

# 2013

## RBWH Research Report





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# Executive Director's report



**Prof. Kesh Baboolal**  
Executive Director,  
Royal Brisbane and  
Women's Hospital

The value of research to human health and patient care is without doubt. Research has created many new, life-saving procedures and treatments that have resulted in the prevention, eradication and effective management of many diseases.

A strong research culture enables continuous service improvement and the delivery of evidence-based care that leads to significant improvements in the quality and safety of our health services. With this in mind, it is my pleasure to highlight the research excellence that continues at Royal Brisbane and Women's Hospital (RBWH) and acknowledge those who have contributed to this success.

Research continues to thrive at RBWH. We are particularly proud of the multidisciplinary research with medical, nursing and allied health clinicians all contributing to a large and varied body of work. 2013 saw a continued growth in our research activity and the creation of new opportunities for research collaboration with our partners across Metro North Hospital and Health Service (MNHHS).

The success of our 22nd annual RBWH Healthcare Symposium and the Queensland Trauma Symposium once again showcased the depth of research being undertaken at the hospital and our commitment to create an environment where we can both share our knowledge and learn from others so that we can deliver the best care to our patients.

The strong partnership between RBWH and other Metro North Hospital and Health Service providers, Queensland Institute of Medical Research (QIMR), The University of Queensland (UQ) and Queensland University of Technology (QUT) continues to shape the Herston campus to achieve the shared ambition to be a centre of excellence for research. This partnership continues to drive the development of the Herston Imaging Research Facility (HIRF), which will put Queensland at the forefront of human imaging research.

I would like to thank all RBWH staff who contributed to our research success in 2013 and would particularly like to acknowledge RBWH Director of Research, Professor Lawrie Powell AC, and his team for the leadership role they have played in this achievement.

Thanks also goes to those at the forefront of our strong research partnerships. In particular Professor Frank Gannon, Director, QIMR Berghofer; Professor Nicholas Fisk, Executive Dean, Faculty of Medicine + Biomedical Sciences, UQ; Professor Ross Young, Executive Dean, Faculty of Health, QUT; Professor Leonie Callaway, Head of the Royal Brisbane Clinical School; and RBWH Foundation CEO, Peter Treseder AM and his team.

I look forward to another year of research success at RBWH as our best and brightest researchers continue to engage in work that will not only benefit patient care, but will also benefit global endeavours to improve human health.

**Professor Kesh Baboolal**  
Executive Director  
Royal Brisbane and Women's Hospital

# Research Director's Report

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**Prof. Lawrie Powell AC**  
Director, Research

2013 continued to see the impressive increase in research activities across the Herston campus with increased peer-review funding, publications and postgraduate and graduate student research as shown clearly in the accompanying graphs (see page 5).

This increase is also seen in the significant collaboration and partnerships between the various institutions on the campus – The University of Queensland (UQ) Faculty of Health Sciences, with the Health Sciences building; The University of Queensland Centre for Clinical Research (UQCCR) and Medical School; Queensland Institute of Medical Research (QIMR); and Queensland University of Technology (QUT). Their individual reports can be found within this report.

RBWH is now the largest teaching hospital for the UQ School of Medicine and for the QUT School of Nursing and the Herston site has now been officially named as the Herston Campus of The University of Queensland. The hospital's clinical programs involve the whole spectrum of medicine, nursing and allied health, including obstetrics, women's health and neonatology. This, and the significant outreach programs where staff regularly visit and service regional hospitals, makes RBWH the largest health care centre in the state, involving approximately ten per cent of Queensland Health activities and consuming approximately ten per cent of the total Queensland Health budget.

Despite this, the continued research productivity at RBWH would not be possible without the strong support of the RBWH Private Practice Trust Fund (PPTF) and RBWH Foundation, both of which contributed to the \$2 million allocated in 2013 for peer-reviewed research.

The significant collaborative ventures involving RBWH and its partner institutions in this large medical, educational and research precinct are discussed in the other reports and will not be detailed again here. They include the Herston Imaging Research Facility (HIRF), the Australian Centre for Health Services Innovation (AusHSI), the Centre for Palliative Care Research and Education (CPCRE) and the QIMR/RBWH Clinical Research Award Programme.

It is particularly pleasing to see the steady increase in research productivity in nursing and allied health at RBWH, with significant collaboration with QUT and Griffith University, including an NHMRC-funded Centre for Research Excellence (Griffith/RBWH) for nursing. Dr Marilyn Banks, Director, Nutrition and Dietetics, won several accolades from her alma mater, QUT and also the NHMRC, including Professional Research Training Fellow.

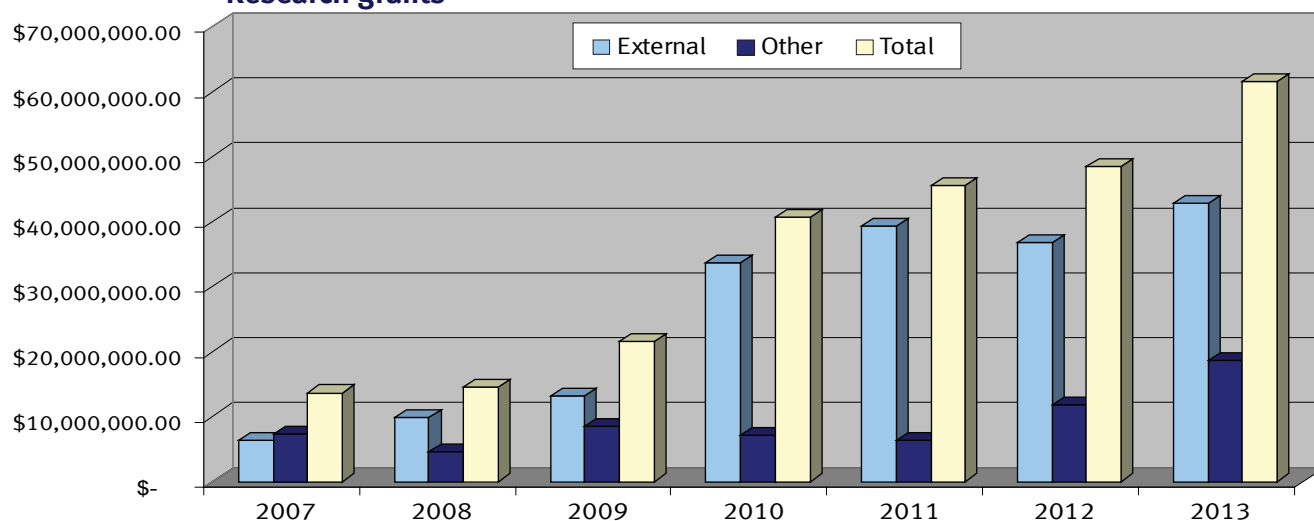
The annual RBWH Healthcare Symposium continues to be the major showcase for the hospital's clinical, educational and research activities with more than 1000 attendees and more than 100 staff and students in its planning and execution with statewide, national and international speakers. The 2013 Symposium was the 22nd annual one and was again a huge success.

Thus, RBWH continues its trend towards a full academic health centre with excellence in clinical care, teaching and research. It is widely recognised that such centres attract staff with enquiring minds, tenacity and a pursuit of excellence. Such staff themselves attract students and others of like mind. The end result is a higher quality of health care at a sustainable cost.

**Professor Lawrie Powell AC**  
Director, Research  
Royal Brisbane and Women's Hospital

# Research performance

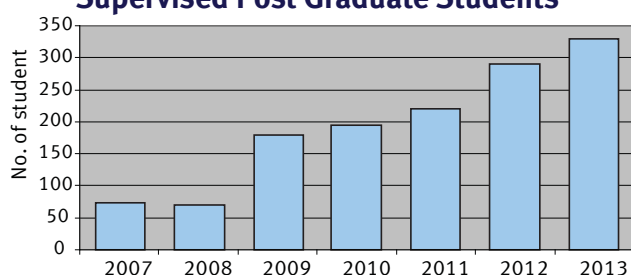
## Research grants



Year	External	Other	Total
2007	\$6,386,227.00	\$7,253,778.00	\$13,640,005.00
2008	\$9,906,443.00	\$4,559,248.00	\$14,465,691.00
2009	\$13,181,391.00	\$8,393,707.00	\$21,575,098.00
2010	\$33,560,687.00	\$7,069,210.00	\$40,629,897.00
2011	\$39,237,730.00	\$6,272,327.00	\$45,510,057.00
2012	\$36,704,749.00	\$11,774,729.00	\$48,479,478.00
2013	\$42,841,191.00	\$18,653,800.00	\$61,494,991.00

**External:** External Research Funding includes funds received from external peer reviewed funding sources (e.g. National Health and Medical Research Council (NHMRC), National Heart Foundation, Australian Government ARC Grant). Internal Research funding includes funds received from internal peer-reviewed funding sources (Queensland Health, RBWH Foundation, RBWH Private Practice Trust Fund and university Funding). Funds received from commercially-sponsored trials contract research are not included. Grants include those where an RBWH researcher is a chief or Co-Investigator

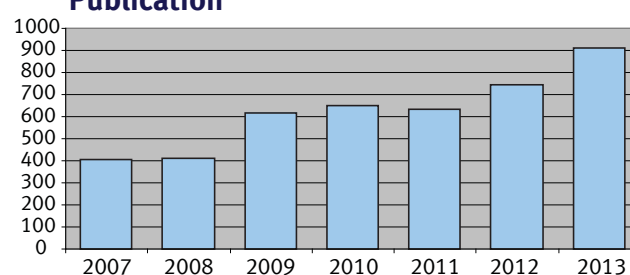
## Supervised Post Graduate Students



Year	No. of Students
2007	73
2008	70
2009	180
2010	194
2011	221
2012	291
2013	330

Higher degrees include masters and doctoral level degrees conferred or currently under supervision by a RBWH

## Publication



Year	No. of publications
2007	405
2008	413
2009	619
2010	648
2011	632
2012	743
2013	912

Publications include peer-reviewed journal articles, where an RBWH researcher is a named co-author. Books, book chapters, electronic publications, abstracts, conference proceedings and 'in press' articles are not included.

# Queensland University of Technology



**Prof. Ross Young**  
Executive Dean,  
Faculty of Health  
Queensland University  
of Technology

Queensland University of Technology (QUT) has continued its strong relationship with the Royal Brisbane and Women's Hospital (RBWH) with significant accomplishments in health-related research and training in 2013. Much of QUT's involvement is through its Faculties of Health, and Science and Engineering, and the University's state-of-the-art research facility, the Institute of Health and Biomedical Innovation (IHBI).

The strong relationship between QUT and RBWH promotes novel research, training and education into patient care and advances in health sciences. Adjunct and joint appointments bring together multidisciplinary teams to address developments in health services, nursing, cancer care, nutrition, and chronic disease. Education of future researchers and clinicians remains a strong priority for both areas.

Construction on the Herston Imaging Research Facility (HIRF) commenced in 2013. This joint venture between The University of Queensland (UQ), Metro North Hospital and Health Service through the RBWH, QUT and the QIMR Berghofer Medical Research Institute will allow earlier detection of cancer, mental disorders and neurological disease, as well as the ability to profile patients for individualised treatment according to their level of risk. The alliance will see Queensland at the forefront of human imaging research, education and clinical care.

In the two years since establishment, the Australian Centre for Health Services Innovation (AusHSI) has continued to build health services research capacity by funding academics and health professionals to work together to deliver solutions to important health services challenges. A joint partnership between the Queensland Government, the RBWH, The University of Queensland and QUT, the Centre has moved into a phase of expansion and consolidation and has fully implemented the governance and operational arrangements of the centre. Significant effort has been put into securing additional financial partners, building capacity through consultancy, and running training and skills development programs. The successful 'Stimulus Grant' funding scheme awarded funding for five projects in 2013 along with four PhD scholarships. There was an enthusiastic response to these rounds, with the Centre currently supporting 11 collaborative clinician – researcher teams through Stimulus Grants.

The \$2.5M NHMRC Centre for Research Excellence for End-of-Life Care was announced in 2013 and brings together experts from four universities to help Australians engage in much needed conversations about end of life care. Located at QUT, and funded for five years, the CRE will generate new knowledge about health service delivery at the end of life and will support people across different parts of the system. Involving researchers from the RBWH, the CRE builds on a successful research partnership around palliative care through the Centre for Palliative Care Research and Education (CPCRE), which entered its 12th year in 2013. Led by a consortium of RBWH, The Prince Charles Hospital, QUT, Karuna Hospice Services, and CheckUP, this Queensland Health initiative is improving state-wide palliative care services through education and research endeavours.

QUT is a major university partner of the RBWH with a strong focus on nursing research and training. A number of longstanding partnerships and collaborations in this area continued to grow in 2013. Researchers from the RBWH/QUT Centre for Clinical Nursing are working together to further research around evidence based practice in nursing via the Nursing Research and Development Unit, a key aspect of the Centre. The Centre also includes an Education Unit, designed to develop and support a culture of continuous learning and enquiry that values education and professional practice. Together with the activities conducted through this centre, the establishment of three QUT RBWH Nursing Professorial Units in Cancer Nursing, Renal Nursing, and Intensive Care Nursing have continued and bring about improvements in outcomes for patients at the hospital.

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Enrolment of clinical professionals in higher degree research programs at QUT remains popular with candidates enjoying the benefit of expert supervisory teams across both academic and hospital settings. In 2013, a number of QUT undergraduate students participating in the Vacation Research Experience Scheme (VRES) worked closely with researchers at the RBWH and fostered the growing link between the two organisations. Publication outputs also show productive links between academic staff, clinicians and students in the key areas of emergency medicine, health services, palliative care, nursing practice, nutrition and dietetics, and cancer. Outputs in international journals, such as the 'International Journal of Cancer' and 'European Journal of Oncology Nursing', show the worldwide significance of our joint research. New grants commenced in 2013 with Chief Investigators from QUT and RBWH in Cancer, nutrition and dietetics, aged care and pain management.

QUT is excited to continue to build strong networks with the RBWH between clinicians, specialists and researchers from the health care sector and universities. HIRF will be a major competitive advantage in the future development of clinical research collaborations.

**Professor Ross Young**

Executive Dean, Faculty of Health  
Queensland University of Technology

# The University of Queensland



**Prof. Bruce Abernethy**  
Deputy Executive Dean and  
Associate Dean (Research),  
Faculty of Health Sciences  
The University of Queensland

The relationship between The University of Queensland (UQ) and Royal Brisbane and Women's Hospital (RBWH) is a long-standing one that the university values highly.

2013 saw a continued strengthening of that relationship at a number of levels and through a number of important joint ventures and new initiatives.

Schools and dedicated research centres within the Faculty of Health Sciences act as the principal source of contact between UQ and RBWH. The Schools of Medicine, Nursing and Midwifery, and Population Health all have a strong presence on the Herston campus and staff and research students from these schools engage collaboratively in research of direct relevance to the day-to-day activities of RBWH.

Four research centres from within the School of Medicine are based at RBWH – the Burns, Trauma and Critical Care Research Centre (BTCCRC), directed by Professor Jeffrey Lipman; the Queensland Centre for Gynaecological Cancer Research, directed by Professor Andreas Obermair; the Multiple Sclerosis Research Centre, directed by Professor Michael Pender; and the Psychiatry and Clinical Neurosciences Research Centre, directed by Professor Gerard Byrne. Each of these has direct involvement from key hospital units, departments and clinicians.

Also co-located with the hospital is The University of Queensland Centre for Clinical Research (UQCCR), which is a university-level centre dedicated to undertaking clinically-relevant research in the areas of mothers, babies and lifelong health, cancer, brain and mental health, infection and immunity.

The newly established Asia Pacific Centre for Neuromodulation within UQCCR, directed by Professor Helen Chenery, has also created a range of exciting new collaborative research opportunities on the impact of deep brain stimulation techniques on a host of neurological and neuro-degenerative conditions.

Throughout 2013 there has been further recognition from both the university and hospital of the critical importance of the nexus between research, teaching and clinical service delivery that the UQ-RBWH partnership provides. High-level planning has continued, under the banner of the Mayne Health Science Alliance, to position both UQ and RBWH as key contributors to a future academic health sciences centre. Integral to such a development is enhancing the active interactions and collaborations that already exist between UQ and RBWH by way of conjoint and academic title holder staff appointments, joint research projects, joint commitments to the recruitment and support of academic clinicians and joint contributions to the development of world-class infrastructure, such as the Herston Imaging and Research Facility (also involving QIMR Berghofer and QUT).

The new initiatives launched by UQ in 2012 to further enhance clinical engagement with RBWH and other key hospitals are now well established.

The first initiative was a wide-ranging internal review of the operation of the clinical schools of the university. Stemming from this, two new posts of direct relevance to the RBWH have been established within the Faculty of Health Sciences. Professor Gerald Holtmann has been appointed to the new post of Associate Dean (Clinical) to oversee clinical teaching and research partnerships across all the health sciences disciplines at UQ and Professor Leonie Callaway has been appointed to oversee clinical activities and engagement between the university and all hospitals in a northern cluster, including RBWH.

The second initiative was the establishment of a research seed funding scheme to support the research activities of clinicians appointed as academic title holders of UQ. This co-investment scheme is to both help recognise the contributions that academic title holders make to the teaching and research activities of the university and to make available funds to help foster hospital-based clinical research. The first round of grants was awarded for work to commence in 2013.

Given the long-standing collaboration and the stimulus provided by these new initiatives and opportunities, the UQ Faculty of Health Sciences looks forward to its continued interaction with RBWH with genuine optimism and excitement.

**Professor Bruce Abernethy**  
Deputy Executive Dean and Associate Dean (Research)  
Faculty of Health Sciences  
The University of Queensland

# The University of Queensland Centre for Clinical Research



**Prof. Murray Mitchell**  
Director,  
The University of Queensland  
Centre for Clinical Research

I am very proud to report on what has been another year of success for UQCCR.

We have built upon solid foundations to firmly position the Centre as a major contributor to the vibrancy of UQ's Herston Campus, a major translational hub and clinical landmark.

And we have accomplished this with the support and energy of our many collaborations and cooperative ventures.

This year our Annual Report focuses on 'The Power of Partnerships' and highlights just some of the impact that UQCCR is achieving with partners throughout Queensland, Australia and the world.

Issues arising in Health are often multifaceted and call for a team of clinicians or scientists to put their heads together and solve. Not only from the one organisation, but also from various Centres, Institutes or Universities, and across more than one discipline.

Individually, we have the capability to make a big difference, but collectively we have the power to really transform lives. Funding from the community, government and industry sectors makes this possible. For example:

- Professors Paul Colditz and Boualem Boashash received \$1 million from the Qatar National Research Fund for their project, "Localisation of EEG Abnormalities for Improving Brain Monitoring of Newborn Babies at Risk of Brain Injury using a multichannel time-frequency signal processing approach".
- Funding of \$28 million over seven years was approved for the ARC Centre of Excellence for the Dynamics of Language – an initiative led by Professor Nicholas Evans at Australian National University, with Professor Helen Chenery, Director of the Asia-Pacific Centre for Neuromodulation (APCN) significantly involved as the project's Chief Investigator.

This will accelerate our program of research into computational language analyses, both for people with Parkinson's and Alzheimer's disease.

Disseminating the new knowledge created at UQCCR is also critical to our success. In 2013, UQCCR produced 413 publications, supported 143 Research Higher Degree and Honours students and graduated another 26 students.

We can be very proud of the calibre of our students, as demonstrated by the success of ascending research stars like Hosam Zowawi, Lisa Byrom, Carlos Salomon, and Ben Rogers. Thank you to all our students for your contribution in 2013 to UQCCR's success.

The Herston Imaging Research Facility (HIRF), on track to open in September 2014, is strengthening the ties between UQ, RBWH, QIMR Berghofer Medical Research Institute, and QUT. The HIRF will create more opportunities for UQCCR patients to become our partners in the research transforming clinical care.

We congratulate the Centre for Clinical Diagnostics (CCD) team on becoming NATA-accredited. This outcome is the culmination of two years' tremendous effort and enters the CCD onto a very short list of accredited research facilities in Australia. In fact, the CCD is the only 100 percent pure research facility accredited in Australia, affording researchers greater confidence in their results, knowing that the technical processes meet world-recognised standards.

Congratulations are also extended to UQCCR individual staff members whose efforts have been celebrated at the highest levels.

Professor Peter Silburn AM was appointed a Member of the Order of Australia in the 2013 Australia Day Honours, in recognition of his 'significant service to medicine as a neurologist, particularly in the treatment of neurodegenerative diseases.'

Postdoctoral Research Fellow Dr Bradley Partridge was named one of 11 Queensland Tall Poppy Award winners for 2013 by the Australian Institute of Policy and Science. His research focuses on the use of 'smart drugs', said to be able to enhance intelligence, memory or attention spans. Within UQCCR we formally recognised the efforts of six outstanding researchers at the UQCCR Shimadzu Awards night: Dr Hanna Sidjabat, Dr Peter Simpson, Dr Adrian Carter, Dr Nadeeka Dissanayaka, Stephanie Miller and Hassendrini Peiris.

Finally, I would like to acknowledge and thank personally the entire UQCCR staff – research, clinical, academic and professional – for their many ‘quiet’ achievements and their unswerving support during a tough year of significant changes for UQ, including UQCCR.

Everyone has shown deep commitment by handling the challenges and additional workload with the same quality and dedication as previous years.

**Professor Murray Mitchell**

Director

The University of Queensland Centre  
for Clinical Research

# QIMR Berghofer Medical Research Institute

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**Prof. Frank Gannon**  
Director and Chief Executive  
Officer, QIMR Berghofer  
Medical Research Institute

As a Medical research Institute sharing the same campus at Herston, it is natural that QIMR Berghofer and the RBWH would have overlapping interests and activities. A start point for this is the fact that key members of the QIMR Berghofer Faculty are active clinicians at the RBWH. Examples include Professor James McCarthy, Coordinator of the Infectious Diseases Program; Professor Michael Breakspear, Coordinator of the Mental Health/Complex Disorders Program; and Professor Geoff Hill, Coordinator of the Immunology Department. A particularly interesting development has been the recent appointment of Geoff Hill as the Director of Research, Cancer Care Services at the RBWH. This will ensure that all of the possibilities in this particular area will be known to both partners, and more collaboration will come from it.

2013 was a very significant year in the further growth of the linkages between QIMR Berghofer and Metro North/RBWH. Progress towards the establishment of the ambitious plan to establish a unique multi-modality research imaging building, the Herston Imaging Research Facility (joint operation involving Metro North/RBWH, UQ, QUT and QIMR Berghofer), has continued to move forward. The facility is now visible to all with construction almost completed and the equipment due to be placed within HIRF in mid 2014. The fact that the four partners are sharing resources for this development shows the degree to which our collaborative base has been strengthened.

Our mutual engagement in the development of an Integrated Health Science partnership has been reinforced during the year. Although the discussions to date have been centred to the Herston Campus, the longer term plan is that a Brisbane wide or South East Queensland integrated health research alliance will be formed. Significant work is required in order to achieve this construct of partnerships, but the benefit of integrating research and clinical activities and training is well worth the effort.

These are prospects for the near future but a significant development in 2013 has been the continuation of the Clinical Research Program linking QIMR Berghofer and the RBWH clinicians. Both parties contribute to supporting research involving a clinician at RBWH and a researcher at QIMR Berghofer. At QIMR Berghofer we are very committed to this concept and hope that it will grow in importance and impact in the years to come. Through it we can identify new opportunities to work together and in the process mould some of the research activities at QIMR Berghofer such that they match the needs defined by clinicians.

All of the activities point to many aspects of shared engagement. However a new initiative launched in 2014 moves this to a different scale. QIMR Berghofer has had a very successful Ride to Conquer Cancer event (Rio Tinto Ride to Conquer Cancer) since 2011. A related fundraising event shifts the emphasis from cycling to walking. QIMR Berghofer decided to share the benefits of the Weekend to End Women's Cancer Walk with the RBWH and the first of these events was held in October 2013. Approximately 1,350 participated and the amazing sum of over \$3.5M was raised which was shared equally between the two partners. The funds from the walk have now been allocated to research projects and a particularly satisfying component was the decision to support joint projects between RBWH and QIMR Berghofer. The practical benefits arising from the walk are obvious, but the equally important message is that shows that the two organisations are working well together.

As shown by these activities, it is clear that QIMR Berghofer is very aware of the benefits of co-location at the Herston campus site with the RBWH. We hope and anticipate that there will be more clinical research at the hospital and that our possibilities for joint activities will grow and become more comprehensive. The above shows that there are many opportunities provided for this to happen.

**Professor Frank Gannon**  
Director and Chief Executive Officer  
Queensland Institute of Medical Research

# RBWH Foundation



**Peter Treseder AM**  
Chief Executive Officer,  
RBWH Foundation



RBWH Foundation's mission, as the charity arm of Royal Brisbane and Women's Hospital, is to actively engage with the community to raise money for research, equipment, training and various other needs at the hospital. Although the Foundation supports a variety of initiatives that range in complexity, clinical research has always been the primary focus of the charity and its fundraising activities.

There are countless new and ongoing clinical research projects being conducted at the hospital that will improve outcomes for not only patients at RBWH but the health system at large. Making the fundamental discoveries that lead to these medical breakthroughs can be a long and costly endeavour with many unforeseen impediments, commonly caused by the unpredictable nature of research funding. RBWH Foundation is committed to assisting the researchers at RBWH.

Despite economic pressures, the Foundation achieved a record income of \$9.25m for the year ended 30 June 2013 (a 33.5% increase on prior year). This growth enables the Foundation to invest more into clinical research and other life-saving initiatives. It also creates an organisation which will be able to make a perpetual contribution to the people of Queensland and beyond.

Over \$1.8 million in research project funding and a further \$609,000 in scholarships were distributed at the annual Research Grant Awards program, the Foundation's main conduit of allocating funding. These grants are awarded based on merit by the Foundation's Research Advisory Committee and are designed to enable projects to get off the ground and establish a basis from which the researchers apply for more substantial grants from larger external bodies. These grants include Research Initiative Grants, Nursing and Allied Health Research Grants and Patricia Dukes Fellowship Grants.

RBWH Foundation also provided funding to a number of research centres based at RBWH for ongoing projects. Some of the projects which the Foundation funded in 2012/13 include:

- Burns, Trauma and Critical Care Research Centre – Through corporate sponsorship, RBWH Foundation enabled the centre to continue its research work in areas such as the application of antibiotic therapy in critically ill patients and improving the psychological health of burns patients.
- Neurology Research Centre – RBWH Foundation provides ongoing funding for research into determining reliable markers for the progression of Motor Neurone Disease. It is hoped that these developments can be used in international clinical treatment trials. Funding was also raised during the year for Stroke research, particularly investigations into emergency treatment and secondary prevention.
- Perinatal Research Centre – In 2013, RBWH Foundation completed funding a five-year Brain Research Advances in Newborns (BRAIN) Project that focused on understanding and detecting brain injuries in newborns while determining new methodologies for treating these injuries. The Foundation also supported the commencement of the BRAINwave Project which is investigating the development of a baby's brain and how it can be rehabilitated when necessary to avoid permanent injury.
- Queensland Motion Analysis Centre – RBWH Foundation secured a four-year sponsorship deal to fund the centre and its work in identifying and improving medical outcomes for burns patients, premature babies and patients with neurological and movement disorders

Many of the hospital's main research centre/groups have now established tied funds with the Foundation to house money received through sponsorship, special donations, bequests and grants. These tied funds allow researchers easy access to their funding as and when required.

As the request for research funding continues to increase, so does the Foundation's commitment to raising money to further advance medical treatments, prevention and methods of detection for many of the diseases and conditions plaguing our society today.

We would like to thank the many individuals, businesses and community groups whose financial contributions to RBWH Foundation have made the funding of many of these research projects possible.

**Peter Treseder AM**  
Chief Executive Officer RBWH Foundation

# Herston Health Services Library



**Nicky Foxlee**

Manager,  
Herston Health Sciences  
Library and UQ Dentistry  
Library The University of  
Queensland

The Herston Health Sciences Library provides resources and services to support the research, clinical, teaching and learning needs of hospital staff located on the Herston site, and staff and students of The University of Queensland (UQ).

Librarians in the Research and Information Service (RIS) at the Herston Health Sciences Library provide expert advice to Hospital staff from across hospital departments and units. They support staff conducting research through all stages of their research cycle and can assist with:

- Literature searches
- Individual research consultations
- Metrics for research grant applications and measuring research impact
- Advanced information literacy training and department in-service sessions
- Developing collections for research and teaching needs
- Staying up-to-date with the literature in a discipline
- Endnote (referencing software)

During the past year, RIS Librarians conducted approximately 15 individual research consultations each week and undertook over 113 literature searches for Hospital clients requiring evidence-based information to support research, patient care, clinical guideline and care pathway development, and audit or policy documentation. The Librarians regularly contribute their expertise to systematic review and clinical guideline groups and provide metrics assistance for grant applications.

Royal Brisbane and Women's Hospital staff have access to world-class research and scholarship through the print resources provided by the UQ Library. The UQ Library has one of the largest academic collections in Australia with over 2 million volumes. The Library provides an exceptional print collection of health and medical books, and journals. In 2013, the Herston Collection Development Committee – comprising representatives from the Hospitals and the University – purchased 941 new items; 13,336 items were borrowed from the collection; and 90,694 items were re-shelved after being returned to, or used in the library.

Increasingly, researchers seek access to scholarly information in electronic format. The Library provides an extensive and increasing range of electronic journals, books and other digital material. Clinicians with UQ academic title have full access to UQ Library electronic resources, while other Hospital staff members have walk-in access to a wide range of electronic books, journals and databases. Hospital staff members also have access to Queensland Health's Clinician's Knowledge Network (CKN), a gateway to electronic books, journals, full-text databases and other resources.

Ensuring Hospital staff can find and use the Library's research collections and tools is a priority for the Herston Health Sciences Library. RIS Librarians conduct regular advanced information literacy training to support the research needs of Hospital staff. Training includes searching the specialized databases on CKN and on the UQ Library system to find best evidence, expert searching for systematic reviews, managing references using Endnote and training on Microsoft Word and Excel. During the past year, 2,251 library clients attended 165 information literacy classes or talks held in the Herston Health Sciences Library eZone or in a Hospital Department. In addition, Library staff responded to a total of 9,147 information enquiries made in person, by email or on the telephone.

The document delivery service enables the Library to meet the research and information needs of all of its clients. If an item – whether it is print or electronic – is unavailable from the collections of the UQ Library or CKN, it is obtained from another library. In 2013, the Herston Health Sciences Library received 3,442 document delivery requests from across our client groups.

The Royal Brisbane and Women's Hospital (RBWH), the Royal Children's Hospital (RCH) and UQ Library jointly fund the Herston Health Sciences Library. The UQ Library manages the Herston Health Sciences Library. In 2013, 62,837 people visited the Herston Health Sciences Library and 11,753 clients used the after-hours eZone.

**Nicky Foxlee**

Manager  
Herston Health Sciences Library  
And UQ Dentistry Library  
The University of Queensland

# Human Research Ethics Committee

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**Conor Brophy**  
Chair,  
Human Research Ethics  
Committee, Royal Brisbane  
and Women's Hospital

The nature of the research studies considered by the Royal Brisbane & Women's Hospital Human Research Ethics Committee (RBWH HREC) has evolved over recent years since the 2007 revision of the NHMRC guidance, The National Statement on Ethical Conduct in Human Research, and the introduction of the National Approach to single ethical review of multicentre research. The changes seen appear to be related, in part, to the extension of human research ethical review beyond that of interventional studies of drugs or invasive procedures to social science studies exploring human experiences, the interrogation of large data sets containing health and other sensitive information, and to investigations of health service delivery. This mirrors the recognition of the importance of qualitative research methodologies, of research measures other than traditional biochemical or physiological parameters, and of providing evidence to effect change in models of service delivery.

As the type of research evolves, so must the capacity of the HREC and advisory bodies in order that research is appropriately reviewed. The RBWH HREC has responded to this in terms of the clinical and research expertise accessed beyond the HREC membership from, not only the Scientific sub-Committee, but also an increasing pool of expert reviewers providing targeted scientific input.

During 2013, the RBWH HREC membership included 28 volunteers contributing to the crucial categories of lay members; those with knowledge and current experience in professional care; those with research experience relevant to the research reviewed; lawyers; and pastoral carers. The HREC provided ethical review for organisations within the Herston campus, and also reviewed studies to be conducted at multiple external sites. The HREC considered a total of 235 applications, of which 120 studies were to be conducted at more than one site, and for which the HREC provided single ethical review under the NHMRC National Approach. The majority, 112 studies, involved multiple sites in Queensland and the other 8 included sites in other states. Eight studies did not involve RBWH or a campus partner. The median time to final decision for new studies reviewed by the full Committee was 26 days, well within the proposed national standard of 60 days.

A number of projects, 51, were considered to be exempt from full HREC review, either because they constituted negligible risk and involved only review of existing collections of non-identifiable data, or they were audits evaluating standards of care. The median review period for these projects was four days.

As has been the practice in previous years, HREC members also met with researchers between scheduled Committee meetings to discuss contentious issues raised during review. Because of the numbers of studies considered at each HREC meeting, which makes attendance and presentation by researchers for each submission impractical, it is also considered to be the most efficient method of focusing attention where clarification of study methodologies or processes is required or major ethical questions have become apparent. These ad hoc, additional HREC sub-group meetings continue to be an effective way of resolving concerns, and are appreciated by both Committee members and researchers. They attest to the commitment of HREC members to the promotion of high quality research across campus and within the Metro North Hospital and Health Service as displayed in this research report.

**Conor Brophy**  
Chair, Human Research Ethics Committee  
Royal Brisbane and Women's Hospital

# Allied Health Professions



**Peter Buttrum**  
Acting Director,  
Allied Health Professions

## Overview

On behalf of Judith Catherwood who was the Executive Director, Allied Health Professions, in 2013, we are pleased to provide this research overview. The Allied Health Professions (AHP) service line comprises the professions of Audiology, Nutrition and Dietetics, Occupational Therapy, Orthotics and Prosthetics, Physiotherapy, Psychology, Rehabilitation Engineering, Social Work and Speech Pathology. The professions support RBWH clinical services lines within multiprofessional teams and aim to provide high quality and evidence based services across the continuum of care.

Aligned to the RBWH vision of being a world class academic health centre, the Allied Health professions have a strong commitment to high quality research. This research investment, along with ongoing education, underpins the evidence base, effectiveness, and efficiency of our service delivery, and the outcomes are aimed at transforming clinical service delivery within rapidly changing healthcare environments.

In 2013, Allied Health have continued their enormous recent success in research outcomes. AHP staff were successful in achieving over 50 publications in high quality peer reviewed journals, and several million dollars in external grant funding. Additionally, staff presented at over 40 national and international conferences.

We are extremely proud of our ongoing commitment to high quality research. We also appreciate and thank the contribution of our several University partners, without whom this level of research success would not be possible, and look forward to their ongoing collaboration. Finally, and most importantly, sincere thanks and congratulations are extended to all the Allied Health staff for their dedicated efforts and achievements in 2013.

## Key departments

- » Department of Nutrition and Dietetics
- » Department of Occupational Therapy
- » Department of Orthotics and Prosthetics
- » Department of Physiotherapy
- » Department of Psychology
- » Rehabilitation Engineering Centre
- » Department of Social Work and psychology
- » Department of Speech Pathology and Audiology

## Executive and directing staff

**Peter Buttrum**  
Acting Director, Allied Health Professions

**Dr Marilyn Banks**  
Director, Nutrition and Dietetics

**Susan Laracy**  
Director, Occupational Therapy

**Mark Holian**  
Director, Orthotics and Prosthetics

**Mark Cruickshank**  
Acting Director, Physiotherapy

**Peter Slattery**  
Director, Rehabilitation Engineering

**Pamela McNeil**  
Acting Director, Social Work and Psychology Services

**Lynell Bassett**  
Director, Speech Pathology and Audiology

**Michele Clark**  
Professor, Allied Health

# Department of Nutrition and Dietetics

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**Dr Marilyn Banks**  
Director,  
Nutrition and Dietetics

## Overview

The Department of Nutrition and Dietetics provides a comprehensive clinical service to inpatients and outpatients of the RBWH. Services to inpatients include nutritional assessment, intervention and support, discharge planning for outpatient follow-up and community services. Outpatient counselling services are provided to groups and individuals in clinics within the Department and as part of multidisciplinary teams. A home enteral nutrition service is also provided. There is commitment to provide ongoing education to hospital staff, education and support for student dietitians, and support and advice to dietitians and other health professionals in regional areas.

Dietetic Assistants in Nutrition Support Services undertake nutrition screening, assist patients with menu choices, organise specialised nutrition products, and monitor nutritional intakes. They also update information on patients' diet orders to ensure the correct menu selections for patients while they are in hospital.

The Department has a commitment to research. Major interests are divided into three areas: nutrition support (ICU, burns, stroke, malnutrition, pressure ulcers, cancer, bone marrow transplant, tube feeding and food service); chronic disease management (diabetes, gestational diabetes and maternity, obesity management, gastroenterology, renal disease and mental health); and education (student placement and collaborative learning). Research is not confined to these areas and depends on the interests of staff and collaborative groups.

The Department has developed strong local research collaborations with Internal Medicine Services, the Burns Trauma and Critical Care Research Centre, Cancer Care Services, Department of Gastroenterology and Hepatology and Nursing and Midwifery Services.

State wide and national networks include Murdoch Children's Research Institute; the Parenting Research Centre; Australian & New Zealand Burns Dietitians Interest Group; Australian and New Zealand Burns Association (ANZBA); Joanna Briggs Institute; Australasian Society of Parental and Enteral Nutrition (AuSPEN); Australian and New Zealand Intensive Care Research Centre (ANZIC-RC); as well as Nursing Research Centre of Excellence, and collaborations with other hospitals, including The Princess Alexandra, The Prince Charles, The Royal Children's and The Wesley.

Academic partners are Queensland University of Technology (QUT); the Institute of Health and Biomedical Innovation (IHBI) at QUT; The University of Queensland (UQ); Griffith University; The University of Queensland Centre for Clinical Research (UQCCR) and Queensland Institute of Medical Research (QIMR).

## Research staff

Name	Qualifications	Position	Interests/specialities
Sarah Andersen	BHlthSci NutrDiet	Senior Dietitian/ Nutritionist	cancer care, nutrition support, malnutrition
Dr Marilyn Banks	PhD, BScGradDipEd, GradDipNutrDiet, MHlthSci	Director, Nutrition & Dietetics	malnutrition, pressure ulcers, elderly, critical care, food services
Claire Blake	BHlthSci NutrDiet	Dietitian/ Nutritionist	nutrition support
Teresa Brown	BSc Nutr(Hons) GradDipNutrDiet	Team Leader, Dietitian/ Nutritionist	cancer care, gastrostomy
Dr Susan de Jersey	BHlthSci NutrDiet(Hons) BAppSci HMS(Hons) MPH PhD	Senior Dietitian/ Nutritionist	maternal health, maternal obesity, infant feeding, gestational diabetes
Kathleen Dwyer	BHlthSci NutrDiet	Dietitian/ Nutritionist	cancer care, pressure ulcers
Amanda Lowe	BHlthSci NutrDiet(Hons)	Dietitian/ Nutritionist	cancer care, nutrition support
Belinda Mason	BAppSci HMS BHlthSciNutrDiet	Senior Dietitian/ Nutritionist	cancer care, renal and gestational diabetes
Emma Osland	BHSc (Nutr and Diet) (Hons) MPhil	Team Leader, Dietitian/ Nutritionist	nutrition support, surgical nutrition
Dr Lynda Ross	PhD(BiomedSci), BNutrDiet(Hons)	Research Coordinator	chronic disease, rare diseases
Dr Adrienne Young	BHlthSci NutrDiet(Hons) PhD	Dietitian/Nutritionist	malnutrition, elderly

## Supervised post-graduate students

Name	Current studies	Research topic
Agarwal, E.	PhD (malnutrition research) The University of Queensland	The Australasian Nutrition Care Day Survey: an investigation into the relationship between nutritional factors and clinical outcomes at three months in acute care patients
Al Balushi, R.	PhD (trauma research) The University of Queensland	Effect of intravenous GLutamine supplementation IN Trauma patients receiving enteral nutrition (GLINT Study): a prospective, blinded, randomised, placebo-controlled clinical trial
Brown, T.	PhD (cancer care research) The University of Queensland	Does early commencement of nutrition support in patients with head and neck cancer improve outcomes?
de Jersey, S.	PhD (maternity research) Queensland University of Technology	Are we missing opportunities: understanding health behaviours associated with overweight in pregnancy: New Beginnings Healthy Mothers and Babies Study
Young, A.	PhD (malnutrition research) Queensland University of Technology	Encouraging Assisting and Time to Eat: Comparison of mealtime assistance interventions in elderly medical inpatients.
Roberts, S.	PhD (pressure ulcer research) Griffith University	Nutrition in prevention of pressure ulcers in hospitalised patients

## Awards and achievements

Award	Event	Recipient
QuARRIE for Preadmission Staff – Multidisciplines (Patient Satisfaction – Priority One)	RBWH QuARRIE awards	Christine Chapman-Kiddell, Paula MacDermott, Amy Scott and Siobhan Wallin
QUT Outstanding Alumni Award - Faculty of Health	QUT Outstanding Alumni Awards Breakfast	Merrilyn Banks
QUT Alumni Special Excellence Award for services to the community	QUT Outstanding Alumni Awards Breakfast	Merrilyn Banks
<b>Conference Awards</b>		
Highly Commended DAA Research in Practice award “Updated evidence-based practice guidelines for the nutritional management of patients receiving radiation therapy and/or chemotherapy”	30th Dietitian’s Association of Australia National conference in Canberra ACT	Teresa Brown and Jan Hill (co-authors)
DAA Award of Merit at the National Level, for making a significant contribution to the dietetic profession.	30th Dietitian’s Association of Australia National conference in Canberra ACT	Philip Juffs

## Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Banks, M.	Efficacy and cost effectiveness of nutrition in healing pressure ulcers	NHMRC Health Professional Research Training Fellow (part time)	\$147,446	2012-2015
Blake, C., Banks, M., Lowe, A., Farrell, A., Collins, P., Hannan-Jones M.	An observation of patient nutrition and fluid intake when on thickened fluids	AuSPEN small project grant	\$9,438	2013
Young, A., Mudge, A., Banks, M., Isenring, E., Ross, L., Rogers, L., Moore, R.	Evaluation of an innovative interdisciplinary post-hospital nutrition outreach service for older medical patients.	AuSPEN small project grant	\$76,000	2013
Teresa Brown	Prophylactic nutrition support in high risk patients prior to treatment for head and neck cancer	RBWH Scholarship	\$32,500	2013

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## Publications

### Peer-reviewed journal articles

- Agarwal E, Ferguson M, Banks M, Batterham M, Bauer J, Capra S, Isenring E. Malnutrition and poor food intake are associated with prolonged hospital stay, frequent readmissions, and greater in-hospital mortality: Results from the Nutrition Care Day Survey 2010. *Clinical Nutrition*. 2013; 32:737-745.
- Agarwal E, Ferguson M, Banks M, Batterham M, Bauer J, Capra S, Isenring E. Malnutrition and decreased food intake are associated with prolonged length of hospital stay, frequent hospital readmissions and greater in-hospital mortality: Results from the Australasian Nutrition Care Day Survey 2010. *Clinical Nutrition*. 2012 Dec 5;doi:10.1016/j.clnu.2012. 11.021. [Epub ahead of print]
- Agarwal E, Ferguson M, Banks M, Bauer J, Capra S, Isenring L. An exploratory study to evaluate whether medical nutrition therapy can improve dietary intake in hospital patients who eat poorly. *Journal of Human Nutrition and Dietetics*. 2013; 26(6): 538-43.
- Al Balushi R, Paratz J, Cohen J, Banks M. The clinical role of glutamine supplementation in patients with multiple trauma: a narrative review. *Anaesthesia and Intensive Care*. 2013; 41(1):24-34.
- Banks M, Graves N, Bauer J, Ash S. Cost effectiveness of nutrition support in the prevention of pressure ulcer in hospitals. *European Journal of Clinical Nutrition*. 2013; 67(1):2013 42-46.
- Brown T, Spurgin A, Ross L, Tripcony L, Keller J, Hughes B, Hodge R, Dickie G, Walker Q, Banks M, Crombie J. Validated swallowing and nutrition guidelines for patients with head and neck cancer: Identification of high risk patients for proactive gastrostomy. *Head and Neck*. 2012 Sep 13;doi:10.1002/hed.23146. [Epub ahead of print].
- Brown T, Findlay M, von Dincklage J, Davidson W, Hill J, Isenring E, Talwar B, Bell K, Kiss N, Kurmis R, Loeliger J, Sandison A, Taylor K, Bauer J. Using a wiki platform to promote guidelines internationally and maintain their currency: Evidence based guidelines for the nutritional management of adult patients with head and neck cancer. *Journal of Human Nutrition and Dietetics*. 2013; 26(2):182-90.
- de Jersey SJ, Nicholson JM, Callaway LK, Daniels L. An observational study of nutrition and physical activity behaviours, knowledge and advice in pregnancy. *BMC Pregnancy and Childbirth*. 2013; 13:115.
- de Jersey SJ. Medical Myth- Eating for two during pregnancy, in *The Explainer*. CSIRO Publishing, Collingwood, Australia 2013.
- Isenring E, Zabel R, Bannister M, Brown T, Findlay M, Kiss N, Jenelle Loeliger J, Cara Burgess, Camilleri B, Davidson W, Hill J, Bauer J. Updated evidence based practice guidelines for the nutritional management of patients receiving radiation therapy and/or chemotherapy. *Nutrition and Dietetics*. 2013; 70(4): 312–324.
- Mason BJ, Ross L, Gill E, Healy H, Juffs P, Kark A. An Australian Scored Sodium Questionnaire: Development and validation in Chronic Kidney Disease. *Journal of Renal Nutrition*. Accepted 2013; DOI:10.1053/j.jrn.2013.10.004.
- Osland E, Hossain MB, Khan S, Memon MA. Effect of timing of pharmaconutrition (immunonutrition) administration on outcomes of elective surgery for gastrointestinal malignancies: a systematic review and meta-analysis. *Journal of Parenteral and Enteral Nutrition*. Online 2013; DOI:10.1177/0148607112474825.
- Roberts S, Banks M. Nutritional intakes of patients at risk of pressure ulcers in the clinical setting. *Nutrition*. 2013; DOI:10.1016/j.nut.2013.11.019.
- Shirtcliff J, de Jersey SJ, Anderson J. Nutrition for the breastfeeding woman. *Nutrition & Dietetics*. 2013; 70:255–259.
- Young A, Kidston S, Banks MD, Mudge AM, Isenring EA. Malnutrition screening tools: comparison against two validated nutrition assessment methods in older medical inpatients. *Nutrition*. 2013; 29(1):101-106.

