Together we deliver exceptional health outcomes through globally recognised discovery and translation
**Foreword**

Our vision is a hospital where high quality translational research improves patient outcomes and service delivery. Our mission is to promote a culture of multidisciplinary research and scholarship excellence. Our core values are respect, teamwork, compassion, high performance and integrity. Together, we will make a difference.

Redcliffe Hospital Research Plan 2016-2020

Research is vital part of effective and efficient health care that results in the best possible outcomes for patients. Our vision for research at Redcliffe Hospital is a health care facility where high quality translational research improves patient outcomes and where close collaboration between clinical, research and educational endeavours promotes a culture that drives excellence in clinical care.

Research is relevant to everyone working in a health care setting. Our staff apply evidence-based health care, together with patient priorities, to embody the core values of respect, teamwork, compassion and integrity. Our clinician researchers, research coordinators, academic partners and research collaborators apply enquiring minds to evaluate new therapies and new ways of delivering health care.

This report highlights research endeavours at Redcliffe Hospital in 2016. It is by no means an exhaustive list of all research-related activities across the facility. For example, there are many evidence-based quality improvement projects, journal clubs, educational activities and systematic evaluations of the literature that do not feature in this report. However, it is the intent of this research report to acknowledge the many staff, students and external research partners who are involved in research-related activities at our facility. This acknowledgement extends to all staff who exemplify the culture of evidence-based enquiry at Redcliffe Hospital.

For further information on research in Metro North Hospital and Health Service, please visit our website: www.health.qld.gov.au/metronorth/research/

On behalf of the Redcliffe Hospital Research Steering Committee, I hope you find this report informative and inspiring reading.

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# Table of contents

Foreword ........................................................................................................................................................................ 2  
Table of contents ................................................................................................................................................................. 3  
Research Steering Committee .............................................................................................................................................. 4  
  Strategic direction ............................................................................................................................................................. 4  
Support personnel ............................................................................................................................................................... 4  
  Director of Research ......................................................................................................................................................... 4  
  Librarian ........................................................................................................................................................................... 4  
  Research mentors ............................................................................................................................................................. 5  
  Research Governance Officer ........................................................................................................................................ 5  
Education and training .......................................................................................................................................................... 5  
  Research Forum ............................................................................................................................................................... 5  
  Demystifying Research Workshop ................................................................................................................................ 6  
Research Hub ....................................................................................................................................................................... 6  
Partnerships ......................................................................................................................................................................... 7  
  The University of Queensland ........................................................................................................................................ 7  
  Queensland University of Technology ................................................................................................................................. 7  
  QIMR Berghofer ............................................................................................................................................................... 7  
  Emergency Medicine Foundation ......................................................................................................................................... 7  
Activity, outcomes and achievements ...................................................................................................................................... 8  
  Studies ................................................................................................................................................................................. 8  
  Publications ....................................................................................................................................................................... 10  
  Conference presentations .................................................................................................................................................. 12  
  Higher degrees ................................................................................................................................................................. 15  
Research finances .................................................................................................................................................................. 16  
  Private Practice Trust Fund ........................................................................................................................................... 16  
  Grants ............................................................................................................................................................................... 17  
Research in the spotlight ....................................................................................................................................................... 18  
  Preventing pressure injuries in the Intensive Care Unit .................................................................................................. 18  
  Treating headache in the Emergency Department ......................................................................................................... 18  
  Quantifying teaching in the clinical setting ....................................................................................................................... 19  
  Using big data to define a medical education community of practice ........................................................................... 20  
  A world record at Redcliffe Hospital? ............................................................................................................................ 21  
Future directions .................................................................................................................................................................... 21  
Appendices .......................................................................................................................................................................... 22  
  Appendix 1: Redcliffe Hospital Research Plan 2016-2020 ............................................................................................... 22  
  Appendix 2: Clinical trials involving the Research Hub ................................................................................................. 24
Research Steering Committee

The peak body for guiding research priorities and strategy at Redcliffe Hospital is the Research Steering Committee. Meeting quarterly, the Research Steering Committee is comprised of multidisciplinary, executive and partner organisation representatives. The Research Steering Committee members in 2016 were:

- Dr Joel Dulhunty, Director of Research & Medical Education (Chair)
- Louise Oriti, Executive Director, Redcliffe Hospital
- Dr Alka Kothari, The University of Queensland (Northside Clinical School) representative
- Dr Alan Barnard, Queensland University of Technology (Nursing Professorial Unit, Redcliffe Hospital)
- Associate Professor Martin Christensen, Queensland University of Technology (Critical Care Nursing Professorial Unit, Redcliffe Hospital)
- Dr Jonathan Hunter, Medical representative
- Jesse Spurr, Nursing representative
- Gayle Sutherland, Director of Allied Health
- Fiona English, Allied Health representative
- Vanessa Constable, Research Governance Officer, Redcliffe Hospital
- Dr Karen Singh, Director, Performance Improvement and Redesign Unit, Redcliffe Hospital
- Dr Julia Hocking, Research Development Manager, Redcliffe Hospital / Emergency Medicine Foundation
- Jane Orbell-Smith, Librarian, Redcliffe-Caboolture Hospital Library Service

The Research Steering Committee reports to the Redcliffe Hospital Executive Committee and has linkage to the Metro North Research Steering Committee.

Strategic direction

Development of a 5-year Redcliffe Hospital research plan in alignment with Metro North Hospital and Health Service and facility priorities has been a key action of the Redcliffe Hospital Research Steering Committee in 2016. The Redcliffe Hospital Research Plan for 2016-2020 focuses on core pillars, including governance, culture, partnerships, priorities, education and training, funding and translation (Appendix 1).

