBWH Research Council -

To participate in the development and implementation of the RBWH Research Operational Plan, based on the MN Research Strategy, including strategies to:

- Embed research in operational functions of the hospital
- Improve processes to ensure high quality research outcomes
- Strengthen and develop research partnerships
- To provide expert advice on use of RBWH and RBWH Foundation research grants to ensure maximum benefit of our patients and the organisation.
- To oversee reporting and promotion of RBWH research activities
- To provide expert advice to the RBWH Executive on issues relating to research.
- To provide a conduit for communication of research related matters to Service Lines and other researchers.
- To provide an opportunity for sharing ideas and increased collaboration related to research processes, resources and projects across RBWH, MN and external partners.

Individual members of the council may also be asked to:

- assist in evaluation of research grants
- assist in the provision of expert advice to ethics
- assist in the provision of expert advice in the monitoring of research
- nominate to be a research mentor
- attend Executive meetings periodically

The membership of the Council for 2017 were -

- Dr Merrilyn Banks, Executive Director, Research RBWH (Chair)
- Ms Jacqueline Robinson, Research Governance Officer, RBWH

Service Line Representatives:

- Dr Anna Farrell, (Allied Health Professions)
- Prof Geoff Hill, (Cancer Care Services)
- Prof Jeff Lipman, (Critical Care & Clinical Support Services)
- Dr Helen Healy, (Internal Medicine Services)
- Ms Marita Prior, (Medical Imaging Services)
- Mr Satyan Chari, Safety (Medical Services / Safety & Quality)
- Dr Niall Higgins, (Mental Health Services)
- Prof Joan Webster, (Nursing & Midwifery Services)
- Assoc Prof Nicholas O'Rourke, (Surgical & Perioperative Services)
- Ms Katie Foxcroft, (Women's and Newborn Services)

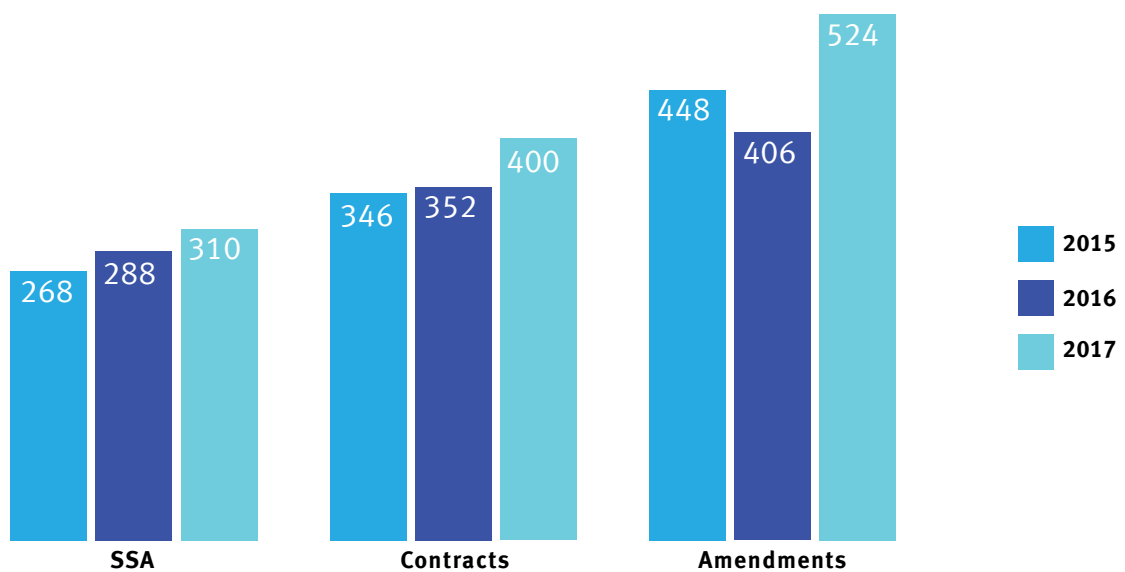
Individual Members:

- Mr Ian Parker, Physiotherapist
- Assoc Prof Louise Cullen, Senior Staff Specialist, DEM
- Dr Jye Smith, Principal Medical Physicist, Nuclear Medicine
- Prof Leonie Callaway, Consultant Obstetric Physician
- Ms Nicole Marsh, Nurse Researcher for Vascular Access