# Department of Occupational Therapy



**Susan Laracy**  
Director,  
Occupational Therapy

## Overview

RBWH Occupational Therapy Services aims to undertake clinical research in the areas of practice provided by the RBWH. The Crammond Fellow in Pain Management (a 3 year research fellowship) has been part of the establishment of RBWH OT for over 12 years and has supported 2 PHD candidates. Further research capacity within the profession requires resourcing and is included in the current workforce training and development plan.

## Research staff

Name	Qualifications	Position	Interests/specialities
Nicole Andrews	BOccThy (Hon 1)	Senior Occupational Therapist	Chronic pain, activity patterns, disability and daily function
Tennille Rowland	MPhil, BOccThy, Grad Cert (Stroke)	Advanced Occupational Therapist	stroke
Karl Bagraith	BOccThy (Hon 1)	Senior Occupational Therapist	Pain management

## Awards and achievements

Award	Event	Recipient
Occupational therapy Australia post-graduate research award	-	Andrews, N
Australian Pain Society PhD student travel award	-	Andrews, N

## Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Andrews, N.	Approach to activity and determinants of daily function in patients with chronic pain: a momentary within-persons perspective	RBWH Post-graduate Scholarship (awarded in 2012)	\$65,000	2013
Bagraith, K.S., Strong, J., McPhail, S.M., Sussex, R	Allied Health PhD Write-up Scholarship	Allied Health Professions of Queensland	\$30,975	2012-2013

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## Publications

Bagraith KS, Strong J. Rehabilitation and the World Health Organization's International Classification of Functioning, Disability and Health. In: Strong J, Unrah A, editors. *Pain: A Textbook for Health Professionals*. 2nd ed. Toronto: Churchill Livingstone; 2013.

Chien CW, Bagraith KS, Khan A, Deen M, Strong J. Comparative responsiveness of verbal and numerical rating scales to measure pain intensity in patients with chronic pain. *The journal of pain*. 2013; 14:1653-62.

Schleiger E, Sheikh N, Rowland T, Wong A, Read S, Finnigan S. Prognosticating Post-Stroke Cognitive Deficits from Pre-Discharge EEG. In: *Frontiers in Human Neuroscience ACNS-2013 Australasian Cognitive Neuroscience Society Conference*. 2013; doi: 10.3389/conf.fnhum.2013.212.00128.

Schleiger E, Sheikh N, Rowland T, Wong A, Read S, Finnigan S. Pre-Discharge EEG markers are informative of post-stroke cognitive outcomes. Abstracts from the 24th Annual Scientific Meeting of the Stroke Society of Australasia, Darwin. *International Journal of Stroke*. 2013; 8(Suppl.1);21.

Schleiger E, Sheikh N, Rowland T, Wong A, Read S, Finnigan S. Prognosticating post-stroke cognitive deficits from pre-discharge EEG. Abstracts from Smart Strokes 2013 (9th Australasian Nursing & Allied Health Conference), Brisbane. *International Journal of Stroke*. 2013; 8(Suppl 2);31.

# Department of Physiotherapy

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**Mark Cruickshank**  
Acting Director,  
Physiotherapy

## Overview

The RBWH Physiotherapy Department is a large dynamic team that provides clinical services across a wide variety of quaternary, tertiary and secondary services, including medicine, surgery, orthopaedics, critical care, rehabilitation, trauma services, burns, oncology, obstetrics, gynaecology and neonatology.

The Department has a strong research culture across a number of clinical fields. Research within the department has been underpinned by practical clinical research questions with a focus on the direct translation of research findings to improve patient and health service outcomes. Research is well integrated within the Department and is driven by collaboration between designated research fellows and clinical staff members with specific interest in their fields of professional practice and expertise.

University partnerships are an essential foundation in successful research programs and the Physiotherapy Department has two University co-joint positions. Dr Shaun O'Leary has continued as the Principal Research Fellow in the joint research position with the University of Queensland, whilst Professor Alice Jones has continued in the joint research position with Griffith University's School of Physiotherapy and Exercise Science. The Griffith University joint research position was re-negotiated in 2013 for another 3 years, with Dr Jennifer Paratz being appointed full-time to that position in late 2013, commencing in early 2014. Professor Alice Jones will continue her partnership with the Department in 2014 with a part time appointment at Griffith University.

The Department has enjoyed a hugely successful year in 2013. Physiotherapy staff were successful in obtaining over \$2.5M in research grants and achieving 29 peer reviewed publications. These grants included a significant NHMRC Project Grant by Dr Shaun O'Leary and a Queensland Health Innovations Grant by Maree Raymer. Our researchers have also published with a diverse variety of multi-professional nationally and international collaborators.

We are very proud of our ongoing commitment to high quality research, and sincere thanks are extended to all staff within the Department for their efforts and achievements in 2013.

## Research staff

Name	Qualifications	Position	Interests/specialities
Julie Adsett	BPhy (Hons)	Advanced Clinical Physiotherapist	Heart failure, chronic disease management
Peter Buttrum	BPhy	Director of Physiotherapy	Clinical education, orthopaedics
Praline Choolun	BSc (Phy), Grad Dip (Geriatrics)	Physiotherapist Team Leader (GARU)	Neurological physiotherapy
Professor Alice Jones	PhD, Certificate Physiotherapy, MPhil, DipEd, Msc, FACP.	Principal Research Fellow	Acute care physiotherapy, pain management
Dr Shaun O'Leary	BPhy (Hons), MPhy (Manip), PhD, FACP	Principal Research Fellow	Musculoskeletal conditions
Anita Plaza	BPhy (Hons)	Team Leader, Advanced Clinician, Burns	Burns
Madonna Puglisi	BPhy (Hons)	Senior Physiotherapist	Burns
Hildegard Reul-Hirche	DipPhy	Senior Consultant Physiotherapist - Lymphoedema	Lymphoedema, Breast cancer rehabilitation
Dr Peter Thomas	BPhy (Hons), PhD, FACP	Consultant Physiotherapist	Critical care, cardio-respiratory
Glen Volker	BPhy	Acting Team Leader, Outpatients	Musculoskeletal Conditions
Peter Window	BPhy (Hons)	Physiotherapist	Musculoskeletal Conditions
Maree Raymer	BPhy (Hons), MPhySt (Manip); MHM	Assistant Program Manager, Statewide N/OPSC & MDS	Service models for patients with MSK conditions, including economic impact
Dr Jennifer Paratz	MPhy, PhD, FACP, Grad Cert Ed (Med. Sc)	Principal Research Fellow	Intensive care, Burns
Mark Cruickshank	BPhy, MHSM	Deputy Director Physiotherapy	General medicine

## Supervised post-graduate students

Name	Current studies	Research topic
Julie Adsett	PhD	Safety, efficacy and acceptability of aquatic exercise for patients with stable heart failure
<b>Supervisor – Shaun O'Leary</b>		
Peter Window	MPhil (Physiotherapy) UQ	Low back pain and gluteal dysfunction
Yaheli Bet-Or	MPhil (Physiotherapy) UQ	Neck Pain and the scapula
Elise Gane	PhD (Physiotherapy) UQ	Neck Dissection
Deokhoon Jun	PhD (Physiotherapy) UQ	Risk factors for neck pain in office workers
Xiaoqi Chen	PhD (Physiotherapy) UQ	Exercise for neck pain in office workers
Khalid Jaber	MPhil (Physiotherapy) UQ	Predictive factors in Total Knee Arthroplasty

## Supervised post-graduate students

Name	Current studies	Research topic
<b>Supervisor - Hildegard Reul - Hirche</b>		
Jennifer Sanderson	MPhil (Physiotherapy) Griffith, Gold Coast	The Development of a New Assessment Tool to Describe Lymphoedematous Tissue Characteristics by correlating Ultrasound findings to Standardized Nomenclature
<b>Supervisor – Dr Jenny Paratz</b>		
James Walsh	PhD – Conferred December, 2013	Predictors of success in pulmonary rehabilitation
Geetha Kayambu	PhD	Early rehabilitation in sepsis
Bernadette Bissett	PhD	Respiratory muscle function in intensive care
Michelle Spermon	MPhil	Compression therapy for donor sites in burns
Dr Judith Bellapart	PhD	Optimal haemoglobin in head injury
Dr Wim Ronsman	MPhil	Transfer of trauma patients
Courtney Clark	MPhil	Mobilization in ICU
Orlando Flores	PhD	"Metabolism in burns"

## Awards and achievements

Award	Event	Recipient
Best 5 x 5 paper	Australian Physiotherapy Association National Conference (MPA)	Raymer, M.
Collaboration and Exchange Award	Heart Foundation	Julie Adsett
Henirietta Law Bursary for best allied health presentation	ANZBA ASM 2013	Madonna Puglisi
Best Free paper in Educators section	APA National Conference, Melbourne	Peter Buttrum

## Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
T Comans, M Raymer, S O'Leary, D Smith.	Are physiotherapy led screening clinics cost effective in improving orthopaedic outpatient services?	AusHSI Stimulus Grant.	\$78,450	2013-2014
V Johnston, L Straker, G Sjogaard, Comans T, S O'Leary, M Melloh	A workplace-based exercise intervention to prevent and reduce the economic and personal burden of non-specific neck pain in the office personnel	NHMRC Project Grant (APP1042508)	\$660,834	2013-2017

## Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Muller M, <b>Paratz J</b> , Redman B, Harrison J, Dulhunty J	Extension of burns prevention media campaign	RBWH Private Practice Trust Fund	\$55,000	2013-2015
Fraser J, Dhanani J, Lipman J, Reade M, Roberts J, <b>Paratz J</b>	Metabolomics in critical care - the study of metabolic processes in the body to improve health care outcomes	Major Equipment and Infrastructure (MEI) fund 2012 NHMRC Equipment Grant	\$205,000	2013-2014
Parker, I.	Allied Health-led Vestibular Screening Clinic and Rehabilitation Service	RBWH AHP MOC funding	\$30,500	2012-2013
O'Leary, S.	Developing clinical motion analysis (research equipment funding)	RBWH Private Practice Trust Fund	\$39,957	2012-2013
O'Leary, S., Volker, G., McPhail, S., Kuipers, V., Dalton, M.	Do clinicians have the necessary skills to facilitate optimal utilisation of health services by patients with chronic musculoskeletal disorders?	Queensland Health HP Research Grant Scheme	\$40,000	2012-2013
Patman, S., Skinner, E., Reeve, J., Thomas, P.	Minimum standards of practice of physiotherapists working in critical care: WA Delphi study	Physiotherapists' Registration Board of WA Research Grant	\$25,000	2012-2013
Adsett, J., Mudge, A.	Safety and efficacy of aquatic exercise for patients with stable heart failure	Heart Foundation Post Graduate Scholarship	\$71,439.50	2012-2017

## Publications

### **Shaun O'Leary – Publications (2013)**

Elliott J, Pedler A, Jull G, Van Wyk L, Galloway G, O'Leary S. Differential Changes in Muscle Composition Exist in Traumatic and Non-Traumatic Neck Pain. *Spine*. 2013; Nov 21. [Epub ahead of print].

Johnston V, O'Leary S, Comans T, Straker L, Melloh M, Khan A, Sjøgaard G. A workplace exercise versus health promotion intervention to prevent and reduce the economic and personal burden of non-specific neck pain in office personnel: A cluster randomized controlled trial. *Journal of Physiotherapy*. Accepted for publication 2013. October 24.

O'Leary S, Lund M, Johan Ytre-Hauge T, Reiersen Holm S, Naess K, Nagelstad Dalland L, McPhail S. Pitfalls in the use of Kappa when interpreting agreement between multiple raters in reliability studies. *Physiotherapy*. 2013; Nov 18. [Epub ahead of print].

Peolsson A, Marstein E, McNamara T, Nolan D, Sjaaberg E, Peolsson M, Jull G, O'Leary S. Does posture of the cervical spine influence dorsal neck muscle activity when lifting? *Manual Therapy*. 2013; Jul 20. [Epub ahead of print].

Peolsson A, Peolsson M, Jull G, **O'Leary S**. Cervical muscle activity during loaded arm lifts in patients 10 years post-surgery for cervical disc disease. *Journal of Manipulative and Physiological Therapeutics*. 2013; 36(5):292-9.

Peolsson A, Peolsson M, Jull G, **O'Leary S**. Is there a difference in the pattern of muscle activity when performing neck exercises with a guild board versus a pulley? *Journal of Rehabilitative Medicine*. 2013; 45(9):900-5.

### **Julie Adsett – Publications (2013)**

**Adsett J**, Hickey A, Nagle A, Mudge A. Implementing a community-based model of exercise training following cardiac, pulmonary and heart failure rehabilitation. *J Cardiopulm Rehabil Prev*. 2013; 33(4):230-43.

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## Publications

### Alice Jones – Publications (2013)

**Jones AYM**, Skinner MA. The current status of Physical Therapy in China. Chinese Journal of Rehabilitation Medicine. 2013; 28 (6): 493-501.

Jones AYM. Sun-style T'ai Chi is effective at improving walking endurance and health-related quality of life in people with COPD. [commentary]. Journal of Physiotherapy. 2013; 59:273.

Pang Marco YC, Yang Feigo ZH, **Jones AYM**. Vascular elasticity and grip strength are associated with bone health of the hemiparetic radius in chronic stroke: implications for rehabilitation. Physical Therapy. 2013; 93(6):774-785. Doi:10.2522/ptj.20120378.

Ngai S, **Jones AYM**, Hui-chan C, Ko F, Hui D. An adjunct intervention for management of Acute Exacerbation of Chronic Obstructive Pulmonary Disease (AECOPD): Case report. The Journal of Alternative and Complementary Medicine. 2013; 19(2) 178-181.

Ngai SPC, Jones AYM. Changes in skin physiological changes experienced by healthy subjects during Acu-TENS associated with acupoint sensations? Acupuncturepuncture and heart rate variability with application of Acu-TENS to BL13 (Feishu). Journal of Alternative and Complementary Medicine. 2013; 19(6): 558-563.

Yu D, **Jones AYM**. Physiological changes associated with Deqi during Electro-acupuncture to LI4 and LI11 – a randomized placebo controlled trial. 2013. Acupuncture in Medicine. 31:143-150.

### Peter Thomas – Publications (2013)

Berney S, Denehy L, Patman S, **Thomas P**. ICU mobility practices in Australia and New Zealand: A point prevalence study. Critical Care and Resuscitation. 2013; 15 (4):260-265.

Berney SC, Harrold M, Webb SA, Seppelt I, Patnam S, **Thomas PJ**, Denehy L. Intensive Care Unit mobility practices in Australia and New Zealand: A point prevalence study, Crit Care Resusc, 2013; 15:260-265.

Thomas P, Lipman J, Paratz J (In press): Seated and semi-recumbent positioning of the ventilated intensive care patient - effect on gas exchange, respiratory mechanics and hemodynamics. Heart Lung. Accepted November 2013 [Epub ahead of print 2013.11.011].

### Jenny Paratz – Publications (2013)

Al Balushi RM, Cohen J, Banks M, **Paratz JD**. The clinical role of glutamine supplementation in patients with multiple trauma: a narrative review Anaesth Intensive Care. 2013; 41(1):24-34.

Kayambu G, Boots R, **Paratz J**. Physical Therapy for the Critically Ill in the Intensive Care Unit: A Systematic Review and Meta Analysis Crit Care Med. 2013; 41:1543-54.

Muller MJ, Dulhunty JD, Harrison J, Redman B, **Paratz J**. Don't Be a Flamin' Fool: Effectiveness of an adult burn prevention media campaign in two regions in Queensland, Australia- an interventional study. J Trauma. 2013; 74:652-7.

**Paratz J**, Lipman J. BNP: Not just a heart throb Anaesthesia & Analgesia. 2013; 1:59-61.

Walsh JR, McKeough ZJ, Morris NR, Chang AT, Yerkovich ST, Seale HE, **Paratz JD**. Metabolic disease and participant age are independent predictors of response to pulmonary rehabilitation. J Cardiopulm Rehabil Prev. 2013; 33:249-256.

Walsh JR, McKeough ZJ, Morris NR, **Paratz JD**. Performance-based criteria are used in participant selection for pulmonary rehabilitation programs. Aust Health Rev. 2013 Jun;37(3):331-6. doi: 10.1071/AH12192

### Presentations (2013)

**Comas Raymer, O'Leary Smith Scuffham**. Are physiotherapy screening clinics cost effective? Australian Physiotherapy Association Conference, Melbourne; 2013.

**Cruickshank M**. Care of the elder inpatient – “When everyone is responsible, no one is responsible.” – Solving the problem with a multi-professional allied health assistant. 10th National Allied Health Conference, Brisbane; 2013 October.

Hayes S, Ward L, Janda M, **Reul-Hirche H**, Gordon S, Matthews M, Obermair A. Incidence of Lymphoedema pre-treatment for Gynaecological Cancer 2013 International Society of Lymphology Congress, Rome, Italy; (oral presentation) 2013.

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## Publications

### Presentations (2013)

**Paratz J.** Intensive Care Platform Australian national Physiotherapy Conference. 2013 October.

**Paratz J.** The diagnosis of sepsis in Burns – a new marker? South African Burns Society. 2013 August.

**Paratz J.** Cardiac risk and Burn injury South African Burns Society. 2013 August.

**Paratz J.** The problem solving method of Cardiorespiratory Physiotherapy – 3 day seminar Singapore; 2013 July.

**Paratz JD,** Lipman J, Muller M, Paterson D. BNP – a new marker for diagnosis of sepsis in burns? World Society Federation intensive and Critical care Medicine, Durban. 2013 August.

**Paratz J,** Kayambu G, Boots R. Oxidative stress during exercise in early septic shock Australian national Physiotherapy Conference. 2013 October.

Perrett T, **Plaza A,** Lane A, Kolmus A, Bingham S, Edgar D. Predicting Therapist time to treat Acute Burn Inpatients. 2013 Australian and New Zealand Burn Association Annual Scientific Meeting, Fremantle; 2013.

**Puglisi M,** Plaza A, Muller M. TENS is an effective adjunct in the management of donor site pain post split skin graft. 2013 Australian and New Zealand Burn Association Annual Scientific Meeting, - Winner of the Henrietta Law Memorial Award for Best Allied Health Presentation at the conference. Fremantle; 2013.

**Reul-Hirche H.** The Establishment of a National Lymphoedema Practitioner Register - The Australian Journey, British Lymphology Society Conference, Birmingham, UK; (oral presentation). 2013.

**Thomas P.** Chest Radiograph Interpretation - ACCCN Respiratory Critical Care Seminar, Brisbane; 2013.

**Thomas P.** Ventilator hyperinflation: Lessons learnt from a benchtop analysis APA National Conference, Melbourne; 2013.

**Thomas P.** Plenary Session speaker, Cardio Respiratory Debate. The Weakest link: functional rehabilitation is superior to specificity. APA National Conference, Melbourne; 2013.

**Thomas P.** Simulation education in physiotherapy. New Frontiers in Simulation. Laerdal MiniSUN Conference, Redcliffe and Townsville; 2013.

**Veltjens N.** Establishing the Ponseti Method in West Africa – a Mercy Ships' mission International clubfoot conference in Iowa City; 2012 October.

# Department of Psychology



**Anne Clair**  
Director,  
Psychology

## Overview

Psychological research has a strong focus on behavioural medicine, including health behaviours, treatment adherence, and the psychological impact of disease.

Applications within behavioural medicine include: health promotion, symptom management and disease management. In 2014 the RBWH & UQ Psychology Education, Research and Training Centre (RUPERT) opened. This clinic works in collaboration with The University of Queensland's School of Psychology. This centre provides new opportunities to establish joint research projects. In addition the Psychology services have established collaborations with four local University partners including The University of Queensland, Queensland University of Technology, Griffith University and Australian Catholic University.

The collaboration formed between the Griffith University's School of Psychology and RBWH Department of Psychology work on joint research projects to investigate factors influencing psychological adjustment and community functioning following stroke.

Psychologists working with cancer patients are also collaborating on a multi-site intervention study to treat fear of cancer recurrence.

Psychology research in the renal medicine area focuses on the assessment of stress and burnout in renal nurses. Two projects investigating interventions to improve adherence in dialysis patients have commenced. These projects are funded by the PPTF and the RBWH Foundation.

In 2012, a research working group was formed at the psychology department to engage more clinicians in research. This group continues with its aims: to provide a forum for collaboration, support and resource sharing.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Sara Winter	BPsychSc (Hons I), PhD Clinical Neuro Psychology	Team Leader Surgery and Critical Care Psychology Services	adherence to treatment, sleep disorders, mechanisms of change, surgery and critical care
Dr Donna Spooner	PhD Clinical and Neuro Psychology	Advanced Clinical Neuropsychologist	neuropsychology, cognition, epilepsy
Elisabeth Hamernik	BA(Hons)MClinPsy	Team Leader Internal Medicine	Adherence, chronic disease management, palliative care, aging
Therese de Dassel	MCP	Senior Clinical Psychologist	perinatal developmental outcomes
Maree Grier	MCP	Senior Clinical Psychologist	psycho-oncology
Amanda Fairclough	BA (Hons)	Senior Psychologist	psycho-oncology
Riley O'Donohue	Currently completing DCP	Psychologist	Mechanisms of addiction, burns
Sarah Griffiths	Currently completing DCP	Psychologist	Perinatal cognitive outcomes

## Supervised post-graduate students

Name	Current studies	Research topic
Fairclough, A	Master of Clinical Psychology	Following a positive BRCA1/2 result: the male partner experience
Graham, S..	Bachelor of Psychology, Honours	The effect of psychological trauma and mood symptoms on recovery time and treatment adherence in burns survivors.

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## Research grant

Investigators	Project title	Granting body	Amount awarded	Years of funding
Williams, N. Reed, C, Williams L., Hamernik E	Motivational interviewing for people undergoing home dialysis to improve adherence	RBWH Foundation	\$28,000	2013
Bonner, A., Healy, H., Clark, R. Hamernik, E.	Adaptation of the fluid watchers program for people with chronic kidney disease receiving hemodialysis	Royal Brisbane and Women's Hospital Project Grant	\$25,000	2013

## Publications

Hocking J, Thomas H, Dzafic I, Williams R, Reutens D, Spooner DM. (2013). Disentangling the cognitive components supporting Austin Maze performance in left versus right temporal lobe epilepsy. *Epilepsy & Behaviour*. 2013; 29 (3):485-491.

Spooner D, Lo A, Khoo S, O'Neill S, Pachana N. The relationship between hormone replacement therapy (HRT) and memory performance in women: Influences of HRT type and APOE  $\epsilon$ 4 allele status. *International Journal of Clinical Neurosciences and Mental Health*. 2014; 1(2):1-10. (Accepted in 2013)

# Department of Rehabilitation Engineering



**Peter Slattery**  
Director,  
Rehabilitation Engineering

## Overview

Rehabilitation Engineering has continued to further strengthen the evidence base for service delivery through a number of projects:

Programme theory analysis of custom cushion services for adult clients with spinal cord injury

This is a joint project with Metro South Spinal Outreach Team (SpOT) aiming to map the client journey from referral to six months post discharge to evaluate the outcomes of the current service model.

The main data collection has been completed and assessments of outcomes completed. Paper has been submitted for publication. The outcomes have been significant and the principles of the research have been rolled into daily service delivery. Several smaller research projects have started using the outcomes of the initial work (Principal RBWH Researchers, Peter Slattery and Oliver Mason).

Strength analysis of custom designed hardware

A strength testing rig has been designed and fabricated to analysis the relative performance of various hardware systems developed in house. This information is being used to develop standard procedures for clinical work in Rehabilitation Engineering. (Principal Researcher, Peter Slattery)

Life cycle of flexible polyurethane foam in custom seating

A second phase cyclic testing rig was completed in 2013 with the assistance of medical engineering students from QUT. Work has now moved to developing accurate measurement tools for determining cushion life. (Principle Researcher, Peter Slattery)

## Research staff

Name	Qualifications	Position	Interests/specialities
Peter Slattery	BE (Mech) (Hons), MEngSc (Research), CPEng, RPEQ, NPER (Biomed), MIEAUST	Director, Rehabilitation Engineering, Adj Assoc. Prof. Faculty Science and Engineering QUT	Rehabilitation engineering, engineering design, inter-team communication

# Department of Social Work Services



**Dr Jan Hinson**  
Director,  
Social Work

## Overview

Social Work Services at the RBWH identifies its mission as assisting patients, their families and carers with the impact of changes in health on individual and family functioning, and achieving maximum benefits from health care services through leadership in service provision, education and research.

During 2013, Social Work received funding through Health Workforce Australia as part of the Queensland Regional Training Network (QRTN) Clinical Innovation initiative to develop and deliver a clinical rotational model in aged care.

The PRAC project was implemented in Semester 2 2013 and involved final year social work students being rotated across both acute and subacute clinical settings. A research study was designed to evaluate the project and used a mixed methods approach to examine student attitudes both prior to and at the conclusion of the placement to determine whether the placement experience makes a difference to their attitudes towards older people.

Effectiveness of the model is based on student's learning outcomes and ability to work effectively in a professional social work role with older people. Confidence and work readiness were key outcomes and consequently four of the students are now employed within the Department.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Jan Hinson	BSocWk, MSWAP, MASSW (Acc.) PhD, Adjunct Professor	Director of Social Work	Trauma and Violence, Child Protection
Wayne Middleton	BSocWk, Master of Health Science, Health Services Management	Social Worker Advanced	Clinical Governance
Helen Redfern	BSocWk, MASW, MAASW	Clinical / Research Specialist	Chronic Disease, Ethics, Aged Care and Disability, Clinical Education
Dr Suzette Fox	PhD, BSocWk	Clinical Educator	Clinical education and supervision, Interprofessional education and collaboration
Martha Druery	BA (Psych), BSocWk (Hons)	Senior Social Worker	Psychosocial Outcomes, family bereavement and trauma.
Hayley Parsons	BSocWk, MASW	Senior Social Worker	Evidence-Based Practice, Professional Identity, Organisational Culture
Anne de Ruiter	MPhil	Senior Social Worker	Workforce Capability

## Supervised post-graduate students

Name	Current studies	Research topic
Parsons, H	Doctor of Social Work (Professional Doctorate)	Evidence-based hospital social workers' experience of organisational culture and professional identity
Middleton, W.	Doctor of Health Science, HScD (Professional Doctorate)	An analysis of the understanding of and engagement in clinical governance by allied health professionals
Parr, M	Masters of Social Work	Course Work
Brennan, K.	Masters of Social Work	Course Work

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## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Fox, S., Redfern, H.	Placement rotation in aged care (PRAC) project	Queensland Regional Training Networks Clinical Training Placements Innovation Project	\$70,000	2012-2013

## Publications

Crane P, Fox S, Hardy F, & Spencer A. Innovations in social work practice learning through University and industry collaboration: The Royal and QUT research project. 2013 Australian Association Social Work and Welfare Education (AASWWE) Symposium, Perth: Curtin University; [oral conference presentation]; 2013 October 3-4.

Fox, S. Redfern, H. Students' attitudes towards working with Older People - The Placement Rotation in Aged Care (PRAC) Project. 2013 National Allied Health Conference (NAHC) Queensland Regional Training Networks Forum (QRTN), Brisbane; [oral conference presentation]; 2013 November 6.

# Department of Speech Pathology and Audiology



**Lynelle Bassett**  
Director,  
Speech Pathology  
and Audiology

## Overview

The Speech Pathology and Audiology Department provides tertiary and quaternary level clinical services to adult inpatients and outpatients with swallowing and/or communication disorders of varying complexity and aetiology as well as providing audiology services. Speech Pathology and Audiology merged to become one department in July 2013 and the development of innovative clinical research is a key priority. Services are provided at the RBWH Acute Hospital, the Geriatric Evaluation and Management Unit, and the Geriatric Assessment and Rehabilitation Unit, Rosemount.

The Department participates in a range of specialist multidisciplinary teams and has a strong commitment to clinical research and student education. In particular, the Speech Pathology and Audiology Department has established key research partnerships with the UQ Centre for Clinical Research & School of Health and Rehabilitation Sciences resulting in ongoing collaborative research projects and publications.

Key research areas include:

- Head and Neck Cancer – intervention, models of care and outcomes of patients following surgery and/or chemotherapy/radiotherapy
- Stroke- intensity of aphasia treatment, provision of aphasia friendly education
- Dysphagia following Thermal Burn Injury
- Dysphagia – dysphagia screening, instrumental assessment, swallowing rehabilitation
- Telehealth and telerehabilitation
- Tracheostomy – simulated training
- Cochlear implants

## Research staff

Name	Qualifications	Position	Interests/specialities
Lynell Bassett	B.Sp. Thy	Director Speech Pathology	Tracheostomy; Burns
Sonia Baker	B.Sp.Path	Speech Pathologist - Advanced	Tracheostomy; Critical care
Penni Burfein	B.Sp.Path	Speech Pathologist-Advanced	Aphasia; Rehabilitation
Clare Burns	B.Sp.Path; PhD Candidate	Speech Pathologist- Advanced	Telehealth; Cancer Care
Jane Crombie	PhD Candidate Grad Cert Management	Speech Pathologist- Advanced	Cancer Care; Telehealth
Rebecca Cremer	B. Sp. Path;	Senior Speech Pathologist	Dysphagia
Anna Farrell	B.Sp.Path (Hons) PhD	Speech Pathology Team Leader (Neuro-rehab)	Aphasia; Adult Motor Speech Disorders; Dysphagia
Sarah Heaton	B. Sp. Path	Speech Pathology Team Leader (Acute)	Dysphagia; Burns
Jennifer Helios	B. Sp. Path (Hons)	Senior Speech Pathologist	Cancer care
Laura Moroney	B. Sp. Path	Speech Pathologist	Cancer care
Marita Plunkett	B.Sp.Path (Hons)	Speech Pathology Clinical Educator	Clinical Education; Adult Communication Disorders
Anna Rumbach	B. Sc (Hons); M Sp.Path; PhD	Lecturer, School of Health & Rehabilitation Sciences,	Dysphagia associated with Thermal Burns
Ann-Louise Spurgin (nee Morton)	B Sp. Path. (Hons); Grad Cert in Management	The University of Queensland	Cancer care; Head and Neck surgery
Leisa Turkington	B. App Sc(Sp Path), M. Sc; PhD Candidate	Senior Speech Pathologist;	Dysphagia

## Research staff

Name	Qualifications	Position	Interests/specialities
Professor Elizabeth Ward	B.Sp.Thy (Hons) PhD Grad.Cert.Ed	Professor, Centre for Functioning and Health Research (CFAHR), Queensland Health and Conjoint Professor, School of Health & Rehabilitation Sciences, The University of Queensland	Head and Neck Cancer; Dysphagia associated with Thermal Burns; Telehealth & Telerehabilitation
Carla Rose	B.A., M. Aud. Studies	Audiology Team Leader	Audiology

## Supervised post-graduate students

Name	Current studies	Research topic
Clare Burns	PhD	Telehealth; Cancer Care
Leisa Turkington	PhD	Neurogenic dysphagia and carbonation
Alexia Rohde	PhD	Assessment of Aphasia

## Awards and achievements

Award	Event	Recipient
Best oral presentation	School of Health and Rehabilitation, University of Queensland, Postgraduate Conference	Burns, C.
RBWH Foundation Post graduate Research Scholarship	-	Burns, C.

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Burns, C.	The evaluation of a Speech Pathology telehealth service for management of swallowing and communication disorders of patients with Head and Neck Cancer	RBWH Post graduate Research Scholarship	\$30,500	2013
Burns, C., Ward, E., Bassett, L., Greenup, P., Kenny, E., Malcolm, K., Turner, A., Rees, J.	Evaluation of a telehealth service for Head and Neck cancer patients: A new Speech Pathology service model	AusHSI	\$50,000	2012-2014

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## Publications

Brown T, Spurgin A-L, Ross L, Tripcony L, Keller J, Hughes B, Hodge R, Walker Q, Banks M, Kenny L, Crombie J. Validated swallowing and nutrition guidelines for patients with head and neck cancer: Identification of high risk patients for proactive gastrostomy. *Head and Neck*. 2013; 35(10):1385-1391.

Devine M, Farrell A, Woodhouse H, McCombe P, Henderson R. A developmental perspective on bulbar involvement in Amyotrophic Lateral Sclerosis. *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration*. 2013; 14(7-8):638-9.

Hughes B, Jain V, Brown T, Spurgin A-L, Harnett G, Keller J, Tripcony L, Appleyard M, Hodge R. Decreased hospital stay and significant cost savings after routine use of prophylactic gastrostomy for high risk patients with head and neck cancer receiving chemoradiotherapy at a tertiary cancer institution. *Head and Neck*. 2013; 35(3):436-42.

Rumbach A, Ward E, Heaton S, Bassett L, Webster A, Muller M. Validation of predictive factors of dysphagia risk following thermal burn injury: A prospective cohort study. *Burns*. 2013; 46(4):744-50.

Sharma S, Ward E, Burns C, Theodoros D, & Russell T. Assessing dysphagia via telerehabilitation: Patient perceptions and satisfaction. *International Journal of Speech-Language Pathology*. 2013; 15(2):176-183.

Ward E, Burns C, Theodoros D, Russell T. Evaluation of a clinical service model for dysphagia assessment via telerehabilitation. *International Journal of Telemedicine and Applications*. 2013; doi:10.1155/2013/918526.

Ward E, Burns C, Theodoros D, Russell T. Exploring the impact of dysphagia severity on clinical decision making via telerehabilitation. *Dysphagia*. 2013; 28: 600.

# Cancer Care Services



**Dr Amanda Dines**  
Executive Director,  
Cancer Care Services



**A/Prof Alanna Geary**  
Nursing Director,  
Cancer Care Services



**Prof Geoff Hill**  
Director of Research,  
Cancer Care Services

## Overview

It is an exciting time to be involved in cancer research. Indeed, Cancer Immunotherapy was named the 2013 breakthrough of the year by the journal Science. The emergence of this new 4th pillar of cancer therapy (after chemotherapy, radiotherapy and hormone manipulation) has seen dramatic responses for patients with melanoma, kidney and lung cancer in early phase trials. The use of these so called “checkpoint inhibitor antibodies” that block PD1 and CTLA4 and so take the break of the immune system allow the patient’s own immune system to recognize cancer and offer, for the first time, the potential for sustained anti-tumour responses. We are also entering an era where the genetic manipulation of T cells (the killers of the immune system) can be undertaken to improve their ability to recognize and kill cancer cells. Alongside, we are able to introduce new “suicide genes” into killer T cells so that erroneous immune responses, like graft-versus-host disease, might be more easily controlled after bone marrow transplantation, making the procedure safer.

As science and medicine become more and more intertwined, we are in a great position to take advantage of these advances for our patients. Our increasingly vibrant campus allows close interaction of the Cancer Care Service at RBWH with QIMR Berghofer Research Institute, UQ Health Sciences and the UQ Centre for Clinical Research (UQCCR). Later this year the new Herston Imaging Research Facility will open adjacent to UQCCR, offering Australian first, very high resolution research imaging for our patients. We are optimistic this will permit improved diagnosis and staging of cancers and more reliable quantification of responses to therapy. As our service matures, our researchers are increasingly recognized and funded by leading funding bodies meaning that Cancer Care on our campus is indeed at the cutting edge.

Finally, our reputation and recognition in the community is continuing to grow, and the overwhelming support for the Weekend to End Women’s Cancer is a great sign that we are moving forward with our mission to improve the lives of our patients with cancer.

## Key departments

- » Clinical Haematology and Bone Marrow Transplant Research Unit
- » Department of Medical Oncology
- » Department of Radiation Oncology
- » Queensland Haemophilia Centre

## Executive and directing staff

**Dr Amanda Dines**  
Executive Director Cancer Care Services

**Adj. Assoc. Prof. Alanna Geary**  
Nursing Director Cancer Care Services

**Prof Geoff Hill**  
Director of Research, Cancer Care Services

**Assoc. Prof. Simon Durrant**  
Director Clinical Haematology and Bone Marrow Transplant

**Dr David Wyld**  
Director Medical Oncology

**Assoc. Prof. Graeme Dickie**  
Director Radiation Oncology

**Dr John Rowell**  
Director Queensland Haemophilia Centre

# Haematology and Bone Marrow Transplant Clinical Research Unit



**Assoc. Prof. Simon Durrant**  
Director,  
Clinical Haematology and  
Bone Marrow Transplant

## Overview

The Haematology and Bone Marrow Transplant Clinical Research Unit provides an exceptional research program for complex blood disorders including leukaemia, lymphoma and myeloma. This Department is the Clinical Haematology Referral Centre for the Central Zone and the Bone Marrow Transplant Referral Centre for Queensland and is FACT accredited. In addition to clinical Haematology treatment, we provide:

- Autologous stem cell transplants
- Allogeneic stem cell and bone marrow transplants - related and unrelated
- Clinical trials (both in-house and pharmaceutical-sponsored) for haematology and transplant patients

The unit conducts a wide range of innovative trials, Phase I to Phase IV, into haematological malignancies. These trials include the testing of new therapeutic agents for the treatment of leukaemia, lymphoma and myeloma as well as improvements in the outcome of bone marrow transplantation and ongoing participation in the development of novel treatments.

There is an ongoing collaboration between departmental clinical staff and the QIMR Berghofer Medical Research Institute which corresponds to an improved ability to develop and participate in translational research programs.

The QIMR Berghofer Bone Marrow Transplantation laboratory uses preclinical transplant models to dissect the immunological mechanisms of transplant rejection and aims to improve patient outcome through new therapies to prevent and treat graft-versus-host disease (GVHD). Research focuses on pathways of alloreactivity leading to GVHD and graft-versus-leukaemia (GVL) effects. The ultimate aim is to generate testable therapeutic interventions that attenuate GVHD and improve GVL.

Current research:

- The interleukin-17 family of cytokines as mediators of transplant outcome
- Mechanisms of antigen presentation after transplantation
- Immunological mechanisms of leukaemia and myeloma eradication after transplantation
- Administration of an IL-6R antibody to prevent GVHD in clinical bone marrow transplant (BMT) recipients
- The treatment of steroid refractory acute GVHD with CD52 targeted Ab and TNF antagonists
- The use of type I interferons in preclinical and clinical BMT to improve the eradication of leukaemia
- The use of suicide gene-transfected effector after clinical haplo-identical BMT
- The use of induced regulatory T cells to treat clinical chronic GVHD
- Evaluating the effect of blinatumomab on overall survival when compared to standard of care chemotherapy
- Establish the maximum tolerated dose and/or recommended phase II dose of the combination of INC424 and BKM120 and evaluate the safety of the oral co-administration of INC424 and BKM120 in patients with myelofibrosis

## Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. Simon Durrant	MRCS, LRCP, MBBS, FRCP, FRCPATH	Director, Haematology and Bone Marrow Transplant Unit Assoc. Prof. Medicine, UQ	Clinical haematology, bone marrow transplant
Assoc. Prof. Glen Kennedy	MBBS (Hons), FRACP, FRCPA	Deputy Director, Haematology and Bone Marrow Transplant Unit Visiting Scientist, Queensland Institute of Medical Research	Clinical haematology, bone marrow transplant

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof. Andrew Boyd	B. Med.Sc, MBBS, Ph.D, FRACP	Consultant Haematologist Professor of Experimental Haematology, University of Queensland Senior Principal Research Fellow, Queensland Institute of Medical Research	Clinical haematology
Dr Ann Gillett	MBBS, FRACP, FRCPA	Consultant Haematologist Professor of Experimental Haematology, University of Queensland Senior Principal Research Fellow, Queensland Institute of Medical Research	Clinical haematology
Prof. Geoff Hill	MBChB, MD, FRCPA, FRACP	Director of Research, CCS, RBWH Bone Marrow Transplantation Physician & Haematologist, RBWH Head of Dept, Division of Immunology, QIMR Berghofer Medical Research Institute Laboratory Head, Bone Marrow Transplant, QIMR Berghofer NHMRC Australia Fellow Qld Health Senior Clinical Research Fellow Senior Scientist, QIMR Berghofer Prof. Medicine, UQ, UWA & Griffith University	Clinical and Research, bone marrow transplantation Stem cell transplantation and tolerance Graft-versus-host-disease Immunotherapy of malignancy
Dr James Morton	Master of Medical Science (Epidemiology), MBBS, FRACP, FRCPA (Haematology)	Clinical Haematologist and Bone Marrow Transplant Staff Specialist	Clinical haematology, bone marrow transplant
Dr Jason Butler	MBBS, FRACP, FRCPA, M.Med.Sci (Clin Epid)(Newcastle)	Clinical Haematologist and Bone Marrow Transplant Staff Specialist	Clinical haematology, bone marrow transplant
Dr Kirk Morris	MBBS, FRACP, FRCPA	Senior Medical Officer, Clinical and Laboratory Haematology	Clinical Haematology
Dr Siok Tey	MBBS, FRACP, FRCPA (Clinical Haematology and Haematopathology)	Clinical Haematologist and Bone Marrow Transplant Staff Specialist Senior Research Officer, Bone Marrow Transplant Laboratory, Queensland Institute of Medical Research Senior Lecturer, School of Medicine, University of Queensland	Clinical haematology, bone marrow transplant
Dr Ashish Misra	MBBS, FRACP, FRCPA	Staff Specialist, Haematology and Bone Marrow Transplant	Clinical haematology, bone marrow transplant
Dr Elango Subramonia Pillai	MBBS, FRACP, FRCPA	Consultant Haematologist, Haematology and Bone Marrow Transplant	Clinical haematology, bone marrow transplant

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Steven Lane	MBBS (Hons), PhD, FRACP, FRCPA	Consultant Haematologist, Haematology and Bone Marrow Transplant Team Head, Translational Leukaemia Research Laboratory, Queensland Institute of Medical Research	Clinical haematology & bone marrow transplant
Dr Cameron Curley	MBBS, FRACP, FRCPA	Staff Specialist, Haematology and Bone Marrow Transplant	Clinical haematology & bone marrow transplant

## Supervised post-graduate students

Name	Current studies	Research topic
Charmsaz, S.	PhD	Eph proteins as therapeutic targets in leukaemia
Cheung, M	PhD	The inflammasome and GVHD
Henden, Dr A	PhD, Haematologist undertaking higher degree	Type I and III interferons in BMT
Leveque, L	PhD	Autophagy and stem cell transplantation
Martins, P	PhD	CMV and GVHD responses after BMT

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Boyd, A.W., Reynolds, B.	EphA3 is a marker of glioma stem/progenitor cells and a potential target for therapy	NHMRC	\$560,000	2013
Piper, M., Richards, L., Boyd, A.W., Bailey, T.	Nfib regulates glial differentiation during development and disease via repression of the key epigenetic protein, Ezh2	NHMRC	\$553,650	2012-2014
Rose, S., Boyd, A.W., Fisk, N., Thomas, P.	The development of innovative multiplexed molecular imaging technology targeting improved diagnostic imaging of Glioblastoma Multiforme	NHMRC	\$389,910	2012-2014
Johns, T., Boyd, A.W., McDonald, K.	An integrated systems biology approach for the development of new therapeutic strategies for the treatment of high grade glioma	NHMRC	\$673,500	2012-2014
Bartlett, PF., Boyd, AW.	New therapies for spinal cord injury.	NHMRC	\$660,000	2011-2013

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Bartlett, PF., Boyd, AW	Development of EphA4 antagonists for spinal cord injury	ARC	\$420,000	2011-2013
Boyd, AW.	EphA3 as a target in leukaemia and other cancers.	Kalobios Inc	\$240,000	2012-2014
Dave, K., Offenhauser, C., Gorman, J., Boyd, AW.	Proteomic analysis of EphA2 signalling in prostate cancer.	QIMR Ride To Conquer Cancer Flagship Grant	\$120,000	2013
Hill, GR., Smyth, MJ., Khanna, K., Boyd, A., MacDonald, KP., Lane, SW., Parsons, P., Moller, A.	The ACRF Centre for Comprehensive Biomedical Imaging	Australian Cancer Research Foundation – Approved 2013	\$2,600,000	2013-2014
Hill, GR.	QLD Health Senior Clinical Research Fellowship	QLD Health	\$4,250,000	2011-2016
Hill, GR.	NHMRC Australia Fellowship	NHMRC	\$4,000,000	2011-2015
Khanna, R., Hill, G.R., Tey, S.	Developing personalized immunotherapies	QIMR Ride To Conquer Cancer Flagship Grant	\$1,200,000	2012-2015
Thomas, R., Hill, GR., Frazer I., Brown M., Degli-Eposti M.	Immunotherapies for the treatment of disease	NHMRC Project Grant	\$10,130,000	2010-2014
Trapani, J., Denny, W., Spicer, J., Hill, GR., Wisstock, J.	Development of small molecule inhibitors of perforin	Wellcome Trust (UK)	\$7,600,000	2012-2015
Lane, S.	Treatment of blood diseases by targeting the disease-causing stem cells	Leukaemia Foundation of Australia/Cure Cancer Foundation Postdoctoral Fellowship	\$300,000	2011-2014
Lane, S.	Targeting telomerase – to eradicate leukaemia stem cells in acute myeloid leukaemia	Leukaemia Foundation of Australia	\$100,000	2013
Lane, S.	Understanding the molecular pathogenesis of AML	Rio Tinto Ride to Conquer Cancer	\$79,700	2013
Lane, S.	Regulators of epigenetic gene expression in haematopoiesis	Leukaemia Foundation of Australia	\$120,000	2013-2015
Lane, S.	Targeting human stem cells in JAK2 V617F position MPN	Leukaemia Foundation of Australia	\$100,000	2012-2014
Lane, S.	Targeting leukaemia stem cells in myeloproliferative neoplasms	NHMRC	\$451,000	2012-2014
Lane, S.	Targeting leukaemia stem cells to cure AML	Rhys Pengelly Fellowship in Leukaemia Research	\$450,000	2011-2014
Lane, S.	Treatment of blood diseases by targeting the disease-causing stem cells	Leukaemia Foundation of Australia/Cure Cancer Foundation Postdoctoral Fellowship	\$300,000	2011-2014

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Tey, S.	Cell therapy to prevent and treat graft-versus-host disease after allogeneic haematopoietic stem cell transplantation	NHMRC	\$359,564	2013-2016
Tey, S.	Inducible caspase 9 suicide gene to improve the safety of donor T cell add back after haploidentical stem cell transplantation	NHMRC	\$545,681	2013-2015

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**Casey J, Morris K, Narayana M, Nakagaki M, Kennedy GA.** Oral Ribavirin for treatment of respiratory syncytial virus and parainfluenza 3 virus infections post allogeneic haematopoietic stem cell transplantation. Bone Marrow Transplant. 2013; 48:1558-1561.