Support personnel

There are a number of support structures, mechanisms and personnel in place to assist staff undertaking research at Redcliffe Hospital (see Education and training, Research Hub, Partnerships and Research finances). Support personnel include:

Director of Research

The Director of Research, Dr Joel Dulhunty, provides research support and advocacy at Redcliffe Hospital and coordinates an education program and mentorship scheme for new and novice researchers across all professional groups and disciplines. The Director of Research also provides representation on the Metro North Research Committee and other forums supporting research development in Metro North Hospital and Health Service and with organisations that form the Brisbane Diamantina Health Partners.

The office of the Director of Research is located in the Education Centre. Contact details: Dr Joel Dulhunty, Ph: 3883 7247, email: Joel.Dulhunty@health.qld.gov.au

Librarian

The Redcliffe Hospital Library provides access to print and electronic resources. The Librarian, Jane Orbell-Smith (pictured), provides training and assistance to staff in performing literature reviews and accessing reference materials. Information literacy training and access to referencing software, EndNote, is available via the library and
the on-line Clinicians Knowledge Network and Queensland Health Libraries web-portal. Access to the statistical program, SPSS, is available via The University of Queensland computers located in the library.

The Redcliffe Hospital Library is located in the Education Centre. Contact details: Jane Orbell-Smith, Ph: 3883 7726, email: RedLib@health.qld.gov.au

Research mentors

Redcliffe Hospital has a network of research mentors associated with various departments and with broad range of research expertise who provide advice and assistance to staff seeking to further their research goals. Please contact the Director of Research or Research Governance Officer for details.

Research Governance Officer

The Research Governance Officer, Vanessa Constable (pictured), coordinates the site authorisation of research studies undertaken at Redcliffe Hospital, Caboolture/Kilcoy Hospitals and Community & Indigenous Support Services. The Research Governance Officer provides a contact point for questions in regard to research ethics and governance. Early contact with the Research Governance Officer is recommended for staff and external researchers wishing to undertake research at Redcliffe Hospital.

The Research Governance office is located in the Education Centre. Contact details: Vanessa Constable, Ph: 3883 7243, email: RCRGO@health.qld.gov.au

Education and training

Redcliffe Hospital has a strong focus on education and training across all professional groups to support evidence-based health care. Numerous journal clubs are conducted on a weekly, fortnightly and monthly basis where current evidence related to medicine, health service management and education and training is presented and discussed.

Research education is provided as part of the Redcliffe Hospital Research Forum and via video-linkage with the research education program conducted across Metro North Hospital and Health Service (see: https://www.health.qld.gov.au/metronorth/research/education-events). In addition, various research education sessions are conducted through the course of the year and tailored to the relevant participant group. For example, an introduction to research is provided for junior doctors as part of the Intern Only Education program.

Research Forum

The Redcliffe Hospital Research Forum is held monthly in the Education Centre. Hosted by Nursing Services in 2016, the forum provides support to multidisciplinary staff involved in research by developing a community of research practice. The forum also provides opportunities to present study proposals and results and receive research education on core topics. Access to research mentors on an individual basis is available immediately following the forum. Presentations in 2016 included:

[Introduction to the research journey]. Presented by Dr Joel Dulhunty (February)
[Translating research into practice]. Presented by Vanessa Constable (May)
[Postgraduate research study]. Presented by Dr Alan Barnard (May)
[Costing teaching and training – embedding the right answer!]. Presented by Dr Craig Margetts, Adrian Boddice, Dr Arlena Kuenzel and Dr Joel Dulhunty (June)
[Open research workshop]. Facilitated by Dr Joel Dulhunty (July)
[The Metro North Research strategy: 2017 and beyond]. Presented by Dr Roxanne Machen (September)
[Emergency medicine research and the Research Support Network]. Presented by Dr Julia Hocking (October)
[Developing research skills: presenting with impact!]. Presented by Dr Joel Dulhunty (November)
**Demystifying Research Workshop**

The Demystifying Research Workshop is run annually and aims to take novice researchers through a simulated research journey over the course of one day. This workshop has been conducted for the past four years and is consistently highly rated by participants.

In 2016, the Demystifying Research Workshop was held on 25 October with allied health, medical and nursing participants from Redcliffe Hospital, Community, Indigenous & Subacute Services and other facilities in Metro North Hospital and Health Service attending. Librarian Jane Orbell-Smith provided a practical introduction to framing a clinical question and literature searching. Director of Research Dr Joel Dulhunty and Research Governance Officer Vanessa Constable led participants through key steps in developing a study protocol and ethical and funding considerations. Dr Alan Barnard from Queensland University of Technology provided an introduction to qualitative research in a healthcare setting. Participants undertook a data collection exercise before lunch and used the data they collected to develop their statistical analysis skills in an afternoon session. Research Coordinator Megan Ratcliffe provided an overview of research record keeping and Clinical Nurse Shaun Matthews gave a first-hand account of his transition from clinician to clinician-researcher. The day concluded with a session on publishing, project completion and next steps.

**Research Hub**

The Research Hub is a coordination centre for clinical trials conducted at Redcliffe Hospital. Research Coordinators, Maree Duroux (pictured left below), Megan Ratcliffe and Samantha Shone (pictured right below), provide day-to-day oversight of sponsored and investigator-initiated clinical trials and clinical registries with a particular focus on new therapeutics. In 2016, clinical trials have been conducted in the areas of General Medicine, Oncology, Anaesthetics and Intensive Care Medicine with Research Hub support (Appendix 2). Research Hub facilities include an administration office and a research clinic with on-site centrifuge for biochemistry samples.