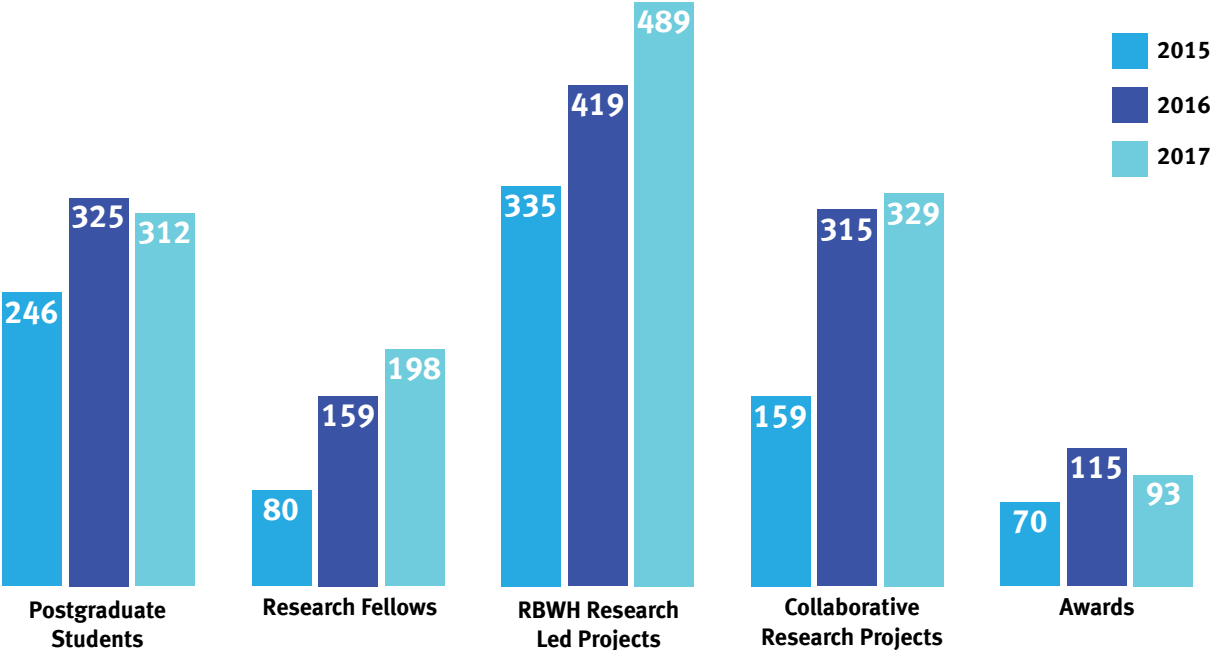
The first meeting was held on Monday 13th March 2017, and continued on a monthly basis during 2017.



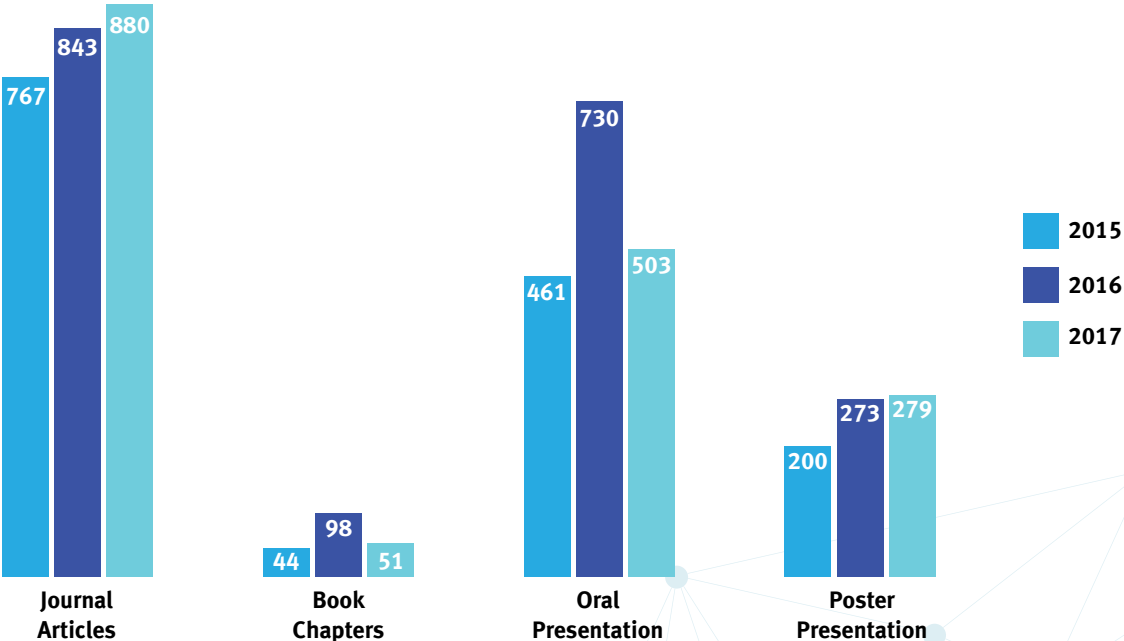
2017 again proved to be a very productive year for Researchers on the RBWH Campus. In total 310 SSA's, along with 400 Contracts and 524 Amendments were submitted to the Research Governance Office, representing an ongoing annual increase.