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Coleman MA, Bridge JA, Lane SW, Dixon CM, **Hill GR**, Wells JW, Thomas R, Steptoe RJ. Tolerance Induction with gene-modified stem cells and immune-preserving conditioning in primed mice: restricting antigen to differentiated antigen-presenting cells permits efficacy. Blood. 2013; 121:1049-58.

Cromer D, **Tey SK**, Khanna R, Davenport MP. Estimating cytomegalovirus growth rates by using only a single point. J Virol. 2013; 87(6):3376-81.

**Curley C, Durrant S, Kennedy GA.** Is extramedullary relapse of acute myeloid leukemia after allogeneic hematopoietic stem cell transplantation associated with improved survival? Asia Pac. J. Clin. Oncol. 2013; 9(3):285-9.

Curley C, **Hill GR**, McLean A, Kennedy GA. Immunotherapy following relapse of acute leukaemia after T-cell-replete allogeneic peripheral blood progenitor cell transplantation: importance of new onset chronic graft-versus-host disease. Int J. Lab. Hematol. 2013; Sept 25. DOI: 10.1111/ijlh.12153. [Epub ahead of print].

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Dorrance AM, De Vita S, Radu M, Reddy PNG, McGuinness MK, Harris CE, Mathieu R, **Lane SW**, Kosoff R, Milsom MD, Chernoff J, Williams DA. The Rac GTPase effector p21 Activated Kinase is essential for hematopoietic stem/ progenitor cell migration and engraftment. Blood. 2013; 121(13):2474-82.

Faber K, Bullinger L, Ragu C, Garding A, Mertens D, Miller C, Martin D, Walcher D, Döhner K, Döhner H, Claus R, Plass C, Sykes SM, **Lane SW**, Scholl C, Fröhling S. Myeloid leukemogenesis driven by aberrant CDX2 expression involves transcriptional repression of KLF4 and deregulated PPARGamma signaling. J. Clin. Invest. 2013; 123:299-314.

Fayad L, Offner F, Smith MR, Verhoef G, Johnson P, Kaufman JL, Rohatiner A, Advani A, Foran J, Hess G, Coiffier B, Czuczman M, Giné E, **Durrant S**, Kneissl M, Luu KT, Hua SY, Boni J, Vandendries E, Dang NH. Safety and clinical activity of a combination therapy comprising two antibody-based targeting agents for the treatment of non-Hodgkin lymphoma: results of a phase I/II study evaluating the immunoconjugate inotuzumab ozogamicin with rituximab. J. Clin. Oncol. 2013; 31(5):573-83.

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Heidel FH, Bullinger L, Arriba-Tutusaus P, Wang Z, Gaebel J, Hirt C, Niederwieser D, **Lane SW**, Dohner K, Vasioukhin V, Fischer T, Armstrong SA. The cell fate determinant Lgl1 influences HSC fitness and prognosis in AML. *J. Exp. Med*. 2013; 210(1):15-22.

**Henden A, Morris K, Truloff N, Nakagaki M, Kennedy GA**. Incidence and outcomes of invasive fungal disease in adult patients with acute lymphoblastic leukaemia treated with Hyper-CVAD: implications for prophylaxis. *Leuk. Lymph*. 2013; 54:1329-1331.

Horne-Debets JM, Faleiro R, Karunaratne DS, Liu XQ, Lineburg KE, Poh CM, Grotenbreg GM, **Hill GR**, MacDonald KPA, Good MF, Renia L, Ahmed R, Sharp AH and Wykes MF. PD-1 dependent exhaustion of CD8+ T cells drives chronic malaria. *Cell Reports*. 2013; 5:1204-13.

**Jackson K, Mollee P, Morris K, Butler J, Jackson D**, Kruger P, Klein K, **Kennedy G**. Outcomes and prognostic factors for patients with acute myeloid leukemia admitted to the intensive care unit. *Leukemia & Lymphoma*. 2013; May 29. DOI: 10.3109/10428194.2013.796045. [Epub ahead of print].

**Jackson K, Mollee P, Morris K, Kennedy G**. Addition of etoposide to standard AML induction chemotherapy does not improve survival. *Int. Med. J*. 2013; 43:953-954.

Kantarjian HM, Cortes JE, Kim DW, Khoury HJ, Brümmendorf TH, Porkka K, Martinelli G, **Durrant S**, Leip E, Kelly V, Turnbull K, Besson N, Gambacorti-Passerini C. Bosutinib safety and management of toxicity in leukemia patients with resistance or intolerance to imatinib and other tyrosine kinase inhibitors. *Blood*. 2013; Dec 17. DOI: 10.1182/blood-2013-07-513937. [Epub ahead of print].

**Kennedy GA, Morris KL, Subramonpillai E, Curley C, Butler J, Durrant S**. A prospective phase II randomized study of deferasirox to prevent iatrogenic iron overload in patients undertaking induction/consolidation chemotherapy for acute myeloid leukaemia. *Br. J. Haematol*. 2013; 161(6):794-801.

Koyama M, Kuns RD, Olver SD, Lineburg KE, Lor M, Teal BE, Raffelt NC, Leveque L, Chan CJ, Robb RJ, Markey KA, Alexander KA, Varelias A, Clouston AD, Smyth MJ, MacDonald KP, **Hill GR**. Promoting regulation via the inhibition of DNAM-1 after transplantation. *Blood*. 2013; 121(17):3511-20.

Lancet JE, Wei AH, **Durrant STS**, Hertzbert MS, Swords RT, Lewis ID, Johan B, Cortes JE, Yarranton G, Walling JM. A phase I study of KB004, a novel non-fucosylated humanized antibody, targeted against the receptor tyrosine kinase EphA3, in advanced hematologic malignancies. *Blood*. 2013; 122(21).

Leguchi K, Tomita T, Omori T, Komatsu A, Deguchi A, Masuda J, Duffy SD, Coulthard MG, **Boyd AW**, Maru T. ADAM12-cleaved ephrin-A1 causes lung metastasis. *Oncogene*. 2013; May 20. DOI: 10.1038/onc.2013.180 [Epub ahead of print].

**May C, O'Rourke K, Jackson K, Francis L, Kennedy GA**. Purpura fulminans in a patient with paroxysmal nocturnal haemoglobinuria (PNH). *Int. Med. J*. 2013; 43:102.

Moore J, Bryant A, Nivison-Smith I, **Subramonia Pillai E, Kennedy G**, Kalf A, Ritchie D, George B, Hertzberg M, Patil S, Spencer A, Fay K, Cannell P, Berkahn I, Doocey R, Spearing R. Fludarabine Melphalan reduced intensity conditioning allotransplantation provides similar disease control in lymphoid and myeloid malignancies-analysis of 344 patients. *Bone Marrow Transplant*. 2013; Sept 23. DOI: 10.1038/bmt.2013.142. [Epub ahead of print].

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Ong ML, Wikstrom ME, Fleming P, Estcourt MJ, Hertzog PJ, **Hill GR**, Andoniou CE and Degli-Esposti MA. CpG pre-treatment enhance anti-viral T cell immunity against cytomegalovirus. *Blood*. 2013; 122:55-60.

Seillet C, Jackson JT, Markey KA, **Hill GR**, MacDonald KP, Nutt SL, Belz GT. CD8a+ DCs can be induced in the absence of transcription factors Id2, Nfil3 and Batf3. *Blood*. 2013; 121(9):1574-83.

Spanevello MD, Tajouri SI, Mircioiu C, Kurniawan N, Pearse MJ, Fabri LJ, Owczarek CM, Hardy MP, Bradford RA, Ramunno ML, Turnley AM, Ruitenber MJ, **Boyd AW**, Bartlett PF. Acute delivery of EphA4-Fc improves functional recovery after contusive spinal cord injury in rats. *J. Neurotrauma*. 2013; 30:1023-34.

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**Tey SK, Kennedy GA,** Cromer D, Davenport MP, Walker S, Jones LI, Crough T, **Durrant ST, Morton JA, Butler JP, Misra AK, Hill GR,** Khanna R. Clinical assessment of anti-viral CD8+ T-cell immune monitoring using QuantiFERON-CMV assay high risk allogeneic haematopoietic stem cell transplant patients with CMV infection complications. PLoS One. 2013; 8(10):e74744.

Vannucchi AM, Kiladjian JJ, Griesshammer M, Masszi T, **Durrant S,** Zachee P, Pane F, Harrison C, He S, Leopold L, Li Jingjin, Pirron U, Lawniczek T, Verstovsek S. Baseline characteristics and symptom burden in RESPONSE: A randomized, open-label, phase 3 study of Ruxolitinib in polycythemia vera patients resistant to or intolerant of Hydroxyurea. Blood. 2013; 122(21).

Wikstrom ME, Khong A, Fleming P, Kuns R, Hertzog PJ, Frazer IH, Andoniou CE, **Hill GR,** Degli-Esposti MA. MyD88-dependent early monocytic response to cytomegalovirus infection in vivo is independent of common inflammatory cytokine signals. 2013; Dec 16. DOI: 10.1002/eji.201243109. [Epub ahead of print].

Zhang P, Tey SK, Koyama M, Kuns RD, Olver SD, Lineburg KE, Lor L, Teal BE, Raffelt NC, Raju J, Leveque, Markey KA, Varelias A, Clouston AD, Lane SD, MacDonald KPA and **Hill GR.** Induced regulatory T cells promote tolerance when stabilized by rapamycin and IL-2 in vivo. J Immunol. 2013; 191(10):5291-303.

Zinkernagel MS, Chinnery HR, Ong ML, Petitjean C, Voigt V, McLenachan S, McMenamin PG, **Hill GR,** Forrester JV, Wikstrom ME, Degli-Esposti MA. Interferon gamma-dependent migration of microglia cells in the retina after systemic cytomegalovirus infection. Am. J. Path. 2013; 182(3):875-885.

# Department of Medical Oncology



**Dr David Wyld**  
Director,  
Medical Oncology

## Overview

The Department of Medical Oncology provides clinical services to patients at the Royal Brisbane and Women's Hospital and The Prince Charles Hospital. It also acts as the major tertiary referral centre for the central zone, including providing outreach clinics to Rockhampton, Hervey Bay and Bundaberg.

The department has an ongoing, active clinical research program.

We are currently involved in about 70 Clinical Trials. These include RBWH specific Investigator initiated Studies, large international studies and studies conducted as part of Australian cooperative cancer-trials groups, (such as the ANZ Breast Cancer Trials Group, the ANZ Gastro-Intestinal Trials Group, the ANZ Lung Cancer Trials Group, The Australian and New Zealand Urogenital and Prostate cancer Trials group and the ANZ Gynaecology-Oncology Group). The worth of our clinical trials program is acknowledged by the Queensland Cancer Fund, which provides funding for research staff on the basis of demonstrated accrual to approved, unfunded randomised Phase II and III studies.

Several clinical staff from the unit also have broader roles within Australasian collaborative cancer trials groups, including membership of executive committees, roles as Australian Principal Investigators for some national studies, positions on individual Australia-wide trial management committees and on trial data monitoring and safety committees.

There is ongoing collaboration between departmental clinical staff and other institutions such as the Queensland Institute of Medical Research (QIMR) and TCPH, improving the unit's ability to develop and participate in translational research programs.

Areas of specific interest include Dr Inglis' collaborative work in the area of neuro-oncology, Dr Hughes' ongoing collaboration related to pulmonary malignancies with Dr K. Fong at TPC, Dr Burge's collaboration with Dr B. Leggett's laboratory regarding colorectal cancer, ongoing collaboration with the RBWH Nuclear Medicine Department in areas including investigating the utility of PET imaging in staging of operable pancreatic cancer as well as ongoing work related to imaging and therapy for neuroendocrine tumours. Head and neck malignancies and gynaecologic cancers remain areas of specific ongoing clinical research activity

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr David Wyld	MBBS (Hons), FRACP	Director Medical Oncology	Gastro-intestinal, neuroendocrine
Dr Brett Hughes	BSc (Med), MBBS (Hons), FRACP	Staff Specialist	Lung, mesothelioma, head & neck, thyroid
Dr Geoffrey Beadle	MBBS, FRACP, FRACR	Staff Specialist	Breast cancer
Dr Matthew Burge	MBChB, FRACP	Staff Specialist	Gastro-intestinal, phase I studies
Dr Melissa Eastgate	MBBS, FRACP	Staff Specialist	Gastro-intestinal, melanoma, head and neck
Dr Michelle Nottage	MBChB, FRACP	Staff Specialist	Breast, head and neck cancers
Dr Po-Ling Inglis	MBBS, BSc (Molecular Biology), FRACP	Staff Specialist	Breast, lung, central nervous system
Dr Jeffrey Goh	MBBS, FRACP	Staff Specialist	Gynaecology, genitourinary, central nervous system

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Alison Hadley	MBBS (Hons), MMed (Clin Epi), FRACP	Staff Specialist	Gynaecology, breast, gastro-intestinal cancer
Dr Zarnie Lwin	FRACP, BMBS (Myanmar), FCP (South Africa)	Staff Specialist	Central nervous system, lung, health services research, psychosocial research
Dr Wade Pullin	MBBS, B.Beh.Sc	Research Fellow	
Annette Cubitt	RN, Grad Cert (Clinical Trials Management), CCRP	Clinical Trials Manager	
Jenny Campbell	RN, BSc(Nursing)	Clinical Trial Coordinator	
Andrea McKenzie	EEN	Clinical Trial Coordinator	
Erin Purdon	RN, BN GC Cancer Nursing	Clinical Trial Coordinator	
Natasha Roberts	BN (Hons)	Clinical Trial Coordinator	
Amy Ives	BN AssocSc N	Clinical Trial Coordinator	
Chrissy Fletcher	RN, BA	Clinical Trial Coordinator	
Wendy Pritchard	RGN (UKCC), BSc Hons in Nursing Practice - Cancer	Clinical Trial Coordinator	
David Hickey	BAppSc	Clinical Trial Coordinator	
Victoria Holt	BA (Hons), Grad Dip Lib Stud	Research Assistant	
Danni Church		Administration Officer	

## Supervised post-graduate students

Name	Current studies	Research topic
Brown, T.	PhD	A randomised comparison of early prophylactic feeding via gastrostomy versus standard care in high risk patients with head and neck cancer

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Good, P., Lwin, Z., Broom, A., Kirby, E., Adams, J.	Negotiating palliative care in the context of culturally and linguistically diverse (CALD) patients: the Interpreters Study.	Mater Research Institute Theme 2 Program Grant	\$15,000	2013
Hadley, A.	Medical Oncology Gynaecological Cancer Database	RBWH Private Practice Trust Fund	\$8,093	2013-2014
Leggett, B., Whitehall, V., Burge, M., Wyld, D.	Project: Whole exome sequencing to identify mutations that predict recurrence in stage II colorectal cancer.	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013

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## Publications

Beesley VL, Green AC, Wyld DK, O'Rourke P, Wockner LF, Defazio A, Butow PN, Price MA, Horwood KR, Clavarino AM, Australian Ovarian Cancer Study Group, Australian Ovarian Cancer Study-Quality Of Life Study Investigators, Webb PM. Quality of life and treatment response among women with platinum-resistant versus platinum-sensitive ovarian cancer treated for progression: A prospective analysis. *Gynecol Oncol*. 2013; Oct 11. DOI: 10.1016/j.ygyno.2013.10.004. [Epub ahead of print].

Broom A, Good P, Kirby E, **Lwin Z**. Negotiating palliative care in the context of culturally and linguistically diverse patients. *Intern Med J*. 2013; 43(9):1043-6.

Brown T, Spurgin A, Ross L, Tripcony L, Keller J, **Hughes B**, Hodge R, Walker Q, Banks M, Kenny L, Crombie J. Validated swallowing and nutrition guidelines for patients with head and neck cancer: identification of high risk patients for prophylactic gastrostomy. *Head and Neck*. 2013; 35:1385-91.

**Burge M**, Francesconi AB, Kotasek D, Fida R, Smith G, Wilks A, Vasey PA, Lickliter JD, Phase I, pharmacokinetic and pharmacodynamic evaluation of CYT997, an orally-bioavailable cytotoxic and vascular-disrupting agent. *Invest New Drugs*. 2013; 31(1):126-35. **(2006/147)**.

Clarke S, **Burge M**, Cordwell C, Gibbs P, Reece W, Tebbutt N. An Australian translational Study to evaluate the prognostic role of inflammatory markers in patients with metastatic ColorEctal caNcer Treated with bevacizumab (Avastin™) [ASCENT]. *BMC Cancer*. 2013; 13:120.

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Day BW, Stringer BW, Al-Ejeh F, Ting MJ, Wilson J, Ensbey KS, Jamieson PR, Bruce ZC, Lim YC, Offenhäuser C, Charmsaz S, Cooper LT, Ellacott JK, Harding A, Leveque L, **Inglis P**, Allan S, Walker DG, Lackmann M, Osborne G, Khanna KK, Reynolds BA, Lickliter JD, Boyd AW. EphA3 maintains tumorigenicity and is a therapeutic target in glioblastoma multiforme. *Cancer Cell*. 2013; 23(2):238-48.

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**Hughes BG**, Jain VK, Brown T, Spurgin AL, Hartnett G, Keller J, Tripcony L, Appleyard M, Hodge R. Decreased hospital stay and significant cost savings after routine use of prophylactic gastrostomy for high-risk patients with head and neck cancer receiving chemoradiotherapy at a tertiary cancer institution. *Head Neck*. 2013; 35(3):436-42.

Jordan S, Steer C, DeFazio A, Quinn M, Obermair A, Friedlander M, Francis J, O'Brien S, Goss G, **Wyld D**, Australian Ovarian Cancer Study Group, Webb P; Ovarian Cancer Patterns of Care Study Group. Patterns of chemotherapy treatment for women with invasive epithelial ovarian cancer: a population-based study. *Gynecol Oncol*. 2013; 129(2):310-7.

Josephides E, Rodriguez-Vida A, Galazi M, Chowdhury S, **Suder A**. The role of metastasectomy in renal cell carcinoma. *Expert Rev Anticancer Ther*. 2013; 13(12):1363-71.

Kiely BE, Martin AJ, Tattersall MH, Nowak AK, Goldstein D, Wilcken NR, **Wyld DK**, Abdi EA, Glasgow A, Beale PJ, Jefford M, Glare PA, Stockler MR. The median informs the message: accuracy of individualized scenarios for survival time based on oncologists' estimates. *J Clin Oncol*. 2013; 31(28):3565-71.

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Lin C, Ravi-Kumar A, Keller J, O'Rourke P, MacFarlane D, Gwynne R, Kenny L, Buddle N, Martin J, **Hughes B**, Thomas P. 18F-fluoro-L-thymidine positron emission tomography for mucosal head and neck squamous cell carcinoma treated with definitive chemoradiation: A pilot study of nodal assessment and tracer safety. *ISRN Molecular Imaging vol*. 2013; Article ID 710305, 7 pages. Epub. 2013; Feb 21. DOI:10.1155/2013/710305.

**Lwin Z**, MacFadden D, Al-Zahrani A, Atenafu E, Miller BA, Sahgal A, Menard C, Laperriere N, Mason WP. Glioblastoma management in the temozolomide era: have we improved outcome? *J Neurooncol*. 2013; Nov. 115(2):303-10.

**Lwin Z**, Riess JW, Gandara D. The continuing role of chemotherapy for advanced non-small cell lung cancer in the targeted therapy era. *J Thorac Dis*. 2013; Oct. 5(Suppl 5):S556-S564. Review.

McNamara M, **Lwin Z**, Jiang H, Chung C, Millar BA, Sahgal A, Laperriere N and Mason WP. (Does time to first progression (TTP) impact post-progression survival in glioblastoma (GBM) in the temozolomide (TMZ) treatment era? *Neuro-Oncology*. 2013; 15, Supplement 3, ISSN 1522-8517.

Mohd Noor A, Sarker D, Vizor S, McLennan B, Hunter S, **Suder A**, Moller H, Spicer JF, Papa S. Effect of patient socioeconomic status on access to early-phase cancer trials. *J Clin Oncol*. 2013; 31(2):224-30.

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Nowak AK, Brown C, Millward MJ, Creaney J, Byrne MJ, **Hughes B**, Kremmidiotis G, Bibby DC, Leske AF, Mitchell PL, Pavlakis N, Boyer M, Stockler MR. A phase II clinical trial of the vascular disrupting agent BNC105P as second line chemotherapy for advanced Malignant Pleural Mesothelioma. *Lung Cancer*. 2013; 81(3):422-7.

Price TJ, Segelov E, **Burge M**, Haller DG, Ackland SP, Tebbutt NC, Karapetis CS, Pavlakis N, Sobrero AF, Cunningham D, Shapiro JD. Current opinion on optimal treatment for colorectal cancer. *Expert Rev Anticancer Ther*. 2013; 13(5):597-611.

Savas P, **Hughes B**, Solomon B. Targeted therapy in lung cancer. IPASS and beyond, keeping abreast of the explosion of targeted therapies for lung cancer. *JTD*. 2013; 5 (supp 5): S579-92.

# Department of Radiation Oncology

## Overview



**Assoc. Prof. Graeme Dickie**  
Director,  
Radiation Oncology

The Radiation Oncology Department provides radiotherapy services to a wide geographic area with treatment being delivered at the Royal Brisbane and Women's Hospital. The department provides service to the Royal Children's Hospital as well as outreach to the Prince Charles, Rockhampton, Longreach, Hervey Bay, Maryborough, Bundaberg, Redcliffe and Caboolture Hospitals. The unit has acquired new technology and is fortunate to be the first Australian site to have helical tomotherapy.

It has been a productive year for cancer research in Radiation Oncology at Royal Brisbane & Women's Hospital. Our core clinical research activity continues in concert with the busy clinical department.

We are grateful for our donors who continue to make funds available to support our work. We are particularly proud of our success in highly competitive National Health and Medical Research Council (NHMRC) grants. Over the last few years the trials program has progressed from largely retrospective investigator initiated trials to more translational and prospective projects.

Physics research has assumed a greater profile and we have a number of investigator initiated projects. Our new computing cluster has dramatically improved computation time and accelerated this work. Advanced imaging remains central to these technologies. This underlines the importance of an active imaging and medical physics research program.

## Research staff

Name	Qualifications	Position	Interests/specialities
Assoc Prof Graeme Dickie	MBBS, MBA, FRACP, FRANZCR	Director - Radiation Oncology	radiation oncology
Assoc Prof Roger Allison	MBBS, MRCP, FRCR, FRANZCR, FACHPM	Staff Specialist	radiation oncology, paediatric
Dr Catherine Bettington	MBBS, FRANZCR	Staff Specialist	radiation oncology
Dr Philip Chan	MBBS, FRANZCR	Staff Specialist	radiation oncology
Dr Robyn Cheuk	MBBS, DRACR	Staff Specialist	radiation oncology, paediatric
Dr Michael Fay	MBChB, FRACP, FRANZCR	Staff Specialist	radiation oncology, brain tumours
Dr Michelle Grogan	MBBS, FRANZCR	Staff Specialist	radiation oncology
Dr Lizbeth Kenny	MBBS, FRANZCR	Staff Specialist	radiation oncology
Dr Charles Lin	MBBS, FRANZCR	Staff Specialist	radiation oncology
Dr Gary Pratt	MBBS, FRANZCR	Staff Specialist	radiation oncology
Dr Sue Whitaker	MBChB, DMRT, FRCR, FRANZCR	Staff Specialist	radiation oncology
Lee Tripcony	BSc	Principal Clinical Scientist Statistics	database, statistics
Jacqui Keller	BBus(HIM)	Manager Clinical Trials	research, clinical trials
Jennifer Edmunds	Rn, BHSc	Clinical Trial Coordinator	research, clinical trials
Rebecca Pincus	Rn, BN, Grad Cert CDM	Clinical Trial Coordinator	research, clinical trials
Charmaine Mickelwright		Research Assistant	research, clinical trials
Greg Rattray	BApp Sc(MRT), Grad.Cert. HMgt (QH), FIR	Director – Radiation Therapy	radiation therapy
Daniel Bryant	BApp Sc (RT)	Radiation Therapist - Advanced	radiation therapy
Kevina Chroma	M HSc MRS, Grad.Dip. HMgt	Radiation Therapist - Advanced	radiation therapy

## Research staff

Name	Qualifications	Position	Interests/specialities
Stacey Cooke	BApp Sc (RT)	Radiation Therapist - Advanced	radiation therapy
Jemma Devereaux	BApp Sc (RT)	Radiation Therapist	radiation therapy
Shayne Etherton	BApp Sc (RT)	Radiation Therapist	radiation therapy
Selina Harris	BApp Sc (RT)	Radiation Therapist	radiation therapy
Rob McDowall	Grad.Cert. HMgt (QH), Dip.App Sc RT	Senior Radiation Therapist - Planning	radiation therapy
Janine Miles	BApp Sc (RT)	Radiation Therapist - Advanced	radiation therapy
Julie-Anne Outhwaite	BApp Sc (RT)	Radiation Therapist - Advanced	radiation therapy
Anthony Pagidas	BApp Sc (RT)	Radiation Therapist	radiation therapy
Michelle Ralston	BApp Sc (RT)	Radiation Therapist - Advanced	radiation therapy
Kathy Vidler	Dip.App Sc RT	Radiation Therapist	radiation therapy
Christopher Walsh	BApp Sc (RT)	Radiation Therapist - Advanced	radiation therapy
Calum Rae	BApp Sc (RT)	Radiation Therapist	radiation therapy
Melissa Borean	BApp Sc (RT)	Radiation Therapist	radiation therapy
Catherine Moreno	BApp Sc (RT)	Radiation Therapist	radiation therapy
Jasmine Baker	BApp Sc (RT)	Radiation Therapist	radiation therapy
Steven Sylvander	BSc, MSc	Director Medical Physics	Medical Physics
Robert Fitchew	BSc(Hons), MSc	Deputy Director Medical Physics	Medical Physics
Phil Back	BSc, MSc, PhD	Principal Physicist	Medical Physics
Alastair Dick	BSc, MSc	Physicist - Senior	Medical Physics
Zoe Baldwin	BMRP	Physicist - Senior	Medical Physics
Onno Kamst	BSc, MSc, Grad. Dip Ed	Physicist	Medical Physics
Craig Lancaster	BSc, Grad. Dip Med Phys	Physicist - Advanced	Medical Physics
Rachael Wilks	BSc, MSc	Physicist	Medical Physics
Kirby Francis	BSc, MSc	Physicist	Medical Physics
Diana Binny	BSc, MSc	Physicist	Medical Physics
Nancy Yu	BSc, MSc	Physicist	Medical Physics
Christopher Poole	BEng, MSc, PhD	Physicist	Medical Physics

## Supervised post-graduate students

Name	Current studies	Research topic
Fay M	PhD	Application of functional imaging in brain tumours
Kamst O	PhD	Portal Dosimetry Optimisation
Livingstone, A	MSc	3D optical scanning Presage Gel
Outhwaite J	PhD Medical Radiations	Patient stabilisation in Head and neck cancer
Veeranki, C	MSc	Octavius 2 commissioning on Tomotherapy.

## Awards and achievements

Award	Event	Recipient
The Bob Fitchew Award	ACPSEM-Q	Award named after Robert Fitchew for physics

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Rose, S., Kenny, L., Fay, M., Fisk N et al.	Australian Cancer Research Foundation Molecular Oncology Translational Imaging Facility	Australian Cancer Research Foundation	\$2,000,000	2012-2014
Kneebone, A., Williams, S., Frydenberg, M., Duchesne, G., Fisher, R., Kenny, L.	RAVES – Radiotherapy Adjuvant Versus Early Salvage following radical prostatectomy	NHMRC	\$775,000	2009-2013
Rose, S., Crozier, S., Salvado, S., Coulthard, A., Thomas, P., Fay, M.	Improving the Assessment of Brain Tumour Treatment Outcome using 18F-FDOPA PET – MRI Fusion	NHMRC	\$637,125	2010-2013
Valery, P., Garvey, G., Fay, M., Martin, J., Baade, P.	Patterns of care, co-morbidities and quality of life in indigenous people with cancer	NHMRC	\$610,731	2011-2013
Turner, M., Yates, P., Kenny, L., Gordon, L., Burmeister, B., Thomson, D., Hughes, B., McCarthy, A., Perry, C., Chan, R.	Improving quality of life in high-risk cancer populations: a randomised trial of a structured intervention for head and neck cancer survivors	NHMRC	\$476,074	2013-2015
Rose, S., Boyd, A., Whittaker, A., Thomas, P., Fay, M., Fisk, N.	The development of innovative Multiplexed Molecular Imaging Technology targeting improved diagnostic imaging of Glioblastoma Multiforme	NHMRC	\$389,925	2012-2015
Dickie, GJ.	Cancer Clinical Trials Data Manager Grants	Cancer Council Queensland	\$81,618	2013
Sylvander, S.	Presage Gel and Vista Scanner	PPTF	\$68,791	2013-2014
Fay, M.	Application of functional imaging in brain tumours	Royal Brisbane and Women's Hospital Foundation	\$40,000	2012-2013
Fay, M., Martin, J., Rose, S., Boyd, A.	Pilot study of the effect of valproate in the treatment of high grade glioma: validation of pathology and imaging biomarkers	Royal Brisbane and Women's Hospital Project Grant	\$32,000	2013
Yu, N.	Improvements to Monte Carlo models with improved Linac measurements	Royal Brisbane and Women's Hospital Project Grant	\$39,000	2013

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Bettington, C.	HREC/12/QRBW/129 A single arm prospective study of the effect of preoperative chemoradiotherapy on sexual dysfunction in men with locally advanced rectal cancer	RANZCR Research Grant	\$10,000	2012-2016
Thotathil, Z., Keller, J. Amin, R.	Clinical Trials Workshop TROG ASM	Genesis Oncology Trust	\$10,000	2012-2013
Kamst, O.	TSET measurements with Gafchromic film - T	PPTF	\$3,630	2013-2014
Poole, C.	3D printing in Radiation Oncology	RBWH Foundation Cancer Care Fund	\$500	2013-2014
Kamst, O.	3D sensor in Radiation Oncology	RBWH Foundation Cancer Care Fund	\$500	2013-2014

## Publications

Bettington CS, Tripcony L, Bryant G, Hickey B, Pratt G, Fay M. A retrospective analysis of survival outcomes for two different radiotherapy fractionation schedules given in the same overall time for limited stage small cell lung cancer. *Journal of Medical Imaging and Radiation Oncology*. 2013; 57(1):105-112.

Brown, T. E., Spurgin, A.-L., Ross, L., Tripcony, L., Keller, J., Hughes, B. G. M., Hodge, R., Walker, Q., Banks, M., Kenny, L. M. and Crombie, J. Validated swallowing and nutrition guidelines for patients with head and neck cancer: Identification of high-risk patients for proactive gastrostomy. *Head Neck*. 2013; 35(10):1385–1391.

Cartmill B, Cornwell P, Ward E, Davidson W, Nund R, Bettington C, Rahbari RM, Poulsen M, Porceddu S. Emerging understanding of dosimetric factors impacting on dysphagia and nutrition following radiotherapy for oropharyngeal cancer. *Head Neck*. 2013; 35(8):1211-1219.

Fay M, Poole CM, Pratt G. Recent advances in radiotherapy for thoracic tumours. *Journal of Thoracic Disease*. 2013; 5(5):551-555.

Finnigan R, Hruby G, Wratten C, Keller J, Tripcony L, Dickie G, Rischin D, Poulsen M. The Impact of Pre-Radiation Residual Disease Volume on Time to Loco-Regional Failure in Cutaneous Merkel Cell Carcinoma- A Trog Sub-Study. *International Journal of Radiation Oncology Biology Physics*. 2013; 86(1):91-5.

Goergen SK, Pool FJ, Turner TJ, Grimm JE, Appleyard MN, Crock C, Fahey MC, Fay MF, Ferris NJ, Liew SM, Perry RD, Revell A, Russell GM, Wang SS, Wriedt C. Evidence-based guideline for the written radiology report: Methods, recommendations and implementation challenges. *Journal of Medical Imaging and Radiation Oncology*. 2013; 57(1):1-7.

Graham PH, Plant N, Graham JL, Browne L, Borg M, Capp A, Delaney GP, Harvey J, Kenny L, Francis M, Zissiadis Y. A paired, double-blind, randomized comparison of a moisturizing durable barrier cream to 10% glycerine cream in the prophylactic management of postmastectomy irradiation skin care: trans Tasman Radiation Oncology Group (TROG) 04.01. *International Journal of Radiation Oncology Biology Physics*. 2013; 86(1):45-50.

Hughes BGM, Jain VK, Brown T, Spurgin AL, Hartnett G, Keller J, Tripcony L, Appleyard M, Hodge R. Decreased hospital stay and significant cost savings after routine use of prophylactic gastrostomy for high-risk patients with head and neck cancer receiving chemoradiotherapy at a tertiary cancer institution. *Head and Neck*. 2013; 35(3):436-42.

Kenny L. Counterpoint to Dr de Campo's letter. *Journal of Medical Imaging and Radiation Oncology*. 2013; Dec 5. DOI: 10.1111/1754-9485.12138. [Epub ahead of print].

Kenny LM, Adam A. Radiation oncology and interventional oncology: time for a collaborative approach. *Clinical Oncology (R Coll Radiol)*. 2013; 25(9):515-8.

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## Publications

Kenny LM, Peters LJ, Barton M, Milross C. Radiotherapy – a leap forward in cancer care. *Cancer Forum*, Cancer council Australia March. 2013; 37(1):42-46.

Lin C, Ravi Kumar A, Keller J, O'Rourke P, McFarlane D, Gwynne R, Kenny L, Buddle N, Martin J, Hughes B, and Thomas P. 18F-fluoro-L-thymidine Positron Emission Tomography for Mucosal Head and Neck Squamous Cell Carcinoma Treated with Definitive Chemoradiation: A Pilot Study of Nodal Assessment and Tracer Safety. *IRSN Molecular Imaging*. 2013; 21:7 pages.

Lin C, Tripcony L, Keller J, Poulsen M, Dickie G. Cutaneous Carcinoma of the Head and Neck with clinical features of perineural infiltration treated with radiotherapy. *Clinical Oncology*. 2013; 25(6):362-7.

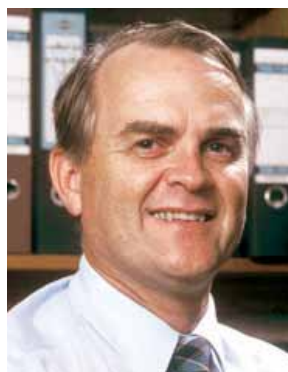
Lindsay J1, Dooley M, Martin J, Fay M, Kearney A, Barras M. Reducing potentially inappropriate medications in palliative cancer patients: evidence to support deprescribing approaches. *Support Care Cancer*. 2013; Dec 21. DOI: 10.1007/s00520-013-2098-7. [Epub ahead of print].

Outhwaite J, W. McDowall R, Marquart L, Rattray G, Fielding A, Hargrave C. Training program impact on thermoplastic immobilization for head and neck radiation therapy. *Radiography*. 2013; 19(1):28-34.

Rose S, Fay M, Bourgeat P, Dowson N, Salvado O, Gai Y, Coulthard A, Crozier S. Correlation of MRI-Derived Apparent Diffusion Coefficients in Newly Diagnosed Gliomas with [18F]-Fluoro-L-Dopa PET: What Are We Really Measuring with Minimum ADC? *AJNR American Journal of Neuroradiology*. 2013; 34(4):758-64.

Windsor AA, Koh ES, Allen S, Gabriel GS, Yeo AE, Allison R, van der Linden YM, Barton MB. Poor outcomes after whole brain radiotherapy in patients with brain metastases: results from an international multicentre cohort study. *Clinical Oncology (R Coll Radiol)*. 2013; 25(11):674-80.

# Queensland Haemophilia Centre



**Dr John Rowell**  
Director,  
Queensland and Queensland  
Haemophilia Centre

## Overview

The Queensland Haemophilia Centre is a state-wide service based at the Royal Brisbane & Women's Hospital (RBWH). The centre provides comprehensive care for those with haemophilia and other inherited bleeding disorders. Designated staff provide medical, nursing, physiotherapy and social work input into patient care. This includes specialised support including diagnosis, factor replacement therapy, musculo-skeletal and orthopaedic assessment and management, care and support in relation to blood-borne viruses, genetic counselling and psychosocial support.

A large focus this year has been the World Federation of Haemophilia Congress that was held for the first time in Australia.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr John Rowell	MBBS FRCPA MBA	Director Haematology – Pathology Queensland and Queensland Haemophilia Centre, CCS	Haemophilia
Ms Beryl Zeissink	RN MNurs MSc (GenetCouns)	Clinical Nurse Consultant – Queensland Haemophilia Centre	Haemophilia
Ms Olivia Hollingdrake	RN Grad Cert (Onc Nursing) Grad Cert (Public Health)	Clinical Nurse – Queensland Haemophilia Centre	
Ms Maureen Spilsbury	B. Social Work (Honours)	Advanced Social Worker – Queensland Haemophilia Centre	Psychosocial aspects of Inherited Bleeding Disorders
Dr Desdemona Chong	B. Soc. Sci (Honours) D. Psych	Advanced Psychologist – Qld Haemophilia Centre	
Dr Moana Harlen	B. Ed., B Behav. Sci B. Psych (Hons) D. Psych	Snr Psychologist Haemophilia – Qld Haemophilia Centre	



**A/Prof Alanna Geary**  
Nursing Director,  
Cancer Care Services

## Overview

The nursing team comprises 267 nursing staff, providing quality nursing care across the Clinical Haematology and Bone Marrow Transplant Unit, the Department of Medical Oncology, the Department of Radiation Oncology and the Queensland Haemophilia Centre. The growing demand of cancer care has presented a challenge for the nursing profession in its workload, workforce issues, and most importantly the need to provide innovative and cost-effective nursing care. Cancer nurses play an important and unique role in responding to the needs of people affected by cancer throughout the continuum of care, from prevention to survivorship, end-of-life care and bereavement support.

The nursing research team was established in 2008 to provide an infrastructure for research and innovation and to ensure that our nursing care is at the world-class level. The team is involved in national and international supportive cancer care research efforts including a number of NHMRC funded research projects. In 2013, the Cancer Nursing Professorial Precinct was established, which is a strategic initiative of Cancer Care Services, RBWH and the School of Nursing, QUT. Through our strong collaboration with QUT and other research partners, the precinct seeks to further improve outcomes for people affected by cancer through high quality clinical research and the delivery of evidence-based nursing care.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Raymond Chan	RN, BN, MAppSc, PhD, FACN	Nurse Researcher and Deputy Director Research; Senior Research Fellow, QUT; Adj Associate Professor, Griffith University	Health services research/ symptom management/ palliative care/ survivorship cancer care/ intravenous access devices management
Sarah Northfield	RN, BN, GradCert(Cancer Nursing)	Clinical Nurse (Research)	Intravenous access devices management/ palliative care
Peter Hancock	RN, BN, MN (Cancer Nursing)	Clinical Nurse (Research)	Intravenous access devices management
Jennifer Mann	RN, BN, MN (Cancer Nursing)	Clinical Nurse (Research)	Radiation induced skin reactions

## Supervised post-graduate students

Name	Current studies	Research topic
Button, E,	PhD	Identification of palliative care needs in patients with a haematological malignancy
Flynn, J.	Master of Advanced Practice (Health Care Research)	Sterile vs Aseptic non-touch technique for bung change
Gavin, N.	PhD	The effect of parenteral nutrition on microbial growth and its influence upon catheter-related blood stream infection in patients with a central venous access device
Northfield, S.	Master of Applied Science (Research)	Referrals to specialist palliative care in acute cancer care settings
Savage, K.	Master of Applied Science (Research)	Palliative care education for nurses caring for patients with a haematological malignancy

## Awards and achievements

Award	Event	Recipient
Adem Crosby Haematology Nursing Award	Leukaemia Foundation Haematology Nursing Award	Button, E.
Best Nursing Poster Award	HAA Annual Scientific Meeting 2013	Button, E.
PhD Scholarship	National Health and Medical Research Council (NHMRC) Centre for Research Excellence for End of Life Care	Button, E.
Cecilia Brazil Nursing Research Award	22nd RBWH Healthcare Symposium	Chan, R.
Health Practitioner Research Fellowship	National Health and Medical Research Council (NHMRC)	Chan, R.
PhD Scholarship	National Health and Medical Research Council (NHMRC) Centre for Research Excellence for Nursing	Gavin, N.
PhD Scholarship	Royal Brisbane and Women's Hospital	Gavin, N.
Best Poster Award	16th CNSA Winter Congress	Russell, E.

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Chan R., Yates P., Turner J., Hughes B.	Development and evaluation of a nurse-led, tailored self-management behavioural intervention for managing distressing symptoms in patients with advanced cancer (The SM2 Study). (APP 1070997)	NHMRC and RBWH Foundation	\$199,724	2013-2017
Turner, J., Yates, P., Kenny, L., Gordon, L., Burmeister, B., Thomson, D., Hughes, B., McCarthy, A., Perry, C., Chan, R.	Improving quality of life in high-risk cancer populations: a randomised trial of a structured intervention for head and neck cancer survivors (APP1041640)	NHMRC	\$476,074	2013-2016
Anderson, D., McCarthy, A., Yates, P., Turner, J., Monterosso, L., Krishnasamy, M., White, K., Hall, S.	The Women's Wellness after Cancer Program: a national multisite randomized clinical trial of an e-health enabled lifestyle modification intervention to improve the health and wellness of women after cancer treatment	NHMRC	\$1,165,260	2013-2015
Mollee, P., Kennedy, G., Looke, D., Van Kulenburg, A., Geary, A.	Catheter-associated bloodstream infections in adults with cancer: a prospective randomised controlled trial (APP 1050386)	NHMRC	\$86,658	2012-2014
Rickard, C., Webster, J., Young J., McMillan, D., Fraser, J., Chan, R.	The RSVP Trial: Replacement of Intravascular device administration sets after Standard Versus Prolonged use. (APP1008428)	NHMRC	\$1,555,305	2011-2014

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Chan, R., Keller, J., Chuek, R., Tripcony, L., Blades, R., Keogh, S.	A double-blind randomised controlled trial of Moogoo Udder Cream® versus aqueous cream for managing radiation-induced skin reactions in patients with cancer.	Office of Health and Medical Research, Queensland Health	\$15,000	2013
Chan, R., Keller, J., Chuek, R., Tripcony, L., Blades, R., Keogh, S.	A double-blind randomised controlled trial of Moogoo Udder Cream® versus aqueous cream for managing radiation-induced skin reactions in patients with cancer.	Royal Brisbane and Women's Hospital Project Grant	\$10,000	2013
Gavin, N.	Bacteraemia associated with total parenteral nutrition (TPN) feeding in hospitalised patients	NHMRC Centre of Research Excellence in Nursing, Griffith University	\$96,000	2012-2014

## Publications

Chan R. Towards better end-of-life care: A major opportunity for nurses to contribute to the debate. *International Journal of Nursing Studies*. 2013; 51:355-356.

Chan R. Evidence-based cancer nursing: Cancer Nursing and the Cochrane Collaboration. *Cancer Nursing*. 2013; 36(1):1-2.

Chan R. Intravascular device-related research: future priorities areas for cancer nursing. *Cancer Nursing*. 2013; 36(2):89-90.

Chan R. Response to "Topical agent therapy for prevention and treatment of radio-dermatitis: a meta-analysis". *Supportive Care in Cancer*. 2013; 21:1801-1802.

Chan R. Do nursing interventions targeting concurrent symptoms hold promise for managing fatigue in patients with advanced cancer? *Journal of Clinical Oncology*. 2013; Nov 12. DOI: 10.1200/JCO.2013.52.4363. [Epub ahead of print].

Chan R, Dunning T, Mills J, Yates P, Zeitz K. Nursing Research: The Australian College of Nursing Position Statement. *Collegian*. 2013; Sept 26. DOI: 10.1016/j.collegn.2013.08.005. [Epub ahead of print].

Chan R, Larsen E, Chan P. An overview of level I evidence for the management of radiation dermatitis literature. *Supportive Care in Cancer*. 2013; 21(suppl 1):S30.

Chan R, Phillips J, Currow D. Do palliative care professionals settle for low level evidence? *Palliative Medicine*. 2013; Dec 20. DOI: 10.1177/0269216313514707. [Epub ahead of print].

Chan R, Webster J. End-of-life care pathways for improving outcomes in caring for the dying (Review) (Update). *Cochrane Database of Systematic Reviews* 2013; Issue 11. Art. No.: CD008006. DOI:10.1002/1451858.CD008006.pub3. pp.1-23.

Chan R, Yates P, McCarthy A. A prospective longitudinal survey of fatigue self-management behaviors in patients with advanced cancer. *Supportive Care in Cancer*. 2013; 21(suppl 1):S30.

Russell E, Chan R, New K, Marsh N. A point prevalence study of cancer nursing practices for managing intravascular devices in an Australian tertiary cancer center. *European Journal of Oncology Nursing*. 2013; Dec 27. DOI: 10.1016/j.ejon.2013.11.010. [Epub ahead of print].

So WKW, Chan R, Chan DNS, Hughes BGM, Chair SY, Choi KC, Chan CWH. A systematic review on quality of life among patients at 1 year after treatment for head and neck cancer. *Supportive Care in Cancer*. 2013; 21(suppl 1):S30.

# Corporate Services



**Scott McMullen**  
Executive Director,  
Corporate Services  
and Performance

## Overview

Corporate Services provides a diverse range of non-clinical support services that are critical components in the smooth and efficient operation of RBWH.

Corporate Services at RBWH are recognised throughout Queensland Health for a high level of professionalism and leading by example. This is evidenced by the requests we support to contribute to corporate initiatives in all Corporate Services areas.