The Research Hub is located at the front of the hospital adjacent to the Transit Lounge. Contact details: Maree Duroux, Megan Ratcliffe and Samantha Shone, Ph: 3883 7851, email: Red-Research@health.qld.gov.au
Partnerships

Clinical research is a collaborative activity requiring research expertise, infrastructure and resources. Redcliffe Hospital has established collaborative links with research partners to achieve shared goals.

The University of Queensland

The University of Queensland is co-located in the Moreton Bay Integrated Care Centre providing staff access to educational and training facilities. Medical and nursing students use this space while undertaking clinical placements and problem-based learning activities. In 2016, approximately 135 medical students had clinical placements at Redcliffe Hospital. A significant number were engaged in research projects under the leadership of clinical and research mentors, in particular, Dr Alka Kothari (pictured), Deputy Head of The University of Queensland Northside Clinical School. The University of Queensland contributes funding for student teaching and research, which in 2016 helped support research infrastructure at Redcliffe Hospital.

The University of Queensland is located on Level 2 of the Moreton Bay Integrated Care Centre at the front of Redcliffe Hospital. Contact details: Dr Alka Kothari, email: alka.kothari@uq.edu.au, and Mark Livett, UQ Student Co-ordinator, Ph: 3883 7717, email: m.livett@uq.edu.au

Queensland University of Technology

Queensland University of Technology has established two professorial units at Redcliffe Hospital to support critical care and nursing research. The units are under the leadership of Dr Alan Barnard (pictured) and Associate Professor Martin Christensen from the School of Nursing, and provide mentorship for staff undertaking research projects and higher degrees with Queensland University of Technology.

Dr Alan Barnard and Associate Professor Martin Christensen are visiting research academic leads at Redcliffe Hospital. The Critical Care Nursing Professorial Unit is located in the Intensive Care Unit, Level 2 (Main Building), Redcliffe Hospital. Contact details: Dr Alan Barnard, email: a.barnard@qut.edu.au, and Associate Professor Martin Christensen, email: martin.christensen@qut.edu.au

QIMR Berghofer

Quantitative research is dependent on sound biostatistical guidance, which encompasses study design, data collection and management, statistical analysis, interpretation and presentations of results and responding to reviewer comments. The Statistics Unit at QIMR Berghofer provides a statistical consultancy service for Redcliffe Hospital staff undertaking research.

Researchers at Redcliffe Hospital can contact and collaborate with statisticians via email, telephone and videoconference link. Contact details: Emma Ballard (pictured), Ph: 3845 3953, email: Emma.Ballard@qimrberghofer.edu.au

Emergency Medicine Foundation

A Research Support Network, funded by the Emergency Medicine Foundation, commenced in 2016. It supports emergency medicine clinicians in seven of the 16 Queensland Hospital and Health Services, including Metro North, Sunshine Coast and Wide Bay. A goal of the Research Support Network pilot is to grow Queensland’s emergency
medicine research capacity by providing leadership and support for quality emergency medicine research, multi-
disciplinary collaboration and translation of new knowledge into better clinical practice.

Research Development Manager, Dr Julia Hocking (pictured), provides expertise and support for emergency medicine staff at Redcliffe Hospital, including assisting clinicians with study design, grant applications and publication of findings. Further details are available at: emergencyfoundation.org.au/research/research-support-network/

Dr Julia Hocking visits Redcliffe Hospital on a regular basis, meeting with clinician staff in the Emergency Department. Contact details: Dr Julia Hocking, Ph: 0406407520, email: julia.hocking@emfoundation.org.au

**Activity, outcomes and achievements**

Research activity is measurable in metrics such as the number of staff engaged in research, the number of publications in a given year and the quantum of grant funding. However, some important research outcomes are difficult to quantify, including the translation of findings into practice. The following sections highlight research achievements by Redcliffe Hospital staff and collaborators in 2016.

In addition, three staff deserve special mention for their nomination in the inaugural Metro North Research Excellence Awards in 2016: Jesse Spurr in the category of Innovation and Creativity for novel research exploring the intersection of health care and social media, Dr Alka Kothari in the category of Promoting Healthy Minds and Bodies for clinical research into the care of pregnant women and the unborn child and Dr Karen Singh in the category of Integrated Care for health services research in the field of root cause analysis.

**Studies**

As of December 2016, there were 111 active research studies at Redcliffe Hospital. Eleven studies were completed in the calendar year. Figure 1 shows the type of research studies undertaken in 2016. Of the 17 clinical drug trials, there was 1 Phase II trial, 15 Phase III trials and 1 Phase IV trial.

![Figure 1. Type of research studies being conducted at Redcliffe Hospital as of December 2016](image-url)
Departments and work units involved in research studies in 2016 included:

- Medicine and Older Persons (27)
- Obstetrics and Gynaecology (17)
- Emergency Department (9)
- Oncology (9)
- Intensive Care (7)
- Medical Education (7)
- Paediatrics (7)
- Mental Health (5)
- Orthopaedics (5)
- Speech Pathology (3)
- Dietetics and Nutrition (2)
- General Surgery (2)
- Nursing – multiple departments (2)
- Occupational Therapy (2)
- Pharmacy (3)
- Physiotherapy (2)
- Allied Health – multiple departments (1)
- Anaesthetics (1)
- Medical – multiple departments (1)
- Medical Imaging (1)
- Urology (1)

Figure 2 shows the breakdown of research studies by predominant professional group for 2016.
Publications

Publications by Redcliffe Hospital staff members and affiliated personnel (identified in bold) or relating to clinical trials or studies conducted at Redcliffe Hospital are as follows:

1. Alghamry A (Alaa), Hanna J, Pelecanos A, Kyranis S, Khelgi V, O'Rourke P, Carroll O (Oran), Oxenford C (Cassie), Rangaswamaiah S (Swetha), Tan C (Christopher). Predictors of significant coronary artery disease in atrial fibrillation: are cardiac troponins a useful measure. *Int J Cardiol* 2016;223:744-749.