Research Activity



Publications





During 2017 the RBWH Research Services welcomed Natalie Bradford as RBWH Research Coordinator.

Natalie has a background as a registered nurse in Paediatric oncology spanning over 20 years. This clinical background provided a strong understanding of the principles of evidence-based practice, and ethical codes of conduct such as Good Clinical Practice. Natalie's interest in research is grounded in the opportunities to contribute to the improvement of health services and the health the general population. As the new research coordinator for Research Services at RBWH, Natalie is highly motivated to expand her experiences and help clinicians to develop their research ideas. Natalie is available to assist with all aspects of commencing a research project at RBWH. This includes establishing the research question and aims, developing a study protocol, sourcing funding, and assisting with HREC, and Governance processes.

The 2017 RBWH Symposium

After three jam-packed days of research, innovation and partnership, the 26th annual Healthcare Symposium concluded with its awards ceremony on 14 September 2017. The awards highlighted some of the best and brightest minds at the Royal Brisbane and Women's Hospital.

Congratulations to the outstanding 2017 Winners –

Angela Byrnes (The Professor Lawrie Powell AC Early Career Research Award): exploring practice gaps to improve perioperative nutrition care of the elderly (experience study): baseline clinical audit.

Dr Elise Coghill (The Professor William Egerton Award for Medical Research): severe inflammation, adhesion formation and pain in response to the use of Flowseal for haemostasis during laparoscopic surgery.

Associate Professor Victoria Eley (The Professor William Egerton Award for Medical Research): epidural extension failure in women with class III obesity is comparable to that of non-obese women—a prospective two-centre cohort study.

Elise Button (The Cecilia Brazil Nursing Research Award): clinical indicators identifying the risk of deteriorating and dying in people with haematological malignancy.

Tracey Hawkins (The Cecilia Brazil Nursing Research Award): the Cannulation Rates in the Emergency Department Intervention Trial (CREDIT).

Annette Collins (Health Practitioners Research Award): home-based telehealth service for swallowing and nutritional management following head and neck cancer treatment.

Anna Weis (Discovery and Innovation Research Award): serum microRNA as a biomarker for Cirrhosis and Hepatocellular Carcinoma in Hepatitis C—preliminary results and future potential.

Emily Larsen (Clinical Research Award): intravenous administration set (infusion tubing) replacement after four or seven days is equally effective to prevent bloodstream infections (RSVP trial)

Professor Louise Cullen (Complex Health Challenges Research Award): improved assessment of chest pain trial (IMPACT): assessing patients with possible acute coronary syndromes.

David Hughes (Health Services Implementation Research Award): ED Medicine Wise—fostering a medicine-wise culture in the emergency department.

Professor Louise Cullen (Best Overall Presentation)



Angela Byrnes - The Professor Lawrie Powell AC Early Career Research Award



Anna Weis - Discovery and Innovation Research Award



Annette Collins - Health Practitioners Research Award



David Hughes - Health Services Implementation Research Award



Dr Elise Coghill and Associate Professor Victoria Eley - The Professor William Egerton Award for Medical Research



Elise Button and Tracey Hawkins – The Cecilia Brazil Nursing Research Award



Emily Larsen - Clinical Research Award



Tracey Hawkins accepting on behalf of Prof. Louise Cullen – Best Overall Presentation

RBWH AND RBWH FOUNDATION RESEARCH ADVISORY COMMITTEE



PROF GERARD BYRNE
Chair, Research Advisory
Committee

The Research Advisory Committee (RAC) was established to assist 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 administration of funding health science research at the Hospital. RAC members provide their services on an honorary basis.