Corporate Services provided more than 10.1 million occasions of service to support the RBWH clinical services lines in the 2012-2013 financial year.

## Key departments

- » Clinical Resources and Assets
- » Engineering and Building Services
- » Information Technology Services
- » Strategy and Efficiency
- » Workplace Relations
- » Central Messenger Services
- » Lady Ramsay Early Learning and Education Centre
- » Records Office
- » Operational Support Services, including:
  - Administrative Support Management Unit
  - Food and Retail Services
  - Occupational Health and Safety
  - Patient Support Services
  - Security and Occupational Violence Prevention Services
  - Switchboard Services

## Executive and directing staff

**Scott McMullen**  
Executive Director, Corporate Services

**Mohan Singh**  
Director, Engineering and Building Services

**Katherine Gallagher**  
A/Director, Information Technology Services

**Iris Frangos**  
Manager, Medical Technology and Assets

**Assoc Prof. Geoffrey Hitchings**  
Director, Operational and Support Services

**Mark Whelan**  
Director, Workplace Relations

# Corporate Services

## Overview

### Facilitating Transitions and leadership in Health

This study is an Australian Research Council (ARC)-funded project conducted by The University of Queensland (UQ) Business School with the Royal Brisbane and Women's Hospital. The study examines how employees integrate multiple, potentially conflicting identities over time at two critical transition points: the transition of new employees to their roles, and the transition of clinicians and others to leadership and management roles.

The study is in its final year of data collection. Data collection commenced in January 2011 and will conclude in November 2014. More than 1200 surveys have been collected and more than 200 interviews conducted. Given the longitudinal design methodology employed in the study, preliminary data analysis commenced in March 2014 when the last of time one responses were collected at RBHW Orientation.

### Research staff

Name	Qualifications	Position	Interests/specialities
Scott McMullen	MHM, BA, BSocWk, Cert IV Workplace Assessor	Executive Director, Corporate Services and Performance	evidence-based patient care, trauma counselling, health services/system research
Assoc Prof. Geoffrey Hitchings	AssocDipAppSc (OHS), GradDipOHS, MHLthSc	Director, Commercial Activities, MNHHS	workforce planning, food service delivery, occupational violence, risk engineering, safety management, procurement
Angie Dobbrick	MHM, BSpPath, PGDip Health Research Methodology	Director, Patient Care and Patient Flow	progressive neurological disorders, health services redesign/research, evidenced based practice, innovation

### Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
McMullen, S., Dobbrick, A.	Managing professional transitions in the Health Sector	Australian Research Council	\$500,000	2012-2013
McMullen, S.	Development and evaluation of a model for assessment of clinical services improvements	Queensland University of Technology	\$45,000	2011-2014

# Critical Care and Clinical Support Services



**Dr Robert Webb**  
Acting Executive Director,  
Critical Care and Clinical  
Support Services

## Overview

Critical Care and Clinical Support Services undertakes a variety of research, including clinical trial and laboratory research.

We have a commitment to undergraduate and postgraduate teaching and research and have developed strong links with The University of Queensland (UQ) and Queensland University of Technology (QUT).

Critical Care and Clinical Support Services actively participates in nursing evidence-based practice activities and undertakes nursing research. The nursing staff of the service line are currently involved in a number of nursing research projects, including multidisciplinary research activities.



**Kerri McLeod**  
Nursing Director,  
Critical Care and Clinical  
Support Services

## Key departments

Directorate including:

- » Admissions and Trust Office, Confirmation Centre
- » Centralised Specialist Outpatient Services / Private Practice Specialist Suite
- » Department of Emergency Medicine
- » Department of Intensive Care Medicine
- » Hospital in the Nursing Home
- » Hyperbaric Medicine Service
- » Professor Tess Cramond Multidisciplinary Pain Centre
- » Skin Integrity Service

## Executive and directing staff

**Dr Robert Webb**

Acting Executive Director, Critical Care and Clinical Support Services

**Kerri McLeod**

Nursing Director, Critical Care and Clinical Support Services

**Dr John Burke**

A/Director, Department of Emergency Medicine

**Dr Kenneth Thistlethwaite**

A/Director, Hyperbaric Medicine Service

**Prof. Jeffrey Lipman**

Director, Department of Intensive Care Medicine

**Prof. Julia Fleming**

Director, Professor Tess Cramond Multidisciplinary Pain Centre

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## Supervised post-graduate students

Name	Current studies	Research topic
Campbell J	PhD	Incontinence-associated dermatitis in the acute care setting: an exploration of the phenomenon.

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Campbell J, Coyer F, Osborne S, Robertson I, Mudge A	Incontinence-associated dermatitis and Candida detection; A pilot prospective observational study in the acute care setting.	Royal Brisbane and Women's Hospital Project Grant	\$39,000	2013

# Department of Emergency Medicine



**Dr. John Burke**  
A/Director,  
Emergency Medicine

## Overview

The Department of Emergency Medicine at RBWH has a diverse research programme. Research strengths include acute coronary syndrome, sepsis, trauma, patient flow and care of the elderly patient.

Research staff include one part-time Research Director, one full-time post-doctoral Research Officer, one half-time Research Fellow, four PhD candidates, one master student and an expanding group of dedicated research nurses.

In 2013, the research team continued its success in publishing in high quality journals such as *Annals of Emergency Medicine* and the *Journal of the American College of Cardiology*.

The department has active research collaborations with The University of Queensland's Burns, Trauma and Critical Care Research Centre (BTCCRC), the School of Public Health at Queensland University of Technology (QUT), RBWH Departments of Cardiology and Intensive Care Medicine and Pathology Queensland.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr. John Burke	MBBS, FACEM	A/Director, Emergency Medicine	Patient flow
Dr William Lukin	MBBS, FACEM	Deputy Director, Emergency Medicine	trauma, Hospital in the Nursing Home
Assoc. Prof. Kevin Chu	MBBS, MS, FACEM	Director, Emergency Medicine Research	Subarachnoid haemorrhage, diagnostic tests, research methodology
Prof. Anthony Brown	MBChB, FRCP, FRCS (ED), FACEM, FCEM	Chair, Emergency Medicine	Medical editing, medical education acute coronary syndrome
Dr Catherine Hurn	MBBS, FACEM	Senior Staff Specialist	Trauma, massive transfusion, TEG
Dr Philip Richardson	MBChB, LLB, FACEM	Staff Specialist	End-of-life issues, medical errors
Dr Louise Cullen	MBBS, FACEM	Staff Specialist	Acute cardiac disease, acute coronary syndrome, syncope
Dr Julian Williams	MBBS, FACEM	Staff Specialist	Sepsis, ARISE trial (Queensland state coordinator)
Assoc. Prof. Jaimi Greenslade	BPsych (Hons), PhD	Research Fellow	Psychology, statistics
Dr Ibrahim Mahmoud	MBBS, MSc. MPH, PhD	Research Officer	Epidemiology, infectious diseases, health services
Tegwen Howell	B. Econ., M.Ec.	Research Officer	Subarachnoid haemorrhage
Tracey Hawkins	BN, GradDipNursing (Critical Care and Emergency)	Clinical Nurse (Research)	Acute coronary syndrome, syncope, TEG
Emily Dalton	BN	Clinical Nurse (Research)	Acute coronary syndrome, anxiety
Kate Parker	BN	Clinical Nurse (Research)	Acute coronary syndrome, syncope,
Sally Jones	BN, MN, Grad Cert (Oncology)	Assistant Nursing Director	Nursing research, emotional intelligence leadership

## Supervised post-graduate students

Name	Current studies	Research topic
Cullen, L.	PhD	Acute coronary syndrome
Greenslade, J.	MS (Statistics)	Statistics
Lukin, W.	PhD	Hospital in the Nursing Home (HINH)
Williams, J.	PhD	Sepsis
Flaws, D.	PhD	Acute coronary syndrome

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Chu K.	Diagnostic workup for suspected subarachnoid haemorrhage presenting to the ED with headaches	Queensland Emergency Medicine Research Foundation (QEMRF)	\$268,600	2013
MacDonald S, Brown S, Chu K, Brown AFT, Fatovich D, Arendts G, Macdonald E, Greenslade J, Lukin B, Williams J, Cullen L, Kinnear F.	Establishment of an Emergency Medicine clinical research collaborative	UWA-UQ Bilateral Research Collaboration Awards	\$15,498	2013
Cullen L, Parsonage W, Than M, Pemberton C.	Relationship between patient delay distribution and 12-month health outcomes.	National Heart Foundation of Australia	\$98,436	2013
Than M et al.	Investigation of Cardiovascular Pathology in the Emergency Department.	Health Research Council of New Zealand	\$713,273	2013
Cullen, L., Than, M., Parsonage, W., Greenslade, J.	Early hs-TnI for rapid risk stratification of chest pain patients presenting to the emergency department	Abbott Diagnostics	\$92,237	2012-2013
Cullen, L., Parsonage, W., Greenslade, J.	Two-hour diagnostic algorithm for high-sensitivity cardiac Troponin T in patients with suspected acute myocardial infarction: An international derivation and validation study	Roche	\$29,407	2012-2013
Cullen, L, Parsonage, W., Greenslade, J.	Investigation of faster triage of chest pain patients using Siemens dimension EXL TnI	Siemens	\$15,000	2012-2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Williams, J., Greenslade, J., Brown, S., Stone, S., Lukin, B.	The crystalloid versus albumin in the resuscitation of emergency department patients with Septic Shock (CARESS) trial inflammatory marker pilot study	Queensland Emergency Medicine Research Foundation	\$41,270	2012-2013
Martin, S., Chu, K., Greenslade, J.	Single palmar injection versus double injection dorsal digital nerve block for finger injuries in the emergency department: A randomised clinical trial	Queensland Emergency Medicine Research Foundation	\$8,712	2012-2013

## Publications

Aram N, Brazil V, Davin L, & **Greenslade J**. Intern underperformance is detected more frequently in emergency medicine rotations. *Emergency Medicine Australasia*. 2013; 25:68-74.

**Chu K**, H, Wagholikar A. S, Greenslade JH, O'Dwyer J A, & Brown AF. Sustained reductions in emergency department laboratory test orders: impact of a simple intervention. *Postgraduate Medical Journal*. 2013; 89:(1056), 566-571.

**Cullen L**, Aldous S, Than M, Greenslade J, Tate J, George PM, Hammett CJ, Richards AM, Ungerer JPJ, Troughton RW, Brown AFT, Flaws DF, Lamanna A, Pemberton CJ, Florkowski C, Pretorius CJ, Chu K, Parsonage WA. Comparison of high sensitivity troponin T and I assays in the diagnosis of non-ST elevation acute myocardial infarction in emergency patients with chest pain. *Clin Biochem*. 2013; Dec 5. PubMed PMID: 24316100.

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# Department of Intensive Care Medicine



**Prof. Jeffrey Lipman**  
Director,  
Intensive Care Medicine

## Overview

Once again, the year has been busy and fruitful. We again obtained NHMRC funding, other Grant funding, and for the first time an ARC grant. We have published in high impact journals, and our international collaborations are seemingly forever increasing.

From a numbers point of view our publication rate is impressive – 79 for 2013, the majority of which are articles in peer-reviewed journals, plus 20 book chapters, and 10 other research articles in press. We have publications in British Medical Journal, Critical Care Medicine, Intensive Care Medicine, Critical Care, Clinical Infectious Diseases and many of the high impact infectious diseases journals. Our staff are also presenting at local, national and international meetings.

2014 will see us expanding our collaborative efforts, particularly with Gold Coast ICU and Prince of Wales ICU in Hong Kong. With Professor Van Zundert kick starting Anaesthesia research at RBWH, we also expect more collaborations there too.

Some of our seedlings will start bearing fruit in 2014. Already we have two accepted publications from our European sponsored Defining Antibiotic Levels in ICU trial, with extras soon to come off the drawing board. Hopefully 2014 will see the completion and write-up of BLING II, and SMARRT is about to start enrolling, with Prince of Wales in Hong Kong to be the first “cab off the rank”. Another of our multicentered trials CLIP (use of frozen platelets in Cardiac Surgery) is also soon to start, and it is lovely to see the nurse co-ordinator for this (Renae Deans) using this trial as part of her higher degree.

Congratulations to everyone involved in RBWH ICU.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof. Jeffrey Lipman	MBBCh, DA (SA), FFA (SA), FFA (Crit Care), FCICM, MD	Director, Intensive Care Medicine	management in intensive care, resuscitation of burns and pharmacokinetics of antibiotic dosage
Assoc. Prof. Robert Boots	MBBS (Hons), FRACP, FCICM, PhD, GradDipClinEpi, MMedSci, MHealthAdmin, IS	Deputy Director, Intensive Care Medicine	clinical epidemiology, management of burns and prevention of ventilator associated pneumonia
Prof. Michael Reade	MBBS, BSc, DPhil, MPH, PGCertAME, DIMCRCSED, DMCC, FHEA, FCCP, FANZCA, FCICM	Professor, Military Medicine; Staff Intensivist	a) Clinical trials and preclinical models of: traumatic brain injury, coagulopathy, inflammation, b) early molecular identification of sepsis c) individual patient data meta-analysis of clinical trials d) design of trauma systems
Prof Jason Roberts	BAppSc, BPharm (Hons I), PhD, FSHP	Pharmacist Consultant and NHMRC Career Development Fellow	Drug dosing in critically ill patients, therapeutic drug monitoring
Dr Joel Dulhunty	BSc (Hons), MTH, MBBS, PhD	Research Fellow	epidemiology of burn injury and severe sepsis, study design and methodology
Dr Jeremy Cohen	MBBS, BSc, MRCP, FRCA, FCICM, PhD	Staff Intensivist	adrenal function in critical illness

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr John Gowardman	BSc, BHB, MBChB, FRACP, FCICM	Senior Staff Intensivist	intra-vascular device associated infections, Biofilm formation on vascular devices, head injury, weaning and extubation from mechanical ventilation
Dr Andrew Udy	BHB, MBChB, PGCert (AME), FCICM	Staff Intensivist	impact of augmented renal clearance on the prescription of antibiotics, acute kidney injury, microcirculation, severe sepsis, septic shock and measurement techniques in ICU
Dr Judith Bellapart	MD, ESICM, FCICM	Staff Intensivist	identifying alterations in microcirculation during shock using side stream dark field imaging
Dr Anthony Holley	BSc, MBChB, DipPaeds, DipDHM, FACEM, FCICM	Senior Staff Intensivist	identifying alterations in microcirculation during shock using side stream dark field imaging
Dr Steve O'Donaghue	MBChB, FANZCA, FCICM	Staff Intensivist	microcirculation in shocked critically ill patients during resuscitation and prevention of ventilator associated pneumonia
Dr Neil Widdicombe	MBBS, FRCA (UK), FCICM	Senior Staff Intensivist, Hospital Medical Director, Organ Donation	end-of-life care and organ donation, application of telemedicine in critical care, critical care retrieval and transport
Dr Jayesh Dhanani	MBBS, MD, FCICM	Staff Intensivist	antimicrobial therapy, lung infections, inhaled/aerosol therapy
Dr Rajeev Hegde	MBBS, MD, EDICM, FCICM	Senior Staff Intensivist	inhalation injury
Dr George Pang	MBBS, FANZCA, FCICM	Staff Intensivist	lipid rescue from anaesthetic overdose
Dr Jennifer Paratz	MPhty, FACP, PhD, GradCertEd (Medical and Health Sciences)	Consultant Physiotherapist, Senior Research fellow	management and outcome of critically ill and burns patients, myocardial dysfunction, exercise and metabolism, diagnosis of sepsis in burns patients
Hiran Bandeshe	BSc, BEng	Database Manager	data mining, ICU database management
Therese Starr	GradCertCritCare, GradDipHealthProm, NNC	Research Manager	certified clinical research coordinator involved in major clinical trials
Melissa Lassig- Smith	DipAppSc (Nursing), GradDip (Adv Nursing), GradDipCritCare, MNursing (CritCare)	Research Coordinator	involvement in all aspects of studies in intensive care from initial proposal to completion
Janine Stuart	BNurs	Research Coordinator	involved with all research currently being completed in ICU, writing proposals, obtaining ethics approvals, writing grants, data collection and publishing research articles
Renae Deans	BNurs, CertCritCare	Research Coordinator	clinical research coordinator involved in the project management of major clinical trials

## Research staff

Name	Qualifications	Position	Interests/specialities
Paul Jarrett	Dip (HE) Nurs	Research Coordinator	involved in research studies taking place within ICU, from proposal to completion as well as communication and liaison with study sponsors and other coordinators
Rachael Dunlop	BNurs, GradCert (CritCare)	Research Coordinator	involved in research studies taking place within ICU and QUT
A/Prof Fiona Coyer	PhD, MSc, Grad Cert (Adult education)	Senior Research Fellow	Incontinence associated Dermatitis, pressure injury prevention, end of life care, patient hygiene

## Supervised post-graduate students

Name	Current studies	Research topic
Ruqaiya Al-Balushi	PhD	Glutamine Supplementation in the intensive care setting
Geetha Kayambu	PhD	Early targeted physical rehabilitation is safe yet effective in patients with sepsis syndromes admitted to the ICU
Bernie Bissett	PhD	Inspiratory Muscle Training (IMT) for ventilated patients
James Walsh	PhD	Predictive factors of success in pulmonary rehabilitation
Julian Williams	PhD	Identifying the factors that are apparent early during the course of infection that may predict a poor outcome & to improve the immediate treatment of sepsis syndromes by determining and optimising various aspects of care
Andrew Udy	PhD	the impact of augmented renal clearance on beta-lactam drug concentrations
Janattul-Ain Jamal	PhD	Pharmaco-kinetics & Pharmaco dynamics of $\beta$ -lactam antibiotics during RRT in critically ill patients
Julie Varghese	PhD	Tissue pharmacokinetics of antibiotics in patients undergoing two different forms of RRT
Syamhanin Adnan	PhD	Pharmacokinetics of commonly prescribed antibiotics in the critically ill in two clinical settings
Suzanne Parker	PhD	Pharmacokinetics of key antibiotics in critically ill patients, with particular interest in the iv use of the antibiotic fosfomycin for the treatment of multi-drug resistant infections
Caleb Economou	PhD	The Pharmacokinetics of antibiotics in critically ill patients undergoing extended daily diafiltration
Mohd Hafiz Abdul Aziz	PhD	The effect of continuous infusion of beta-lactam antibiotics on clinical outcome in critically ill patients
Judith Bellapart	PhD	Comparing cerebral microcirculation between injured and non-injured hemispheres during different degrees of anaemia: an ovine model
Danny Tsai	PhD	Investigating the pharmacokinetics of Ceftriaxone, Meropenem, Piperacillin/Tazobactam and Vancomycin in severely septic Indigenous patients

## Supervised post-graduate students

Name	Current studies	Research topic
Abdulaziz Alobaid	PhD	An Investigation of the Pharmacokinetics of Piperacillin/ tazobactam, Meropenem and Fluconazole in Critically Ill Obese Patients
Michelle Spermon	MPhil	How donor site epithelisation and scar maturation times following split skin grafting in burns patients can be improved using compression therapy
Gloria Wong	MBBS/PhD	The use of therapeutic drug monitoring to optimize D-lactam dosing in critically ill patients
Tim Hanrahan	MBBS/MPhil	To clarify what concentrations and dosing regimens of Vancomycin ensure clinical efficacy whilst minimising nephrotoxicity
Renae Deans	MPhil	The utility and cost-effectiveness of cryopreserved platelets, vs. conventional liquid-stored platelets, for use in the management of active bleeding
Paul Conway	MBBS/Hons	response of the hypothalamic-pituitary-adrenal axis in acute subarachnoid haemorrhage
Becky Leung	MBBS/Hons	Cardiovascular risk in burns patients
Stephanie Collins	MBBS/Hons	Asthma Management in Queensland Intensive Care Units
Elissa Milford	PhD	Using blood products and inflammatory modulators to ameliorate acute traumatic coagulopathy in an ovine trauma-haemorrhage model
Natasha van Zyl	MPhil	Development of an ovine model of acute traumatic coagulopathy
Rebecca Rashleigh-Rolls	MAppSc(Research)	An investigation of infection control interventions and their impact on hospital acquired infection rates
Priscilla Pather	MAppSc(Research)	The incidence and measurement of incontinence associated dermatitis in the intensive care environment
Sandra Johnston	MAppSc(Research)	Effectiveness of high fidelity simulation as a teaching tool in undergraduate nursing education
Jill Campbell	PhD	Incontinence-associated dermatitis in the acute care setting: An exploration of the phenomenon
Nahla Tayyib	PhD	Use of an interventional patient skin integrity care bundle in the intensive care unit to best manage skin integrity in the critically ill patient
Naomi Tutticci	PhD	Critical reflection by undergraduate nursing students in a High Fidelity Simulation: student versus academic facilitated reflection
Kathryn Kynoch	PhD	A model of demographic, environmental, psychological and information predictors to meet the needs of families with a relative in an intensive care unit
Jane O'Connell	PhD	An exploratory study for the development of emergency nurse practitioner specialist clinical practice standards
Jennifer Mulvogue	PhD	Knowledge of Psychosis Amongst Registered Nurses in Registered Aged Care Facilities
Hajar Alsamari	PhD	Clinical decision making processes of nurses using renal replacement therapies in intensive care in Saudi Arabia

## Awards and achievements

Award	Event	Recipient
Winner ACCCN Best Nursing Scholarship prize.	Critical care nurses' practices in the provision of end of life care. ANZICS/ACCCN Annual Scientific Meeting on Intensive Care, Brisbane, 2013	Ranse K, Yates P, Coyer F.
NATO Non-article 5 medal with clasp "ISAF" multiple tour indicator numeral 2	second deployment to Afghanistan	Reade MC
NATO Non-article 5 medal with clasp "ISAF" multiple tour indicator numeral 2	second deployment to Afghanistan	Holley A

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Shehabi Y, Bellomo R, Reade M, Seppelt I, McArthur C, Bailey M, Howe B.	The Australasian Sedation Practice in Intensive Care Evaluation (SPICE) Randomised Controlled Trial	NHMRC Project Grant 1043938	\$2,752,725	2013-2015
Brauer S, Ada L, Kuys S, Paratz J	IMproving Physical ACTivity with Treadmill training following stroke: the stroke-IMPACT trial	NHMRC Project Grant 1047426	\$711,271	2012-2015
Rickard C, Fraser J, Webster J, Marshall A, Young J, Playford EG, McMillan D, McGrail M, Gowardman J, Thom O.	The SAVE Trial: Securing All intraVenous devices Effectively in hospitals. A randomised controlled trial	NHMRC Project Grant 1041910	\$944,798	2012-2015
Roberts J	Antibiotic optimisation for severely ill patients	NHMRC Career Development Award	\$278,407	2013
Cooper JD, Phillips L, Bellomo R, Cameron P, Reade M, Isbister J, French C, Myles P, Webb S, McNeil J.	Centre of Research Excellence for Patient Blood Management in Critical Illness and Trauma	NHMRC CRE 1040971	\$2,498,407	2013-2017
Brauer S, Ada L, Kuys S, Paratz J	The stroke IMPACT trial: IMproving Physical ACTivity via Treadmill training	Office of Health Medical Research	\$250,000	2012-2016
Reade M, Holley A, Irving D, Marks D, Johnson L, Fraser J, Bellomo R, Gattas D	Evaluation of cryopreserved platelets for the treatment of perioperative haemorrhage	ANZCA	\$85,646	2013-2014
Ho Kwok, Corcoran T, Lipman J, Roberts J, Barden A, Mori T.	Determinants of Urinary Output Response to Intravenous Frusemide in Patients with Acute Kidney Injury	ANZCA	\$36,000	2013
Shekar K, Roberts J, Smith MT, Fung YL, Fraser JF, Wallis SC, Mullany DV, Diab S, McDonald CI, Barnet AG, Ghassabian S, Platts DG, Dunster KD.	Antibiotic, sedative and analgesic drug pharmacokinetics during extracorporeal membrane oxygenation - understanding altered pharmacokinetics to improve patient outcomes	ANZCA	\$35,000	2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Reade M, Holley A, Irving D, Marks D, Johnson L, Fraser J, Bellomo R, Gattas D	A pilot randomised, controlled, double-blind clinical trial of cryopreserved platelets vs. conventional liquid-stored platelets for the management of post-surgical bleeding	Australian Red Cross Blood Service Research Development Applications	\$45,000	2013
Shekar K, Roberts J, Smith MT, Fung YL, Fraser JF, Wallis SC, Mullany DV, Diab S, McDonald CI, Barnet AG, Ghassabian S, Platts DG, Dunster KD.	Antibiotic, sedative and analgesic drug pharmacokinetics during ovine extracorporeal membrane oxygenation - understanding altered pharmacokinetics to improve patient outcomes	The Prince Charles Hospital Foundation	\$91,900	2013-2014
Bellapart J, Fraser J, Boots R, Reade M, Paratz J	Assessment of the Cerebral Microcirculation after Head Injury	Defence Health Foundation	\$32,355	2012-2013
Paratz J, Boots R, Kayambu G,	Physiological and Functional Outcomes Following Early Rehabilitation in Sepsis (i-PERFORM Trial)	Intensive Care Foundation	\$10,270	2012-2013
Shekar K, Roberts J, Smith M, Fraser J	Antibiotic, sedative and analgesic drug pharmacokinetics during extracorporeal membrane oxygenation understanding altered pharmacokinetics to improve patient outcomes	Intensive Care Foundation	\$30,000	2012-2013
Roberts J, Ranganathan D.	PK of cephalosporin antibiotics in peritoneal dialysis patients with peritonitis.	Royal Brisbane and Women's Hospital Project Grant	\$19,000	2013
Dulhunty J, Lipman J, Starr T.	Randomised controlled trial of beta-lactam continuous infusion compared with intermittent dosing in critically ill patients.	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013
Bellapart J, Boots R, Paratz J, Reade M, Fraser J.	Assessment of the Cerebral Microcirculation after Head Injury	Royal Brisbane and Women's Hospital Project Grant	\$30,000	2013
Maguire M, Reade MC, Tetsworth K, Wullschlegger M.	Thrombelastographic Evaluation of Coagulation Changes in Orthopaedic Reaming	Royal Brisbane and Women's Hospital Project Grant	\$36,000	2013
Boots R, Paratz J, Kenardy J, Comans T, Mitchell G, Coyer F	Improving outcome in Sepsis	Royal Brisbane and Women's Hospital Project Grant	\$38,000	2013
Paratz J, Paul S, Younger J, Cohen J, Muller M	Are burns patients at increased risk of cardiovascular disease?	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013
Economou C	The Pharmacokinetics of Vancomycin, Meropenem & Piperacillin-Tazobactam in Critically Ill Patients undergoing Sustained Low-Efficiency Dialysis	RBWH Research Scholarship	\$40,000	2013
Mudge A, Parsonson F, Donovan P, Reade MC, Walker P, McCrae P.	An interdisciplinary model to enhance care of surgical elders.	Australian Centre for Health Services Innovation	\$75,000	2012-2014

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Fraser J, Chew M, Reade M, Shekar K, Molenaar P, Fung L, Tung JP, Dunster K, Moore J.	Towards optimisation of tissue oxygenation in the critically ill: the effect of fresh and aged blood in infection and trauma.	The Prince Charles Hospital Foundation	\$100,000	2012-2013
McArthur C, Lipman J, Dulhunty J, McGuinness S, Williams T, Freebairn R, Young P.	RCT of continuous vs intermittent beta-lactam antibiotics in the critically ill	Auckland District Health Board	\$213, 894	2013-2015
Dhanani J, Barnett A, Lipman J, Boots R, Ford M, Jarrett P	Saving blood and money - introduction of laboratory testing guidelines and its effect on blood loss and cost of therapy in an intensive care unit.	AusHSI Stimulus Grant	\$40,000	2013-2014
Udy A	Relative hypotension and acute kidney in patients with shock – a prospective multi-centre cohort study	John Hunter Hospital Charitable Trust	\$23,809	2013
Muller M, Paratz J, Redman B, Harrison J, Dulhunty J	Can an adult burn prevention media campaign decrease incidence of fuel and fire burns.	Private Practice Trust Fund, RBWH	\$55,000	2013
Walsh J, Chambers D, Morris N, Yerkovich S, Comans T, McKeough Z, Paratz J	Evaluation of health care utilisation benefits following pulmonary rehabilitation across twenty programs throughout Queensland:	Queensland Health—Health Practitioner Research Grant 2013	\$26,241.95	2013-2014
Lipman J	Effectiveness of a continuous infusion intervention versus standard intermittent dosing of beta-lactam antibiotics in the treatment of severe sepsis	Baxter Healthcare	\$72,727	2013
Paratz J, Boots R, Comans T, Kenardy J, Mitchell G, Coyer F, Thomas P	Improving outcome in sepsis	Health and Medical Research	\$182,000	2013-2016
Lipman, J.	BLING II	Baxter Unrestricted Grant	\$40,000	2012-2013
Staib, A., Aston, K., Fraser, J.F., Fung, Y.L., Shekar, K., Chew, M., Reade, M., Tung, J.P., McDonald, C.	Does age of the transfused blood matter in acutely ill patients with trauma and infection?	Queensland Emergency Medicine Research Foundation (QEMRF)	\$200,000	2012-2013
Roberts JA	Antibiotic Absorption and Clearance during Renal Replacement Therapy: An ex vivo study	University of Queensland Early Career Researcher Grant	\$37,000	2013

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## Publications

Adnan S, Li JX, Wallis SC, Rudd M, **Jarrett P**, Paterson DL, **Lipman J**, **Udy AA**, **Roberts JA**. Pharmacokinetics of meropenem and piperacillin in critically ill patients with indwelling surgical drains. *Int J Antimicrob Agents*. 2013; Jul; 42(1):90-3.

Adnan S, Paterson DL, **Lipman J**, **Roberts JA**. Ampicillin/sulbactam: Its potential use in treating infections in critically ill patients. *Int J Antimicrob Agents*. 2013; Nov; 42(5):384-9.

Al Balushi R, **Cohen J**, Banks M, **Paratz J**. The clinical role of glutamine supplementation in patients with multiple trauma: a narrative review. *Anaesth Intensive Care*. 2013; Jan. 41(1):24-34.

Baldwin CE, **Paratz JD**, Bersten AD. Muscle strength assessment in critically ill patients with handheld dynamometry: An investigation of reliability, minimal detectable change, and time to peak force generation. *J Crit Care*. 2013; Feb. 28(1):77-86.

Barrett H L, Devin R, Clarke S, Nitert M D, **Boots R**, Fagermo N, Callaway LK, Lust K. A fifteen-year retrospective review of obstetric patients requiring critical care. *Obstet Med*. 2012; Dec. 5:166-170.

**Bellapart J**, Dunster KR, Diab S, Platts DG, Raffel C, Gabrielian L, Maybauer MO, Barnett A, **Boots RJ**, Fraser JF. Intracardiac echocardiography guided transeptal catheter injection of microspheres for assessment of cerebral microcirculation in experimental models. *Cardiol Res Pract*. 2013; 2013:595838.

Beumier M, **Roberts JA**, Kabtouri H, Hites M, Cotton F, Wolff F, **Lipman J**, Jacobs F, Vincent JL, Taccone FS. A new regimen for continuous infusion of vancomycin during continuous renal replacement therapy. *J Antimicrob Chemother*. 2013; 68:2859–2865.

**Boots RJ**. Can Readmissions Really be Used as an ICU Performance Indicator? *Crit Care Med*. 2013; Jan. 41(1):331-2.

Carlier M, Carrett S, **Roberts JA**, Stove V, Verstraete AG, Hoste E, Depuydt P, Decruyenaere J, Wallis SC, **Lipman J**, De Waele JJ. Meropenem and piperacillin/tazobactam prescribing in critically ill patients: does augmented renal clearance affect pharmacokinetic/pharmacodynamic target attainment when extended infusions are used? *Crit Care*. 2013; May 3. 17(3):R84.

Carlier M, Noë M, De Waele JJ, Stove V, Verstraete AG, **Lipman J**, **Roberts JA**. Population pharmacokinetics and dosing simulations of amoxicillin/clavulanic acid in critically ill patients. *J Antimicrob Chemother*. 2013; Nov. 68(11):2600-8.

**Cohen J**, Venkatesh B, Tan T. Comparison of the diagnostic accuracy of measured and calculated free cortisol in acutely ill patients using the Coolens equation. *Crit Care Resusc*. 2013; Mar. 15(1):39-41.

**Coyer F**, Cook JL, **Gracie C**. Securing medical devices Part A: What's available for endotracheal tubes? *Critical Times*. 2013; September. 8-12.

**Coyer F**, Cook JL, **Gracie C**. Securing medical devices Part B: What's available for nasogastric tubes? *Critical Times*. 2013; December. 16-19.

**Coyer FM**, Stotts NA, Blackman VS. A prospective window into medical device-related pressure ulcers in intensive care. *Int Wound J*. 2013; Feb 4. [Epub ahead of print].

**Dhanani J**, Mullany DV, Fraser JF. Effect of preoperative renal function on long-term survival after cardiac surgery. *J Thorac Cardiovasc Surg*. 2013; Jul. 146(1):90-5.

**Dulhunty JM**, **Roberts JA**, Davis JS, Webb SA, Bellomo R, Gomersall C, Shirwadkar C, Eastwood GM, Myburgh J, Paterson DL, **Lipman J**. Reply to Soman et al. Continuous infusion of beta-lactam antibiotics in severe sepsis: a multi-centre double-blind, randomised controlled trial. *Clin Infect Dis*. 2013; 57(2):323-4.

**Dulhunty JM**, **Roberts JA**, Davis JS, Webb SA, Bellomo R, Gomersall C, Shirwadkar C, Eastwood GM, Myburgh J, Paterson DL, **Lipman J**. Continuous infusion of Beta-lactam antibiotics in severe sepsis: a multicenter double-blind, randomized controlled trial. *Clin Infect Dis*. 2013; Jan; 56(2):236-44.

**Dulhunty JM**, **Roberts JA**, Davis JS, Webb SA, Bellomo R, Gomersall C, Shirwadkar C, Eastwood GM, Myburgh J, Paterson DL, **Starr T**, **Udy AA**, Paul SK, **Lipman J**; Australian and New Zealand Intensive Care Society Clinical Trials Group and Australasian Society for Infectious Diseases Clinical Research Network. A protocol for a multicentre randomised controlled trial of continuous beta-lactam infusion compared with intermittent beta-lactam dosing in critically ill patients with severe sepsis: the BLING II study. *Crit Care Resusc*. 2013; Sep.15(3):179-85.

Evans JA, Wallis SC, **Dulhunty JM**, **Pang G**. Binding of local anaesthetics to the lipid emulsion Clinoleic™ 20%. *Anaesth Intensive Care*. 2013; Sep. 41(5):618-22.

Fielding DI, Bashirzadeh F, Deller D, Douglas A, Boots R, Hopkins P. Life-saving closure of a pulmonary cavity by endobronchial valve placement. *Am J Respir Crit Care Med*. 2013; 187:1145-6.

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## Publications

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# Department of Hyperbaric Medicine Service



**Dr Kenneth Thistlethwaite**

Acting Director,  
Hyperbaric Medicine

## Overview

The Hyperbaric Medicine Service is conducting research in the use of Hyperbaric Oxygen Therapy (HBOT) in the treatment of patients with established late radiation soft tissue injury, Diabetic Foot Ulcers, Idiopathic Sudden Sensorineural Hearing Loss (ISSHL) and as adjunctive therapy in the treatment of chronic non healing wounds.

The Xerostomia and chronic non healing wound trials are randomised, double-blinded and placebo-controlled. The diabetic foot ulcer trial is randomised, prospective and multi centred. The ISSHL study is a retrospective audit of cases for averaged decibel improvement. We are also collaborating with the Queensland Institute of Medical Research (QIMR) to look at the effect of HBOT on the oral bacterial genome in the xerostomia group of patients.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Susannah Sherlock	BSc, MBBS, FANZCA	Staff Specialist	HBOT with respect to soft tissue radiation injury, sudden sensorineural hearing loss , diabetic wound healing
Dr Kenneth Thistlethwaite	BSc(Hons), MBBS, FRACGP(JCCA)	Staff Specialist	Chronic non healing leg wounds, sudden sensorineural hearing loss, diabetic wound healing

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Sherlock, S., Reid, D., Webb, R., Bourke, A., Acton, C., Dickie, G., Krause, L., Atkinson, P., King D.	Hyperbaric Oxygen for Treatment of Radiation Induced Xerostomia	ANZCA	\$20,000	2013
Sherlock, S	Hyperbaric oxygen therapy for foot ulcers in diabetes	RBWH Private Practice Trust Fund	\$10,000	2013-2014

# Professor Tess Cramond Multidisciplinary Pain Centre



**Prof. Julia Fleming**

Director,  
Professor Tess Cramond  
Multidisciplinary Pain Centre

## Overview

The Professor Tess Cramond Multidisciplinary Pain Centre provides assessment and management of inpatients and outpatients with complex persistent pain, malignant pain and burns pain that may impact adversely upon multiple dimensions of patient's lives. The Pain Centre intends to expand the research program to include pharmaceutical and interventional therapies, evaluation of systems, models of care and outcome measures for pain management, and the role the Centre's pain management programs on mood, stress, sleep and activity.

Highlights have been :

- Dr Paul Gray was continued to explore techniques and medications for neuropathic pain following burn injury, promoting the concept of "Phantom Skin Pain".
- Ms Nicole Andrews, Occupational Therapist and past Cramond Research Fellow, continued her PhD research studies into the activity patterns in patients with chronic pain.
- Dr Bryce Clubb continued collaborations with the Drugs of Dependence Unit (Bill Lovedale) to investigate the co-occurrence of chronic non-malignant pain and substance dependence.
- The Allied Health Model of Care Project was completed and report submitted. This project evaluated an Integrated Allied Health Assessment process for patients with chronic pain, and the role of Allied Health Assistant in the Multidisciplinary Pain Centre.
- Karl Bagraith, past Cramond Fellow in the Pain Centre, continued chronic pain outcomes research in association with the Pain Centre, and progressed a study to clinically validate new depression and anxiety measures for pain practice and research.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof Julia Fleming	MBBS, PhD, FANZCA, FFPMANZCA, Dip Med (Pain Mngmt)	Director	Pain Medicine, Neurobiology of pain, glia and spinal inhibitory systems, neuropathic and metastatic bone pain, public health in pain
Dr Paul Gray	MBBS, PhD, FANZCA, FFPMANZCA	Senior Staff Specialist	Pain Medicine, Anaesthesia; burn pain; persistent pain management strategies including interventional.
Dr Bryce Clubb	MBBS, FRACR, FFPMANZCA, FACHAM, RACP	Staff Specialist (Pain Medicine, Addiction medicine)	Concurrent chronic non-malignant pain and substance dependence
Nicole Andrews	BOccThy (Hon 1)	Senior Occupational Therapist	Chronic pain, activity patterns, disability and daily function
Mr Karl Bagraitht	BOccThy (Hon1)	Principle Project Officer New MOC Workforce	Outcome measurement, persistent pain, chronic musculoskeletal conditions, International Classification of Functioning, Disability and Health

## Supervised post-graduate students

Name	Current studies	Research topic
Siti Sarah Fazalul Rahiman	PhD	The potential role of DYN A (1-17) fragments as an immunotherapeutic target in peripheral inflammation (Supervisor: Dr P Gray)

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## Awards and achievements

Award	Event	Recipient
Occupational therapy Australia post-graduate research award	-	Andrews, N.
Australian Pain Society PhD student travel award	-	Andrews, N.

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Andrews, N.	Approach to activity and determinants of daily function in patients with chronic pain: a momentary within-persons perspective	RBWH Post-graduate Scholarship	\$65,000	2013

# Internal Medicine Services



**Kate Mason**  
Acting Executive Director,  
Internal Medicine Services



**Sandy Jamieson**  
Acting Nursing Director,  
Internal Medicine Services

## Overview

Internal Medicine Services has a commitment to academic medicine, with areas of outstanding research productivity.

To support our research there are strong links with the Queensland Institute of Medical Research (QIMR), The University of Queensland Centre for Clinical Research (UQCCR), The University of Queensland (UQ) School of Medicine, Queensland University of Technology (QUT) and a range of other research partners. Internal Medicine staff actively participate in the Annual RBWH Health Care Symposium and in speciality conferences where excellence in medicine related research is presented to the broader health care community.

Translation of research outcomes into clinical practice benefits for our patients will be a major focus of the future of research application in Internal Medicine Services.

Nursing and health professionals actively participate in research and evidenced-based practice and multidisciplinary research across the service line. In most areas of Internal Medicine Services, Research Assistant roles are filled by highly skilled nursing staff.

We are proud of the fact that over the last few years, we have had a continual increase in publications and an increase in the value of the research grants. This is a testament to the dedication, curiosity and persistence of our staff. The most important benefit of this is that we know that the best patient care occurs in centres where there is a strong culture of research with a multidisciplinary focus.

## Key departments

- » Department of Cardiology
- » Department of Clinical Immunology and Allergy
- » Department of Clinical Pharmacology
- » Department of Dermatology
- » Department of Endocrinology
- » Department of Gastroenterology and Hepatology
- » Genetic Health Queensland
- » Infectious Diseases Unit
- » Department of Internal Medicine and Aged Care/Obstetric Medicine Unit
- » Department of Neurology
- » Department of Nuclear Medicine/Queensland PET Service
- » Palliative Care Service
- » Department of Pharmacy
- » Department of Renal Medicine
- » Department of Rheumatology
- » Department of Thoracic Medicine

## Executive and directing staff

**Kate Mason**  
Acting Executive Director  
Internal Medicine Services

**Sandy Jamieson**  
Acting Nursing Director  
Internal Medicine Services

**Assoc. Prof. John Atherton**  
Director, Cardiology

**Dr Roger Prentice**  
Director, Clinical Immunology and Allergy

**Dr Paul Kubler**  
Director, Clinical Pharmacology

**Dr Ivan Robertson**  
Director, Dermatology

**Assoc. Prof. Michael d'Emden**  
Director, Endocrinology

**Dr Mark Appleyard** Director, Gastroenterology and Hepatology  
**Assoc. Prof. Julie McGaughran**  
Director, Genetic Health Queensland

**Assoc. Prof. Tony Allworth**  
Director, Infectious Disease

**Assoc. Prof. Charles Denaro**  
Director, Internal Medicine and Aged Care

**Dr Andrew Wong**  
Director, Neurology and Stroke Services

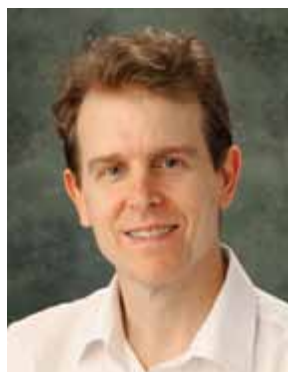
**Dr Carol Douglas**  
Clinical Director, Palliative Care

**Assoc. Prof. Ian Coombes**  
Director, Pharmacy

**Dr Helen Healy**  
Director, Renal Medicine

**Dr Paul Kubler**  
Director, Rheumatology

# Department of Cardiology



**Assoc. Prof. John Atherton**  
Director,  
Cardiology

## Overview

We have a broad investigator-driven research program with a dominant focus on health service research and evaluation, including chest pain assessment, heart failure disease management, alternative models of cardiac rehabilitation, cardiac genetics, cardiac obstetrics, multimodality imaging and heart failure prevention. Much of this research has grown from the efforts of clinicians to improve models of care with interdisciplinary collaboration within RBWH and with other centres nationally and internationally.

The evaluation of chest pain has involved a collaboration with the emergency department and internal medicine. This research has led to international collaborations and is informing the evaluation of chest pain across Queensland and other jurisdictions. We have unique cardiac obstetric (collaboration with obstetric physicians in Internal Medicine and Obstetric Medicine) and cardiac genetic (collaboration with Genetic Health Queensland) clinics. We have steering committee membership on the European Cardiac Obstetric Registry (part of the EURObservational Research program as the only Australian representative), and the Australian National Genetic Heart Disease Registry. One of our staff is the Queensland clinical lead for Snapshot ACS (which provided insight into the management of acute coronary syndromes in Australia and New Zealand), and the chair of the Queensland Snapshot Data Workgroup of Statewide Cardiac Clinical Network.

We are investigating the role of training echocardiography-naïve nursing staff to assess LV function. This could allow a paradigm shift of echocardiography to affordable population screening and disease monitoring. We are collaborating with a UQ-based group of researchers to investigate the role of salivary biomarkers in heart failure and cardiovascular disease detection. Additional research interests include a dedicated electrophysiology animal laboratory, hypertrophic cardiomyopathy genotype-phenotype correlation and Fabry disease.

We have a strong clinical trials research program and have been the lead national and global recruiting site for a number of multicentre trials. Areas of interest include acute coronary syndromes, heart failure, pacing and atrial fibrillation. Dr Chris Hammett is the Australian National PI for the ATLANTIC study (a multinational study of antiplatelet therapy timing for STEMI patients undergoing primary PCI).