38. **Ng F (Faith)**, Bruxner G (George). Flying under the radar: first hospitalisation with anorexia nervosa at age 54. *Med J Aust* 2016;204(9):347.


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**Conference presentations**

Conference and other external presentations involving Redcliffe Hospital staff include the following:

2. **Amber Cavanagh.** *Imaging device to aid in Taylor spatial frame imaging.* 11th Annual Scientific Meeting of Medical Imaging and Radiation Therapy, Brisbane, 22-24 April 2016.

3. **Annie Chen.** *The role of imaging modalities in the diagnosis and treatment of osteosarcomas.* 11th Annual Scientific Meeting of Medical Imaging and Radiation Therapy, Brisbane, 22-24 April 2016.


5. **Adam Cristaudo.** *Treatments and other prognostic factors in the management of the open abdomen: a systematic review.* Royal Australasian College of Surgeons Annual Scientific Congress 2016, Brisbane, 4 May 2016.


7. **Adam Cristaudo.** *The role of trauma in acute appendicitis in paediatric patients* (poster presentation). Royal Australasian College of Surgeons Annual Scientific Congress 2016, Brisbane, 2-6 May 2016.

8. **Adam Cristaudo.** *The surgeon-led model to improve operating theatre change over time and overall efficiency: a randomized controlled trial* (poster presentation). Royal Australasian College of Surgeons Annual Scientific Congress 2016, Brisbane, 2-6 May 2016.

9. **Adam Cristaudo.** *Proximal serrated adenoma detection rates between surgeons and gastroenterologists: are we lagging behind?* A retrospective comparative study (poster presentation). General Surgeons Australia Annual Scientific Meeting 2016, Melbourne, 29 September – 1 October 2016.


12. **Jacque Dorante, Michele Wyland.** *An educational strategy to improve staff performance.* 17th World Federation Hospital Sterilization Service Congress, Brisbane, 26-29 October 2016.

13. **Jacque Dorante, Michele Wyland.** *Creating effective poster presentations.* Sterilization and Research Advisory Council of Australia, Brisbane (13 February 2016), Ballina (16 April 2016) and Mackay (7 April 2016).


20. **Craig Margetts, Joel Dulhunty, Adrian Boddice, Arlena Kuenzel.** Costing teaching and training - embedding the right answer! Activity Based Funding Conference 2016, Brisbane, 10 May 2016.

21. **Craig Margetts, Joel Dulhunty, Adrian Boddice, Arlena Kuenzel.** Costing teaching and training - embedding the right answer! (poster presentation). Royal Australasian College of Medical Administrators Annual Scientific Meeting 2016, Brisbane, 13-14 October 2016.


27. **Leonie Naumann, Amy McKenzie.** The Lymphoedema Clinical Pathways Project. CAHRLI Forum 2016, Brisbane, 23 May 2016.

28. **Leonie Naumann, Amy McKenzie, Soraya Bews, Gayle Sutherland.** The lymphoedema clinical pathway pilot project – a community based approach to improve lymphoedema service access. 25th Annual Royal Brisbane and Women’s Hospital Healthcare Symposium, Brisbane, 12 September 2016.


31. **Liz Savina.** Singing can we recommend it? A review of the research on the outcomes of signing interventions for people with Parkinson’s disease, COPD and presbyphonia. Metro North Hospital and Health Service Speech Pathology Network, Brisbane, 16 August 2016.
32. **Liz Savina.** *Steam, straws and earplugs: how to take care of your voice.* Woodford Folk Festival, Woodford, 29 December 2016.

33. **Liz Savina.** *Exploring the health benefits of singing.* Woodford Folk Festival, Woodford, 1 January 2017.


40. **Jesse Spurr.** *Leave the sim lab behind: in situ simulation for clinician educators* (pre-conference workshop presenter), Social Media and Critical Care Conference, Dublin, 13 June 2016.


42. **Jesse Spurr.** *Clinical trials worth knowing.* Caboolture Redcliffe ICU Nursing Sepsis Workshop (facilitator), Brisbane, 24 June 2016.

43. **Jesse Spurr.** *Goal directed simulation.* The Teaching Course Down Under, Melbourne, 11-15 July 2016.

44. **Michele Wyland.** *Storyboards: bringing the theatre experience to the department* (poster presentation). 17th World Federation Hospital Sterilization Service Congress, Brisbane, 26-29 October 2016.

45. **Michele Wyland, Monica Stankiewicz.** *Cluster of suspected intra-operative antiseptic burns.* Perioperative Nurses Association Queensland, Brisbane, 13 August 2016.

**Higher degrees**

Redcliffe Hospital staff undertaking higher degree studies in 2016 include:

1. **Tina Baulch.** Master of Research, Queensland University of Technology. Research project: *What are the qualitatively different ways frequent presenters to the emergency department understand their experience of chronic diseases self-management?*

2. **Adam Cristaudo.** PhD, The University of Sydney. Research project: *Prognostic factors in the management of the open abdomen.*


4. **Jodie Gordon.** Master of Hospital Administration, Latrobe University.

5. **Christina Kapitsalas.** Master in Clinical Education, Flinders University.

7. Mary McDonald, Master of Nursing Studies (Nurse Practitioner), Queensland University of Technology.

8. Timothy Sladden, PhD, The University of Queensland. Research project: The role of endothelial glycocalyx breakdown in human lung transplantation and the establishment of a porcine model to study mechanisms and evaluate therapeutic interventions.