2017 RAC Membership:

2017 Committee

Prof Gerard Byrne - Chair	Prof Claire Rickard
Dr Merrilyn Banks	Prof Robert Tindle
Adjunct Assoc Prof Ian Coombes	Dr Jacobus Ungerer
Adjunct Assoc Prof Robyn Fox	Prof Joan Webster
Prof Murray Mitchell	Dr Ian Wilkey
Prof Grant Ramm	Dr Helen Healy
Prof Jeff Lipman	

Other Attendees

Ms Anitha Dinesh	Ms Kaelah Bosanquet
Ms Maxine Goulston	

In 2017 the RBWH Private Practice Trust Fund provided \$1,500,000 for competitive Scholarships and research Grants and the RBWH Foundation provided \$750,000 for competitive research Grants for the calendar year 2017. The RAC gives priority to Scholarships over Grants, and those postgraduate research students who obtain competitive external support (e.g. from NHMRC or ARC) are eligible for top-up funds.

The RAC received 24 applications for postgraduate Scholarships, of which 20 were successful (83% success rate). Scholarships were awarded to both MPhil and PhD students. 13 of the 24 scholars were enrolled part-time. Students were enrolled at the University of Queensland, Queensland University of Technology and Griffith University. Their clinical disciplines included nursing, allied health and medicine. The total value of Scholarships was \$518,305.50.

In addition, the RAC received 94 applications for research Grants, of which 38 were successful (40% success rate). Twenty research Grants were supported by funds from the RBWH Foundation and 18 research Grants were supported by funds from the RBWH Private Practice Trust Fund. The total value of research Grants was \$1,404,798.38. The disciplines represented among successful grantees included medicine, surgery, psychiatry, imaging, nursing, allied health & technical support.

After many years of exceptional voluntary service to the Committee, we said farewell to two long-serving Committee Members in 2017, Dr Ian Wilkey, formerly Medical Superintendent, Royal Brisbane Hospital and Dr Jacobus Ungerer, Director Chemical Pathology, Pathology Queensland.

On behalf of the RBWH Research Advisory Committee, the RBWH research staff and the many recipients of Scholarships and Grants, I would like to take this opportunity to thank both Ian and Jacobus for their valued commitment to the future of both early career researchers and senior researchers across the campus. Their encyclopaedic knowledge and wise counsel will be missed.

In addition, I would like to thank Anitha Dinesh for her continued support and preparation for meetings enabling the RAC Committee to continue the financial commitment to recipients of the RBWH and RBWH Foundation Scholarships and Grants.

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

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 here on the RBWH campus. The facility houses one of only four combined PET and MR scanners in Australia, a 3T Prisma MRI scanner and a PET/CT scanner, along with supporting infrastructure. HIRF is operated as a unit of RBWH, using RBWH radiographers and nuclear medicine technologists to operate the scanners. Being a standalone facility separate to the clinical radiology and nuclear medicine departments, HIRF offers greater access and booking certainty to scanners than is possible in a busy clinical environment, and makes a more pleasant place for volunteers to attend.

HIRF is a collaboration 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 widevariety of PET tracers to researchers for use at HIRF.

Our second full year of operations in 2017 saw a significant increase in activity and completion of our first research projects. Over 40 projects have now commenced recruiting spanning the modalities of diagnostic CT, MR, PET/CT and PET/MR across a wide range of disciplines. The research projects cover a broad range of areas including psychosis, dementia, Parkinsons disease, speech disorders, multiple sclerosis, cystic fibrosis, musculoskeletal and a wide variety of cancers.

For more information about HIRF please visit our website www.hirf.com.au

RBWH HUMAN RESEARCH ETHICS COMMITTEE REPORT

The National Statement on Ethical Conduct in Human Research (also referred to as the National Statement) published by the National Health and Medical Research Council (NHMRC), obliges all institutions involved in the practice of research to ensure consideration is given to each of the four major themes: Research Merit and Integrity, Justice, Beneficence and Respect; ensuring the risks and benefits are appropriately balanced and thus, the safety of all those involved in the research. One of the mechanisms through which safety is evaluated is the review of all proposed studies involving human participants by an appropriately constituted Human Research Ethics Committee (HREC). As one of more than 200 HRECs registered by the NHMRC, the RBWH HREC plays an integral role in ensuring research across Australia, but particularly within the RBWH, is ethically acceptable.

As required by the National Statement, the RBWH HREC comprises people from various backgrounds who draw on diverse experiences and expertise to assess each proposal in accordance with relevant national and international guidelines and regulations. The 30 members, appointed for their knowledge, expertise and experience and, not as representatives of any organisation, group or opinion, include researchers, clinicians, scientists, lawyers, IT experts, ministers of religion, as well as other people within the community not directly involved in scientific research or healthcare.