We were the top Australian recruiter for an interventional device trial (ABSORB-3), numerous acute coronary syndrome trials (COGENT, PEGASUS, SOLID, APPRAISE, ATLAS-ACS, ATLAS-ACS2, TAO, ACCELERATE), and the worldwide top recruiter for both the ATLAS-ACS and ATLAS-ACS2 trials (investigating the use of rivaroxaban in acute coronary syndromes). We were the top Australian enrolling site for the TIGRIS registry. We are also a lead recruiting site for multicentre studies in electrophysiology and pacing including being in the top five worldwide for PROTECT PACE and in the top 10 worldwide for CASTLE AF.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Ferdous Alam	MBBS, FRACP	Electrophysiology Fellow	
A/Prof John Atherton	MBBS, PhD, FRACP, FCSANZ	Director of Cardiology	Heart failure, cardiac genetics, cardiac rehabilitation, economics
Dr Anthony Brazzale	MBBS	Cardiology Registrar	
Dr Loretta Carr	MBBS	Cardiology Registrar	
Dr Charles Chao	MBBS, FRACP	Cardiologist	Cardiac Imaging
Dr Karin Chia	MBBS, FRACP	Staff Cardiologist and Electrophysiologist	Electrophysiology
Dr Julie Ch'ng	MBBS, FRACP	Staff Cardiologist	Echocardiography

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Claudia Cosgrove	MBBS	Cardiology Registrar	
Dr David Cross	MBBS FRACP FCSANZ	Visiting Senior Cardiologist	Clinical trials, acute coronary syndromes
Dr Arun Dahiya	MBBS, FRACP	Staff Cardiologist	Multimodality imaging including echocardiography, cardiac CT and cardiac MRI
Dr Mark Dooris	MBBS (Hons Class 2) FRACP Grad Dip Sci (Mathematics), FCSANZ	Staff Interventional Cardiologist and Director of Cardiac Catheterisation Laboratory	Interventional cardiology, clinical audit, mathematics
Ms Gae Goodman	BN	Clinical trials coordinator	Clinical trials
Dr Christopher Hammett	BHB, MBChB, MD, FRACP, FCSANZ	Staff Interventional Cardiologist	Interventional cardiology, clinical trials, acute coronary syndromes
<b>Dr Sam Hayman</b>	<b>MBBS</b>	<b>Cardiology Registrar</b>	
<b>Dr Samuel Hillier</b>	<b>MBBS, M Phil</b>	<b>Cardiology Fellow</b>	
Ms Linda Hindom	BN	Clinical trials coordinator	Clinical trials
Dr Cleonie Jayasuriya	MBBS, FRACP	Staff Cardiologist	Echocardiography
Ms Lydia Lilwall	BN	Clinical trials coordinator	Clinical trials
Ms Ada Lo	Grad Dip Appl Sci, Masters	Senior Echosonographer	Echocardiography, cardiomyopathies, novel echocardiographic imaging techniques
Dr Louise McCormack	MBBS	Cardiology Registrar	
Dr Paul Martin	MBBCh, MRCPI, FRACP, PhD, FCSANZ	Staff Cardiologist and Electrophysiologist	Electrophysiology, atrial fibrillation
Dr Iman Mohasseb	MBBS	Cardiac Imaging Fellow	
Ms Leeanne Palethorpe	BN	Clinical trials coordinator	Clinical trials
Dr William Parsonage	BMedSci (Hons) MBBS DM MRCP(UK) FRACP	Staff Cardiologist	Echocardiography, cardiac obstetrics, chest pain assessment, Fabry disease
Dr Rohan Poulter	MBBS, FRACP	Interventional Cardiology Fellow	Cardiac CT
Dr Sandy Prasad	MBBS, FRACP	Staff Cardiologist	Echocardiography
Prof Adam Scott	BSc PhD	Director of Cardiac Sciences	Exercise physiology, heart failure, Fabry disease
Dr Rajesh Shetty	MBBS, MD (Internal Medicine), DM (Cardiology), FRACP	Staff Interventional Cardiologist	Interventional cardiology, pulmonary hypertension
Dr Yash Singbal	MBBS	Cardiology Registrar	
Dr Peter Stewart	MBBS, FRACP	Staff Interventional Cardiologist	Interventional cardiology
Dr Roger Wilkinson	MBBS, FRACP, FCSANZ	Visiting Cardiologist	
Dr John Younger	MB BCh MRCP FRACP	Staff Cardiologist	Multimodality imaging including echocardiography, cardiac CT and cardiac MRI

## Supervised post-graduate students

Name	Current studies	Research topic
Guppy-Coles, K	B App Sci Honours	The performance and reliability of using non-specialised nursing staff to quantify a left ventricular ejection fraction via 3D-echocardiography.
Guppy-Coles, K	PhD	Novel 3D echocardiography techniques of left ventricular functional assessment: utilisation in routine clinical practice and screening.
Poulter, R	PhD	Evaluating the diagnostic performance of dual energy cardiac computed tomography.
Lo, A	PhD	Identification of new echocardiographic parameters in distinguishing between familial cardiomyopathy genotypic positive patients with and without phenotypic expression.
Dahiya, A	M Phil	Assessment and improvement of multi-reader concordance and accuracy in diagnoses based on multiple parameters.
Suna, J	Masters of Research	The effect of exercise on sleep quality in heart failure patients.

## Awards and achievements

Award	Event	Recipient
QH/MNHHS Australia Day Award; QH Australia Day Awards		Dr Adam Scott
2013 MJA, MDA National Prize for excellence in medical research, for the best research paper published in the Medical Journal of Australia.	Acute coronary syndrome care across Australia and New Zealand: the SNAPSHOT ACS study Med J Aust 2013;199:185-91	Chew DP, French J, Briffa TG, <b>Hammett CJ</b> , Ellis CJ, Ranasinghe I, Aliprandi-Costa BJ, Astley CM, Turnbull FM, Lefkovits J, Redfern J, Carr B, Gamble GD, Lintern KJ, Howell TEJ, Parker H, Tavella R, Bloomer SG, Hyun KK, Brieger DB
American Society of Echocardiography Foundation 2013 Abstract Presenter Travel Grant	American Society of Echocardiography 24th Annual Scientific Sessions, Minneapolis, June/ July 2013	Mr Kris Guppy-Coles
Short-listed to present at the 2013 Cardiac Society of Australia and New Zealand Nursing Affiliate Prize section	61st Cardiac Society of Australia and New Zealand Annual Scientific Meeting, Gold Coast, August 2013	Mr Kris Guppy-Coles
Winner, Best Clinical, Education and Health Services Poster	22nd Annual Royal Brisbane and Women's Healthcare Symposium, October, 2013	Mr Kris Guppy-Coles

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
L Cullen, AFT Brown, J Greenslade, P O'Rourke, K Chu, X-Y Hou, W Parsonage, N Graves, M Than, J Tate	A decision analytic cost-effectiveness model for chest pain pathways.	Queensland Emergency Medicine Research Foundation	\$41,716	2011-2013
L Cullen, W Parsonage, J Greenslade.	2hr Diagnostic algorithm for high sensitivity cardiac Troponin T in patients with suspected acute myocardial infarction: an international derivation and validation study.	Roche Diagnostics	\$29,407	2011-2013
L Cullen, M Than, W Parsonage, J Greenslade	Early hs-TnI for rapid risk stratification of chest pain patients presenting to the Emergency Department.	Abbott Laboratories	\$92,237	2012-2013
L Cullen, W Parsonage, J Greenslade.	Investigation of faster triage of chest pain patients using Siemens Dimension EXL TnI.	Siemens	\$15,000	2012-2013
J Atherton, H Trueman.	Statewide cardiac genetic project	Statewide Cardiac Clinical Network	\$65,000	2012-2013
L Cullen, W Parsonage, M Than, C Pemberton.	Relationship between patient delay distribution and 12-month health outcomes.	National Heart Foundation of Australia	\$98,436	2013-2014
A Dahiya, J Atherton, S Prasad.	Evaluation of a training protocol for novice health professionals to evaluate left ventricular function using real-time, 3-dimensional echocardiography to allow screening for left ventricular systolic dysfunction (LVSD) in high-risk populations.	GE Healthcare Global Research	\$36,454	2013-2014
J Wu, J Atherton, A Chang, M Courtney, A Clark, E Strodl, S McPhail.	Improving delivery by Ehealth-Assurance for life for cardiac-diabetic patients.	Royal Brisbane and Women's Hospital Project Grant	\$39,000	2013
Brown, A., Greenslade, J., O'Rourke, P., Chu, K., Hou, X., Parsonage, W., Graves, N., Than, M., Tate J	A clinical decision tool for rapid assessment of cardiac chest pain	Queensland Emergency Medicine Research Foundation	\$581,223	2011-2013

## Publications

**Camuglia AC, Younger JF, McGaughran J, Lo A, Atherton JJ.** Cardiac myosin-binding protein C gene mutation expressed as hypertrophic cardiomyopathy and left ventricular noncompaction within two families: Insights from cardiac magnetic resonance in clinical screening. *Int J Cardiol.* 2013; 168:2950.

Chew DP, French J, Briffa TG, **Hammett CJ**, Ellis CJ, Ranasinghe I, Aliprandi-Costa BJ, Astley CM, Turnbull FM, Lefkovits J, Redfern J, Carr B, Gamble GD, Lintern KJ, Howell TEJ, Parker H, Tavella R, Bloomer SG, Hyun KK, Brieger DB. Acute coronary syndrome care across Australia and New Zealand: the SNAPSHOT ACS study. *Med J Aust.* 2013; 199:185-91. (awarded the 2013 MJA, MDA National Prize for excellence in medical research, for the best research paper published in the Medical Journal of Australia).

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## Publications

Chew DP, Junbo G, **Parsonage W**, Kerkar P, Sulimov VA, Horsfall M, Mattchoss S; Perceived Risk of Ischemic and Bleeding Events in Acute Coronary Syndrome Patients (PREDICT) Study Investigators. Perceived risk of ischemic and bleeding events in acute coronary syndromes. *Circ Cardiovasc Qual Outcomes*. 2013; 6:299-308.

Cullen L, Greenslade J, **Hammett CJ**, Brown AF, Chew DP, Bilesky J, Than M, **Lamanna A**, Ryan K, Chu K, **Parsonage WA**. Comparison of Three Risk Stratification Rules for Predicting Patients With Acute Coronary Syndrome Presenting to an Australian Emergency Department. *Heart Lung Circ*. 2013; 22:844-51.

Cullen L, Mueller C, **Parsonage WA**, Wildi K, Greenslade JH, Twerenbold R, Aldous S, Meller B, Tate JR, Reichlin T, **Hammett CJ**, Zellweger C, Ungerer Mmed JP, Gimenez MR, Troughton R, Murray K, Brown AF, Mueller M, George P, Mosimann T, Flaws DF, Reiter M, **Lamanna A**, Haaf P, Pemberton CJ, Richards AM, Chu K, Reid CM, Peacock WF, Jaffe AS, Florkowski C, Deely JM, Than M. Validation of high-sensitivity troponin I in a 2-h diagnostic strategy to assess 30-day outcomes in emergency-department patients with possible acute coronary syndrome. *J Am Coll Cardiol*. 2013; 62:1242-9.

Cullen L, **Parsonage WA**, Greenslade J, **Lamanna A**, **Hammett CJ**, Than M, Tate J, Kalinowski L, Ungerer JP, Chu K, Brown A. Delta troponin for the early diagnosis of AMI in emergency patients with chest pain. *Int J Cardiol*. 2013; 168:2602-8.

**Dahiya A**, Collier P, Krasuski R, Kalahasti V, Del Nido P, Stewart WJ. Aorta-to-pulmonary vein fistula in an asymptomatic 25-year-old man. *Circulation*. 2013; 127:1727-9.

Foo JYY, Wan Y, Schulz BL, Kostner K, **Atherton JJ**, Cooper-White JJ, Dimeski G, Punyadeera CK. Circulating fragments of NT-proBNP in plasma of heart failure patients. *Clin Chem*. 2013; 59:1523-31.

Fredericks B, Clark RA, Adams M, **Atherton J**, Taylor-Johnson S, Wu C-J, Howie-Esquivel J, Dracup K, Buitendyk N. Using participatory action research to assist in heart failure self-care amongst indigenous Australians: A pilot study. *ALARj-Action Learning Action Research Journal*. 2013; 19:40-60.

George T, **Ashover S**, Cullen L, Larsen P, Gibson J, Bilesky J, Coverdale S, **Parsonage W**. Introduction of an accelerated diagnostic protocol in the assessment of emergency department patients with possible acute coronary syndrome: the Nambour Short Low-Intermediate Chest pain project. *Emerg Med Australas*. 2013; 25:340-4.

Greenslade JH, Cullen L, Kalinowski L, **Parsonage W**, Palmer S, Aldous S, Richards M, Chu K, Brown AF, Troughton R, Pemberton C, Than M. Examining renal impairment as a risk factor for acute coronary syndrome: a prospective observational study. *Ann Emerg Med*. 2013; 62:38-46.

Greenslade JH, Cullen L, Than M, Aldous S, Chu K, Brown AF, Richards AM, Pemberton CJ, George P, **Parsonage WA**. Validation of the Vancouver Chest Pain Rule using troponin as the only biomarker: a prospective cohort study. *Am J Emerg Med*. 2013; 31:1103-7.

Hawkes AL, Patrao TA, **Atherton J**, Ware RS, Taylor CB, O'Neil A, Foreman R, Oldenburg B. Effect of a telephone-delivered coronary heart disease secondary prevention program (ProActive Heart) on quality of life and health behaviours: primary outcomes of a randomised controlled trial. *Int J Behav Med*. 2013; 20:413-424.

Hawkes AL, Patrao TA, Ware R, **Atherton JJ**, Taylor CB, Oldenburg BF. Predictors of physical and mental health-related quality of life outcomes among myocardial infarction patients. *BMC Cardiovasc Disord*. 2013; 13:69.

Ingles J, Sarina T, Yeates L, Hunt L, Macciocca I, **McCormack L**, Winship I, McGaughran J, **Atherton J**, Semsarian C. Clinical predictors of genetic testing outcomes in hypertrophic cardiomyopathy. *Genet Med*. 2013; 15:972-7.

Ingles J, Yeates L, Hunt L, McGaughran J, Scuffham P, **Atherton J**, Semsarian C. Health status of cardiac genetic disease patients and their at-risk relatives. *Int J Cardiol*. 2013; 165:448-53.

Kusunose K, **Dahiya A**, Popovic ZB, Motoki H, Alraies MC, Zurick AO, Bolen MA, Kwon DH, Flamm SD, Klein AL. Biventricular mechanics in constrictive pericarditis comparison with restrictive cardiomyopathy and impact of pericardiectomy. *Circ Cardiovasc Imaging*. 2013; 6:399-406.

**Lamanna A**, **Atherton JJ**. Prevention and management of heart failure. *Modern Medicine*. 2013; 30:18-26. (previous invited review selected for publication in January 2013 issue of *Modern Medicine Middle East*).

**Lamanna A**, Fayers T, Clarke S, **Parsonage W**. Valvular and Aortic Diseases in Osteogenesis Imperfecta. *Heart Lung Circ*. 2013; 22:801-10.

Malaiapan Y, Leung M, Ahmar W, Hutchison AW, **Prasad S**, Katticaran T, Cameron JD, Harper RW, Meredith IT. Guideline recommended door-to-balloon time can be achieved in transradial primary PCI-the usefulness of a dedicated radial guide catheter. *Cardiovasc Revasc Med*. 2013; 4:27-31.

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Motoki H, Alraies MC, **Dahiya A**, Saraiva RM, Hanna M, Marwick TH, Klein AL. Changes in left atrial mechanics following pericardiectomy for pericardial constriction. *J Am Soc Echocardiogr*. 2013; 6:640-8.

O'Neil A, Taylor CB, Sanderson K, Cyril S, Chan B, Hawkes AL, Hare DL, Jelinek M, Venugopal K, **Atherton JJ**, Amerena J, Grigg L, Walters D, Oldenburg B. Efficacy and feasibility of a tele-health intervention for Acute Coronary Syndrome patients with depression: Results of the 'MoodCare' randomized controlled trial. *Annals of Behavioral Medicine*. 2013 (in press)-accepted 10/10/13.

**Parsonage WA**, Cullen L, **Younger JF**. The approach to patients with possible cardiac chest pain. *Med J Aust* 2013; 199:30-4. **Parsonage WA**, Tate JR, Greenslade JH, Hammett CJ, Ungerer JPJ, Pretorius CJ, Brown AFT, Cullen L. Effect of recalibration of the hs-TnT assay on diagnostic performance. *Clinical Chemistry and Laboratory Medicine*. 2013; August DOI: 10.1515/cclm-2013-0490,

**Sanford KL**, **Williams KM**, **Archbald JA**, **Parsonage WA**, **Scott AC**. Non-physician-led exercise stress testing is a safe and effective practice. *Crit Pathw Cardiol*. 2013; 12:177-80.

Six AJ, Cullen L, Backus BE, Greenslade J, **Parsonage W**, Aldous S, Doevendans PA, Than M. The HEART score for the assessment of patients with chest pain in the emergency department: a multinational validation study. *Crit Pathw Cardiol*. 2013; 12:121-6.

Thavendiranathan P, **Dahiya A**, Phelan D, Desai MY, Tang WH. Isolated left ventricular non-compaction controversies in diagnostic criteria, adverse outcomes and management. *Heart*. 2013; 99:681-9. Review.

Wu CJJ, Sung HC, Chang, AM, **Atherton J**, Kostner K, Courtney M, McPhail SM. Protocol for a randomised blocked design study using telephone and text-messaging to support cardiac patients with diabetes: A cross cultural international collaborative project. *BMC Health Services Research*. 2013; 13:402.

Zhang X, Wan Y, Cooper-White J, Dimeski G, **Atherton J**, Punyadeera C. Quantification of D-dimer levels in human saliva. *Bioanalysis*. 2013;5:2249-56.

### Multicentre trials

Piccini JP, Stevens SR, Lokhnygina Y, Patel MR, Halperin JL, Singer DE, Hankey GJ, Hacke W, Becker R, Nessel CC, Mahaffey KW, Fox KAA, Califf RM, Breithardt G, ROCKET AF. Steering Committee & Investigators. Outcomes Following Cardioversion and Atrial Fibrillation Ablation in Patients Treated with Rivaroxaban and Warfarin in the ROCKET AF Trial, *J Am Coll Cardiol*. 2013; 61:1998-2006.

Piccini JP, Stevens SR, Chang Y, Singer DE, Lokhnygina Y, Go AS, Patel MR, Mahaffey KW, Halperin JL, Breithardt G, Hankey GJ, Hacke W, Becker RC, Nessel CC, Fox KA, Califf RM, ROCKET AF. Steering Committee and Investigators. Renal dysfunction as a predictor of stroke and systemic embolism in patients with nonvalvular atrial fibrillation: validation of the R(2)CHADS(2) index in the ROCKET AF (Rivaroxaban Once-daily, oral, direct factor Xa inhibition Compared with vitamin K antagonism for prevention of stroke and Embolism Trial in Atrial Fibrillation) and ATRIA (AnTicoagulation and Risk factors In Atrial fibrillation) study cohorts. *Circulation*. 2013; 127:224-32.

Steg PG, Mehta SR, Pollack CV Jr, Bode C, Cohen M, French WJ, Hoekstra J, Rao SV, Ruzyllo W, Ruiz-Nodar JM, Sabaté M, Widimsky P, Kiss RG, Navarro Estrada JL, Hod H, Kerkar P, Guneri S, Sezer M, Ruda M, Nicolau JC, Cavallini C, Ebrahim I, Petrov I, Kim JH, Jeong MH, Ramos Lopez GA, Laanmets P, Kovar F, Gaudin C, Fanouillere KC, Minini P, Hoffman EB, Moryusef A, Wiviott SD, Sabatine MS. TAO Investigators. Anticoagulation with otamixaban and ischemic events in non-ST-segment elevation acute coronary syndromes: the TAO randomized clinical trial. *JAMA*. 2013;310:1145-55.

Wallentin, L., R. D. Lopes, et al. Efficacy and safety of apixaban compared with warfarin at different levels of predicted international normalized ratio control for stroke prevention in atrial fibrillation. *Circulation*. 2013; 127:2166-76.

# Department of Clinical Immunology and Allergy



**Dr Roger Prentice**  
Director,  
Clinical Immunology  
and Allergy

## Overview

The Department of Clinical Immunology and Allergy provides a consultative service for patients with immunological conditions and allergies.

Clinical immunology patients include those with immunodeficiencies, angioneurotic odema, connective tissue diseases such as systemic lupus erythematosus and vasculitides such as Wegener's granulomatosis. Patients with allergic conditions such as urticaria, angioedema, allergic rhinitis, asthma, eczema, stinging insect allergy and drug allergy are also treated in the area.

The day procedure unit within the department provides services including gammaglobulin infusions with hypogammaglobulinaemia, an allergy challenge capsule testing for food additive reactions, and skin testing for drugs such as anaesthetic agents.

Facilities located in the Department of Clinical Immunology and Allergy include:

- An injection clinic for the desensitisation of patients with bee, wasp, grass, cat or house dust mite allergy
- Patient education for house dust mite elimination
- Patient education for self-administration of adrenaline
- A consultative service from the RBWH Department of Nutrition and Dietetics for patients with urticaria and angioedema.

**Research is currently being undertaken into house dust mite allergy and stinging insect hypersensitivity**

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Roger Prentice	MBBS, MSC (Med), MRCP (UK), FRACP	Director, Clinical Immunology and Allergy	house and dust mite allergy, urticaria, angioedema, connective tissue diseases
Dr Graham Solley	MBBS, FACP, FAAAAI, DABIM, DABAI FRCPA	Visiting Medical Officer	stinging insect allergy

# Department of Clinical Pharmacology



**Dr Paul Kubler**  
Director,  
Clinical Pharmacology

## Overview

The primary aims of the Department of Clinical Pharmacology are to enhance medication safety within the hospital and to maximise the efficacy, safety and cost-effectiveness of drug therapy using a consistent systematic approach.

Clinical research projects focus on improving the quality of medication use, therapeutic drug monitoring and developing strategies to optimise the use of medicines in individuals. The unit is also involved in translating research into clinical practice to improve the quality of prescribing and administration.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Paul Kubler	MBBS, FRACP	Senior Staff Specialist	Therapeutics and Drug Monitoring
Dr Jennifer Martin	MBChB, MA (Oxon), FRACP, PhD	Senior Staff Specialist and Clinical Pharmacologist	Pharmacogenetics and Quality use of medicines
Dr Peter Donovan	MBBS, FRACP	Staff Specialist	Clinical Pharmacology, Endocrinology and General Medicine
Ms Karen Davies	B Nursing, RN	CNC, Safe Medication Practice	Medication safety and quality processes and procedures, education and renal medicine
Dr Mitchell McKean	MBBS	Advanced Trainee	Toxicology
Dr Andrew Finch	MBBS	Advanced Trainee	Therapeutic Drug Monitoring
Ms Champika Pattullo	B Pharm	QUM Pharmacist	Quality use of Medicine
Ms Sandra Franklin		Administration Officer	Clinical Pharmacology

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Martin J, Barras M, Lucas C, Roberts J, Paterson D, Kubler P, Coombes I	Are modern methods for aminoglycoside monitoring superior to existing approaches? A randomised controlled trial.	Royal Brisbane and Women's Hospital Project Grant	\$35,000	2013

## Publications

Kubler PA, McKean MM. Glucose-6-Phosphate Deficiency. Aust Doctor. 2013; September.

# Department of Endocrinology



**Assoc. Prof. Michael d'Emden**  
Director,  
Endocrinology

## Overview

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

Clinical services provided include in-patient consultative services at RBWH and specialised out-patient clinics at RBWH and Bundaberg Hospital.

The department contributes to the Statewide Thyroid Cancer Clinic held with members of Cancer Care Services. It also supports the Obstetric Endocrine Clinic service for Women's and Newborn Services. It provides outreach services to Bundaberg and telehealth services in maternity health, endocrinology and complex Type 2 Diabetes to hospitals in the Central zone.

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

Associate Professor Emma Duncan has a major role within the Department to promote and undertake research. There are now 3 doctoral student and 1 potential student starting next year. The department has developed strong links with several research departments and has started major clinical studies in several areas including:

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

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

On-going Research projects:

Basic Science

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

Clinical trials

- 12 Studies

## Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. Michael d'Emden	PhD, FRACP	Director Endocrinology	clinical trials, chronic disease, thyroid hormone action, testosterone transport
Assoc. Prof. Emma Duncan	PhD, FRACP	Senior Staff Specialist	genetics of endocrinology, clinical bone disease
Dr Maree Mungomery	FRACP	Visiting Medical Officer	chronic disease, diabetes telehealth project
Dr Kerry Richard	PhD	Senior Scientist	thyroid hormone, iodine and placenta

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Huika Li	MB	Scientist	testosterone transport
Dr Kelly Landers	PhD	Research Assistant	thyroid hormone, iodine and placenta
Erika Tapp	BHlthSc	Research Assistant	clinical trials
Helen Legg	BNurs	Research Assistant	clinical trials
Liz Lahz	BNurs	Research Assistant	clinical trials

## Project Officer – Chronic Disease

Name	Qualifications	Position	Interests/specialities
Sharon Chambers	RN	Project Officer	chronic disease projects

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
CIA - Kerry Richard	Mechanisms of placental transthyretin and thyroid hormone uptake	Science and Education Research Trust Fund (Pathology Queensland)	\$80,000	2013
Duncan, E (CIC)	Determining the causes of congenital vertebral defects	NHMRC Project Grant 1044543	\$926,275.74	2013-2015
Duncan, E (Sole CI)	New Approaches for Gene Mapping in Osteoporosis	NHMRC Project Grant 1032571	\$867,452	2012-2014

Department of Endocrinology also received \$350,000 from Pathology Queensland for QIMR laboratories infrastructure.

## Publications

Anderson RP, Henry MJ, Taylor R, Duncan EL, Danoy P, Costa MJ, Addison K, Tye-Din JA, Kotowicz MA, Knight RE, Pollock W, Nicholson GC, Toh BH, Brown MA, Pasco JA. A novel serogenetic approach determines the community prevalence of celiac disease and informs improved diagnostic pathways. *BMC medicine*. 2013; 11(1):188.

Britten FL, Ulett K, Duncan EL, Perry-Keene DA. A Late Developer with Hypertension: A Case of Incidentally Diagnosed 17 $\beta$ -Hydroxylase Deficiency. *Med J Aust*. 2013; 199(8):556-8.

Chay J, Donovan P, Cummins L, Kubler P, Pillans P. Experience with low-dose rituximab in off-label indications at two tertiary hospitals. *Intern Med J*. 2013; Aug. 43(8):871-82. doi: 10.1111/imj.12207.

Clifton-Bligh RJ, Hofman MS, Duncan E, Sim Ie W, Darnell D, Clarkson A, Wong T, Walsh JP, Gill AJ, Ebeling PR, Hicks RJ. Improving diagnosis of tumor-induced osteomalacia with Gallium-68 DOTATATE PET/CT. *J Clin Endocrinol Metab*. 2013; 98(2):687-94.

Daniel A, d'Emden M, Duncan E. Pituitary gigantism treated successfully with the growth hormone receptor antagonist, pegvisomant. *Intern Med J*. 2013; Mar. 43(3):345-7. doi: 10.1111/imj.12077.

Daniel A, d'Emden M, Duncan EL. Pituitary gigantism treated successfully with the growth hormone receptor antagonist, pegvisomant. *Intern Med*. 2013; J 43(3):345-7.

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- d'Emden M. Is the use of cholesterol in mortality risk algorithms in clinical guidelines valid? Ten years prospective data from the Norwegian HUNT 2 study. *J Eval Clin Pract.* 2013; 19(4):720-1. doi: 10.1111/jep.12030. Epub 2013; Apr 22.
- d'Emden MC, Fagermo ND, Love AJ, Lust KM. Gestational diabetes needs to be managed. *Med J Aust.* 2013; Jun 17. 198(11):595-6.
- Donovan PJ, Iedema J, McLeod DS, Kubler P, Pillans P. Off-label use of recombinant factor VIIa in two tertiary hospitals in Queensland. *ANZ J Surg.* 2013; Mar. 83(3):149-54. doi: 10.1111/ans.12005. Epub 2012 Nov 9.
- Donovan PJ, Sundac L, Pretorius CJ, d'Emden MC, McLeod DS. Calcitriol-mediated hypercalcemia: causes and course in 101 patients. *J Clin Endocrinol Metab.* 2013; Oct. 98(10):4023-9. doi: 10.1210/jc.2013-2016. Epub 2013; Aug 26.
- Duncan EL, Brown MA. Genome-wide Association Studies in Thakker R, Whyte M, editors. *Genetics of Bone Biology and Skeletal Diseases*, Elsevier. 2012; – book chapter – released 2013.
- Gregson CL, Paggiosi MA, Crabtree N, Steel SA, McCloskey E, Duncan EL, Fan B, Shepherd JA, Fraser WD, Smith GD, Tobias JH; Analysis of body composition in individuals with high bone mass reveals a marked increase in fat mass in women but not men. *J Clin Endocrinol Metab.* 2013; 98(2):818-28.
- Halbritter J, Bizet AA, Schmidts M, Porath JD, Braun DA, Gee HY, McInerney-Leo AM, Krug P, Filhol E, Davis EE, Airik R, Czarnecki PG, Lehman AM, Trnka P, Nitschke P, Bole-Feysot C, Schueler M, Knebelmann B, Burtey S, Szabo AJ, Tory K, Leo PJ, Gardiner B, McKenzie FA, Zankl A, Brown MA, Hartley JL, Maher ER, Li C, Leroux MR, Scambler PJ, Zhan SH, Jones SJ, Kayserili H, Tuysuz B, Moorani KN, Constantinescu A, Krantz ID, Kaplan BS, Shah JV, Consortium UK, Hurd TW, Doherty D, Katsanis N, Duncan EL, Otto EA, Beales PL, Mitchison HM, Saunier S, Hildebrandt F. Defects in the IFT-B component IFT172 cause Jeune and Mainzer-Saldino syndromes in humans. *Am J Hum Genet.* 2013; 93(5):915-25.
- Landers KA, Li H, Subramaniam VN, Mortimer RH and Richard K. Transthyretin-thyroid hormone internalisation by trophoblasts. *Placenta.* 2013; 34(8):716.
- Landers KA, Mortimer RH and Richard K. Transthyretin and the Placenta. *Placenta.* 2013; 34 (7):513–517.
- Lucas C, Donovan P. 'Just a repeat' - When drug monitoring is indicated. *Aust Fam Physician.* 2013; Jan-Feb. 42(1-2):18-22. Review.
- McInerney-Leo AM, Marshall MS, Gardiner B, Coucke PJ, Van Laer L, Loeys BL, Summers KM, Symoens S, West JA, West MJ, Paul Wordsworth B, Zankl A, Leo PJ, Brown MA, Duncan EL. Whole exome sequencing is an efficient, sensitive and specific method of mutation detection in osteogenesis imperfecta and Marfan syndrome. *BoneKEy reports.* 2013; 2:456.
- McInerney-Leo AM, Schmidts M, Cortes CR, Leo PJ, Gener B, Courtney AD, Gardiner B, Harris JA, Lu Y, Marshall M, Consortium UK, Scambler PJ, Beales PL, Brown MA, Zankl A, Mitchison HM, Duncan EL, Wicking C (last three authors equal senior author) Short-rib polydactyly and Jeune syndromes are caused by mutations in WDR60. *Am J Hum Genet.* 2013; 93(3):515-23.
- Petchey WG, Hickman IJ, Prins JB, Hawley CM, Johnson DW, Isbel NM, Duncan EL. Vitamin D does not improve the metabolic health of patients with chronic kidney disease stage 3-4: a randomized controlled trial. *Nephrology (Carlton).* 2013; 18(1):26-35.
- Schmidts M, Vodopiutz J, Christou-Savina S, Cortes CR, McInerney-Leo AM, Emes RD, Arts HH, Tuysuz B, D'Silva J, Leo PJ, Giles TC, Oud MM, Harris JA, Koopmans M, Marshall M, Elcioglu N, Kuechler A, Bockenhauer D, Moore AT, Wilson LC, Janecke AR, Hurles ME, Emmet W, Gardiner B, Streubel B, Dopita B, Zankl A, Kayserili H, Scambler PJ, Brown MA, Beales PL, Wicking C, Uk10K, Duncan EL, Mitchison HM. Mutations in the gene encoding IFT dynein complex component WDR34 cause Jeune asphyxiating thoracic dystrophy. *Am J Hum Genet.* 2013; 93(5):932-44.
- Sparrow DB, McInerney-Leo A, Gucev ZS, Gardiner B, Marshall M, Leo PJ, Chapman DL, Tasic V, Shishko A, Brown MA, Duncan EL, Dunwoodie SL (last two equal last authors). Autosomal dominant spondylocostal dysostosis is caused by mutation in TBX6. *Hum Mol Genet.* 2013; 22(8):1625-31.
- Zhang L, Choi HJ, Estrada K, Leo PJ, Li J, Pei YF, Zhang Y, Lin Y, Shen H, Liu YZ, Liu Y, Zhao Y, Zhang JG, Tian Q, Wang YP, Han Y, Ran S, Hai R, Zhu XZ, Wu S, Yan H, Liu X, Yang TL, Guo Y, Zhang F, Guo YF, Chen Y, Chen X, Tan L, Zhang L, Deng FY, Deng H, Rivadeneira F, Duncan EL, Lee JY, Han BG, Cho NH, Nicholson GC, McCloskey E, Eastell R, Prince RL, Eisman JA, Jones G, Reid IR, Sambrook PN, Dennison EM, Danoy P, Yerges-Armstrong LM, Streeten EA, Hu T, Xiang S, Papasian CJ, Brown MA, Shin CS, Uitterlinden AG, Deng HW. Multistage genome-wide association meta-analyses identified two new loci for bone mineral density. *Hum Mol Genet.* 2013; (ePub 20 Nov 2013 ahead of print).
- Zheng HF, Duncan EL, Yerges-Armstrong LM, Eriksson J, Bergstrom U, Leo PJ, Leslie WD, Goltzman D, Blangero J, Hanley DA, Carless MA, Streeten EA, Lorentzon M, Brown MA, Spector TD, Pettersson-Kymmer U, Ohlsson C, Mitchell BD, Richards JB. Meta-analysis of genome-wide studies identifies MEF2C SNPs associated with bone mineral density at forearm. *J Med Genet.* 2013; 50(7):473-8.

# Department of Gastroenterology and Hepatology



**Dr Mark Appleyard**  
Director,  
Gastroenterology  
and Hepatology

## Overview

Research in the Conjoint Gastroenterology Laboratory is focussed on understanding the molecular events underlying the development of bowel polyps and cancers. We aim to identify genetic changes associated with advanced bowel polyps and therefore those at highest risk of progressing to cancer. We are also studying subgroups of bowel cancer with the aim of identifying gene changes associated with different outcomes and responses to therapy. We are using state of the art technologies to study these molecular changes, including genome wide array analysis to examine DNA methylation signatures, expression profiles and copy number variations. Work from this laboratory has directly impacted surveillance strategies for early detection of bowel polyps and choice of therapy for patients with advanced bowel cancer.

Research in the Inflammatory Bowel Disease programme headed by Dr Graham Radford-Smith links clinical outcomes to disease biology in both Crohn's disease and ulcerative colitis. In the past 12 months, the focus of research has been on: GWAS and exome-sequencing analysis of extreme phenotypes in ulcerative colitis, including refractory disease requiring colectomy, and colorectal cancer complicating UC; clinical predictors of outcome in severe UC; the health economics of rescue therapy in acute, severe colitis; variance in management of inflammatory bowel disease in Metro North hospitals; and, predictors of a refractory disease course in patients with Crohn's disease. Some of this work contributed significantly to increased choice of therapies available to IBD patients through the Pharmaceutical benefit scheme within Australia. Our clinical and scientific programmes continue to play a major role within the ANZ IBD Consortium, now made up of 16 centres across the region. This Consortium maintains a strong link with the International IBD Genetics Consortium, with ongoing genetic and clinical studies that define IBD risk, disease course and related complications.

Dr Mark Appleyard conducts research into diseases of the small bowel and how these may be diagnosed and treated by advanced endoscopy techniques such as capsule endoscopy. He also has an interest in colonoscopy and in endoscopy outcomes research, and is Co-PI on the "Optimization of colonoscopy" project, centred at the RBWH and QIMR.

Dr Richard Skoien joined the full time staff in 2012 as a consultant hepatologist. He has commenced several projects in collaboration with the liver fibrosis group in the QIMR (Professor Grant Ramm), including studies on new non-invasive methods of detecting progression of liver diseases, complications of cirrhosis and HCC surveillance.

Professor Lawrie Powell continues his research into haemochromatosis including large multicenter trials.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Mark Appleyard	MBBS, FRACP	Director of Gastroenterology and Hepatology	Small Bowel Endoscopy
A/Prof Graham Radford-Smith	DPhil FRACP	Senior Staff Specialist, Head of the IBD and TPN Programmes, Group Leader, QIMR	Inflammatory Bowel Diseases, Health services research, TPN
Prof Barbara Leggett*	MD FRACP	Senior Staff Specialist; Head of the Conjoint Gastroenterology Laboratory	Colorectal Cancer Clinical Hepatology
Dr Richard Skoien	BA, LLB, BSc, MBBS, FRACP, PhD	Staff Specialist - Hepatology	Viral hepatitis, non-alcoholic fatty liver disease, non-invasive assessment of liver disease, liver cancer
Prof Lawrie Powell	AC, MD, PhD, DUniv, FRACP, FRCP, FRCPT	Director of Research; Senior Staff Specialist	Haemochromatosis

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Florian Grimpen	MD FRACP	Staff Specialist – Endoscopy/GE	Interventional Endoscopy
Dr Mariko Howlett	MBBS, FRACP	Staff Specialist – IBD/GE	Inflammatory Bowel Diseases
Dr Georgia Hume	MBBS (Hons), FRACP	Staff Specialist, PhD student	Inflammatory Bowel Diseases
Dr John Croese	MBBS, FRACP	Staff Specialist - Gastroenterology	Gastroenterology
Dr Matthew Remedios	MBBS, FRACP	Staff Specialist – Endoscopy	Interventional Endoscopy
Dr Marnie Wood	MBBS, FRACP	Staff Specialist – Hepatology	Clinical Hepatology
Dr Andrew Hallam	MBBS, FRACP	Visiting Medical Officer – Hepatology	Clinical Hepatology
Dr Ben Devereaux	MBBS, FRACP	Visiting Medical Officer – Endoscopy	Interventional Endoscopy
Dr Patrick Walsh	MBChB, FRACP	Visiting Medical Officer – Endoscopy	Interventional Endoscopy
Dr Andrew Bryant	MBBS, FRACP	Visiting Medical Officer - Endoscopy	Interventional Endoscopy
Dr James Irwin	MBBS, FRACP	IBD Research Fellow, MPhil student	Inflammatory Bowel Diseases
Dr Nicole Walker	MBBS, FRACP	Honorary Research Fellow, MPhil student	Inflammatory Bowel Diseases
Dr Jason Hwang	MBBS, FRACP	Endoscopy Fellow	Interventional Endoscopy
A/Prof Vicki Whitehall	PhD	Senior Scientist	Colorectal Cancer
Troy Dumenil	MAppSci	Research Assistant	Colorectal Cancer
Diane McKeone	Diploma Laboratory Techniques	Research Assistant	Colorectal Cancer
Sally Pearson	Diploma Laboratory Techniques	Research Assistant	Colorectal Cancer
Winnie Fernando	MSc	PhD Student	Colorectal Cancer
Catherine Bond	MSc	PhD Student	Colorectal Cancer
Dr Mark Bettington	BSc MBBS FRCPA	PhD Student	Colorectal Cancer
Jo Minna	BNurs	Clinical Nurse	Liver clinical trials
Ms Deborah D’Arcy	BNurs	Clinical Nurse Consultant	Liver clinical trials
Ms Rita Marangone	BNurs	Clinical Nurse	Liver clinical trials
Ms Lisa Simms	BSc (Hons)	Senior Scientist	Inflammatory Bowel Diseases
Dr Bodo Speckman	PhD	Post-doctoral Fellow	QIMR
Mrs Katherine Hannigan	BSc (Public Health)	Senior Research Assistant	Inflammatory Bowel Diseases
Mrs Kylie Mesquitta	BSc (Hons)	Research Assistant	Inflammatory Bowel Diseases
Dr Phoebe Thwaites	MBBS	Medical Registrar, Honorary Research Fellow	Inflammatory Bowel Diseases
Mrs Allison Brown	BNurs	Clinical Nurse	Inflammatory Bowel Diseases – Clinical Research
Mrs Madonna McIntyre	BNurs	Clinical Nurse	Inflammatory Bowel Diseases – Clinical Trials
Ms Yoon An	MBBS	Medical Intern	Clinical Endoscopy research

## Supervised post-graduate students

Name	Current studies	Research topic
Catherine Bond	PhD	Molecular Features Distinguishing Microsatellite Stable versus Microsatellite Instability High Serrated Pathway Tumours
Dr Mark Bettington	PhD	Identification of molecular features of high risk colorectal polyps
Winnie Fernando	PhD – submitted 2014	Molecular pathogenesis of serrated carcinoma of the colon
Dr James Irwin	MPhil	Laboratory markers and poor outcome in Crohn's disease
Dr Nicholas Tutticci	MPhil	The prevalence and predictors of sessile serrated adenomas at colonoscopy
Dr Nicole Walker	MPhil	Acute severe ulcerative colitis – long term outcomes
Dr Georgia Hume	PhD – (IBD research) – awarded 2013	The intestinal mucosal immune response and genetic susceptibility to Inflammatory Bowel Disease
Dr Richard Skoien	PhD (Hepatology research) – awarded 2013	The pathogenesis of non-alcoholic fatty liver disease: from parenchymal injury to portal fibrosis

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Whitehall V and Leggett B	KRAS- and BRAF- Mediated Methylation Signatures in Colorectal Cancers and Polyps	NHMRC Project Grant 1050455	\$425,636	2013-2015
Leggett B, Whitehall V, Burge M and Wyld D	Whole Exome Sequencing to Identify Mutations that Predict Recurrence in Stage II Colorectal Cancer	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013
Radford-Smith, Montgomery, Lawrance	Genomic Medicine: Predictors of refractory ulcerative colitis and response to treatment	NHMRC Project Grant	\$849,261	2012-2014
Leggett B and Whitehall V	Molecular and Clinical Features of Serrated Adenomas	Cancer Council Queensland	\$197,450	2012-2013
Radford-Smith, GL., Simms, LA.	Optimizing the use of colonoscopy in Queensland: the application of clinical and faecal biomarkers to the management of both the symptomatic and screening populations	RTRCC-QIMR	\$102,000	2013-2014
Radford-Smith	Factors affecting anti-TNF antibody treatment responses and drug-related adverse events in patients with Crohn's disease	Royal Brisbane and Women's Hospital Project Grant	\$29,000	2013
Appleyard, M., Radford-Smith, GL.	Optimizing the use of colonoscopy in Queensland: the application of clinical and faecal biomarkers to the management of both the symptomatic and screening populations	Royal Brisbane and Women's Hospital Project Grant	\$38,000	2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Skoien R, Cullen O, Fenech M, Beckman K, Thwaites P.	Streamlining hepatocellular carcinoma surveillance at the RBWH using nurse-led clinics	Bayer Australia Ltd	\$26,000	2012-2013
Skoien, R, Leggett, B, Cullen O, Ekanayake D, Fenech M, Beckman K.	Establishment of a clinical and scientific hepatology research programme and database at the RBWH	Royal Brisbane and Women's Hospital New Staff Specialist Grant	\$50,000	2013
Skoien, R, Ramm, G, Burgess A	Serum markers in a typical liver lesions (SMALL) study	RBWH Foundation	\$40,000	2013
Skoien, R., Ramm, G., Powell, L., Burgess A.	New non-invasive methods to detect progression of liver disease and identify patients at highest risk of cirrhosis-related mortality	RBWH Foundation and QIMR	\$70,000	2012-2013
McCrae, Boussioutas, Clarke, Spigelman, Appleyard, Cameron, Hollington, Ee	The effects of butyrylated high amylose maize starch on polyposis (Starplus B) in familial adenomatous polyposis patients	Cancer Council Queensland	\$200,000	2013-2014
Delatycki, M. et al (three centres)	Venesection or expectant management for moderate iron overload in HFE related hereditary haemochromatosis	NHMRC	\$820,000	2012-2014
McLaren, C. et al (eight centres)	Genetic modifiers of iron status in hemochromatosis <i>HFE C282Y</i> homozygotes	NIH	\$1.2M	2013

\* Professor Barbara Leggett also received \$420,000 from Pathology Queensland for QIMR laboratories infrastructure.

## Publications

Beaudoin M, Goyette P, Boucher G, Lo KS, Rivas MA, Stevens C, Alikashani A, Ladouceur M, Ellinghaus D, Törkvist L, Goel G, Lagacé C, Annese V, Bitton A, Begun J, Brant SR, Bresso F, Cho JH, Duerr RH, Halfvarson J, McGovern DP, **Radford-Smith G**, Schreiber S, Schumm PL, Sharma Y, Silverberg MS, Weersma RK. Quebec IBD Genetics Consortium; NIDDK IBD Genetics Consortium; International IBD Genetics Consortium, D'Amato M, Vermeire S, Franke A, Lettre G, Xavier RJ, Daly MJ, Rioux JD. Deep resequencing of GWAS loci identifies rare variants in CARD9, IL23R and RNF186 that are associated with ulcerative colitis. *PLoS Genet.* 2013; 9:e1003723.

Bergqvist CJ, **Skoien R**, Horsfall L, Clouston AD, Jonsson JR, Powell EE. Awareness and opinions of non-alcoholic fatty liver disease by hospital specialists. *Intern Med J.* 2013; Mar. 43(3):247-53.

Bettington M, Walker N, Clouston A, Brown I, Leggett B, Whitehall V. The serrated pathway to colorectal carcinoma: current concepts and challenges. *Histopathology.* 2013; 62:367-386.

**Croese J**, Gaze ST, Loukas A. Int J Parasitol. Changed gluten immunity in celiac disease by *Necator americanus* provides new insights into autoimmunity. 2013; Mar. 43(3-4):275-82. doi: 10.1016/j.ijpara.2012.12.005. Epub. 2013; Jan 3. Review.

Croft A, Walsh A, Doecke J, Cooley R, Howlett M, **Radford-Smith G**. Outcomes of salvage therapy for steroid-refractory acute severe ulcerative colitis: ciclosporin vs. infliximab. *Aliment Pharmacol Ther.* 2013; 38:294-302.

Croft A, Walsh A, Doecke J, **Radford-Smith G**. Commentary: salvage medical therapy for acute severe colitis - ciclosporin or infliximab? Author's reply. *Aliment Pharmacol Ther.* 2013; 38:989.

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Doecke JD, Simms LA, Zhao ZZ, Huang N, Hanigan K, Krishnaprasad K, Roberts RL, Andrews JM, Mahy G, Bampton P, Lewindon P, Florin T, Lawrance IC, Gearry RB, Montgomery GW, **Radford-Smith GL**. Genetic susceptibility in IBD: overlap between ulcerative colitis and Crohn's disease. *Inflamm Bowel Dis*. 2013; 19:240-5.

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Feagan BG, Rutgeerts P, Sands BE, Hanauer S, Colombel JF, Sandborn WJ, Van Assche G, Axler J, **Kim HJ, Danese S**, Fox I, Milch C, Sankoh S, Wyant T, Xu J, Parikh A. GEMINI 1 Study Group. Vedolizumab as induction and maintenance therapy for ulcerative colitis. *N Engl J Med*. 2013; 369:699-710.