Congratulations to the following staff completed higher degree studies in 2016:

1. Stuart Ameron, Master in Medical Radiation Sciences, Charles Sturt University. Research project: Dual energy CT of the pulmonary arteries: optimisation of non-linear blending parameters and quantification of CNR impairment for potential radiation dose reduction: a phantom study with correlation to clinical imaging. Recipient of Executive Dean’s Award for Academic Excellence.

2. Kate Bishop, Graduate Diploma Medical Ultrasound, Queensland University of Technology.

3. Peter Coomber, Master in Clinical Pharmacy, The University of Queensland.

4. Riesa Ginsberg, Graduate Diploma in Clinical Education, Flinders University.


Higher degree candidates supervised by Redcliffe Hospital staff:

1. Ugenthiri Naiker, PhD candidate, Queensland University of Technology. Research project: Waiting times: the outpatient referral process and analysis of variation. Supervisors: Professor Gerard FitzGerald, Professor Michael Rosemann and Dr Joel Dulhunty. Thesis submitted for examination.

Research finances

Research funding for the 2016 calendar year comprised study payments from pharmaceutical sponsors and collaborating research groups, internal grants awarded by the Redcliffe Hospital Private Practice Trust Fund Advisory Committee, grants from external funding bodies and research funding support from The University of Queensland linked to student teaching and research.

The total annual research revenue in 2016 was $392,919. Revenue from commercial (pharmaceutical sponsored) research was $185,896 and $207,023 from non-commercial research and other sources. In-kind contribution by Metro North Hospital and Health Service is a significant component of all research activity at Redcliffe Hospital, conservatively estimated at $31,000 for investigator-initiated research and excluding research support personnel employed at Redcliffe Hospital.

Private Practice Trust Fund

The Redcliffe Hospital Private Practice Trust Fund Advisory Committee meets on a quarterly basis to review and make recommendations on research, equipment and education applications for financial support from the Private
Practice Trust Fund. Objectives of the committee include the provision of grants for research, educational and operational purposes that may not be within the normal budgeting capacity of the facility.

In 2016, the Redcliffe Hospital Private Practice Trust Fund Advisory Committee awarded $65,083 of research funding. The following research grants were awarded:

1. **Alka Kothari. Forgotten fathers study** ($3,390)
2. **Sean Keogh. The legality and ethics of intubating involuntary mental health patients for aeromedical retrieval** ($3,145)
3. **Erik Wood. Propofol on trial for headaches in the Emergency Department setting** ($10,545)
4. **Marianne Kirrane. Circadian phase shift in the critically ill to reduce the symptoms of ICU delirium: an exploratory study** ($26,361)
5. **Karen Beaumont. Comparison of swabstick vs skin wipe antisepsis** ($1,337)
6. **Monica Stankiewicz. A trial of two prophylactic sacral dressings in the prevention of stage 1 pressure injury in the critically ill patient** ($20,305)

**Grants**

The following staff applied for or were the recipients of external research grants in 2016:

4. **Daniel Chambers, Peter Hopkins, Stephanie Yerkovich, Nicole Isbel, Timothy Sladden. Protecting the endothelial glycocalyx to improve transplant rates and outcomes.** National Health and Medical Research Council, Project Grant, $725,180 (awarded for 2016-2018).
5. **Monica Stankiewicz, Jodie Gordon. A trial of two prophylactic sacral dressings in the prevention of stage 1 sacral pressure injury in the critically ill.** Wounds Australia, $2,000 (applied for and awarded in 2016).
Research in the spotlight

Preventing pressure injuries in the Intensive Care Unit

Clinical Nurse Consultants Jodie Gordon and Monica Stankiewicz are undertaking a trial of two prophylactic foam dressings in the prevention of stage 1 sacral pressure injury in critically ill patients in the Intensive Care Unit. This local investigator-initiated clinical trial has received research grant funding from Redcliffe Hospital and Wounds Australia. The study commenced in February 2016 and, as of December 2016, is at the halfway point of patient recruitment with anticipated completion by December 2017.

This study is significant and timely because it contributes to the growing work around pressure injury prevention in the critically ill. The increasing cost of treating pressure injuries is of concern and the cost effectiveness analysis component of this study is relevant to clinicians and health system managers. This study puts nursing research at the forefront of pressure injury prevention and management in the critical care environment. It promotes nursing practice and research and builds collaborative networks within the health system for evidence-based care in the field of wound management.

Pictured: Barb Williams, Monica Stankiewicz, Jodie Gordon and Anita Weier

Treating headache in the Emergency Department

Emergency Department Staff Specialist Dr Erik Wood (pictured next page) has been awarded a Redcliffe Hospital research grant to carry out a clinical trial on the treatment of patients who have severe headaches.

Dr Wood is trialling the use of a medication called propofol to treat stubborn headaches. Propofol is usually used for general anaesthetics and sedation, but at very low doses it has been found to relieve headaches quickly and effectively.

“Patients often come to the Emergency Department because they are experiencing a headache that is not responding to commonly available medications,” Dr Wood said. “Unfortunately there is little evidence to support which available hospital medications consistently offer effective pain relief to individuals with these types of headache. If successful, this new way of using propofol has the potential to introduce a new, safe and effective treatment option that could rapidly restore patients to baseline levels of function and comfort.”
Dr Wood said the treatment could also reduce the length of time a patient would have to stay in the Emergency Department. Dr Wood has developed his research trial in consultation with Dr Julia Hocking, Research Development Manager for the Emergency Medicine Foundation, and Dr Ogilvie Thom from Nambour General Hospital Emergency Department. The study is funded by Redcliffe Hospital and the Emergency Medicine Foundation.