Each member contributes around 2 days per month voluntarily, reviewing studies for discussion at monthly meetings which can run for several hours. In addition to research proposals submitted for full ethical review, members may be asked to consider other submissions outside the committee structure, to enable expedited review of low risk research projects or negligible risk research projects which may be exempt from full HREC review. The HREC, through the Chairperson and office staff, also provide advice and support to both experienced and novice researchers, to facilitate the integration of research methodology within professional practice.

In 2017, the RBWH HREC reviewed 261 research protocols, 2 requests for endorsement to become an Authorised Prescriber of an unapproved product, as well as the review of an additional 145 quality improvement and evaluation projects which were reviewed by the Chairperson and of which 102 were considered to be exempt from HREC review.

None of this work would be possible without the exceptional support of the HREC Office Coordinator, Ann-Maree Gordon and Assistant Coordinator, Ulani Hearn, who do an amazing job managing applications and enquiries. Their detailed and comprehensive knowledge of legislation, regulations and process, and willingness to advise and support researchers are invaluable to the excellent reputation of the RBWH HREC.

JAMIESON TRAUMA INSTITUTE

The establishment of the Jamieson Trauma Institute was announced at the Royal Brisbane and Women’s Hospital Symposium on 16 November 2017. The Institutes’ development has been strongly supported by the Motor Accident Insurance Commission with the establishment of a joint QUT/MNHHS Principal Research Fellow position which commenced on 7 January 2017.

This Institute is named after Dr Kenneth Grant Jamieson (1925-1976) who was the first neurosurgeon at the Brisbane Hospital and Children’s Hospital in 1956. Dr Kenneth G Jamieson was one of Australia’s most distinguished Neurosurgeons best known for his clinical care of patients with head injuries and his research on changing patterns of head injuries and care given. Dr Jamieson was involved in research to include seat belts in cars, wearing of bike helmets, blood alcohol testing, and road safety strategies.

The Jamieson Trauma Institute was established to be a Statewide research facility and situated at Metro North/ RBWH where collaboration and partnerships are being established with: the Motor Accident Insurance Commission; our University partners; Brisbane Diamantina Health Partners; the RBWH Trauma Service; ICU; Orthopaedics; Rehabilitation; Burns, Trauma and Critical Care Research Centre; QH Clinical Skills Development Centre; QIMR - Berghofer; ADF Professor of Military Medicine UQ; the Herston Biofabrication Institute; Specialist Rehabilitation and Ambulatory Care Centre; Statewide Trauma Clinical Network; Queensland Ambulance Service and Retrieval Services Queensland.

Key collaborative areas will be developed around point of care support for rural and remote trauma; robotics; rehabilitation; trauma data analytics unit, with links to the Trauma Data Warehouse; Queensland Burns and Trauma Quality Assurance Committee and Queensland Injury Prevention Council. Data will be fundamental to the Institute. It is critical that we build on the current, often siloed data systems and develop a new, unique, consolidated Queensland trauma data warehouse which is accessible and integrated to enhance clinical care, quality review, research, continuous service improvement and reporting.

The Jamieson Trauma Institute will represent a unique collaboration of service partners, striving to advance trauma prevention, research, systems, and clinical management to deliver the best possible care for people who suffer a traumatic injury, be it those treated at the Royal Brisbane and Women’s Hospital or other facilities across Queensland and Australia. While contributing to the national and international evidence, the Institute will play a key role in determining unique solutions to the unique trauma issues facing Queensland, such as our geography and how we bring trauma expertise closest to the point of traumatic injury.

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)
Martha Druery	PhD, UQ (2014-current)	Psychosocial outcomes post-major burn injuries in adults – a longitudinal exploratory study.	Jeff Lipman , Peter Newcombe, Cate Cameron .
Jacqui Burgess	PhD, UQ (2014-2017)	Prevention of paediatric hot beverage scalds	Roy Kimble, Cate Cameron , Kerriane Watt.
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, Cate Cameron , Lukar Thornton, Danielle Gallegos.
Caroline Gillespie	PhD, QUT (2015-current)	Influencing Safety in Supply Chains: Challenges and Opportunities for Businesses	Kirsten Vallmuur , Narelle Haworth, Darren Wishart