Gathungu G, Kim MO, Ferguson JP, Sharma Y, Zhang W, Ng SM, Bonkowski E, Ning K, Simms LA, Croft AR, Stempak JM, Walker N, Huang N, Xiao Y, Silverberg MS, Trapnell B, Cho JH, **Radford-Smith GL, Denson LA**. Granulocyte-macrophage colony-stimulating factor autoantibodies: a marker of aggressive Crohn's disease. *Inflamm Bowel Dis*. 2013; 19:1671-80.

Goergen SK, Pool FJ, Turner TJ, Grimm JE, **Appleyard MN**, Crock C, Fahey MC, Fay MF, Ferris NJ, Liew SM, Perry RD, Revell A, Russell GM, Wang SC, Wriedt C. Evidence-based guideline for the written radiology report: methods, recommendations and implementation challenges. *J Med Imaging Radiat Oncol*. 2013; Feb. 57(1):1-7.

Goggins BJ, Chaney C, **Radford-Smith GL**, Horvat JC, Keely S. Hypoxia and Integrin-Mediated Epithelial Restitution during Mucosal Inflammation. *Front Immunol*. 2013; 4:272.

Horsfall L, Macdonald G, Scott I, **Skoien R**, Khatun M, Moss C, Seligman C, Kardash C, Poxon V, Powell EE. Use of standardised assessment forms in referrals to hepatology outpatient services: implications for accurate triaging of patients with chronic hepatitis C. *Aust Health Rev*. 2013; May. 37(2):218-22.

Hughes BG, Jain VK, Brown T, Spurgin AL, Hartnett G, Keller J, Tripcony L, **Appleyard M**, Hodge R. Decreased hospital stay and significant cost savings after routine use of prophylactic gastrostomy for high-risk patients with head and neck cancer receiving chemoradiotherapy at a tertiary cancer institution. *Head Neck*. 2013; Mar. 35(3):436-42. 22605643.

Jacobson IM, Gordon SC, Kowdley KV, Yoshida EM, Rodriguez-Torres M, Sulkowski MS, Shiffman ML, Lawitz E, Everson G, Bennett M, Schiff E, Al-Assi MT, Subramanian GM, An D, Lin M, McNally J, Brainard D, Symonds WT, McHutchison JG, Patel K, Feld J, Pianko S, Nelson DR; POSITRON Study; FUSION Study. Sofosbuvir for hepatitis C genotype 2 or 3 in patients without treatment options. *New England Journal of Medicine*. 2013; 368:1867-1877.

Lawrance IC, Murray K, Batman B, Gearry RB, Grafton R, Krishnaprasad K, Andrews JM, Prosser R, Bampton PA, Cooke SE, Mahy G, **Radford-Smith G**, Croft A, Hanigan K. Crohn's disease and smoking: is it ever too late to quit? *J Crohns Colitis*. 2013; 7:e665-71.

O'Brien CL, Allison GE, **Grimpen F**, Pavli P. Impact of colonoscopy bowel preparation on intestinal microbiota. *PLoS One*. 2013; May 1. 8(5):e62815

Reynolds HV, Talekar CR, Bellapart JB, Leggett BA, Boots RJ. Therapeutic plasma exchange as de-coppering technique in intensive care for an adult in a Wilson's crisis. *Anaesth Intensive Care*. 2013; 41:811-812.

Rosty C, Hewett DG, Brown IS, Leggett BA, Whitehall VL. Serrated polyps of the large intestine: current understanding of diagnosis, pathogenesis, and clinical management. *Journal of Gastroenterology*. 2013; 48:287-302.

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**Skoien R**, Richardson MM, Jonsson JR, Powell EE, Brunt EM, Neuschwander-Tetri BA, Bhathal PS, Dixon JB, O'Brien PE, Tilg H, Moschen AR, Baumann U, Brown RM, Couper RT, Manton ND, Ee LC, Weltman M, Clouston AD. Heterogeneity of fibrosis patterns in non-alcoholic fatty liver disease supports the presence of multiple fibrogenic pathways. *Liver Int*. 2013; Apr;33(4):624-32.

Tuttici N, Cameron D, **Croese J**, Roche E. Tattoo of more than lymph nodes. *Gastrointest Endosc*. 2013; May. 77(5):831

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Walsh AJ, Weltman M, Burger D, Vivekanandarajah S, Connor S, Howlett M, **Radford-Smith G**, Selby W, Veillard AS, Grimm MC, Travis SP, Lawrance IC. Implementing guidelines on the prevention of opportunistic infections in inflammatory bowel disease. *J Crohns Colitis*. 2013; 7:e449-56.

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Win AK, Lindor NM, Winship I, Tucker KM, Buchanan DD, Young JP, Rosty C, Leggett B, Giles GG, Goldblatt J, Macrae FA, Parry S, Kalady MF, Baron JA, Ahnen DJ, Marchand LL, Gallinger S, Haile RW, Newcomb PA, Hopper JL, Jenkins MA. Risks of colorectal and other cancers after endometrial cancer for women with Lynch syndrome. *Journal of the National Cancer Institute*. 2013; 105:274-279.

**Wood MJ**, Powell LW, Dixon JL, Subramaniam VN, Ramm GA. Transforming growth factor- $\beta$  and toll-like receptor-4 polymorphisms are not associated with fibrosis in haemochromatosis. *World J Gastroenterol*. 2013; Dec 28. 19(48):9366-76.

Wood MJ, Gadd VL, Powell LW, Ramm GA, Clouston AD. (2013) Ductular reaction in hereditary hemochromatosis: The link between hepatocyte senescence and fibrosis progression. *Hepatology* 59 (3), 848-857.

# Genetic Health



**Assoc. Prof. Julie McGaughran**  
Director,  
Genetic Health Queensland

## Overview

Genetic Health Queensland is the state-wide super specialty service which provides clinical genetics services for the whole state of Queensland. The service is based at the Royal Brisbane and Women's Hospital and undertakes clinics at many locations throughout the state including Cairns, Townsville, Mackay, Bundaberg, Toowoomba, Nambour and Gold Coast.

There are 6 consultant staff, 2 advanced trainees and an intern on elective placement. As a state-wide service, GHQ contributes to education and grand rounds both at RBWH and RCH and across the state. All clinical staff undertake a number of presentations locally to other health professional groups and to non-government organisations. Genetic counsellors work with the medical staff both at RBWH and at sites throughout Queensland. MSc students in genetic counselling undertake their practical training in the department. The Queensland Familial Cancer registry is also part of the department. There are 2 research nurses who are part of the KConFab cancer research group. There is a weekly in service, journal club and clinical review meeting. Research interests include dysmorphology, bone dysplasias, neurogenetics, prenatal genetics, cardiac genetics and cancer genetics.

Given the rarity of many genetic conditions and the availability of some genetic testing only out of state or in a research setting, there is considerable collaboration between staff of the department and national and international colleagues

## Research staff

Name	Qualifications	Position	Interests/specialities
Julie McGaughran	BSc (Hons). MB ChB (Hons), MD, FRCP, FRACP	Director	dysmorphology, cardiac genetics
Michael Gabbett	MBBS, MMedSc(Clin Epid), FRACP, AFRACMA	Senior Staff Specialist	dysmorphology, prenatal genetics
Michael Gattas		Senior Staff Specialist	
John MacMillan	MD, FRACP, FRCPE	Senior Staff Specialist	adult and neuro-genetics
Rachel Susman	BSc, MBBS, MRCP, FRACP	Staff specialist	cancer genetics
Chirag Patel	MD, MRCPCH	Staff Specialist	paediatric genetics, renal genetics
Jennifer Berkman	BSc(Hons), MSc, FHGSA	Senior Genetic Counsellor	Cancer and general genetics
Jan Wakeling	BSc(Hons), MSc	Associate Genetic Counsellor	Cancer genetics
Lauren Hunt	BSc, MSc(Hons), FHGSA	Genetic Counsellor	Cardiac and prenatal genetics

## Supervised post-graduate students

Name	Current studies	Research topic
Tan, Y	PhD	Hereditary endometrial cancer: Improving identification and referral of endometrial cancer patients with suspected Lynch syndrome.
Laura Coulier	Master of Science (Genetic Counselling)	Optimising genetic counselling support for individuals and families affected by Alport syndrome
Nicole Snow	Master of Science (Genetic Counselling)	Do telehealth genetic counselling services follow the reciprocal engagement model of genetic counselling? Exploring attitudes of genetic health professionals in Australasia, Canada and the USA
Alison Rutstein	Master of Science (Genetic Counselling)	Information and support needs for individuals with Alport syndrome

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Dr Julie McGaughran Chief Investigator (16).	The inherited cancer connect (Icon) partnership	Strategic Research Partnership Grant 2013 Cancer Council of NSW	\$1,964,769	Over 5 years 2013
Dr Julie McGaughran Associate Researcher 5.	Elucidating the genetic aetiology of familial colorectal cancer genes	Cancer Council Victoria	\$300,000	2013
Dr Julie McGaughran Associate Researcher 4.	Elucidating the genetic aetiology of familial male breast cancer	Research Division, Peter MacCallum Cancer Centre	\$225,000	2013
Coulier L, Fleming J, Gabbett M, Petersen M	Optimising genetic counselling support for individuals and families affected by Alport syndrome	Alport Foundation of Australia	\$5,000	2013

## Publications

Baas AF\*, **Gabbett M\***, Rimac M\*, Kansikas M, Raphael M, Nivelstein RAJ, Nicholls W, Offerhaus J, Bodmer D, Wernstedt A, Krabichler B, Strasser U, Nystrom M, Zschocke J, Robertson SP, van Haelst MM, Wimmer K. Agenesis of the corpus callosum and gray matter heterotopia in three patients with constitutional mismatch repair deficiency syndrome. *EJHG*. 2012; Jan; 21(1): 55-61. \*joint first authors

Camuglia AC, Younger JF, **McGaughran JM**, Atherton JJ. Hypertrophic and Noncompaction Cardiomyopathy: Same Mutation, Different Diseases. *IJC*. 2013; Oct 3; 168 (3), pp. 2950-2.

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Roscioli T, Elakis G, Cox TC, Moon DJ, Venselaar H, Turner AM, Le T, Hackett E, Haan E, Colley A, Mowat D, Worgan L, Kirk EP, Sachdev R, Thompson E, **Gabbett M**, **McGaughran J**, Gibson K, **Gattas M**, Freckmann M-L, Dixon J, Hoefsloot L, Field M, Hackett A, Kamien B, Edwards M, Ades LC, Collins FA, Wilson MJ, Savarirayan R, Tan TY, Amor DJ, McGillivray G, White SM, Glass IA, David DJ, Anderson PJ, Gianoutsos M, Buckley MF. Genotype and Clinical Care Correlations in Craniosynostosis: Findings From a Cohort of 630 Australian and New Zealand Patients. *Am J Med Genet. C Semin Med Genet*, ISSN: 1552-4876, 2013; Nov; 163 (4), pp. 259-70.

Tan YY, **McGaughran J**, Ferguson K, Walsh MD, Buchanan DD, ANECS Group, Young JP, Webb, P M, Obermair A, Spurdle AB. Improving identification of Lynch Syndrome patients: A comparison of research data with clinical records. *Int J Cancer*. 2013; 132(12):2876-83. **IF 5.444**.

Yeates L, Hunt L, Saleh M, Semsarian C, Ingles J. Poor psychosocial wellbeing particularly in mothers following sudden cardiac death in the young. *Eu J Cardiovascular Nurs*. 2013;Apr 8. [Epub ahead of print].

# Infectious Diseases Unit



**Assoc. Prof. Tony Allworth**  
Director,  
Infectious Disease

## Overview

The Infectious Diseases Unit is a broad based multi-disciplinary Unit providing a range of services both across the RBWH campus and beyond. It has a major role as a consultative service for the clinical management of patients with infectious diseases problems across all disciplines.

The inpatient activity of the Unit is focused on care of patients with complex infectious diseases such as HIV, and other specialised infectious diseases such as malaria, melioidosis, encephalitis, and meningitis.

The Unit is also an isolation ward for patients colonised with multiresistant organisms, those infected with airborne pathogens such as tuberculosis, varicella, SARS and influenza, and it includes the high containment unit for the management of organisms such as those causing viral haemorrhagic fevers. The Unit provides ongoing education for the graduate medical program with clinical attachments for medical students as well as clinical teaching for the physician trainees.

The Richard Kemp Day Therapy Unit provides cost-effective care by facilitating out-patient therapy and the placement of peripherally inserted central catheters (PICCs). The Unit also is the hub for the RBWH Hospital in the Home Program, and the Antimicrobial Stewardship Program of RBWH.

The Infection Monitoring and Prevention Service provides a campus-wide, facility-specific infection control program, which aims to meet the needs of patients and staff and provides expert advice throughout the campus with regard to issues pertinent to infection control.

The Vascular Access Unit has been substantially downsized and now focusses on education and support of clinical areas regarding the insertion, management and care of vascular access in inpatients throughout the hospital. The service continues to conduct a twice-yearly IV cannulation course for both Queensland Health and external clients, including Graduate Medical Course students.

The research interests of the Unit are diverse including anti-microbial therapies and resistance, epidemiology especially in the nosocomial setting, parasitology and its overlap with other disciplines including HIV medicine and immunological diseases, zoonotic infections, and HIV/AIDS.

The medical staff of the Unit are focussed upon the translation of basic science research into clinical application and have affiliations with the Queensland Institute of Medical Research, the University of Queensland, particularly through the Centre for Clinical Research and the Australian Infectious Diseases Research Centre.

The loss of our Research Clinical Nurse position in late 2012 has meant that the clinical trial component of the research program of the Unit has been put on hold until future funding opportunities can be explored. However, it is hoped that these will re-emerge in the near future, particularly in the context of hepatitis C/HIV coinfection.

## Research staff

Name	Qualifications	Position	Interests/specialities
Associate Professor, Tony Allworth	MBBS (Hons 1), FRACP, FRCPA, FACTM, MASM	Director, Infectious Diseases, Visiting Scientist, University of Queensland Centre for Clinical Research	HIV/AIDS, antibiotic resistance, influenza, therapeutic trials
Dr Krispin Hajkowicz	MBBS, FRACP	Consultant Physician, Infectious Diseases Unit and Internal Medicine & Aged Care	Hospital in the Home, Antimicrobial Stewardship, Viral hepatitis
Associate Professor James McCarthy	MD, FRACP, DH&TM (Lon),	Consultant Physician, Infectious Diseases Unit, Visiting Scientist QIMR, Infectious Diseases	Parasitology, Malaria, Vaccine trials

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof David Paterson	MBBS, FRACP, FRCPA	Consultant Physician, Infectious Diseases Unit, Microbiologist, Pathology Queensland, Professor Infectious Diseases, University of Queensland Medical Advisor, CHRISP	Antimicrobial resistance, Infections in ICU
Dr Andrew Redmond	MBBS, FRACP	Consultant Physician, Infectious Diseases Unit, Visiting Scientist QIMR, Infectious Diseases	
Associate Professor, Marion Woods	MD, MPH, FRACP, FACP, FAFPHM	Consultant Physician, Infectious Diseases Unit, Visiting Scientist QIMR, Infectious Diseases	Clinical epidemiology, HIV, Disease Pathogenesis
Mr Geoff McQueen	Bach Nurs	Nurse Unit Manager, Wattlebrae	
Ms Michelle Doidge	Bach Nurs	CNC, Infection Control	
Mr Michael Terry	Bach Nurs	CNC, Infection Control	

## Supervised post-graduate students

Name	Current studies	Research topic
Adnan, S.	Doctor Philosophy (Principal Advisor)	Relationship between antimicrobial use and resistance in intensive care unit.
Aghazadeh, M.	Doctor of Philosophy	Molecular epidemiology of neural angiostrongyliasis in eastern Australia
Appleyard, B.	Doctor of Philosophy	The epidemiology and control of malaria in pregnancy in Solomon Islands
Britton, S.	Doctor of Philosophy	Loop mediated isothermal amplification (LAMP): a novel diagnostic tool for the diagnosis of mixed malaria infections in malaria elimination field settings
Butterworth, A.	Doctor of Philosophy	Targeting Plasmodium falciparum Gametocytes
Furuya Kanamori, L.	Doctor Philosophy	Clostridium difficile: assessing the risks of emerging healthcare-related pathogen.
Griffin, P.	Doctor of Medicine	
Harris, P.	Doctor Philosophy (Principal Advisor)	Defining an evidence based approach for the optimal management of Gram-negative infections in the era of emerging antimicrobial resistance.
Kamolvit, W.	Doctor Philosophy (Principal Advisor)	Carbapenem resistance in commonly encountered Gram negative bacilli.
Marquess, J.	Doctor Philosophy	A longitudinal molecular epidemiological study to investigate changes in prevalence of asymptomatic Clostridium difficile carriage in hospital patients over three years.
McCarthy, K.	Doctor Philosophy (Principal Advisor)	Pseudomonas aeruginosa bloodstream infections: clinical and molecular epidemiology, antibiotic resistance mechanisms, treatment and outcome.
Rogers, B.	Doctor Philosophy (Principal Advisor)	Clinical, epidemiological and molecular characteristics of E.coli (Escherichia coli) infection and its antimicrobial resistance.

## Supervised post-graduate students

Name	Current studies	Research topic
Van Hal, S.	Doctor of Philosophy awarded 2013 (Principal Advisor)	Predictors of mortality in Staphylococcus aureus bacteraemia: the role of Reduced Vancomycin Susceptibility
Vaska, V.	Doctor Philosophy (Principal Advisor)	Clinical, health economic, epidemiologic and molecular epidemiologic and diagnostic aspects of Staphylococcus aureus infections in Queensland.
Wailan, A.	Doctor Philosophy	Genome and plasmid characteristics of NDM-1 and OXA181 producing Enterobacteriaceae.
Williams, J.	Doctor Philosophy	The sepsis registry: a prospective database to characterise and facilitate improved outcome for admitted patients with community acquired infection.
Zowawi, H.	Doctor Philosophy (Principal Advisor)	The prevalence of metallo-beta-lactamase producing enterobacteriaceae, P.aeruginosa, Acinetobacter spp in tertiary and academic healthcare centres in Saudi Arabia.

## Awards and achievements

Award	Event	Recipient
Convenor of the 2013 ASID Gram-negative “Superbugs” Meeting	ASID Gram Negative “Superbugs” Meeting, 2-3 August 2013	Paterson, D.
Elsevier - One of top five cited papers for 2009 to 2013, Award	N/A	Geary TG, Woo K, McCarthy JS, Mackenzie C, Horton J, Prichard R, de Silva N, Olhano P, Lazdins J, Engels D, Bundy D.
Invited member of the Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) Program Committee	Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC)	Paterson, D.
Invited member of the European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) Program Committee	European Congress of Clinical Microbiology and Infectious Diseases (ECCMID)	Paterson, D.

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Clements, A. Andrews, R., Black, J., Traub, R., McCarthy, J.S.	A Cluster RCT of the impact of a community-based hygiene and sanitation programme on infection with intestinal parasites	QIMR	\$230,000	2012-2013
McCarthy, J.S.	Smart state clinical research fellowship	QIMR	\$600,000	2012-2015
McCarthy, J.S. and Good, M.	CRC-ASTIH - phase I clinical trial of a vaccine for group A streptococcus	QIMR	\$348,000	2012-2015
McCarthy, J.S.	NHMRC fellowship - developing drugs and vaccines for malaria by undertaking experimental studies in humans	QIMR	\$385,000	2013-2017
McCarthy, J.S and Britton, S.	NHMRC scholar	QIMRB	\$76,000	2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
McCarthy, J.S.	Impact of an ivermectin mass drug administration program against endemic scabies and strongyloidiasis	QIMRB	\$2,000	2013
McCarthy, J.S.	Tropical Disease - immunity, pathogenesis & vaccine development: global translation	QIMRB	\$1,200,000	2013-2016
McCarthy, J.S.	MMV, Project agreement Piperquine BD / 12/013 (Commerce)	QIMRB	\$180,000	2013
McCarthy, J.S.	MVI-EVITA BD13/022 program for appropriate technology in health	QIMRB	\$300,000	2013
McCarthy, J.S.	Malaria ventures (MMV) - phase I/Ib study - DSM265 - BD13/008	QIMRB	\$35,000	2013
Paterson, D. (CIA)	Characterisation of microorganisms by matrix-assisted laser desorption/ionization (MALDI) mass spectrometry	NHMRC	\$45,385	2013-2013
Paterson, D. (PI)	Randomised controlled trial of Meropenem versus Piperacillin-Tazobactam for definitive treatment of bloodstream infections due to Ceftriaxone non-susceptible escherichia coli and klebsiella spp	International Society of Chemotherapy	€50,000	2013-2014
Paterson, D. (PI)	Randomised controlled trial of Meropenem versus Piperacillin-Tazobactam for definitive treatment of bloodstream infections due to Ceftriaxone non-susceptible escherichia coli and klebsiella spp.	Australian Society for Antimicrobials	\$25,000	2013-2014
McCarthy, J.	Health Research Fellowship	Queensland	\$750,000	2011-2015
Clements, A., Andrews, R., Black, J., Traub, R., McCarthy, J.	A cluster RCT of the impact of a community based hygiene and sanitation programme on infection with intestinal parasites following mass albendazole in timor-Leste	NHMRC Partnership (Project 1013713)	\$987,270	2011-2013
Andrews, R., Speare, R., Carapetis, J., McCarthy, J., Cheng, A., Kearns, T., Mulholland, E., Holt, D., Markey, P.	Impact of ivermectin mass drug administration program against endemic scabies and strongyloidiasis	NHMRC (Project 605804)	\$1,257,125	2011-2014
Graves, N., Paterson, D.L.	Centre for Research Excellence in Reducing Healthcare Associated Infection	NHMRC Centre for Research Excellence Grant	\$2,495,795	2011-2016

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Cooper, M., Paterson, D.L., Roberts, J.,	Membrane-targeted antibiotic for complicated skin and skin structure (csSSSI) infections caused by MRSA, VISA, and VRE (methicillin and Vancomycin-resistant <i>S. aureus</i> and enterococci	Wellcome Trust Grant	\$5,046,982	2011-2013
Clements, A., Paterson, D.L.	<i>Clostridium difficile</i> : assessing the risks to Australia of an emerging healthcare related pathogen	NHMRC Project Grant	\$936,321	2011-2013
Cooper, M., Paterson, D.L.	Development of Novel hybrid antibiotics for the treatment of hospital and community acquired drug resistant gram-negative and gram-positive bacterial infections	NHMRC	\$689,946	2011-2013
Patterson, D.	Queensland Health Senior Clinical Research Fellowship	Queensland Health	\$425,000	2011-2014

## Publications

Adnan S, Li JX, Wallis SC, Rudd M, Jarrett P, Paterson DL, Lipman J, Udy AA, Roberts JA. Pharmacokinetics of meropenem and piperacillin in critically ill patients with indwelling surgical drains. *Int J Antimicrob Agents*. 2013 Jul;42(1):90-3.

Adnan S, Paterson DL, Lipman J, Roberts JA. Ampicillin/Sulbactam: Its Potential Use in Treating Infections in Critically ill Patients. *J Antimicrob Agents*. 2013 Nov;42(5):384-9

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Day KM, Ali S, Mirza IA, Sidjabat HE, Silvey A, Lanyon CV, Cummings SP, Abbasi SA, Raza MW, Paterson DL, Perry JD. Prevalence and molecular characterization of Enterobacteriaceae producing NDM-1 carbapenemase at a military hospital in Pakistan and evaluation of two chromogenic media. *Diagn Microbiol Infect Dis*. 2013 Feb;75(2):187-91.

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Dulhunty JM, Roberts JA, Davis JS, Webb SA, Bellomo R, Gomersall C, Shirwadkar C, Eastwood GM, Myburgh J, **Paterson DL**, Lipman J. Reply to Soman et al. *Clin Infect Dis*. 2013 Jul;57(2):323-4.

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**McCarthy JS**. Experimentally induced blood-stage *Plasmodium vivax* infections in healthy volunteers. Australian Society for Infectious Diseases Seminar 2013, 21 February 2013.

**McCarthy JS**. Is too much hygiene good for us? Worms and autoimmune disease. Communicable Control Disease (CCD) Conference 2013. 22 March 2013.

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## Publications

**McCarthy JS.** Using human blood stage *P. falciparum* infection to define the activity of licensed and experimental antimalarial drugs. 62nd ASTM Annual Meeting, USA. 12 November 2013.

**McCarthy JS.** Population Control of Scabies. Scabies symposium, American Society of Tropical Medicine and Hygiene, Washington DC. 15 November 2013.

**McCarthy JS.** A dose-ranging study in the human induced blood-stage malaria model to define the anti-parasitic activity and pharmacokinetic–pharmacodynamic relationship of the synthetic peroxide antimalarial OZ439. Medicines for Malaria Venture at ASTM, Washington DC. 14 November 2013.

**McCarthy JS.** Walter and Eliza Hall Institute of Medical Research, Australia. 19 January 2013.

**McCarthy JS.** “You mean to say that you are deliberately infecting volunteers with malaria?” James Cook University Seminar 2013, Australia. 19 February 2013.

**McCarthy JS.** 9th Annual Indo-Australian Biotechnology Conference - “Global Health Priorities in Infection & Immunity”, closing address speaker. The University of Melbourne, Australia. April 07- April 09, 2013.

**McCarthy JS.** Human Malaria Challenge Studies by Blood Stage Inoculation: A Tool to define the efficiency of antimalarial drugs and vaccines. Oxford Martin Seminar 2013, The Jenner Institute, University of Oxford, United Kingdom. 24 May 2013.

**McCarthy JS.** What are we learning from the human malaria epidemic at QIMR? QIMR Berghofer Internal Seminar, Australia. 06 June 2013.

**McCarthy JS,** Griffin PM, Sekuloski S, Bright AT, Rockett R, Looke D, Elliott S, Whiley D, Sloots T, Winzeler EA, Trenholme KR. Experimentally induced blood-stage *Plasmodium vivax* infection in healthy volunteers. *J Infect Dis.* 2013 Nov 15;208(10):1688-94. doi: 10.1093/infdis/jit394. Epub 2013 Aug 1. PubMed PMID: 23908484; PubMed Central PMCID: PMC3888148.

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**Paterson DL.** Determining research priorities for clinician-initiated trials in infectious diseases. Steering Group of the Australasian Society for Infectious Diseases Clinical Research Network. *Med J Aust.* 2013 Mar 18;198(5):270-2.

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Williamson DA, Barrett LK, Rogers BA, Freeman JT, Hadway P, **Paterson DL**. Infectious complications following transrectal ultrasound-guided prostate biopsy: new challenges in the era of multidrug-resistant *Escherichia coli*. *Clin Infect Dis*. 2013 Jul;57(2):267-74.

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# Department of Internal Medicine and Aged Care including Obstetric Medicine Unit



**Assoc. Prof. Charles Denaro**  
Director,  
Internal Medicine and  
Aged Care

## Overview

The Internal Medicine Research Unit (IMRU) coordinates research in the Department of Internal Medicine and Aged Care, including investigator-initiated clinical and health services research, participation in international trials, and translation of research into clinical practice to improve quality.

Health services research is led by Adjunct Professor Alison Mudge and the TRIM (Team Research in Internal Medicine) multidisciplinary research group. Alison is a Clinical Director for the Australian Centre for Health Services Innovation (AUSHSI). Major areas of research include the utility of exercise in heart failure patients, improving hospital care for older patients and improving post-hospital care for patients at high risk of readmission.

Participation in international trials of pharmacological agents are led by Associate Professor Charles Denaro and Dr Paul Kubler and include trials in anticoagulants and new agents for rheumatological conditions. The unit has been an active member of the Australian anticoagulation trialists group and has been engaged in many of the multicentre trials investigating the new anticoagulants. Investigator initiated trials include a trial of teriparatide for pelvic fracture healing and investigations of drug monitoring. Dr Donald McLeod is finishing his PhD in the epidemiology of thyroid cancer.

IMRU has a major role in quality improvement projects in the clinical service, and has led innovations such as introduction and audit of patient risk assessment and care planning tools, the development of the multidisciplinary chronic disease management service in heart failure and developing a state-wide service for the treatment of Fabry disease.

The Obstetric Medicine Unit at the RBWH is active in clinical and basic science research across all medical problems which occur throughout pregnancy. A number of PhD candidates are currently undertaking research in areas related to maternal medical conditions in pregnancy and the effects on pregnancy outcomes. The unit has been successful in numerous research grant / funds.

## Internal Medicine and Aged Care Research staff

Name	Qualifications	Position	Interests/specialities
A/Prof Charles Denaro	MBBS FRACP, MD	Director, Internal Medicine and Aged Care	Therapeutics, cardiovascular medicine, health services
Adj Prof Alison Mudge	MBBS (Hon) FRACP Grad Cert Health Ec PhD	Clinical Director, Research and Education, Internal Medicine and Aged Care	Health services, older patients
Paul Kubler	MBBS FRACP	Clinical Director, Clinical Pharmacology Director Rheumatology	Therapeutics, rheumatology
Don McLeod	MBBS (Hons) FRACP MPH	Staff specialist	Endocrinology – thyroid diseases
Peter Donovan	MBBS FRACP	Staff specialist	Endocrinology, clinical pharmacology
Julie Adsett	BPhy (Hons)	Senior Physiotherapist	Models of exercise delivery for patients with chronic heart failure
Jessica Suna	BN, B App Sci, M Hlth Sci (Res)	Nurse researcher	Clinical trials, health services
Diane Bookless	BN, Grad Dip (Community Health), RM	Research nurse	Clinical trials, health services
Katie Foxcroft	RN, RM, MApp Sc (Research)	Coordinator Nurse Research	Obstetric medicine, clinical trials
Lisa Mitchell	RN, MSSc(Health Practice)	Project coordinator / Nurse Researcher	Health service improvement

## Research staff

Name	Qualifications	Position	Interests/specialities
Karen Kasper	RN, BN, MN(leadership)	Project coordinator / Nurse Researcher	Health service improvement
Xanthe Sansome	B Phty	Research Assistant	Clinical trials

## Supervised post-graduate students

Name	Current studies	Research topic
Julie Adsett	PhD	Hydrotherapy in heart failure
Jessica Suna	M Health Sci	The effect of exercise on sleep quality in heart failure patients
Prue McRae	M Phil	Identifying interdisciplinary care needs in older surgical patients
Julian DeLooze	MPH	Epidemiology of Clostridium difficile
Stephen Kyranis	MPH	Delirium in injurious falls

## Awards and achievements

Award	Event	Recipient
RACP Queensland Research Award		Donovan, P
NHF Travel Award	Travel to European Society of Cardiology Heart Failure Congress	Adsett, J

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Mudge A, McRae P et al	Improving care of older orthopaedic patients: Eat Walk Engage	MNHSD SEED Innovation grant	\$96,000	2013 - 2014
Young A, Mudge A, Banks M, Isenring E, Ross L, Kimble R, Whiting E	Hospital to home outreach for malnourished elders (HHOME)	AUSHSI Strategic Research Grant 2013-14	\$76,000	2013 – 2014
Donovan P, Duncan E, Mudge A, Rowlands C, Tesar P	Teriparatide for pelvic fracture healing	Royal Brisbane and Women's Hospital New Staff Specialist grant	\$50,000	2013
Donovan P, Duncan E, Mudge A, Rowlands C, Tesar P	Teriparatide for pelvic fracture healing	RACP Queensland research award	\$10,000	2013 - 2014
Mudge A, Walker P, McRae P, Reade M, Donovan P, Gordon L		Australian Centre for Health Services Innovation Stimulus Grant	\$75,000	2012 – 2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Campbell J, Coyer F, Osborne S, Robertson I, Mudge A	IntACT 1: Incontinence-associated dermatitis and candida detection. A prospective observational study in the acute care setting.	Royal Brisbane and Women's Hospital Project Grant	\$39,000	2013
Coombes I, Whitfield K, Mitchell C, Brazil V, Denaro C, Neilsen A, Barras M	Evaluation of the impact of a clinical pharmacist on the safety and quality of the prescribing on a post-take medical ward round.	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013
Martin J, Barras M, Lucas C, Robwerts J, Paterson D, Kubler P, Coombes I	Are modern methods for aminoglycoside monitoring superior to existing approaches? A randomised controlled trial	Royal Brisbane and Women's Hospital Project Grant	\$35,000	2013
Mudge, A	THRIVE: Targeting Hospitalisation risk in vulnerable elders	RBWH Foundation Patricia Dukes Fellowship	\$240,000	2012-2014

## Publications

Adsett J, Hickey A, Nagle A, Mudge A. Implementing a community-based model of exercise training following cardiac, pulmonary and heart failure rehabilitation *Journal of Cardiopulmonary Rehabilitation*. 2013; Jul-Aug. 33(4):239-43.

Chay J, Donovan P, Cummins L, Kubler P, Pillans P. Experience with low-dose rituximab in off-label indications at two tertiary hospitals. *Intern Med J*. 2013; Aug. 43(8):871-82.

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Donovan PJ, Sundac L, Pretorius CJ, d'Emden MC, McLeod DS. Calcitriol-mediated hypercalcemia: causes and course in 101 patients. *J Clin Endocrinol Metab*. 2013; Oct. 98(10):4023-9.

Lucas C, Donovan P. 'Just a repeat' - When drug monitoring is indicated. *Aust Fam Physician*. 2013; Jan-Feb;42(1-2):18-22.

McRae P, Mudge A, Peel N, Walker P. Geriatric syndromes in older surgical patients-a literature review. *Journal of Frailty and Ageing*. 2013; 2(4):205-210.

Mudge A, McRae P, Cruickshank M. Eat Walk Engage: An interdisciplinary collaborative model to improve care of hospitalized elders. *Am J Med Qual*. accepted Sept 2013; epub Nov 22. 2013; ahead of print

Mudge A, Shakhovskoy R, Karrasch A. Quality of transitions in older medical patients with frequent readmissions: opportunities for improvement. *Eur J Intern Med*. 2013; 24:779-783.

Mudge AM, Adsett J. Factors predicting successful transition to community-based maintenance exercise programs following exercise rehabilitation. *Cardiopulmonary Physical Therapy Journal*. accepted July 2013.

Mudge AM, Maussen C, Duncan J, Denaro CP. Improving quality of delirium care in a general medical service with established interdisciplinary care: a controlled trial. *Internal Medicine Journal*. 2013; 43(3):270- 277.

Young A, Banks M, Mudge A, Ross L, Daniels L. Encouraging, Assisting and Time to EAT: Improved nutritional intake for older medical patients receiving Protected Mealtimes and/or additional nursing feeding assistance. *Clinical Nutrition*. 2013; 32:543-549.

Young AM, Kidston S, Banks MD, Mudge AM, Isenring EA. Malnutrition screening tools: Comparison against two validated nutrition assessment methods in older medical inpatients. *Nutrition*. 2013; 29(1):101-106.

## Obstetric Medicine

### Research staff

Name	Qualifications	Position	Interests/specialities
Dr Karin Lust	MBBS, FRACP	Clinical Director of Obstetric Medicine & Staff Specialist General medicine	Medical Disorders in pregnancy, preconception counseling, contraception
Dr Narelle Fagermo	MBBS, FRACP	Staff Specialist General & Obstetric medicine	Obstetric medicine
Prof Leonie Callaway	MBBS(Hons), FRACP, PHD, GCE Lead	Head , Northern Academic Cluster, Uni of Qld. Staff Specialist General & Obstetric medicine	Obstetric Medicine Obesity in pregnancy Probiotics in pregnancy
Dr Penny Wolski	MBBS, FRACP	Staff Specialist Endocrinology & Obstetric medicine	Obstetric medicine
Dr Helen Barrett	BSc( Hons)MBBS(Hons) FRACP	Staff Specialist Endocrinology & Obstetric medicine	Obstetric medicine Lipids in pregnancy
Katie Foxcroft	RN, RM, MApp Sc (Research)	Coordinator Nurse Research	Obstetric medicine, clinical trials
Marloes Dekker Nitert	MSc Biomedicine	Senior postdoctoral researcher at UQCCR	Obesity pregnancy complications and pregnancy outcomes

### Supervised post-graduate students

Name	Current studies	Research topic
Susan deJersey	PhD	Are we missing opportunities: understanding health behaviours associated with overweight in pregnancy
Kerina Denny	PhD	Role of C5a in Fetal and Maternal Health
Helen Barrett	PhD	Maternal Lipids in Pregnancy
Lisa Harris	PhD	Pre-Eclampsia: Early identification of at-risk patients and clinical implications
Naomi Achong	PhD	Type 1 Diabetes Mellitus and Breastfeeding Type 1 Diabetes Mellitus and peripartum insulin requirements
Fiona Britten	PhD	Breastfeeding in mothers with type 2 diabetes: Breastfeeding rates, maternal benefits and factors affecting success
Catherin Kilgour	PhD	Postnatal follow up of women after a pregnancy with gestational diabetes mellitus (GDM).
Kristine Matusiak	Masters of Philosophy Scholars	Does preconception weight loss alter the neonatal stress response to heel stick? A pilot study
Cara Odenthal	Masters of Philosophy Scholars	Can MRI at 3 and 5 years after first demyelinating event detect reduction in brain volume in patients who progress to clinically definite MS compared to those who do not?

## Awards and achievements

Award	Event	Recipient
SOMANZ Travel grant	SOMANZ Annual Scientific meeting Sydney 2013	Jessica Phillips Yelland
AWE-Novo Nordisk Travel Award	Endocrine Society of Australia for US ENDO conference 2013	Helen L Barrett

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
HL Barrett	PhD studies	Medical and Dental Research Scholarship for PhD studies	\$128,000	2011 - 2014
Taylor SM Woodruff TM Callaway LK Finnell RH	Inflammation and Placental Dysfunction. Inflammation of the womb during pregnancy and reproductive consequences.	NHMRC	\$967,750	2009 - 2013
Mamun AA O'Callaghan M Najman JM Alata R Williams GM Clavarino A McIntyre HD (Associate Investigator: Callaway L)	Early origins, progression and aetiology of obesity, metabolic syndrome and diabetes: A 30 years follow-up study.	NHMRC	\$1,151,675	2010 - 2014
Willmott L White BP Gallois C Parker M Graves N Winch S (Industry Partner: Callaway L)	Futile treatment at the end of life: legal, policy, sociological and economic perspectives.	ARC Metro North	\$268,000 \$150,000	2012 - 2014
Callaway L McIntyre HD Dekker Nitert M Tobin J O'Rourke P Wilkinson S McSweeney C	Probiotics and gestational diabetes mellitus.	NHMRC APP1028575	\$828,718	2012 - 2014
Barrett HL Callaway LK Dekker Nitert M McIntyre HD De Jersey SJ Lingwood B E'Emden M	Validation of a triglyceride meter for home monitoring of triglyceride levels in pregnancy.	Royal Brisbane and Women's Hospital Project Grant	\$13,000	2013
Lust K, Callaway L K, Dekker Nitert M, Barrett HL, Lingwood B, Foxcroft K. Kristine Matusiak	Does preconception weight loss alter the neonatal stress response to heel stick? A pilot study	Royal Brisbane and Women's Hospital Project Grant	\$31,000	2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Britten F, Duncan E, Callaway LK, Brodribb W, Lust K.	Breastfeeding in mothers with type 2 diabetes: Breastfeeding rates, maternal benefits and factors affecting success.	Royal Brisbane and Women's Hospital Project Grant	\$25,000	2013
Callaway LK, Dekker Nitert M, Barrett HL, Foxcroft K.	The gut microbiome: A secret ingredient in the development of gestational diabetes?	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013
Achong NM Callaway LK	Insulin requirements in women with Type 1 Diabetes Melitus during the peripartum period and lactation.	Royal Brisbane and Women's Hospital Project Grant	\$15,000	2013
Dekker-Nitert, M.	The gut microbiome: A secret ingredient in the development of gestational diabetes?	Royal Brisbane and Women's Hospital Post Doctoral Fellowship	\$80,000	2013
Callaway L.K. McIntyre H.D.	A randomised controlled trial of probiotics to prevent gestational diabetes.	NHMRC	\$828,717	2012 - 2015
Lust K. Callaway L.K. Matusiak K.R. Dekker M.	Placental expression of lipoprotein lipase, endothelial lipase and hormone sensitive lipase in pregnancies complicated by pre-eclampsia or intrauterine growth retardation.	Research Grants Pfizer Australia	\$42,900	2012 - 2013
Callaway L.K. Humphrey M.	Prospective study of validity of an obstetric risk score revision.	Qld Health	\$100,000	2011 - 2016
Callaway L.K. McIntyre D. Dekker M. Tobin J. Wilkinson S. O'Rourke P.K. McSweeney	A randomized controlled trial of probiotics to prevent gestational diabetes.	Canadian Institutes of Health Research	\$828,719	2011 - 2016

## Publications

Achung N, Lust KM, et al. Insulin requirements in late pregnancy in women with type 1 diabetes mellitus: a retrospective review. *Diabetes Research and Clinical Practice*. 2013; Dec. 98(3); 414-421.

Al Mamun A, Mannan M, O' Callaghan MJ, Williams GM, Najman JM, Callaway LK. Association between gestational weight gain and postpartum diabetes: evidence from a community based large cohort study. *PLOS ONE*. 2013; 11:8(12).

Barrett HL, Dekker Nitert M, Jones L, O'Rourke P, Lust K, Gatford KL, et al. Determinants of maternal triglycerides in women with gestational diabetes mellitus in the Metformin in Gestational Diabetes (MiG) study. *Diabetes Care*. 2013; Jul. 36(7):1941-6.

Barrett HL, Dekker Nitert M, Wolski P, Fagermo N, Lust K, Callaway LK. The conundrum of eclampsia and fitness to drive. *Aust N Z J Obstet Gynaecol*. 2013; Dec. 53(6):540-3.

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## Publications

Barrett HL, Gatford KL, Houda CM, de Blasio MJ, McIntyre HD, Callaway LK, Dekker Nitert M, Coat S, Owens JA, Hague WM, Rowan JA. Maternal and neonatal circulating markers of metabolic and cardiovascular risk in the Metformin in Gestational diabetes (MiG) trial: responses to maternal metformin versus insulin treatment. *Diabetes Care*. 2013; 36(3):529-36.

Chay J, Lust K, Callaway L. When conventional treatment fails: The role of Intravenous immunoglobulin in recurrent pregnancy loss secondary to antiphospholipid syndrome. *Obstetric Medicine: The medicine of pregnancy*. 2013; June. 6:76-79.

De Jersey SJ, Nicholson JM, Callaway LK, Daniels LA. An observational study of nutrition and physical activity behaviours, knowledge and advice in pregnancy. *BMC Pregnancy and Childbirth*. 2013; 20:13-115.

Dekker Nitert M, Barrett HL, Foxcroft K, Tremellen A, Wilkinson S, Lingwood B, Tobin M J, McSweeney C, O'Rourke P, McIntyre HD, Callaway LK, SPRING: an RCT study of probiotics in the prevention of gestational diabetes mellitus in overweight and obese women *BMC Pregnancy and Childbirth*. 2013; 13:50 DOI: 10.1186/1471-2393-13-50.

d'Emden MC, Fagermo ND, Love AJ, Lust KM. Gestational diabetes needs to be managed *Medical Journal of Australia*. 2013; June 17. 198(11): 595-596.

Denny KJ, Callaway LK, Finnell RH, Taylor SM, Woodruff TM. Elevated Complement 5a in Maternal and Umbilical Cord Plasma in Preeclampsia. *J Reprod Immunol*. 2013; 97(2):211-6.

Denny KJ, Coulthard LG, Liso S, Simmons D, Jeanes A, Callaway LK, Wlodarczyk B, Finnell RH, Woodruff T, Taylor SM. C5a Prevents folate deficiency-induced neural tube defects in mice. *J Immunol*. 2013; 190(7):3493-0.

Foxcroft K, Callaway LK, Byrne NM, Webster J. Development and validation of a pregnancy symptoms inventory. *BMC Pregnancy and Childbirth*. 2013; 13(1): 3.

Lust K, Jardin L. Chapter 14. Maternal Diabetes Mellitus, in Davies M, Inglis G, Jardine L, Koorts P. Antenatal Consults: A Guide for Neonatologists and Paediatricians, Elsevier. 2012.

Mamun AA, Sutharsan R, O'Callaghan M, Williams G, Najman J, McIntyre HD, Callaway L. Cesarean delivery and the long-term risk of offspring obesity. *Obstet Gynecol*. 2013; 122(6):1176-83.

Nankervis A, McIntyre HD, Moses RG, Ross GP, Callaway LK. Testing for gestational diabetes mellitus in Australia. *Diabetes Care*. 2013; May. 36(5):e64.

Parambi A, Allen JS, Faber-Swensson AP, Lust K. and Callaway LK. Hypoxaemia in the peripartum period in a woman with undiagnosed pulmonary arteriovenous malformations. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 2013; 53(6):593-4.

Queensland Government. Co Clinical lead, Hypertensive disorders of pregnancy, Queensland Maternity and Neonatal Clinical Guideline. Update June. 2013; Available from: [http://www.health.qld.gov.au/qcg/documents/g\\_hdp5-0.pdf](http://www.health.qld.gov.au/qcg/documents/g_hdp5-0.pdf).

Queensland Government. Diabetes Mellitus, Peripartum Management – Adult, Metro North Health Service District, 20744/Proc. Sept 2013; Available from: <http://hi.bns.health.qld.gov.au/rbh/policies/guidelines/20744wug.pdf>.

Queensland Government. Position Statement, Diabetes in pregnancy, QLD Maternity and Neonatal Clinical Guidelines Programme. April 2013; Available from: <http://www.health.qld.gov.au/qcg/documents/o-diabetes-position.pdf>.

Watson M, Howell S, Johnston T, Callaway L, Khor SL, Cornes S. Pre-pregnancy BMI: Costs associated with maternal underweight and obesity in Queensland. *Aust NZ J Obstet Gynecol*. 2013; 53(3):243-9.

# Department of Neurology



**Dr Andrew Wong**  
Director,  
RBWH Neurology and Stroke  
Snr Neurologist, TPCB

## Overview

The Neurology Research Centre had a productive year in 2013, continuing to focus on areas of clinical neurology research within the Department of Neurology, Royal Brisbane and Women's Hospital (RBWH).