**Quantifying teaching in the clinical setting**

Director of Medical Services Dr Craig Margetts and co-investigators, Adrian Boddice (Finance), Dr Arlena Kuenzel (Emergency Department) and Dr Joel Dulhunty (Research & Medical Education) (pictured) have undertaken a large single-centre observational study to quantify teaching activities that occur in public hospitals. Nearly 70 clinician participants, as well as staff, patients and their families, have taken part in the study, which will help government funding bodies allocate funding for education outside of fixed education sessions.

Dr Craig Margetts said the project was a first for Australia and possibly the first of its kind internationally. “One of the key questions in Activity Based Funding is the separation of the cost and time involved in providing health care from the equally important role of teaching and training. ‘Embedded’ education occurs in conjunction with patient care, but it has proven challenging to measure accurately,” he said.

Participants in the research were filmed while going about their normal duties. A total of 48 hours of video footage were reviewed and coded by the investigators to determine the proportion of time clinicians teach and receive education during patient care. The results were first presented at the Activity Based Funding Conference in May 2016 and at the Royal Australasian College of Medical Administrators Annual Scientific Meeting in October.
Using big data to define a medical education community of practice

Intensive Care Unit Clinical Nurse Consultant Jesse Spurr (pictured) has completed ground-breaking research in medical education, social media and the use of big data. His research abstract, “Defining digital communities of practice using a Netnographic framework for hashtag analytics”, which was co-authored with international collaborators, Drs Damian Roland and Daniel Cabrera, won the Grand Prize at Stanford Medicine X Symplur Signals Research Challenge in Stanford, California, in September 2015.

In recognition of his achievements, Jesse was a nominee for the inaugural 2016 Metro North Research Excellence Awards in the category of Innovation and Creativity. As a facilitator, presenter, researcher and reviewer, he is a regular contributor in the fields of evidence-based practice, healthcare simulation and critical care medicine. Jesse is also Editor and co-founder of Simulcast (http://simulationpodcast.com), which includes a monthly online healthcare simulation journal club and a monthly podcast with prominent researchers and leaders in healthcare simulation.

Pictured: Free Open Access Medical education conservation identifier analysis
A world record at Redcliffe Hospital?

In December 2016, Obstetrician and Gynaecologist Dr Alka Kothari had 22 abstracts accepted for the Royal College of Obstetricians & Gynaecologists World Congress 2017 to be held in Cape Town, South Africa, 20-22 March 2017. These clinical research projects, which have been developed and progressed under Dr Kothari’s research leadership at Redcliffe Hospital, focus on a broad range of topics relating to obstetric and antenatal care of women, mental health issues for mothers and fathers and ultrasonography practice.

In recognition of the multiple research endeavours undertaken at Redcliffe Hospital and for inspiring junior doctors and medical students to be involved in research activities, Dr Kothari was a nominee for the inaugural 2016 Metro North Research Excellence Awards in the category of Promoting Healthy Minds and Bodies.

Future directions

A core professional value at Redcliffe Hospital is “doing it better” by being continually innovative in the way we do things. In keeping with this philosophy, there are a number of significant research support developments and goals planned for 2017:

- The Redcliffe Hospital research register to be made accessible to staff to access details on research activity across the facility and track progress at a project or departmental level.
- Increase multidisciplinary input into the Research Forum with a focus on local research, research education and strengthening the community of research practice at Redcliffe Hospital.
- Commence a quarterly weblink with the QIMR Berghofer statisticians as part of the Research Forum.
- Hold the inaugural Redcliffe Hospital Research Symposium to showcase local research in September 2017.
- Develop a Redcliffe Hospital Research intranet page to enhance staff access to local research resources.
- Provide strategic input into redevelopment plans at Redcliffe Hospital to support research capacity and development into the future.
- Implement the Metro North Research Strategy to be launched in March 2017.
Appendices

Appendix 1: Redcliffe Hospital Research Plan 2016-2020

Redcliffe Hospital Research Plan 2016 - 2020

Endorsed: Redcliffe Hospital Research Steering Committee, 17/07/2016

Reviewed:

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Version No. 1.0 Effective date: 2016 Review date: January 2016

Redcliffe Hospital Research Plan 2016 – 2020

Introduction
The Redcliffe Hospital Research Plan 2016 – 2020 reflects the strategic focus for research at Redcliffe Hospital for the next three years and aligns with the Metro North Hospital and Health Service Strategic Plan 2016 – 2020. To facilitate achievement of the vision and key priorities for Redcliffe Hospital Research Steering Committee, this document has been developed in alignment with the following tenets of the Metro North Hospital and Health Service (MNHHS) Strategic Plan:

- MNHHS key strategic priorities;
- Key Performance Indicators; and
- Redcliffe Hospital Governance Plan – April 2016

Additionally, this document indicates the potential impact of implementing the strategies at Redcliffe Hospital and outlines responsibility for actioning the priority and achieving the key performance indicators.

Our vision is a hospital where high quality translational research improves patient outcomes and service delivery.

Our mission is to promote a culture of multidisciplinary research and scholarship excellence.