NAME (RBWH STAFF IN BOLD)	CURRENT STUDIES (E.G. PHD, MASTERS ETC.) UNIVERSITY (DURATION)	RESEARCH PROJECT TITLE	SUPERVISORS (RBWH STAFF IN BOLD)
Catherine Niven	PhD, QUT (2017-current)	Evaluating consumer product safety regulator responses to hazardous child products in Australia and USA to inform health and safety policies and improve the safety of Australian children.	Kirsten Vallmuur , Ben Matthews
Kim Vuong	PhD, QUT (2015-current)	Quads and Kids: Understanding parents' knowledge, attitudes and beliefs about safety and risks.	Angela Watson, Ioni Lewis, Kirsten Vallmuur
William Loveday	PhD, QUT (2009-2017)	Prescription drug misusing populations – Who are the doctor shoppers? Professional doctorate student	Kirsten Vallmuur , Gerry Fitzgerald, Belinda Lloyd

2017 RESEARCH POSITIONS: COORDINATORS, FELLOW, ADJUNCT AND HONORARY POSITIONS

NAME	TYPE OF FELLOWSHIP	RESEARCH PROJECT	UNIVERSITY (YEARS)
Kirsten Vallmuur	Honorary Principal Research Fellow	MAIC Principal Research Fellow/Jamieson Trauma Institute/Associate Professor QUT	QUT
Cate Cameron	Principal Research Fellow	Jamieson Trauma Institute /Adjunct Associate Professor QUT	QUT, GU

2017 RESEARCH GRANTS - AWARDED

INVESTIGATORS (RBWH STAFF IN BOLD)	RBWH RESEARCH GROUPS / DEPARTMENTS	PROJECT TITLE	GRANTING BODY	AMOUNT IN 2017	TOTAL AMOUNT (YEARS)
Kirsten Vallmuur	Internal: Jamieson Trauma Institute; External: QUT	Trauma data warehouse fellowship	MAIC	\$194,079	\$800,878
Martha Druery, Michael Rudd , Peter Newcombe, Cate Cameron	Internal: Burns and Critical Care/ Jamieson Trauma Institute External: UQ	Quality of Life outcomes post-major burn injuries in adults - a longitudinal exploratory study.	RBWH and RBWH Foundation	\$40,000	\$40,000 (2017)
Moe Wynn, Kirsten Vallmuur , Arthur ter Hofstede, Stephen Rashford, Emma Bosley, Mark Elcock	Internal: Jamieson Trauma Institute External: QUT, QAS, RSQ	Identifying prehospital retrieval pathways and processes for road trauma patients in Queensland	MAIC	\$150,000	\$300,000

2017 RESEARCH PUBLICATIONS

TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER)	PUBLICATION INFORMATION (RBWH STAFF IN BOLD)
Report	Vallmuur K, Pollard C (2017) Injury hospitalisations in public acute hospitals in Queensland: A five year snapshot 2011/12-2015/16, Metro North Hospital and Health Service.
Report	Vallmuur K (2017) Unintentional land transport injury hospitalisations in public acute hospitals in Queensland: An eight year snapshot 2009/10-2016/17, Metro North Hospital and Health Service.

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

TYPE (ORAL / POSTER / INVITED)	PRESENTATION INFORMATION (RBWH STAFF IN BOLD)
Oral	Vallmuur K , The Queensland Trauma Data Warehouse. BDHP Trauma Day, 17 November 2017.
Oral	Pollard C , The Jamieson Trauma Institute. BDHP Trauma Day, 17 November 2017.
Oral	Pollard C , Exercise Talisman Sabre 2017 – Verification review of deployed ADF field hospital, Shoalwater Bay, QLD. RACS Trauma Verification Symposium, 15 November 2017.
Oral	Vallmuur K , The Queensland Trauma Data Warehouse. Trauma Grand Rounds, 26 October 2017.
Oral	Vallmuur K, Pollard C , Collecting Trauma Data in Queensland: No easy path! Emergency Medicine Foundation Acute Care Research and Translation Workshop, 24 August 2017.
Invited Speaker	Vallmuur K , Evaluating the effectiveness of injury prevention campaigns, New Zealand Midland Trauma Symposium, 25 May 2017.
Invited Speaker	Vallmuur K , The Queensland Trauma Data Warehouse. New Zealand Midland Trauma Symposium, 25 May 2017.
Invited Speaker	Vallmuur K , a) Translational Research: An Overview and Example. New Zealand Trauma Research Workshop, 24 May 2017.
Invited Speaker	Vallmuur K , b) Turning research plans into results. New Zealand Trauma Research Workshop, 24 May 2017.



Associate Professor Cliff Pollard, Dr Cate Cameron and Rosalind Wendt - Jamieson Trauma Institute



Associate Professor Kirsten Vallmuur