Some achievements for the group have been:

The Neuromuscular Group has been successful in participating in two international MND trials.

The Movement Disorder group has advanced collaborations with a number of research groups linking non-motor features and complications of Parkinson's disease.

The Stroke group in conjunction with the RBWH Foundation have been working to raise the public profile of acute stroke research at the Royal Brisbane & Women's Hospital through fundraising initiatives such as the Master Stroke Business Lunch. The Stroke Research Group was also successful in obtaining a grant from the RBWH Research Advisory Committee.

## Research staff

Name	Qualifications	Position	Interests/specialities
EPILEPSY GROUP			
Professor David Reutens	MBBS, MD, FRACP	Consultant Neurologist, Director of Centre for Advanced Imaging; Foundation Professor of Experimental Neurology	
Professor Mervyn Eadie	MD, BS, PhD, FRCP Ed, FRACP	Honorary Consultant Neurologist	
A/Prof Lata Vadlamudi	MBBS, FRACP, PhD	Staff Neurologist	
A/Prof Cecilie Lander	MBBS, FRACP	Visiting Neurologist	
Dr James Pelekanos	MBBS, FRACP, FRCPC	Staff Neurologist and Clinical Academic Fellow	
Dr Alice-Ann Sullivan	MBBS, FRACP,	Staff Neurologist	
Dr Julia Hocking	PhD, BPsych, MCogSci	Research Scientist	
Dr Taracad Venkatachalam	PhD	Research Scientist	
Rebecca Williams	BPsychSci, GDipMagResTech	Research Student	
Jodi Frankland	BN	Epilepsy Nurse/ Epilepsy Action	
Kimberley Irwin		Epilepsy Drug Trials Research Assistant	
Norma Vine		Twin Epilepsy Research Assistant	
MOVEMENT DISORDER GROUP			
A/Prof John O'Sullivan	MBBS, FRACP, MD	Visiting Neurologist	
Dr Nadeeka Dissanayaka	BSc, PhD	Post Doctoral Research Fellow	
Dr Meenakshi Raj		Movement Disorders Fellow	
Amy Jones		Movement Disorders Nurse Specialist	

## Research staff

Name	Qualifications	Position	Interests/specialities
MOVEMENT DISORDER GROUP			
Prof Peter Silburn		Honorary Visiting Neurologist	
Elise Tune		Movement Disorders Nurse Specialist	
A/Prof George Mellick		Research Scientist	
NEUROIMMUNOLOGY GROUP			
Professor Pamela McCombe	MBBS, PhD, FRACP	Visiting Neurologist	
Professor Michael Pender	MBBS (Hons I), MD, PhD, FRACP	Consultant Neurologist	
Dr Stefan Blum	Dr.Med, FRACP	Staff Neurologist	
Kaye Hooper	RN, MPH	Multiple Sclerosis Clinical Nurse Consultant	
Dr Alex Lehn	MBBS	Neurology Registrar	
Dr Peter Patrikios	MBBS, D.Med.Sc, FRACP	Visiting Neurologist	
Genevieve Skinner	RN	Research Co-ordinator Stroke/Neurology	
Dr Andrew Wong		Director, RBWH Neurology and Stroke Snr Neurologist, TPCH	
Dr Judith Greer		Senior Research Fellow, UQ	Collaborator
Dr David Gillis		Immunologist, Autoimmune Lab Pathology Queensland	Collaborator
Dr Richard Wong		Immunologist, Autoimmune Lab Pathology Queensland	Collaborator
Bob Wilson		Chief Scientist, Autoimmune Lab Pathology Queensland	Collaborator
Kerri Prain		Scientist, Autoimmune Lab Pathology Queensland	Collaborator
Dr James Scott		Psychiatrist, RBWH	Collaborator
NEUROMUSCULAR GROUP			
Professor Pamela McCombe	MBBS, PhD, FRACP	Visiting Neurologist, Joint Co-ordinator, RBWH Multidisciplinary MND clinic	
Dr Robert Henderson	MBBS, FRACP, PhD	Staff Neurologist, Joint Co-ordinator, RBWH Multidisciplinary MND clinic	
Dr Stefan Blum	Dr. Med., FRACP	Staff Neurologist	
Dr Caroline Airey		Research Fellow	
Nicole Hutchinson		Clinical Nurse Consultant-Motor Neurone Disease	
Helen Woodhouse		Senior Research Nurse	
Susan Heggie		Research Nurse	
Casey Pfluger		Research Assistant	
Dr Matthew Devine	MBBS	Research Assistant	
Ashwag Rafea S Alruwaili		Research Student	

## Research staff

Name	Qualifications	Position	Interests/specialities
Associate Professor Peter Noakes		University of Queensland School of Biomedical Sciences and Queensland Brain Institute	Collaborator
Dr Shyuan Ngo		University of Queensland School of Biomedical Sciences	Collaborator
Dr Marie Mangelsdorf		Queensland Brain Institute	Collaborator
STROKE GROUP			
Dr Andrew Wong	MBBS, FRACP, PhD	Director, RBWH Neurology and Stroke Snr Neurologist, TPCB	
Dr Stephen Read	MBBS, FRACP, PhD,	Honorary Visiting Neurologist	
Dr Robert Henderson	MBBS, FRACP, PhD	Staff Neurologist	
A/Prof John O'Sullivan	MBBS, FRACP, MD,	Visiting Neurologist	
Dr Stefan Blum	Dr.Med, FRACP,	Staff Neurologist	
Professor Pamela McCombe	MBBS, PhD, FRACP	Visiting Neurologist	
Genevieve Skinner	RN	Research Co-ordinator Stroke/ Neurology	
Tennille Rowland	BOccThy, MPhil	Occupational Therapist	
Professor Alan Coulthard		Senior Staff Specialist & Consultant Diagnostic and Interventional Neuroradiologist, RBWH; Professor of Neuroradiology and Head of the Discipline of Medical Imaging, UQ	Collaborator
Associate Professor David Copland		ARC Future Fellow and UQ Principal Research Fellow, UQCCR & School of Health & Rehab Sciences	Collaborator
Dr Simon Finnigan		Senior Research Fellow, UQCCR	Collaborator
Dr Judith Greer		Senior Research Fellow, UQ	Collaborator

## Supervised post-graduate students

Name	Current studies	Research topic
EPILEPSY GROUP		
Dr Irina Kharatishvili	Post-doctoral Fellow	
Dr Randal Moldrich	Post-doctoral Fellow	
Dr Zuyao Shan	Post-doctoral Fellow	
Dr Jeremy Ullmann	Post-doctoral Fellow	
Dr Viktor Vegh	Post-doctoral Fellow	
Dr Michael Vogel	Post-doctoral Fellow	
Dr Simone Bosshard	Post-doctoral Fellow	

## Supervised post-graduate students

Name	Current studies	Research topic
Dr Marcus Gray	Post-doctoral Fellow	
Dr Min Chen	Post-doctoral Fellow	
Dr Hana Burianova	Post-doctoral Fellow	
Jiaxin Du	PhD – University of Queensland	
Nahla Faizo	PhD – University of Queensland	
Rebecca Williams	PhD – University of Queensland	
Farsheed Sepehrband	PhD – University of Queensland	
Jayran Chupan	PhD – University of Queensland	
MOVEMENT DISORDER GROUP		
Elizabeth Torbey	Doctorate in Psychology student	
Elizabeth White	BSc., MBBS student, vacation scholar	
Ricky Nells	BSc., MBBS student, vacation scholar	
Dr Stefan Blum	PhD – University of Queensland	
Dr Caroline Airey	PhD – University of Queensland	
Dr Matthew Devine	MPhil – University of Queensland	
Ashway Rafea S Alruwaili	PhD – University of Queensland	
STROKE GROUP		
Dr Nabeel Sheikh	PhD- University of Queensland	
Dr Giang Nguyen	PhD- University of Queensland	
Tracy Roxbury	PhD- University of Queensland	
Emma Schleiger	PhD- University of Queensland	
		Patients of the RBWH Acute Stroke Care Unit also help university researchers to study post-stroke mood disorders (e.g. depression), cognition and language (e.g. dysphasia).

## Awards and achievements

Award	Event	Recipient
	2013-2018 NHMRC Clinical Training Fellowship	Dr Marcus Gray
	2012-2015 UQ Post-doctoral Research fellowship	Dr Simon Bosshard
	Fundraising performed in conjunction with the RBWH Foundation – RBWH Dinner Do, GOA 7 Pillars Bicycle Ride	
Tracy Roxbury: first prize in the allied health category for her poster. Neurophysiological Markers of Language Recovery in Subacute Stroke	22nd Annual RBWH Healthcare Symposium (2013).	
2013 University of Queensland Centre for Clinical Research Shimadzu Outstanding Young Investigator Award		Dr Nadeeka Dissanayaka
Fundraising performed in conjunction with the RBWH Foundation.		

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
EPILEPSY GROUP				
O Lipp, DC Reutens and 25 other Chief Investigators	The Science of Learning Research Centre	ARC Special Research Initiative	\$16,000,000	2012-2015
D Reutens, S Meikle, T Venkatachalam, I Turner, J Benlloch, A Boyd, V Vegh, A Gonzalez, R Bhalla, S Yang	Advancing hybrid imaging with magnetic resonance imaging and positron emission tomography	ARC Linkage Discovery Grant	\$300,000	2013-2015
A Janke, G McLachlan, J Ullmann, N Hamilton, I Brereton, D Reutens, G Galloway, J Ross	System to synapse	ARC Linkage Discovery Grant	\$174,000	2013-2015
D Reutens, C Gericke, L Vadlamudi, J Pelekanos, F Tremayne, E Duncan	Improving care and outcomes for patients with suspected first epileptic seizure	Australian Centre for Health Services Innovation - Stimulus Grant	\$75,000	2013
D. Reutens, G. Paxinos, J. Goetz, S. Meikle, P. Bernhardt, P. Dodd, K. Mardon, C. Watson, R. Banati	A facility for ex-vivo molecular imaging	ARC Linkage Infrastructure Equipment and Facilities, Grant No: LE130100164	\$310.00	
J. Goetz, S. Meikle, P. Bernhardt, P. Dodd, K. Mardon, C. Watson, R. Banati	A facility for ex-vivo molecular imaging	ARC Linkage Project Grant LP110200926	\$690,000	2011-2014
J Ullmann, S Yang, N Kurniawan, A Janke, M Wullmann, DC Reutens	A population-based atlas of the zebrafish brain for quantitative phenotypic comparisons of disease models	NIH RO3 Grant	\$120,000	2012-2014
DC Reutens		NHMRC Practitioner Fellowship Grant No: 631352	\$504,875	2010-2014
SF Berkovic, GD Jackson, J Gecz, A Connelly, IE Scheffer, DC Reutens, S Petrou, L Dibbens, F Calamante, P Thomas	Neurobiology of human epilepsy: Genes, cellular mechanisms, networks and whole brain	NHMRC Program Grant, Grant No: 628952	\$16,450,000	2011-2015
L Vadlamudi, D Nyholt	2013 QIMR-Clinician Research Collaboration Award	2013 QIMR-Clinician Research Collaboration Award	\$40,000	2013
L Vadlamudi	Genetics of epilepsy: a twin approach to complex and non-traditional inheritance patterns	Queensland Health Research Fellowship	\$400,000	2012-2016
Reutens, D., Lander, C., Palekanos, J., Vadlamudi, L., Bosshard, S.	Do patterns of anatomical and functional connectivity in the brain correlate with treatment responsiveness in temporal lobe epilepsy? A study with simultaneous EEG-Fmri	RBWH Foundation	\$20,000	2013
L Vadlamudi	Genetics of epilepsy: a twin approach to complex and non-traditional inheritance patterns	Royal Brisbane & Women's Hospital Project Grant	\$40,000	2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
MOVEMENT DISORDER GROUP				
Dr Nadeeka Dissanayaka.	“New methods to diagnose and treat depression and anxiety in Parkinson’s disease patients”.	2013-2016 Lions Medical Research Fellowship.	\$300,000	2013-2016
Dr Nadeeka Dissanayaka, Prof Gerard Byrne, A/Prof John O’Sullivan, Prof Peter Silburn, Dr Rodney Marsh, A/Prof David Copland, Dr Anthony Angwin, A/Prof George Mellick	“Characterising anxiety in Parkinson’s disease: a psycholinguistic and psychophysiology study comparing to anxious older adults”	2013 RBWH Foundation Research Grant	\$40,000	2013
Dr Rodney Marsh, Dr Michael Cole, Dr Nadeeka Dissanayaka, Prof Peter Silburn, A/Prof John O’Sullivan	The effects of a wearable, Freeze Detecting Cueing Device and Venlafaxine on domiciliary freezing of gait and falling in Parkinson’s Disease	Royal Brisbane and Women’s Hospital Project Grant	\$40,000	2013
A/Prof John O’Sullivan	Therapeutic Targeting of Complement C5a Receptors in Huntington’s disease	2011-2013 NHMRC Project Grant APP1004455	\$452,318.50	2011-2013
NEUROMUSCULAR GROUP				
	MNDRIA			\$100,000
	MND & Me Foundation			\$50,000
STROKE GROUP				
Dr Andrew Wong	Australian Stroke Clinical Registry	Royal Brisbane and Women’s Hospital Project Grant	\$40,000	2013
Dr Andrew Wong	Stroke Research Clinical Nurse Consultant position	Private Practice Trust Fund Grant	\$51,903	2013- 2014
Dr Pamela McCombe	T Cells in Stroke – Part of Solution?	Royal Brisbane and Women’s Hospital Project Grant	\$40,000	2013
Dr Robert Henderson	Using biomarkers to assess disease progression and understanding of MND	Royal Brisbane and Women’s Hospital Project Grant	\$40,000	2013
Dr Stefan Blum	Prevalence, clinical and serological characterisation of first episode psychosis associated with NMDAR antibodies	RBWH Foundation	\$40,000	2013

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## Publications

### EPILEPSY GROUP

Choupan J, Hocking J, Johnson K, Reutens D, Yang Z. Brain decoding based on functional magnetic resonance imaging using machine learning: a comparison study. *International Journal of Machine Learning and Computing*. 2013; 3(1): 132-136.

Du J, Vegh V, Reutens DC. Neuronal current imaging: MRI signal phase oscillates with neuronal activity in cerebral cortex. *Neuroimage*. (Accepted 2013).

Eckhaus J, Lawrence KM, Helbig I, Bui M, Vadlamudi L, Hopper JL, et al. Genetics of febrile seizure subtypes and syndromes: A twin study. *Epilepsy Res*. 2013; 105(1-2):103-109.

Hocking J, Thomas HJ, Dzafic I, Williams RJ, Reutens DC, Spooner DM. Disentangling the cognitive components supporting Austin Maze performance in left versus right temporal lobe epilepsy. *Epilepsy Behav*. 2013; Dec;29(3):485-91. doi: 10.1016/j.yebeh.2013.08.020.

Kurniawan ND, Richards KL, Yang Z, She D, Ullmann JF, Moldrich RX, Liu S, Yaksic JU, Leanage G, Kharatishvili I, Wimmer V, Calamante F, Galloway GJ, Petrou S, Reutens DC. Visualization of Mouse Barrel Cortex using Ex-vivo Track Density Imaging. *Neuroimage*. 2013; Sep 20; doi:pii: S1053-8119(13)00966-X. 10.1016/j.neuroimage.2013.09.030.

Martin AK, Robinson G, Dzafic I, Reutens D, Mowry B. Theory of mind and the social brain: implications for understanding the genetic basis of schizophrenia. *Genes Brain Behav*. 2013; Aug 8;doi: 10.1111/gbb.12066.

Moldrich RX, Leanage G, She D, Dolan-Evans E, Nelson M, Reza N, Reutens DC. Inhibition of histone deacetylase in utero causes sociability deficits in postnatal mice. *Behavioural Brain Research*. 2013; Nov 15;257:253-64. doi: 10.1016/j.bbr.2013.09.049.

Nguyen G, Coulthard A, Wong A, Sheikh N, Henderson R, O'Sullivan JD, Reutens DC. Measurement of blood-brain barrier permeability in acute ischemic stroke using standard first-pass perfusion CT data. *Neuroimage Clinical*. (Accepted 16/4/13). 2013; 2: 658–662.

Richards K, Kurniawan ND, Yang Z, Kim TH, Keller MD, Low J, Ullmann JFP, Cole S, Galloway GJ, Reid CA, Paxinos G, Reutens DC, Petrou S. Hippocampal volume and cell density changes in a mouse model of human genetic epilepsy. *Neurology*. 2013; 80:1240-1246.

Shan ZY, Wright MJ, Thompson PM, McMahon KL, Blokland GGAM, de Zubicaray GI, Martin NG, Vinkhuyzen AAE, Reutens DC. Modeling of the hemodynamic responses in block design fMRI studies. *J Cereb Blood Flow Metab*. (Accepted 16/10/13).

Ullmann JFP, Calamante F, Collin SP, Reutens DC, Kurniawan ND. Enhanced characterization of the zebrafish brain as revealed by super resolution track-density imaging. *Brain Struct Funct*. (Accepted 27/10/13).

Ullmann JFP, Watson C, Janke AL, Kurniawan ND, Paxinos G, Reutens DC. An MRI atlas of the mouse basal ganglia. *Brain Structure and Function*. (Accepted 17/4/13).

Ullmann JF, Watson C, Janke AL, Kurniawan ND, Reutens DC. A segmentation protocol and MRI atlas of the C57BL/6J mouse neocortex. *Neuroimage*. 2013; Epub 12/4/13.

Vajda FJE, O'Brien TJ, Graham J, Lander CM, Eadie MJ. Dose-dependency of fetal malformations associated with valproate. *Neurology*. 2013; 81:999-1003.

Vajda FJE, O'Brien TJ, Graham J, Lander CM, Eadie MJ. Associations between particular types of foetal malformation and antiepileptic drug exposure in utero. *Acta Neurologica Scandinavica* 2013; Mar 6;doi: 10.1111/and.12115.

Vajda FJE, O'Brien TJ, Lander CM, Graham J, Roten A, Eadie MJ. Teratogenesis in repeated pregnancies in antiepileptic drug-treated women. *Epilepsia*. 2013; 54:181-186. – doi: 10.1111/j.1528-1167.2012.03625.x.

Venkatachalam TK, Pierens GK, Reutens DC. Synthesis, NMR structural characterization and molecular modeling of substituted thiosemicarbazones and semicarbazones using DFT calculations to prove the syn/anti isomer formation. *Magn Reson Chem*. (Accepted 2013).

Vogel MW, Vegh V, Reutens DC. Numerical study of ultra-low field nuclear magnetic resonance relaxometry utilizing a single axis magnetometer for signal detection. *Med Phys*. 2013; 40(5):052301. doi: 10.1118/1.4800491.

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### MOVEMENT DISORDER GROUP

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### NEUROIMMUNOLOGY GROUP

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Guo S, Lucas RM, Ponsonby A-L. **The Ausimmune Investigator Group.** A novel approach for prediction of vitamin D status using support vector regression. *PLoS One*. (Accepted 8/10/13).

Hughes A-M, Lucas RM, McMichael AJ, Dwyer T, Pender MP, van der Mei I, Taylor BV, Valery P, Chapman C, Coulthard A, Dear K, Kilpatrick TJ, Williams D, Ponsonby A-L. Early-life hygiene-related factors affect risk of central nervous system demyelination and asthma differentially. *Clinical and Experimental Immunology*. 2013; 172:466–474.

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Devine M, Farrell A, Woodhouse H, McCombe PA, Henderson RD. A developmental perspective on bulbar involvement in amyotrophic lateral sclerosis. *Amyotroph Lateral Scler Frontotemporal Degener.* (Accepted July 2013) doi:10.3109/21678421.2013.812663.

Devine MS, Woodhouse H, McCombe PA, Henderson RD. The relationship between limb dominance, disease lateralisation and spread of weakness in amyotrophic lateral sclerosis. *Amyotroph Lateral Scler Frontotemporal Degener.* 2013; Mar 14;(2):150-1.

Drovandi C, Pettitt AN, Henderson RD, McCombe PA. Marginal Reversible Jump Markov Chain Monte Carlo with Application to Motor Unit Number Estimation. *Computational Statistics and Data Analysis.* (Accepted Nov 2013).

Ioannides ZA, Airey C, Fagermo N, Blum S, McCombe PA, Henderson RD. Susac syndrome and multifocal motor neuropathy first manifesting in pregnancy. *Aust N Z J Obstet Gynaecol.* 2013; Jun; 53(3):314-7.

### STROKE GROUP

Anderson CS, Heeley E, Huang Y. et al; **INTERACT2 Investigators.** Rapid Blood-Pressure Lowering in Patients with Acute Intracerebral Hemorrhage. *N Engl J Med.* 2013; 368:2355-2365.

Campbell BCV, Mitchell PJ, Yan B, Parsons MW, Christensen S, Churilov L, Dowling RJ, Dewey H, Brooks M, Miteff F, Levi CR, Krause M, Harrington TJ, Faulder KC, Steinfort BS, Kleinig T, Scroop R, Chrysosidis S, Barber PA, Hope A, Moriarty M, McGuinness B, Wong AA, Coulthard A, Wijeratne T, Lee A, Jannes J, Leyden J, Phan TG, Chong W, Holt M, Chandra RV, Bladin C, Badve M, Rice H, de Villiers L, Ma H, Desmond PM, Davis SM, Donnan GA. A multicentre, randomized, controlled study to investigate EXTending the time for Thrombolysis in Emergency Neurological Deficits with Intra-Arterial therapy (EXTEND-IA). *Int J Stroke.* 2013; ePub 10/11/13 ahead of print.

Chen G, Arima H, Wu G. et al; **INTERACT2 Investigators.** Subarachnoid Extension of Intracerebral Hemorrhage and 90-Day Outcomes in INTERACT2. *Stroke AHA Journal.* 2013; ePub 22/10/13 ahead of print.

Eames S, Hoffman T, Worrall L, Read S, Wong A. Randomised controlled trial of an education and support package for stroke patients and their carers. *BMJ Open.* 2013; May 8; (5). pii: e002538. doi: 10.1136/bmjopen-2012-002538. Print 2013.

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Liu J, Yan J, Greer JM, Read SJ, Henderson RD, Rose SE, Coulthard A, McCombe PA. Correlation of Adrenomedullin gene expression in peripheral blood leukocytes with severity of ischemic stroke. *Int J Neurosci.* (Epub ahead of print doi:10.3109/00207454.2013.837462).

Sheikh N, Wong A, Read S, Coulthard A, Finnigan S. QEEG may uniquely inform and expedite decisions regarding intra-arterial clot retrieval in acute stroke. *Clinical Neurophysiol.* 2013; 124:1913-1914.

# Department of Nuclear Medicine including Queensland PET Service



**Dr William Fong**  
Director,  
Nuclear Medicine

## Overview

The Department of Nuclear Medicine at the Royal Brisbane and Women's Hospital (RBWH) is one of the largest in Australia. It provides a referral, diagnostic and therapeutic nuclear medicine service with four SPECT/CT gamma cameras, one solid state cardiac camera, BMD dual energy X-ray absorptiometry (DEXA) and a pQCT scanner. Research interests in nuclear medicine include image reconstruction methodologies, application of gating and bone mineral densitometry in various disease states.

The department hosts the state-wide Specialised PET Services Queensland, which operates two state-of-the-art PET/CT scanners and a cyclotron. It offers research facilities to a wide variety of investigators. In addition to conventional tracers such as fluorodeoxyglucose (18FDG), the Service also conducts research using 18FDOPA, 18FMISO and 68Ga-DOTATATE. Other tracers, such as 68Ga-PSMA, which will soon be available for human use, and 68Ga-Pentixafor, currently being used in animal studies, allow the study and research of a greater range of diseases. There is also ongoing research interest in image reconstruction algorithms, respiratory gating and image analysis techniques.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr William Fong	MBBS, FRACP	Director, Nuclear Medicine	paediatric nuclear medicine
Dr David Macfarlane	MBBS, FRACP	Deputy Director, Nuclear Medicine; Director, Specialised PET Services Queensland	radionuclide therapy, positron emission tomography (PET)
Dr Aravind Ravi Kumar	MBBS, FRACP	Senior Staff Specialist	nuclear cardiology, nuclear oncology, training and education
Dr Frank Fiumara	MBBS, FRACP, MBA	Senior Staff Specialist	PET, paediatric nuclear medicine
Dr Paul Thomas	B.Med., FRACP	Assistant Director, Specialised PET Services Queensland	neuro-oncology imaging, kinetic analysis of PET tracers
Dr Marissa Bartlett	PhD Physics MACPSEM	Principal Medical Physicist	radiation safety, nuclear medicine and PET radio isotope imaging
Dr Matthew Griffiths	PhD Medical Physics MACPSEM	Director of Sciences, Principal Physicist	cyclotron production of radioisotopes, medical imaging of radioisotopes
Dr Jye Smith	PhD Medical Physics, MACPSEM	Senior Medical Physicist	computer processing of medical images, radio isotope production
Mr Bruce Wallace	MAppSc Medical Physics MACPSEM	Senior Medical Physicist	medical and health physics
Dr Stephen Taylor	PhD Synthetic Organic Chemistry	PET Radiochemist	radiopharmaceutical chemistry, PET radiopharmaceutical development
Dr Melissa Latter	Ph.D. Chemistry	PET Radiochemist	radiopharmaceutical chemistry, PET radiopharmaceutical development
Ms Sandra Kemp	General Nursing	Clinical Nurse Consultant; Study Coordinator (Nursing)	oncology, neurology, radionuclide therapy, positron emission tomography (PET)

## Research staff

Name	Qualifications	Position	Interests/specialities
Mr Travis Pearson	BAppSci(NMT), MBA	Director of Nuclear Medicine Technology	multi-modality imaging
Ms Louise Campbell	BAppSci(NMT), GradDipBusAdmin	Director of PET Technology	multi-modality imaging
Mr Peter Garcia	BAppSci(NMT), MHLthSci	Senior Nuclear Medicine Scientist	multi-modality imaging
Ms Nikki-Louise Scott	BSc(Hons)(BiomedSci), GradDip(NMT)	Nuclear Medicine Scientist	multi-modality imaging
Ms Sarah Frecker	BAppSci(NMT)	Nuclear Medicine Scientist	multi-modality imaging
Ms Rowena Rose	BAppSci(NMT)	Nuclear Medicine Scientist	multi-modality imaging
Mr James Turner	BAppSci(NMT)	Nuclear Medicine Scientist	multi-modality imaging
Mr Jacob Bolwell	BAppSci(NMT)	Nuclear Medicine Scientist	multi-modality imaging

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Rose, S., Fay, M., Thomas, P., Salvado, O., Crozier, S., Coulthard, A	Understanding radiation insensitivity and temozolomide resistance in glioblastoma multiforme	Cancer Council Queensland Cancer Research Grants Application # 1045984	\$199,840	2013-2014
Rose S., Russell P., Boyd A., Crozier S., Whittaker A., Salvado O., Obermair A., Coulthard A., Gardiner F., Lavin M., Lakhani S., Kenny L., Fisk N., Langton C., Farah C., Mitchell M., Rice G., <b>Macfarlane D.</b>	Establishment of the "Australian Cancer Research Foundation (ACRF) Molecular Oncology Translational Imaging Facility"	Australian Cancer Research Foundation (ACRF)	\$2 M	2013-2014

## Publications

Hipwell A, Rao A, **Ravi Kumar A**, Steinke K. CT guided lung biopsies: A single centre, single interventionalist, single-method experience over a 6-year period with Positron Emission Tomography (PET) correlation. 64th Annual Meeting of the RANZCR, Auckland New Zealand. 2013.

Huang YT, **Ravi Kumar A**. Classical skeletal injuries shown on F-18 FDG PET/CT following successful cardiopulmonary resuscitation. Clin Nucl Med. 2013; 38(5):395-6.

Lee J, Hartnett G, **Ravi Kumar A**. Investigation of incidental bowel FDG uptake (letter). J Gastrointest Surg. 2013; 17(12):2182.

Lee K, Gibson G, **Ravi Kumar A**, **Macfarlane D**. 18F-DOPA PET/CT imaging in endocrine disorders – The Australian experience. Annual meeting of the Endocrine Society of Australia and Society for Reproductive Biology, Sydney, 2013.

Lin C, **Ravi Kumar A**, Keller J, et al. 18F-fluoro-L-thymidine Positron Emission Tomography for Mucosal Head and Neck Squamous Cell Carcinoma Treated with Definitive Chemoradiation: A Pilot Study of Nodal Assessment and Tracer Safety. ISRN Molecular Imaging. 2013; Article ID 710305. doi:10.1155/2013/710305.

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## Publications

Mohandas JT, **Ravi Kumar AS**, Ranganathan D, Healy H et al. Splenunculus Masquerading as a Neuroendocrine Tumor of the Pancreatic Allograft in a Kidney-Pancreas Recipient. *Transplantation*. 2013; 96(8):e59-e62.

Nguyen P, Bhatt M, **Ravi Kumar A**. Comparison of objective criteria and expert visual interpretation to classify benign and malignant hilar and mediastinal nodes on 18-F FDG PET/CT. 15th World Congress on Lung Cancer, Sydney Australia, 2013.

Pryor DI, Porceddu SV, **Thomas PA**, Burmeister BH. Economic analysis of FDG-PET–guided management of the neck after primary chemoradiotherapy for node-positive head and neck squamous cell carcinoma. *Head and Neck*. 2013; 35:1287-94.

# Palliative Care Service



**Dr Carol Douglas**  
Clinical Director,  
Palliative Care

## Overview

The Palliative Care Service provides a consultative model of care to any patient at RBWH with progressive life-limiting disease. Patients with progressive malignancy or chronic disease and acute onset life limiting illness are referred when there are unmet complex needs.

The team is comprised of Staff Specialists in Palliative Medicine, a basic Medical Registrar, Advanced Trainee Palliative Medicine and Clinical Nurses.

Approximately 900 patients received care supported by the Palliative Care Service in 2013, with 260 patients dying with service support in this period.

There is no funded, dedicated research position within the service.

The service supports research initiatives generated externally by collaborating with leading researchers in palliative medicine and palliative care, through recruitment of RBWH patients to medication studies and by participation in studies through collaboration with colleagues at RBWH/ UQ/QUT that contribute to the understanding of patients' experiences with progressive life-limiting disease at the end-of-life.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Carol Douglas	MBChB, FRACGP, FACHPM	Senior Staff Specialist, Director	
Dr Alison Kearney	MBChB, MRCP, FRACP	Staff Specialist	

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Connell, S., Douglas, C.	Achieving needs-based end-of-life services: A prospective, longitudinal study of pathways for advanced cancer patients (multi-site research)	Cancer Council Queensland Research Project Grant	\$100,000	2012-2013

## Publications

Lindsay J. Dooley M, Martin J, Fay M, Kearney A, Barras M. Review Article: Reducing potentially inappropriate medications in palliative cancer patients: evidence to support deprescribing approaches. Support Care Cancer. 2013

# Department of Pharmacy



**Assoc. Prof. Ian Coombes**  
Director,  
Pharmacy

## Overview

The Department of Pharmacy continues to develop its research portfolio and the department has had a hugely successful year. We have published 37 peer-reviewed articles, many in high-impact factor journals. We are aiming to increase the number of staff publishing as well as the number of papers published and look forward to delivering on this in future years. We are also proud of the extensive number of collaborators that we have published with which includes authors from many institutions across many countries.

Efforts this year have focused on introducing interested staff in successful approaches to obtaining grant funding, conducting basic research and converting research into conference presentations. Pharmacy staff had 11 presentations accepted to the 2013 Society of Hospital Pharmacists Australia National Conference, held in Cairns in September 2013 (8 oral presentations and 10 poster presentations). With some good momentum generated in 2013, we look forward to further improvements in research quality in output in 2014.

## Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. Ian Coombes	BPharm, PhD	Director, Pharmacy	medication safety, pharmacy practice
Assoc Prof Michael Barras	BPharm, PhD	Assistant Director (Clinical)	medication safety, pharmacokinetics, therapeutic drug monitoring
Margie Butnoris	BPharm	Assistant Director (Inventory)	pharmacy practice
Dr Jason Roberts	BAppSc, BPharm (Hons 1), PhD	Consultant Pharmacist	pharmacokinetics, drug therapy in critically ill patients, therapeutic drug monitoring
Dr Lesley Ross-Lee	BPharm, PhD	Senior Pharmacist, Clinical Trials	clinical trials
Jessica Toleman	BPharm	Assistant Director, Cancer Care Services	quality use of medicines
Helen Trenerry	BPharm	Director, QMAIS	medicines information, medication safety
Dr Karen Whitfield	BPharm, PhD	Senior Pharmacist	clinical therapeutics
Kelly Mulvogue	BPharm	Senior Pharmacist	clinical therapeutics, pharmacy practice
Assoc Prof Neil Cottrell	BPharm, PhD	Hon. Research Consultant	clinical therapeutics, pharmacy practice
Assoc Prof Jennifer Martin	MBBS, PhD	Clinical Pharmacology, Staff Specialist	clinical therapeutics, therapeutic drug monitoring
Dr Bruce Green	BPharm, DCLinPharm	Hon. Research Consultant	pharmacokinetics
Dr Paul Kubler	MBBS	Clinical Pharmacology, Staff Specialist	clinical therapeutics
Elizabeth Doran	MPharm	Senior Pharmacist	clinical therapeutics
Midori Nakagaki	BPharm	Senior Pharmacist, Cancer Care	clinical therapeutics
Serena Rofail	BPharm	Senior Pharmacist	clinical therapeutics
Brooke Myers	BPharm	Senior Pharmacist	clinical therapeutics
Mary Tredinnick	BPharm	Senior Pharmacist	clinical therapeutics
Elsie Peusschers	BPharm	Senior Pharmacist	clinical therapeutics, mental health
Kate Murphy	BPharm	Senior Pharmacist	clinical therapeutics

## Research staff

Name	Qualifications	Position	Interests/specialities
Champika Patullo	BPharm	QUM Pharmacist	quality use of medicines
Jonathon Hall	BPharm	Clinical Pharmacist	clinical therapeutics
Julian Lindsay	BPharm	Clinical Pharmacist	clinical therapeutics
Carla Dawson	BPharm	Pharmacy Technician	pharmacy practice
Kim Ta	BPharm	Clinical Pharmacist	clinical therapeutics
Alison Mudge	BPharm	Clinical Pharmacist	clinical therapeutics

## Supervised post-graduate students

Name	Current studies	Research topic
Mulvogue, K.	MPhil	Improving prescribing in geriatric patients
Lindsay, J.	MSc	The development and evaluation of an oncological palliative care de-prescribing guideline.
Hall, J.	MSc	Mineralocorticoid receptor antagonists in heart failure and kidney disease: incidence of hyperkalaemia and eGFR versus Cockcroft Gault for estimation of GFR.
Myers, B.	MPhil	A study to investigate and evaluate the impact of a clinical pharmacist on the safety and quality of the prescribing on a post take ward round.
Paradissis, C.	Honours	Determining the drugs that cause adverse drug events in the elderly medical population during hospital admission
Al-Sallami, H.	PhD	Evaluation of a Bayesian dose-individualisation method for enoxaparin.
Hale, A.	PhD	Doctor-pharmacist collaborative prescribing in a multidisciplinary surgical preadmission clinic: expanding the role of the preadmission clinic pharmacist.
Noble, C	PhD	Becoming pharmacists: how the pharmacy curriculum influences professional identity formation.
Stacy, S.	PhD	Building the paediatric health workforce and assessing the value to patients of advanced practice pharmacists
Parker-Scott, S.	PhD	Revitalising an old drug: saving critically ill patients with resistant infections with fosfomycin.
Abdul-Aziz, MH.	PhD	Continuous infusion vs bolus dosing implications for beta-lactam antibiotics.
Jamal, JA	PhD	Improving antibiotic dosing in special situations in the IVU burns, renal replacement therapy and extracorporeal membrane oxygenation.
Economou, C.	PhD	The pharmacokinetics of vancomycin, meropenem and piperacillin-tazobactam in critically ill patients undergoing sustained low-efficiency dialysis (SLED)
Wong, G.	MPhil	BeTM Study. A multi-centre study to evaluate the outcome of empiric dosing of beta-lactam antibiotics in reaching pharmacodynamic targets and utility of therapeutic drug monitoring programme in critically ill patients.
Sime, F.	PhD	Does beta-lactam pharmacokinetic variability in critically ill patients justify therapeutic drug monitoring?

## Supervised post-graduate students

Name	Current studies	Research topic
Adnan, S.	PhD	Pharmacokinetics of commonly prescribed antibiotics in critically ill patients with indwelling surgical drains and with multi-drug resistant acinetobacter spp infections.
Sinnorlareddy, M.	PhD	Using pharmacokinetics and pharmacodynamics to optimise dosing of antifungal agents in critically ill patients.
Hanrahan, T.	MPhil	Vancomycin nephrotoxicity in critically ill patients: fact or fiction?
Tsai, D.	PhD	Antibiotic pharmacokinetics in critically ill Australian indigenous patients.
Coulter, S.	PhD	Cost-effectiveness of antimicrobial stewardship programs.
Shekar, K.	PhD	Antibiotic pharmacokinetics in critically ill patients receiving extracorporeal membrane oxygenation.
Wang, L.	MPhil	Antibiotic tissue pharmacokinetics in burn injury patients.
Gomes, F.	PhD	To investigate levels of vitamin D and vitamin D compounds in breast milk.
Al-Adhami, N.	PhD	To investigate and identify the risk factors for trace element deficiency in full term and premature neonates.
Niyomnaitham, S.	PhD	Do safety warnings influence prescribing: a case study using clopidogrel and proton pump inhibitors.
Pattullo, C.	MPhil	A study to investigate the factors that influence the patients understanding of warfarin after discharge from hospital.
D'Arcy, E.	Honours	Antimicrobial use in neonates.

## Awards and achievements

Award	Event	Recipient
Amgen Australia Prize	School of Pharmacy, UQ Awards night	Paradissis, C.
UQ medal first order honours	School of Pharmacy, UQ Awards night	Quek, C.

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Roberts JA, Ranganathan D, Lipman J, Wallis S, Ratanjee S, Kark A, Fassett R, Healy H	Pharmacokinetics of cephalosporin antibiotics in peritoneal dialysis patients with peritonitis	Royal Brisbane and Women's Hospital Project Grant	\$19,000	2013
Myers B, Commes I, Donovan P, Whitfield K	A study to investigate inter-professional communication about medication prescribing on a medical post take ward round.	RBWH Foundation	\$40,000	2013-2014

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## Publications

Adnan S, Li JX, Wallis SC, Rudd M, Jarrett P, Paterson DL, Lipman J, Udy AA, Roberts JA. Pharmacokinetics of meropenem and piperacillin in critically ill patients with indwelling surgical drains. *Int J Antimicrob Agents*. 2013; 42(1):90-3.

Adnan S, Lipman J, Paterson DL, Roberts JA. Ampicillin/sulbactam: its potential use in treating infections in critically ill patients. *Int J Antimicrob Agents*. 2013; 42(5):384-9.

Barras MA, Moore D, Pocock D, Sweedman M, Wilkinson C, Taylor K, Morton J. Reducing the risk of harm from intravenous potassium: a multi-factorial approach in the haematology setting. *J Oncol Pharm Pract*. 2013; Epub Sept 20. (Ahead of Print)  
Barras MA. Anti-Xa assays. *Aust Prescr*. 2013; 36(3):98-101.

Beumier M, Roberts JA, Kabtouri H, Hites M, Cotton F, Wolff F, Lipman J, Jacobs F, Vincent JL, Taccone F. A new regimen for continuous infusion of vancomycin during continuous renal replacement therapy. *J Antimicrob Chemother*. 2013; 68(12):2859-65.

Burrows J, Kirkpatrick C, Coombes I, Cardiff L, Lum E. The impact on clinical practice of a postgraduate clinical pharmacy programme, incorporating competency-based performance evaluation. *Pharmacy Education*. 2013; 13(1):177-182.

Carlier M, Carrett S, Roberts JA, Stove V, Verstraete AG, Hoste E, Depuydt P, Decruyenaere J, Wallis SC, Lipman J, De Waele JJ. Meropenem and piperacillin/tazobactam prescribing in critically ill patients: does augmented renal clearance affect pharmacokinetic/pharmacodynamic target attainment when extended infusions are used? *Crit Care*. 2013; 17(3):R84.

Carlier M, Noe M, De Waele J, Stove V, Verstraete A, Lipman J, Roberts JA. Population pharmacokinetics and dosing simulations of amoxicillin/clavulanic acid in critically ill patients. *J Antimicrob Chemother*. 2013;68(11):2600-8.

Casey J, Morris K, Narayana M, Nakagaki M, Kennedy GA. Oral ribavirin for treatment of respiratory syncytial virus and parainfluenza 3 virus infections post allogeneic haematopoietic stem cell transplantation. *Bone Marrow Transplantation*. 2013; 1-4. 2013; August 5. doi:10.1038.

Coombes ID, Fernando G, Wickramaratne M, Peters NB, Lynch CB, Lum E, Coombes JA. Collaborating to develop clinical pharmacy teaching in Sri Lanka. 2013; March. 25;13.

Costello J, Cardiff L, Coombes I. Practice evaluation and identification of learning and development needs using the General Level Framework – are we meeting pharmacist needs? *Pharmacy Education, An International Journal for Pharmaceutical Education*, 2013; 13.

Dulhunty J, Roberts JA, Davis JS, Webb SAR, Bellomo R, Gomersall C, Shirwadkar C, Eastwood GM, Myburgh J, Paterson DL, Lipman J. Reply to Soman et al: Continuous infusion of beta-lactam antibiotics in severe sepsis: a multicentre double-blind, randomised controlled trial. *Clin Infect Dis*. 2013; 57(2):323-4.

Dulhunty JM, Roberts JA, Davis JS, Webb SAR, Bellomo R, Gomersall C, Shirwadkar C, Eastwood GM, Myburgh J, Paterson DL, Starr T, Udy AA, Paul SK, Lipman J. A protocol for a multicentre randomised controlled trial of continuous beta-lactam infusion compared with intermittent beta-lactam dosing in critically ill patients with severe sepsis: the BLING II study. *Crit Care Resus*. 2013; 15(3):179-85.

Gomes FP, Shaw N, Whitfield K, Koorts P, Hewavitharana AK. Recent trends in the determination of vitamin D. *Bioanalysis*. 2013; 5(24):3063-3078.

Hale AR, Coombes ID, Stokes J, et al. Perioperative medication management: expanding the role of the preadmission clinic pharmacist in a single centre, randomised controlled trial of collaborative prescribing. *BMJ Open*. 2013; 3:e003027. doi:10.1136/bmjopen-2013-003027.

Hayashi Y, Lipman J, Udy AA, Ng M, McWhinney B, Ungerer J, Lust K, Roberts JA. Beta-lactam therapeutic drug monitoring in the critically ill: optimising drug exposure in patients with fluctuating renal function, and hypoalbuminaemia. *Int J Antimicrob Agents*. 2013; 41:162-66.

Jamal JA, Abdul-Aziz HA, Lipman J, Roberts JA. Defining antibiotic dosing in lung infections. *Clin Pulm Med* 2013; in press (CPM-D-12-00073; date accepted 28th December 2012).

Lindsay J, Fay M, Martin J, Dooley M, Kearney A, Barras MA. Reducing potentially inappropriate medications in palliative cancer patients: evidence to support deprescribing approaches. *J Support Care Cancer*. 2013; 22:1113-1119.

Lonsdale DO, Udy AA, Roberts JA, Lipman J. Antibacterial therapeutic drug monitoring in cerebrospinal fluid: Difficulty in achieving adequate drug concentrations. *J Neurosurg*. 2013; 118:297-301.

Lum, MC, Coombes I. The competent prescriber: 12 core competencies for prescribing. *Aust Prescr*. 2013;36(1):13-16.  
Mrara B, Roberts JA, Gowardman J. Digoxin prescription in the critically ill: an unpredictably loaded problem? (letter) *Anaesth Intensive Care*. 2013; 41(3):434-6.

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## Publications

Parker S, Lipman J, Koulenti D, Dimopoulos G, Roberts JA. What is the relevance of fosfomycin pharmacokinetics in the treatment of serious infections in critically ill patients? A systematic review. *Int J Antimicrob Agents*. 2013; 42(4):289-93.

Putt MT, Udy AA, Jarrett P, Martin J, Hennig S, Salmon N, Lipman J, Roberts JA. Phenytoin loading doses in adult critical care patients: Does current practice achieve adequate drug levels? *Anaesth Intens Care*. 2013; 41(5):602-9.

Ranganathan D, John GT, Healy H, Fassett RG, Lipman J, Kubler P, Ungerer J, McWhinney BC, Lim A, Purvey M, Reyalde R, Roberts MJ, Roberts JA. A protocol for the pharmacokinetics of enteric coated mycophenolate sodium in lupus nephritis (POEMSLUN)- an open-label, randomised controlled trial. *BMJ Open*. 2013; 3(8).

Roberts JA, Lipman J. Optimal doripenem dosing simulations in critically ill nosocomial pneumonia patients with obesity, augmented renal clearance and decreased bacterial susceptibility. *Crit Care Med*. 2013; 41(2):489-95.

Roberts JA, Pea F, Lipman J. The clinical relevance of plasma protein binding changes. *Clin Pharmacokinet* 2013; 52:1-8.

Semark A, Venkatesh K, McWhinney BC, Pretorius C, Roberts JA, Cohen J, Venkatesh B. The compatibility of a low concentration of hydrocortisone sodium succinate with selected drugs during a simulated Y-site administration. *Crit Care Resusc*. 2013; 15(1):67.

Shan SS, Arent ML, Coombes ID. Should pharmacists in Australia have access to a structured general level training program? *J Pharm Pract Res*. 2013; 43(2):129-132.

Shekar K, Fraser JF, Roberts JA. Can optimal drug dosing during ECMO improve outcomes? *Intensive Care Med*. 2013; 39(12):2237.

Shekar K, Roberts JA, Ghassabian S, Mullany DV, Wallis SC, Smith MT, Fraser JF. Altered antibiotic pharmacokinetics during extracorporeal membrane oxygenation: cause for concern? *J Antimicrob Chemother*. 2013; 68(3):726-7.

Shekar K, Roberts JA, Smith MT, Fung YL, Fraser JF. The ECMO PK Project: an incremental research approach to advance understanding of the pharmacokinetic alterations and improve patient outcomes during extracorporeal membrane oxygenation. *BMC Anesthesiol*. 2013; 13(1):7.