Our core values are respect, teamwork, compassion, high performance and integrity. Together, we will make a difference.
<table>
<thead>
<tr>
<th>Priority</th>
<th>Action</th>
<th>Key Performance Indicators</th>
<th>Impact</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>Establish the Redcliffe Hospital Research Steering Committee</td>
<td>Quarterly meetings</td>
<td>Strengthen research culture</td>
<td>Redcliffe Hospital Research Steering Committee</td>
</tr>
<tr>
<td></td>
<td>Develop a 5-year research strategy for Redcliffe Hospital</td>
<td>Provide strategic direction on research and research-related activities at Redcliffe Hospital</td>
<td>Alignment of health service, hospital and research priorities</td>
<td>Research Governance Unit</td>
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<td></td>
<td>Develop a governance process for quality assurance projects</td>
<td>Evidence of research and quality assurance governance, project accountability and outcomes</td>
<td>Consistent advice by Research Governance Unit and Performance, Improvement and Re-design Unit on research and quality assurance approval process</td>
<td>Performance, Improvement and Re-design Unit</td>
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<td></td>
<td></td>
<td>Access to research mentors</td>
<td>Risk management</td>
<td></td>
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<tr>
<td>Culture of research</td>
<td>Develop research mentorship programme</td>
<td>Redcliffe Hospital research news stories, publications, conference presentations, grants and reports are promoted via local communications and the Metro North Research Website</td>
<td>Increased willingness and confidence to participate in research</td>
<td>Redcliffe Hospital Research Steering Committee</td>
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<tr>
<td></td>
<td>Promote research outcomes and new stories</td>
<td>Attendance at research forum</td>
<td>Acknowledgement of research outcomes</td>
<td>Director of Research &amp; Medical Education</td>
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<tr>
<td></td>
<td>Active research forum</td>
<td></td>
<td>Development of a community of research practice with opportunity to present research findings and research ideas to peers</td>
<td>Public Affairs</td>
</tr>
<tr>
<td>Research partnerships</td>
<td>Increase number of collaborative research projects involving QUT, UQ, EMF and other research partners</td>
<td>Number of collaborative research projects</td>
<td>Increased research and innovation through established and new partnerships</td>
<td>Research Development Manager, EMF</td>
</tr>
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<td></td>
<td>Increase number of staff with research higher degrees</td>
<td>Number of staff undertaking research higher degrees</td>
<td>Increased capacity and outcomes from research</td>
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<td></td>
<td>Maintain and extend research partnerships with universities, collaborators and sponsors</td>
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<tr>
<td>Research priorities</td>
<td>Establish research priorities, which align with research plan</td>
<td>Number of active and externally funded research projects which align with research priorities</td>
<td>Research engagement, capacity and translation</td>
<td>Redcliffe Hospital Research Steering Committee</td>
</tr>
<tr>
<td></td>
<td>Increase the number of research projects and grant applications, which align with</td>
<td></td>
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<tr>
<td>Education and training</td>
<td>Annual research education plan</td>
<td>Published research calendar on Metro North Research Website</td>
<td>Increased knowledge and skills in research processes and project formulation</td>
<td>Director of Research &amp; Medical Education</td>
</tr>
<tr>
<td></td>
<td>Formal and informal education and training opportunities for novice and experienced researchers</td>
<td>Attendance and evaluation of research education opportunities, e.g. Demystifying research workshop and Research forum</td>
<td>Access to up to date and relevant research information</td>
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<td></td>
<td>Professional development opportunities for research mentors, research coordinators and other research support staff</td>
<td>Feedback and utilisation of biostatistical support opportunities</td>
<td>Linking researchers to biostatistical and library services</td>
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<tr>
<td></td>
<td>Promote biostatistical support opportunities</td>
<td></td>
<td>Research translation</td>
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<td></td>
<td>Promote library services</td>
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<td>Librarian Services</td>
</tr>
<tr>
<td>Funding</td>
<td>Increase number of competitive grant funding submissions</td>
<td>Research revenue (grant funding, sponsored research and governance)</td>
<td>Sustainable research support services</td>
<td>Redcliffe Hospital Research Steering Committee</td>
</tr>
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<td></td>
<td>Maintain funding base for research hub with active clinical trials</td>
<td></td>
<td>Increased support for research activities, i.e. feasibility</td>
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<td></td>
<td>Build funding base for research coordinators and research support staff</td>
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<td></td>
<td>Maintain and develop hospital funding source for research</td>
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<tr>
<td>Translation</td>
<td>Ensure findings of local research and quality assurance studies are disseminated locally and nationally</td>
<td>Number of completed studies with local and/or external presentations and publication</td>
<td>Evidence-based practice</td>
<td>Redcliffe Hospital Research Steering Committee</td>
</tr>
<tr>
<td></td>
<td>Increase use of evidence base (e.g. literature search) in clinical priority setting, projects and practice</td>
<td></td>
<td>Influencing clinical priorities and practice</td>
<td>Research Governance Unit</td>
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<td>Library Services</td>
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</tbody>
</table>
## Appendix 2: Clinical trials involving the Research Hub

<table>
<thead>
<tr>
<th>Full title</th>
<th>Principal Investigator (Discipline)</th>
<th>Indication (Type)</th>
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</thead>
<tbody>
<tr>
<td>Abdominal sepsis study: epidemiology of etiology and outcome (AbSeS)</td>
<td>Dr Timothy Warhurst (Intensive Care)</td>
<td>Abdominal sepsis (Observational study)</td>
</tr>
<tr>
<td>A randomised blinded placebo controlled trial of hydrocortisone in critically ill patients with septic shock (ADRENAL)</td>
<td>Dr Timothy Warhurst (Intensive Care)</td>
<td>Septic shock (Phase IV trial)</td>
</tr>
<tr>
<td>ADX13036 non–interventional, retrospective tissue sample collection follow-up to Amgen Study 20050244 (Study of denosumab compared with zoledronic acid in the treatment of bone metastases in subjects with advanced cancer or multiple myeloma)</td>
<td>Dr Kieron Bigby (Oncology)</td>
<td>Lung cancer (Biomarker study)</td>
</tr>
<tr>
<td>A prospective, randomised clinical trial of two levels of anaesthetic depth on patient outcome after major surgery (BALANCED Anaesthesia)</td>
<td>Dr Sanjiv Sawhney (Anaesthetics)</td>
<td>Post-surgical care (Randomised trial)</td>
</tr>
<tr>
<td>A randomized controlled trial of rivaroxaban for the prevention of major cardiovascular events in patients with coronary or peripheral artery disease: cardiovascular outcomes for people using anticoagulation strategies (COMPASS)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>Coronary / peripheral artery disease (Phase III trial)</td>
</tr>
<tr>
<td>A phase III, double-blind, randomized placebo-controlled study to evaluate the effects of dalcetrapib on cardiovascular risk in a genetically defined population with a recent Acute Coronary Syndrome (Dal-GenE)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>Acute coronary syndrome (Phase III trial)</td>
</tr>
<tr>
<td>Reduced-dose rivaroxaban and standard-dosed rivaroxaban versus ASA in the long-term prevention of recurrent symptomatic venous thromboembolism in patients with symptomatic deep-vein thrombosis and/or pulmonary embolism (EinsteinChoice)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>VTE (Phase III trial)</td>
</tr>
<tr>
<td>A randomized, double-blind, multi-center, parallel group study to assess the efficacy and safety of PT010 relative to PT003 and PT009 on COPD exacerbations over a 52-week treatment period in subjects with moderate to very severe COPD (PEARL / ETHOS)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>COPD (Phase III trial)</td>
</tr>
<tr>
<td>Prospective, multi centre, international registry of male and female patients newly diagnosed with atrial fibrillation (GARFIELD-AF)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>Atrial fibrillation (Observational study)</td>
</tr>
<tr>
<td>Global Anticoagulant Registry in the FIELD observing treatment and outcomes in patients with treated acute Venous Thromboembolic Events in the real world (GARFIELD-VTE)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>VTE (Observational study)</td>
</tr>
<tr>
<td>A phase 3b, prospective, randomized, open-label, blind evaluator (PROBE) study evaluating the efficacy and safety of (LMW) heparin/edoxaban versus dalteparin in venous thromboembolism associated with cancer (Hokusai-VTE Cancer)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>VTE associated with cancer (Phase IV trial)</td>
</tr>
<tr>
<td>Study Description</td>
<td>Principal Investigator (Speciality)</td>
<td>Speciality</td>
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<tr>
<td>A study of atezolizumab in combination with carboplatin or cisplatin + pemetrexed compared with carboplatin or cisplatin + pemetrexed in participants who are chemotherapy-naive and have stage IV non-squamous non-small cell lung cancer (IMpower 132)</td>
<td>Dr Kieron Bigby (Oncology)</td>
<td>Lung cancer (Phase III trial)</td>
</tr>
<tr>
<td>Medically ill patient assessment of rivaroxaban versus placebo in reducing post-discharge venous thromboembolism risk (MARINER)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>VTE prevention (Phase III trial)</td>
</tr>
<tr>
<td>A randomized, double-blind, placebo-controlled, parallel-group study to evaluate the effect of alirocumab (SAR236553/REGN727) on the occurrence of cardiovascular events in patients who have recently experienced an acute coronary syndrome (ODYSSEY Outcomes)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>Acute coronary syndrome (Phase III trial)</td>
</tr>
<tr>
<td>Restrictive versus liberal fluid therapy in major abdominal surgery (RELIEF)</td>
<td>Dr Sanjiv Sawhney (Anaesthetics)</td>
<td>Abdominal surgery (Phase IV trial)</td>
</tr>
<tr>
<td>Prospective, multicentre, international registry of male and female patients newly diagnosed with atrial fibrillation and treated with rivaroxaban: Rivaroxan Evaluation in Real Life Settings (RIVER)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>Atrial fibrillation (Observational study)</td>
</tr>
<tr>
<td>A phase 2b, randomized, double-blind, placebo-controlled multi-center study evaluating antiviral effects, pharmacokinetics, safety and tolerability of GS-5806 in hospitalized adults with Respiratory Syncytial Virus (RSV) Infection</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>Respiratory Syncytial Virus infections (Phase II trial)</td>
</tr>
<tr>
<td>A prospective multicentre randomised controlled trial of early goal-directed sedation compared with standard care in mechanically ventilated patients in intensive care (SPICE III)</td>
<td>Dr Timothy Warhurst (Intensive Care)</td>
<td>Critical illness and mechanical ventilation (Phase III trial)</td>
</tr>
<tr>
<td>Phase 3 Multi-center, double-blind, randomized, placebo-controlled, parallel group evaluation of the efficacy, safety and tolerability of bococizumab (PF-04950615), in reducing the occurrence of major cardiovascular events in high risk subjects (SPIRE-1)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>Cardiovascular disease (Phase III trial)</td>
</tr>
<tr>
<td>Phase 3 multi-center, double blind, randomized, placebo controlled, parallel group evaluation of the efficacy, safety and tolerability of bococizumab (PF-04950615), in reducing the occurrence of major cardiovascular events in high risk subjects (SPIRE-2)</td>
<td>Dr Patrick Carroll (General Medicine)</td>
<td>Cardiovascular disease (Phase III trial)</td>
</tr>
<tr>
<td>A phase III, randomized, double-blind, placebo-controlled multicenter trial of bavituximab plus docetaxal versus docetaxal alone as second-line therapy in patients with stage IIIb/IV non-squamous non-small-cell lung cancer (SUNRISE)</td>
<td>Dr Kieron Bigby (Oncology)</td>
<td>Lung cancer (Phase III trial)</td>
</tr>
<tr>
<td>Gabapentin for taxane acute pain syndrome – a phase III randomised, placebo-controlled, crossover trial (TAPS)</td>
<td>Dr Gemma Harnett (Oncology)</td>
<td>Breast cancer (Phase III trial)</td>
</tr>
</tbody>
</table>

COPD, chronic obstructive pulmonary disease; VTE, venous thromboembolism.