Udy AA, Covajes C, Taccone F, Jacobs F, Vincent JL, Lipman J, Roberts JA. Can population pharmacokinetic modelling guide vancomycin dosing during renal replacement therapy in critically ill patients? *Int J Antimicrob Agents*. 2013; 41:564-8.

Udy AA, Roberts JA, Lipman J. Clinical implications of antibiotic pharmacokinetic principles in the critically ill. *Intensive Care Med*. 2013; 39:2070–2082.

Udy AA, Roberts JA, Lipman J. How should we dose antibiotics in pneumonia? *Curr Opin Inf Dis*. 2013; 26:189-95.

Udy AA, Roberts JA, Shorr AF, Boots RJ, Lipman J. Augmented renal clearance in septic and traumatised patients with normal plasma creatinine concentrations: identifying at-risk patients. *Crit Care*. 2013; 17:R34.

Wong G, Briscoe S, Adnan S, McWhinney B, Ungerer J, Lipman J, Roberts JA. Protein binding of beta-lactam antibiotics in critically ill patients: Can we successfully predict unbound concentrations? *Antimicrob Agents Chemother*. 2013; 57(12):6165-70.

# Department of Renal Medicine



**Dr Helen Healy**  
Director,  
Renal Medicine

## Overview

Renal research has seen important firsts and prestigious awards during 2013. We formed a partnership to develop and implement an innovative program of kidney care in the community under the sponsorship of Professor Keshwar Baboolal. Dr Healy with partners Ms Tracey Johnson and Dr Suzanne Williams of Inala Primary Care were awarded funding from Queensland Health Innovation Fund for the Keeping Kidneys program.

Renal research are associated with an NHMRC Centre in Research Excellence with Professor Ann Bonner a Chief Investigator (CI) on an End of Life CRE. The collaboration will result in important service delivery research in our patient population. It complements studies in renal supportive care funded through an AusHSI grant awarded to CIs Hoy, Healy, Bonner and Connelly.

Professor Ann Bonner and Ms Danielle Heffernan, Assistant Nursing Director – Renal, are conjoint heads of the Nursing Professorial Unit whose aim is developing new research capacity across the Kidney Health Service and we have seen an increase in abstract presentations at conferences, grant success and publications, all visible steps in the development of early career researchers.

Dr Andrew Mallett began his doctoral studies by establishing the first genetic renal service in Australia in partnership with Dr Chirag Patel from Genetics Health Queensland. The conjoint clinic is based on models Dr Mallett examined during his Churchill Fellowship at the start of the year.

These are highlights of an impressive body of research by the many people in this report.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof Ann Bonner	RN, BAppSc (Nurs), MA, PhD	Professor of Nursing (QUT)	chronic kidney disease, self-management, nursing practice
Sonya Coleman	RN, NP, MNSc (Nurs Prac)	Nurse practitioner	chronic kidney disease
Dr Vincent D'Intini	MBBS, FRACP	Senior Staff Specialist	acute kidney injury
Dr Helen Healy*	MBBS, FRACP, PhD	Director, Kidney Health Service; Eminent Staff Specialist	Mechanisms of chronic kidney disease, therapeutic intervention in chronic kidney disease
Danielle Heffernan	RN, GradDipHealthMg, MSF	Assistant Nursing Director, Renal Medicine	renal supportive care
Dev Jagadeesan	BSc, MBBS	Registrar	Epidemiology of glomerulonephritis in Australia
Dr George T John	MBBS, MD, DM, FRCP, FRACP	Senior Staff Specialist	immunosuppression, kidney transplantation, infectious disease
Dr Adrian Kark	MBChB, FRACP	Senior Staff Specialist	chronic kidney disease, salt
Dr Andrew Kassianos	PhD, MTIM (Biotech)	Post-doctoral Fellow, Kidney Research Laboratory	dendritic cell innate immunity, T/B lymphocytes
Roshini Malasingam	MBChB, FRACP	Renal Fellow	CKD/AKI in the ICU setting, renal replacement therapy
Andrew Mallett	MBBS, MMed, AFRACMA, FRACP	Senior Registrar	Inherited kidney disease, nephrogenetics, renal tubular disorders, nephronophthisis/MCKD, clinic models
David McIntyre	RN, NP, MNSc (Nurs Prac)	Nurse Practitioner	intradialytic hypotension
Janaki Mohandas	MBBS, FRACP	Senior Registrar	Co-trimoxazole and effect on allograft function

## Research staff

Name	Qualifications	Position	Interests/specialities
Linh Pham	BA Social Work/ Social Science, JP Qual	Clinical renal social worker	Home therapies, psychosocial aspects of renal transplantation
Dr Dwarakanathan Ranganathan	MD, DM, FRCP, FRACP	Senior Staff Nephrologist; Eminent Staff Specialist	home therapies, lupus nephritis/ vasculitis, glomerulonephritis
Dr Sharad Ratanjee	MBChB, FRACP	Senior Staff Specialist	haemodialysis, erythropoietin stimulating agents
Anne Salisbury	RN, Industry Fellow, UQ	Manager CKD Queensland	Chronic kidney disease.
Goutham Sivasuthan	BSc	Medical Student, SOM, UQ	SLE and pregnancy
Xiangju Wang	MBBS, MPhil	Research Scientist, Kidney Research Laboratory	cell senescence, laser capture microscopy, multiplex tandem PCR
Assoc Prof Ray Wilkinson	PhD	Senior Post-doctoral Fellow, Kidney Research Laboratory	dendritic cells, innate immunity, T/B lymphocytes
Lesley Williams	RN	Clinical nurse	Home therapies
Nicola Williams	RN	Clinical nurse	Home therapies

## Supervised post-graduate students

Name	Current studies	Research topic
Afrin, S.	Masters	A novel three-dimensional in vitro model to study immune cell and renal cell interactions
Alasmari, H.	PhD	Examining intensive care nurses' clinical decision-making associated with acute kidney injury and continuous renal replacement therapy
Almutary, H.	PhD	Exploring symptom clusters in people with chronic kidney disease
Clarkem C.	DHlthSc	The use of alcohol and its influence on injury severity score, outcome and treatment after major trauma
Dinh, H.T.T.	MAppSc	Exploring teach-back as a method for improving heart failure knowledge and self-management
Hayes, B.	DHlthSc	Job satisfaction, stress and burnout in haemodialysis nurses
He, W.	PhD	Exploring the factors associated with concordance with lifestyle modifications in Chinese people with hypertension
Hiremagalur, B	PhD	Supportive care needs for dialysis patients
Mallett, A	PhD	Genetic diagnostics in genetic renal disease – methods, applications and therapeutics
Sampangi, S.	PhD	The role of renal proximal tubular epithelial cells (PTEC) in autologous immune-modulation
Thepha, T.	PhD	Self-management program in people with chronic kidney disease stage 4 in northeast Thailand

## Awards and achievements

Award	Event	Recipient
Nurse-led collaboration: Investing in an opportunity to move renal healthcare forward. Keynote address 2013	Renal Society of Australasia 41st annual conference	Bonner, A.
ICI Young Investigator Travel Award	International Congress of Immunology, Italy	Kassianos, A.
Patricia Dukes Post-doctoral Fellowship	RBWH Foundation	Kassianos, A.
Postgraduate Scholarship 2013-2014	RBWH Foundation	Mallett, A.
2013 Travelling Fellowship 2013	ANZSN	Mallett, A.
Churchill Fellowship	Winston Churchill Memorial Trust	Mallett, A.
QUT Student Travel Award	American Society Nephrology, USA	Sampangi, S.

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Kassianos, A.	The functional characterisation of human dendritic cell (DC) subsets in renal inflammation	RBWH Foundation Post Doctoral Fellowship	\$240,000	2012-2014
Kassianos, A. Healy, H. Wilkinson, R.	The recruitment of inflammatory immune cells in human chronic kidney disease	RBWH Foundation	\$35,000	2013-2014
Ranganathan, D., Roberts, J	Extension of GIPD Study	RBWH Research foundation	\$17,000	2013-2014
Ranganathan, D., Wallis, S.	STAB Study (Fluids only)	Baxter	\$5,000	2013-2014
Yates, P., Mitchell, G., Currow, D., Eager, K., Edward, H., Gardner, G., Willmott, L., Bonner, A., Clark, R., Tieman, J.	Centre for research excellence, end of life care. (\$2.4 million)	NHMRC	\$2,498,000	2013-2018
Bonner, A.	Renal nursing professorial unit.	School of Nursing, Queensland University of Technology	\$40,000	2013
Heffernan, D., Bonner, A., Healy, H.	Renal health professionals' attitudes towards death.	Renal Society of Australasia (QLD branch)	\$3,000	2013
Williams, N., Reid, C., Williams, L., Sullivan, P., Bonner, A., Hamernik, E., Ranganathan, D.	Motivational interviewing for people with end stage kidney disease undergoing dialysis at home to improve treatment adherence: a randomised controlled trial.	RBWH Foundation	\$28,000	2013
Bonner, A. Clark, R. Healy, H. Hamernik, E. Bennett, P. Nicholas, P.	Adaptation of the fluid watcher's program for people with chronic kidney disease receiving haemodialysis.	RBWH Research Project Grant	\$25,000	2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Hoy, W., Healy, H	Impact on hospital utilisation and costs of proactive planning for conservative therapy without dialysis in selected patients with advanced kidney disease.	Australian Centre for Health Services Innovation, QUT	\$74,000	2013-2015
Healy, H., Johnson, T., Williams, S., Hoy, W.	Keeping Kidneys	Health Innovation Fund	\$991,430	2013-2015
Healy, H.	Keeping Kidneys	Queensland Institute of Clinical	\$30,000	2013
Healy, H.	How kidney proximal tubule epithelial cells modulate the antibody production of antilogous B lymphocyte	Royal Brisbane and Women's Hospital Foundation	\$35,000	2013-2014

Dr Helen Healy also received \$110,000 from Pathology Queensland for QIMR laboratories infrastructure.

## Publications

Alexander S, Varughese S, David V, Kodgire SV, Mukha R, Kekre N, Tamilarasi V, Jacob C, John GT. Extensive emphysematous pyelonephritis in a renal allograft treated conservatively: case report and review of the literature.; *Transpl Infect Dis.* 2012; Oct 1. doi: 10.1111/tid.12016.

Al-Mutary H, Bonner A, Douglas C. Chronic kidney disease in Saudi Arabia: a nursing perspective. *Middle East Journal of Nursing.* 2013; 7(6):17-25.

Al-Mutary H, Bonner A, Douglas C. Symptom burden in chronic kidney disease: A review of recent literature. *Journal of Renal Care.* 2013; 39(3):140-150.

Anzai E, Douglas C, Bonner A. Nursing practice environment, quality of care and morale of hospital nurses in Japan. *Nursing & Health Sciences.* 2013; DOI: 2013;10.1111/nhs.12081.

Bennett P, Bonner A, Andrew J, Nandkumar J, Au C. Using images to communicate the hidden struggles of life on dialysis. *Journal of Communication in Healthcare.* 2013;6(1),12-21.

Bonner A, Caltabiano M, Berlund L. Quality of life, fatigue and activity in Australians with chronic kidney disease: A longitudinal study. *Nursing & Health Sciences.* 2013;15(3),360-367.

Brown L, Gardner G, Bonner A. A comparison of treatment options for management of end stage kidney disease in elderly patients: A systematic review protocol. *JB1 Database of Systematic Reviews & Implementation Reports.* 2013;11(4):197-208.

Chiramel G, Keshava S, Tamilarasi N, John GT. Is liver biopsy safe in patients with chronic renal disease? *Indian J Gastroenterol.* 2012; Sep 28. PMID: 23054949

de-Vitry Smith S, Dietsch E, Bonner A. Pregnancy as public property: The experience of couples following diagnosis of a foetal anomaly. *Women and Birth.* 2013;26(1):76-81.

Dinh T, Clark R, Bonner A, Hines S. The effectiveness of health education using the teach-back method on adherence and self-management in chronic disease: a systematic review protocol. *JB1 Database of Systematic Reviews & Implementation Reports,* 2013;11(10):30-41

Dywili S, Bonner A, O'Brien L. Why do nurses migrate? – a review of recent literature. *Journal of Nursing Management.* 2013;21:511-520.

Hayes B, Bonner A, Douglas C. An introduction to mixed methods research for nephrology nurses. *Renal Society of Australasia Journal.* 2013;9(1):8-14.

Joseph R, Pulimood S, Abraham P, John GT. Successful treatment of verruca vulgaris with Thuja occidentalis in a renal allograft recipient. *Indian J Nephrol.* doi: 10.4103/0971-4065.116316. PMID: 24049274. 2013;9(23);(5):362-4.

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## Publications

- Kassianos A, Sampangi S, Wang X, Roper K, Beagley K, Healy H, Wilkinson R. Human proximal tubule epithelial cells (PTEC) modulate autologous dendritic cell function. *Nephrology Dialysis Transplantation*. 2013;28:303-312. Editorial commentary in publication issue.
- Kassianos A, Wang X, Sampangi S, Muczynski K, Healy H, Wilkinson R. Increased tubulointerstitial recruitment of human CD141hi CLEC9A+ and CD1c+ myeloid dendritic cell subsets in renal fibrosis and chronic kidney disease. *American Journal of Physiology – Renal Physiology*. 2013;305(10):F1391-F1401.
- Li P, Culleton B, Ariza A, Do J, Johnson D, Sanabria M, Shockley T, Story K, Vatazin A, Verrelli M, Yu A, Bargman J; IMPENDIA and EDEN Study Groups. Randomized, controlled trial of glucose-sparing peritoneal dialysis in diabetic patients. *J Am Soc Nephrol*. doi: 10.1681/ASN.2012100987. Epub. 2013. Aug 15.2013;11(24):1889-900.
- Lloyd A, Bonner A, Dawson-Rose C. The health information practices of people living with chronic health conditions: Implications for health literacy. *Journal of Librarianship and Information Science*. 2013;10.1177/0961000613486825.
- Manvizhi S, Mathew B, Fleming D, Basu G, John GT. Combined approach with therapeutic drug monitoring and pharmacogenomics in renal transplant recipients. *Indian J Nephrol*. doi: 10.4103/0971-4065.107216. PMID: 23580812. 2013;1(23);(1):71-3
- Mason B, Ross L, Gill E, Healy H, Juffs P, Kark A. Development and Validation of a Dietary Screening Tool for High Sodium Consumption in Australian Renal Patients, *Journal of Renal Nutrition*. 2013;10.(4);10.1053.
- Mittal D, Kassianos A, Tran LS, Bergot AS, Gosmann C, Hofmann J, Blumenthal A, Leggatt GR, Frazer IH. Indoleamine 2,3-dioxygenase activity contributes to local immune suppression in the skin expressing human papillomavirus oncoprotein E7. *Journal of Investigative Dermatology*. 2013;133(12):2686-94.
- Mohandas J, Ravi Kumar A, Ranganathan D, Healy H, Huang YT, O'Loughlin B, Chapman J, John GT. Splenunculus masquerading as a neuroendocrine tumor of the pancreatic allograft in a kidney-pancreas recipient. *Transplantation*. doi: 10.1097/TP.0b013e3182a80c67. 2013;10(27);96(8):e59-62.
- Mohapatra A, Basu G, Sen I, Asirvatham R, Michael JS, Pulimood AB, John GT. Tuberculosis in a renal allograft recipient presenting with intussusception, *Ind J Nephrol*. 2012;22(1):52-56.
- Morris MI, Daly JS, Blumberg E, Kumar D, Sester M, Schluger N, Kim SH, Schwartz BS, Ison M, Humar A, Singh N, Michaels M, Orlowski J, Delmonico F, Pruett T, John GT, Kotton C. Diagnosis and management of tuberculosis in transplant donors: a donor-derived infections consensus conference report; *Am J Transplant*. 2012; Sep;12(9):2288-300. doi: 10.1111/j.1600-6143.2012.04205.x.
- Rajapurkar M, John GT, Kirpalani A, Abraham G, Agarwal S, Almeida A, Gang S, Gupta A, Modi G, Pahari D, Pisharody R, Prakash J, Raman A, Rana D, Sharma R, Sahoo R, Sakhuja V, Tatapudi R, Jha V. What do We Know About Chronic Kidney Disease in India: First Report of the Indian CKD Registry; *BMC Nephrol*. 2012;6;13(1):10.
- Ranganathan D, Fassett R, John GT. Mycobacterium fortuitum peritonitis in a patient receiving continuous ambulatory peritoneal dialysis. *Saudi J Kidney Dis Transpl*. 1003-4. PMID: 24029271. 2013;9;24(5).
- Ranganathan D, John GT, Healy H, Roberts M, Fassett R, Lipman J, Kubler P, Ungerer J, McWhinney B, Lim A, Purvey M, Reyalden R, Roberts JA. A Protocol for the Pharmacokinetics of Enteric Coated Mycophenolate Sodium in Lupus Nephritis (POEMSLUN): an open-label, randomised controlled trial. *BMJ Open*. doi:pii: e003511. 10.1136/bmjopen-2013-003511. PMID: 23929919. 2013;8(7);3(8).
- Ranganathan D, John GT. Nocturnal hemodialysis. *Indian J Nephrol*. doi: 10.4103/0971-4065.103905. PMID: 23326041. 2012;9;22(5):323-32.
- Sivasuthan G, Dahwa R, John GT, Ranganathan D. Dialysis and pregnancy in end stage kidney disease associated with lupus nephritis. *Case Rep Med*. 2013;11(20):923581. doi: 10.1155/2013/923581.
- Stevenson S, Mallett A, Oliver K, Hyland V, Hawley C, Malmanche T, Isbel N. Atypical HUS associated with severe, unexpected antibody mediated rejection post kidney transplant. *Nephrology*. 2014;4(19)(Supp1):22-26.
- Sun HY, Munoz P, Torre-Cisneros J, Aguado JM, Lattes R, Montejo M, Garcia-Reyne A, Bouza E, Valerio M, Lara R, John GT, Bruno D, Singh N. Mycobacterium tuberculosis-associated immune reconstitution syndrome in solid-organ transplant recipients. *Transplantation*. doi: 10.1097/TP.0b013e31828719c8 PMID: 23435454.2013;5(15);95(9):1173-81.
- Whallet G, Marwick T, Doughty R, Cooper B, Johnson D, Pilmore A, Harris D, Pollock C, Collins J, IDEAL Echo Substudy investigators. Effect of early initiation of dialysis on cardiac structure and function: results from the echo substudy of the IDEAL trial. *AM J Kidney Dis*. 2013;6(2):262-270.

# Department of Rheumatology



**Dr Paul Kubler**  
Director,  
Rheumatology

## Overview

The rheumatology department provides a comprehensive range of diagnostic and therapeutic services to patients with acute and chronic musculoskeletal disease. Areas of research interest include management of inflammatory arthritis, carpal tunnel syndrome, crystal arthritis and connective tissue disease.

The department has a focus on adolescent rheumatology and has established the YARD (Young Adults with Rheumatic Disease) Service for optimising the care of 16-25 year old patients (including transition care) in a multidisciplinary environment.

The department liaises closely with other medical specialties, allied health and community service providers to optimise patient outcomes. In particular, there is a monthly combined renal-rheumatology clinic (vasculitis and SLE) and respiratory-rheumatology service.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Paul Kubler	MBBS, FRACP	Director	Inflammatory arthritis, carpal tunnel syndrome and drug use in rheumatic diseases
Dr Sumant Kevat	MBBS, FRACP	Visiting Specialist	Inflammatory arthritis
Dr Ameer Sonigra	MBBS	Advanced Trainee	Inflammatory arthritis and pulmonary hypertension in scleroderma
Dr Ashleigh Hennessey	MBBS	Advanced Trainee	Infective and crystal arthritis

# Department of Thoracic Medicine



**Assoc. Prof.  
Stephen Morrison**  
Director,  
Thoracic Medicine

The Department of Thoracic Medicine provides diagnostic and therapeutic services for patients with acute and chronic respiratory problems, including pulmonary infection, interstitial lung diseases, occupational lung diseases, sleep disorders, pulmonary malignancy, asthma and chronic obstructive pulmonary disease (COPD).

#### Facilities and services:

- An acute respiratory failure service to provide non-invasive ventilation to certain categories of COPD patient.
- Sophisticated pulmonary function studies, including body plethysmography, gas transfer measurement, exercise testing, measurement of chemical drives to ventilation and bronchial reactivity.
- Comprehensive sleep monitoring services, including multiple sleep latency testing.
- A sophisticated fiberoptic bronchoscopic service is available, including early diagnosis of lung cancer by autofluorescence and endobronchial ultrasound techniques.
- The department offers procedures such as pleural biopsy, intercostal drain placement and pleurodesis.
- There is close liaison with the Division of Cancer Care Services and the Department of Thoracic Surgery for the management of pulmonary malignancy.
- Educational and support services are available for patients with respiratory sleep disorders, asthma, COPD and specialised equipment such as oxygen delivery systems and non-invasive ventilation.

## Research staff

Name	Qualifications	Position	Interests/specialities
A/Prof Stephen Morrison	PhD FRCP FRACP	Director	Asthma, COPD, Sleep Disorders
Dr David Fielding	MD FRACP	Deputy Director	Lung Cancer, Endobronchial U/S
Dr Farzad Bashirzadeh	FRACP	Staff Thoracic Physician	Interventional Pulmonology
Dr Justin Hundloe	FRACP	Staff Thoracic Physician	Interventional Pulmonology
Dr Chris Zappala	MD FRACP	Staff Thoracic Physician	Interstitial Lung Disease
Dr Matthew Salamonsen	PhD FRACP	Research Fellow	Pleural Procedures
Mr Michael Brown	M Appl Sci	Director Respiratory Science	Lung Function, Polysomnography

## Research doctorates awarded

Name	Qualifications
Dr Chris Zappala	MD
Dr Phan Nguyen	PhD
Dr Matthew Salamonsen	PhD

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
D Fielding, M Salamonsen	Pleural procedures	NHMRC	\$36,000	2012-2014
D Fielding, M Salamonsen	Pleural procedures	RBWH Foundation	\$27,402	2013
S Dharmage, S Morrison	TAHS asthma study	NHMRC	\$1.86m	2012-2015

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## Publications

Bircan E, Bui D, Giles G, Walters H, Hopper J, Perret J, Markos J, Burgess J, Matheson M, Abramson M, Morrison S, Thomas P, Dharmage S. Ambient wood smoke, traffic pollution and adult asthma prevalence and severity. *Respirology*. 2013; 18(7): 1101-7.

Corte TJ, Goh NS, Glaspole IN, Zappala CJ, Hopkins PM, Wilsher ML. Idiopathic pulmonary fibrosis: is all-cause mortality a practical and realistic end-point for clinical trials? *Thorax*. 2013; May;68(5):491-2.

De Laetis A, Sestini P, Pantelidis P, Hoyle R, Hansell DM, Goh NS, Zappala CJ, Visca D, Maher TM, Denton CP, Ong VH, Abraham DJ, Kelleher P, Hector L, Wells AU, Renzoni EA. Serum interleukin 6 is predictive of early functional decline and mortality in interstitial lung disease associated with systemic sclerosis. *J Rheumatol*. 2013; Apr;40(4):435-46.

Fielding DI, Bashirzadeh F, Deller D, Douglas A, Boots R, Hopkins P. Life-saving closure of a pulmonary cavity by endobronchial valve placement. *Am J Respir Crit Care Med*. 2013; May 15;187(10):1145-6.

Fielding DI, Kurimoto N. EBUS-TBNA/staging of lung cancer. *Clin Chest Med*. 2013; Sep;34(3):385-94.

Hoy RF, Burgess JA, Benke G, Matheson M, Morrison S, Gurrin L, Walters EH, Dharmage SC, Abramson MJ. Occupational exposures and the development of new onset asthma: a population based cohort study from age 13 to 44 years. *J Occup Environ Med*. 2013; 55:235-9.

Kandane-Rathnayake RK, Tang MLK, Simpson JA, Burgess JA, Mészáros D, Feather I, Southey MC, Schroen CJ, Hopper J, Morrison SC, Giles GG, Walters EH, Dharmage SC, Matheson MC. Adult serum cytokine concentrations and the persistence of asthma. *Int Arch Allergy Immunol*. 2013; 161:342-350.

Nguyen P, Bashirzadeh F, Hodge R, Agnew J, Farah CS, Duhig E, Clarke B, Perry-Keene J, Botros D, Masters IB, Fielding D. High specificity of combined narrow band imaging and autofluorescence mucosal assessment of patients with head and neck cancer. *Head Neck*. 2013; May;35(5):619-25.

Oktaria V, Dharmage SC, Burgess JA, Simpson JA, Morrison S, Giles GG, Abramson MJ, Walters EH, Matheson MC. Association between latitude and allergic diseases: a longitudinal study from childhood to middle-age. *Ann Allergy Asthma Immunol*. 2013; 110: 80-85.

Perret JL, Dharmage SC, Matheson MC, Johns DP, Gurrin LC, Burgess JA, Marrone J, Markos J, Morrison S, Feather I, Thomas PS, McDonald CF, Giles GG, Hopper JL, Wood-Baker R, Abramson MJ, Walters EH. The interplay between the effects of lifetime asthma, smoking, and atopy on fixed airflow obstruction in middle age. *Am J Respir Crit Care Med*. 2013; 187:42-48.

Plit ML, Havryk AP, Hodgson A, James D, Field A, Carbone S, Glanville AR, Bashirzadeh F, Chay AM, Hundloe J, Pearson R, Fielding D. Rapid cytological analysis of endobronchial ultrasound-guided aspirates in sarcoidosis. *Eur Respir J*. 2013; Nov;42(5):1302-8.

Salamonsen M, Dobeli K, McGrath D, Readdy C, Ware R, Steinke K, Fielding D. Physician-performed ultrasound can accurately screen for a vulnerable intercostal artery prior to chest drainage procedures. *Respirology*. 2013; Aug;18(6):942-7.

Salamonsen M, McGrath D, Steiler G, Ware R, Colt H, Fielding D A new instrument to assess physician skill at thoracic ultrasound, including pleural effusion markup. *Chest*. 2013; Sep;144(3):930-4.

# Department of Medical Imaging



**Vanessa Clarke**  
Acting Executive Director,  
Medical Imaging



**Prof. Alan Coulthard**  
Director,  
Research



**Dr John Clouston**  
Director,  
Medical Imaging

## Overview

The Department of Medical Imaging (DMI) is actively involved in departmental, interdepartmental and multi-site collaborative research projects. The DMI Research Office, under the directorship of Professor Alan Coulthard, has three research personnel; Research Development Officer, Research Medical Officer and Research Project Officer, who together manage all aspects of DMI's research.

DMI has approximately 70 active service-based research projects, for which the department provides imaging services of all modalities to other RBWH departments, and also to external research groups. In 2013, seventeen new service-based research projects were established.

The DMI Research Office has expanded its role to provide research support to residents and radiology registrars. Residents are encouraged to become involved in existing departmental projects, providing an environment for junior doctors to develop key research skills required for their future progression to the Queensland Radiology Training Program. Registrars are required by the Royal Australian and New Zealand College of Radiologists (RANZCR) to complete two research projects in fulfillment of their specialty training assessment requirements. Registrars are supervised by consultants from DMI, and from other radiology training sites in Queensland. Fifteen registrar projects are in progress in DMI, and a further ten have now been completed by registrars, resulting in publication or presentation at the RANZCR Annual Scientific Meeting. The Research Office also receives enquiries from medical students and non medical staff who wish to be involved in research activities.

Together, Medical Imaging research pursuits in 2013 have culminated in 24 publications in peer-reviewed journals, along with 40 presentations (oral and poster) at national and international conferences, by consultants, registrars and radiography staff. The future of research in the department is positive, with continuing growth in research involvement.

## Executive and directing staff

**Vanessa Clarke**  
Acting Executive Director,  
Medical Imaging Reform

**Prof. Alan Coulthard**  
Director, Research

**Dr John Clouston**  
Director, Medical Imaging



## Research staff

Name	Qualifications	Position	Interests/specialities
Prof. Alan Coulthard	MBBS, BMedSci, FRCS, FRCR, FRANZCR	Director of Research, Dept Medical Imaging, Professor of Neuroradiology and Head of The University of Queensland (UQ) Discipline of Medical Imaging	neuroradiology, neuro- intervention
Dr John Clouston	MBBS, FRANZCR	Director, Medical Imaging	interventional radiology
Assoc. Prof. Karin Steinke	MD, MS, PD, FRANZCR	Staff Specialist	thoracic and breast imaging and intervention
Assoc. Prof. Peter Scally	MBBS, FRANZCR	Staff Specialist	medical student education, quality management in radiology, software development to teach critical analysis
Dr Paul Tesar	MBBS, FRANZCR, FRCR, FRCPA	Staff Specialist	imaging of gastrointestinal tract, liver and musculoskeletal system
Dr Nick Kienzle	MBBS, FRANZCR	Staff Specialist	interventional radiology and abdominal imaging
Dr Craig Hacking	BSc (Biomed), MBBS, FRANZCR	Staff Specialist	imaging and cancer staging
Dr Janelle Thomas	BSc(Hons), PhD	Research Development Officer	research development
Karen Dobeli	MAppSci(MedRadSci), FIR	Senior Radiographer	computed tomography

## Supervised post-graduate students

Name	Current studies	Research topic
Odenthal, C.	MPhil	Atrophy measures in MS
Oughton, J.	PhD	The relationship of arterial stiffness and resistance to white matter hyperintensity distributions in aging women: The LAW blood flow and brain study
Nguyen, G.	PhD	Perfusion computed tomography in the evaluation of blood-brain barrier disruption in acute ischaemic stroke
Salamonsen, M.	PhD	Image analysis in pleural diseases
Marshall, H.	PhD	Lung cancer screening

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Clouston, J., Coulthard A.	Funding of Research Development Officer position	Covidien	\$190,942	2012-2015
Clouston, J., Coulthard A.	Funding of Research Project Officer position	PPTF	\$185,957	2012-2014
Wong, A.	Australian Stroke Clinical Registry	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Taylor, B., van der Mei, I., Lucas, R., Blizzard, C., Coulthard, A., Broadley, S., Williams, D., Shaw, C.	The role of environmental and genetic factors in progression of multiple sclerosis	NHMRC	\$945,045	2013-2015
Coulthard, A., Rose, S., Macfarlane, D., Slaughter, R.	ACRF Molecular Oncology Translational Imaging Facility	ACRF	\$2,000,000	2013-2015
Henderson, R., McCombe, P., Chalk, J., Rose, S., Coulthard, A., Pettitt, A., Ridall, G., McGrory, C.	Measuring disease of upper and lower motor neurones in ALS	MND Research Australia	\$25,000	2007-2014
Rose, S., Crozier, S., Salvado, O., Coulthard, A., Thomas, P., Fay, M.	Improving assessment of brain tumour treatment outcome using 18F-FDOPA PET MRI	NHMRC	\$637,125	2010-2015

## Publications

Barwood CH, Murdoch BE, Riek S, O'Sullivan JD, Wong A, Lloyd D, Coulthard A. Long term language recovery subsequent to low frequency rTMS in chronic non-fluent aphasia. *NeuroRehabilitation*. 2013; 32(4):915-28.

Brown N, Jones L. Knowledge of medical imaging radiation dose and risk among doctors. *Journal of Medical Imaging and Radiation Oncology*. 2013; 57(1):8-14.

Brown N, Moesbergen T, Steinke K. The French and their hernias: prospective radiological differentiation of de Garengot from other groin hernias. *J Radiol Case Rep*. 2013; 7(4):16-21.

Danaher LA, Steinke K. Hot tips on hot tips: technical problems with percutaneous insertion of a microwave antenna through rigid tissue. *Journal of Medical Imaging and Radiation Oncology*. 2013; 57(1):57-60.

Dobeli KL, Lewis SJ, Meikle SR, Thiele DL, Brennan PC. Noise-reducing algorithms do not necessarily provide superior dose optimisation for hepatic lesion detection with multidetector CT. *Br J Radiol*. 2013; 86(1023):20120500.

Dobeli KL, Lewis SJ, Meikle SR, Thiele DL, Brennan PC. Optimisation of computed tomography protocols: limitations of a methodology employing a phantom with location-known opacities. *J Digit Imaging*. 2013; 26(6):1001-7.

Hughes AM, Lucas RM, McMichael AJ, Dwyer T, Pender MP, van der Mei I, Taylor BV, Valery P, Chapman C, Coulthard A, Dear K, Kilpatrick TJ, Williams D, Ponsonby AL. Early-life hygiene-related factors affect risk of central nervous system demyelination and asthma differentially. *Clinical and Experimental Immunology*. 2013; 172(3):466-74.

Lane A, Chuk LR, Colditz PB, Coulthard A. The MRI-compatible neonatal incubator in practice. *Journal of Paediatrics and Child Health*. 2013; 49(9):E377-80.

Lee A, Sekar R, Andrijic V. 3D ultrasound MRI fusion: an experimental approach. *Ultrasound Obstet Gynecol*. 2013; 42(s1):61.

Lee A, Sinnott S, Sekar R, Andrijic V. Ultrasound MRI fusion: combined registration and visualisation in fetal studies. *Ultrasound Obstet Gynecol*. 2013; 41:718-730.

Lee WK, Lau EW, Chin K, Sedlaczek O, Steinke K. Modern diagnostic and therapeutic interventional radiology in lung cancer. *J Thorac Dis*. 2013; 5(Suppl 5):S511-S523.

Liu H, Steinke K. High-powered percutaneous microwave ablation of stage I medically inoperable non-small cell lung cancer: a preliminary study. *J Med Imaging Radiat Oncol*. 2013; 57(4):466-74.

Lucas RM, Ponsonby AL, Dear K, Valery PC, Taylor B, van der Mei I, McMichael AJ, Pender MP, Chapman C, Coulthard A, Kilpatrick TJ, Stankovich J, Williams D, Dwyer T. Vitamin D status: multifactorial contribution of environment, genes and other factors in healthy Australian adults across a latitude gradient. *J Steroid Biochem Mol Biol*. 2013; 136:300-8.

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## Publications

Nguyen GT, Coulthard A, Wong A, Sheikh N, Henderson R, O'Sullivan JD, Reutens DC. Measurement of blood-brain barrier permeability in acute ischemic stroke using standard first-pass perfusion CT data. *Neuroimage Clin.* 2013;2:658-62.

Odenthal C, Steinke K. Case report: Positron emission tomography fails to detect pulmonary adenocarcinoma recurrence after radiofrequency ablation. *J Radiol Case Rep.* 2013; 7(11):15-23.

Ponsonby AL, Lucas RM, Dear K, van der Mei I, Taylor B, Chapman C, Coulthard A, Dwyer T, Kilpatrick TJ, McMichael AJ, Pender MP, Valery PC, Williams D. The physical anthropometry, lifestyle habits and blood pressure of people presenting with a first clinical demyelinating event compared to controls: the Ausimmune study. *Mult Scler.* 2013; 19(13):1717-25

Rose S, Fay M, Thomas P, Bourgeat P, Dowson N, Salvado O, Gal Y, Coulthard A, Crozier S. Correlation of MRI-derived apparent diffusion coefficients in newly diagnosed gliomas with [18F]-Fluoro-L-Dopa PET: What are we really measuring with minimum ADC? *Am J Neuroradiol.* 2013; 34(4):758-64.

Saeidpour M, Steinke K. Retrocardiac mass in a patient with cirrhosis: A case report. *International Journal of Case Reports and Images.* 2013; 4 epub Sept

Salamonsen M, Dobeli K, McGrath D, Readdy C, Ware R, Steinke K, Fielding D. Physician-performed ultrasound can accurately screen for a vulnerable intercostal artery prior to chest drainage procedures. *Respirology.* 2013; 18(6):942-7.

Sheikh N, Wong A, Read S, Coulthard A, Finnigan S. QEEG may uniquely inform and expedite decisions regarding intra-arterial clot retrieval in acute stroke. *Clin Neurophysiol.* 2013; 124(9):1913-4.

Steinke K. A little bird told me. *Inner Visions. Radiographics.* 2013; 33(2):620.

Steinke K, Buckley R. Noughts and Crosses. *Inner Visions. Radiographics.* 2013; 33(1):174

Valery PC, Lucas RM, Williams DB, Pender MP, Chapman C, Coulthard A, Dear K, Dwyer T, Kilpatrick TJ, McMichael AJ, van der Mei I, Taylor BV, Ponsonby AL. Occupational exposure and risk of central nervous system demyelination. *Am J Epidemiol.* 2013; 177(9):954-61.

Zaheer SN, Winter C, Coulthard A. Idiopathic bilateral foramina of Monro stenosis/atresia in an adult patient. *American Journal of Neuroradiology.* 2013; in press.

# Medical Services



**Dr Judy Graves**  
Executive Director,  
Medical Services



**Dr Mark Mattiussi**  
Deputy Executive Director,  
Medical Services



**Dr Graham Steel**  
Acting Deputy Executive  
Director, Medical Services



**Therese Lee**  
Acting Director,  
Safety and Quality Unit

## Overview

Medical Services is responsible for providing support to all areas of the Royal Brisbane and Women's Hospital in all aspects of medical administration.

The service line manages and coordinates medical staff appointments and allocations, credentialing and privileges, medical education and training through the Centre for Medical Officer Recruitment and Education (CMORE), the Private Practice Trust Fund (PPTF), medico-legal services, chaplaincy, Health Information Services (HIS), Medical Records and the Safety and Quality Unit. It provides specialist advice to the Hospital and Health Service Chief Executive and RBWH Executive in relation to medico-legal matters, recruitment, appointment, credentialing and privileges of medical staff and the handling of patient compliments and concerns.

The RBWH Human Research Ethics Committee (HREC) falls under this service line. Its role is to consider applications to conduct research in the hospital or to conduct research that involves patient participation. The committee provides recommendations as to whether or not, on ethical grounds, approval should be granted for research to proceed.

The Centre for Palliative Care Research and Education (CPCRE) is the main area of research. Medical Administration also undertakes research activities as part of quality improvement in health care service delivery.

## Key departments

- » Centre for Medical Officer Recruitment and Education (CMORE)  
(formerly Medical Education and Training Service)
- » Safety and Quality Unit
- » Health Information Services (HIS),  
incorporating Medical Records
- » Centre for Palliative Care Research and Education
- » Human Research Ethics Committee
- » Patient Staff Liaison

## Executive and directing staff

**Dr Judy Graves**  
Executive Director Medical Services

**Dr Mark Mattiussi**  
Deputy Executive Director Medical Services

**Dr Graham Steel**  
Acting Deputy Executive Director Medical Services

**Prof Patsy Yates**  
Acting Director, Palliative Care Research and Education

**Dr Conor Brophy**  
Chair, Human Research Ethics Committee

**Therese Lee**  
Acting Director, Safety and Quality Unit

# Centre for Palliative Care Research and Education



**Prof. Patsy Yates**

Acting Director,  
Palliative Care  
Research and Education

## Overview

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

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

The CPCRE is administered by a consortium of five organisations: Royal Brisbane and Women's Hospital (lead agency); The Prince Charles Hospital; Queensland University of Technology; Karuna Hospice Service and Check-UP Australia. An advisory board comprising consortium members and representatives from the palliative care community and Queensland Health guides CPCRE in its activities.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof Patsy Yates	RN, BA, DipAppSoc, MSocSci, PhD, FRCNA	Director, Centre for Palliative Care Research and Education	Palliative care, symptom management and supportive care
Prof Janet Hardy	BSc, MBChB, MD, FRACP, FRChPM	Clinical Research Program Leader	Palliative medicine research, evidence based symptom management
John Haberecht	RN, DipAppSci (Nurs), MEd, BA, GradDipArts, Cert IV Training and Assessment	Director of Learning and Development	End-of-life clinical pathways, improving access to palliative care education
Kym Griffin	RN, MN (Prac), Cert IV Leadership, Cert IV Frontline Management, Cert IV Training and Assessment, MPCNA, MONG, MPCQ	Research Officer	Improving access to palliative care, improving access to good quality end-of-life care for non-oncological clients
Aurora Hodges	Cert IV Frontline Management	PEPA Manager Queensland	Advance care planning, improving access to palliative care for all socio-economic groups
Darryl Lingwoodock	EN, Cert IV Training and Assessment, Cert IV in Aboriginal and Torres Strait Islander Mentoring	PEPA Indigenous Project Officer	Improving access to palliative care for Indigenous peoples, closing the gap, and advancing reconciliation
Rosaleen Matters	EN, BBus	Directors Secretary	Improving access to palliative care

## Supervised post-graduate students

Name	Current studies	Research topic
Chan R	Doctor of Philosophy	Self-management associated with fatigue in patients with advanced cancer
Huang Ya-Ling	Doctor of Philosophy	End-of-life decision making among community members in Taiwan
Hope C	Doctor of Philosophy	Evaluation of the implementation of a nurse led, evidence based tailored pain education intervention for people requiring palliative care
Jennifer Fox	Doctor of Philosophy	Melanoma patients transitioning to palliative care – a grounded theory approach
James Hughes	Masters by Research	Do measures of access block correlate to time to analgesia in painful conditions at a large tertiary emergency department
Dorreen Tapsall	Professional Doctorate	Design, implementation and evaluation of a new model of nurse education in the haematology/oncology setting
Lawrence Lim	Professional Doctorate	An assessment of the Continuous Quality Improvement implementation in palliative care services
Vanessa Brunelli	Doctor of Philosophy	Evaluating a program for developing specialist cancer nurse competencies for effective and sustainable self-management of dyspnoea in lung cancer patients
Bista Sudeep Raj	Doctor of Philosophy	Improving analgesia in cancer patients
Anthony Hall	Doctor of Philosophy	The pharmaco-kinetic, pharmaco-dynamic and adverse event relationships of gabapentin and pregabalin in the management of persistent pain
Chris McKeon	Masters of Science	Electroacupuncture in chemotherapy-induced nausea and vomiting
Rani George	Doctor of Philosophy	Individualisation of pain management in cancer patients - methadone

## Awards and achievements

Award	Event	Recipient
Fellowship of the American Academy of Nursing (FAAN)	40th Annual Meeting, American Academy of Nursing, Washington, USA, 19 Oct 2013	Yates, P.

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Yates P, Mitchell G, Currow D, Eagar K, Edwards H, Gardner G, Willmott L, Bonner A, Clark R, Tieman J	Centre for Research Excellence in End of Life Care	National Health and Medical Research Council	\$2,495,543	2013 – 2018

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Respecting Patient Choices, Palliative Care Australia, CareSearch, University of Queensland, Queensland University of Technology, Australian and New Zealand Society of Palliative Medicine, Leading Age Services Australia, Aged and Community Services Australia	National Advisory Service for Palliative Care and Advance Care Planning	Australian Government Department of Health and Ageing	\$2,846,450	2013 – 2015
Yates P.	National coordination and management of the Program of Experience in the Palliative Approach (PEPA)	Australian Government Department of Health and Ageing	\$380,697	2013 – 2013
Yates P, Mitchell G, Connell S, Skerman H, Wilson A, Colquist S & Douglas C.	Achieving needs-based end-of-life services: a prospective longitudinal study of the pathways for advanced cancer patients	Cancer Council Queensland	\$200,000	2011 – 2013
Broom A, Adams J, Yates P, Kirby E, Good E, Wootton J & Hardy J	Pathways to and through palliative care: a sociological study of patient, carer and clinical experiences at the end-of-life.	Australian Research Council	\$165,830	2012 – 2015
Turner J, Kelly B, Clarke D, Yates P, Aranda S, Jolley D, Chambers S, Hargraves M & Mcfadyen L.	Application of tailored therapies to reduce distress and depression in cancer patients: a randomised trial	Beyond Blue	\$591,305	2010 – 2013
Yates P, Hardy J, Currow D, Martin P, Mitchell G, Philip J, Hudson P & Clavarino A.	Randomised controlled trial of aetiology based anti-emetic guidelines in reducing nausea in advanced cancer	National Health and Medical Research Council	\$1,111,000	2010 – 2013
Anderson D, McCarthy A, Yates P, Turner M, King N, Monterosso, L, Krishnasamy M, White K, Hall S	The Women's Wellness after Cancer Program	National Health and Medical Research Council	\$1,165,260	2013 – 2015
Beatty L, Koczwara B, Wade T, Turner J, Yates P, Butow P, Knott V, Lambert S, Milne D, Wootton A, De Bono S, Katris P	Finding My Way: A randomised controlled trial evaluating an internet self-help program for cancer-related distress	National Health and Medical Research Council	\$380,990	2013 – 2015
Turner M, Yates P, Kenny L, Gordon L, Burmeister B, Thomson D, Hughes B, McCarthy A, Perry C, Chan R	Improving quality of life in high-risk cancer populations: a randomised trial of a structured intervention for head and neck cancer survivors	National Health and Medical Research Council	\$483,360	2013 – 2015

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Yates P, Hardy J, Clavarino A, Fong K, Mitchell G, Skerman H	Evaluating novel methods for delivering non-pharmacological interventions for dyspnoea in patients with lung cancer.	National Health and Medical Research Council	\$487,125	2012 – 2013
Agar M, Hardy J & Currow D, et al.	Randomised controlled trial of oral risperidone versus oral haloperidol versus oral placebo with rescue subcutaneous midazolam in the management of delirium in palliative care inpatients	Australian Government Department of Health and Ageing	\$158,464	2008 – 2013
Currow D, Hardy J, Fazekas B & Shelby-Jones T, et al.	Randomised double blind controlled trial of infusional subcutaneous octreotide in the management of bowel obstruction in people with advanced cancer	Australian Government Department of Health and Ageing	\$157,080	2008 – 2013
Mitchell G, Hardy J, Currow D, Nikles J, Vora R, Schuller P & Yelland M.	Using Single Patient Trials to determine the effectiveness of psychostimulants in fatigue in advanced cancer patients.	National Health and Medical Research Council	\$297,000	2008 – 2013
Nikles J, Mitchell G, Hardy J et al	N-of 1 trials of pilocarpine vs placebo for dry mouth in palliative care patients	Cancer Council Queensland	\$81,680	2010 – 2013
Hardy J, O'Shea A, Norris R & Charles B.	A double-blind, randomised, placebo-controlled cross-over study of intranasal midazolam for the management of dyspnoea related to maximally treated, life-limiting disease	JP Kelly Mater Health Services Research Fund	\$15,000	2009 – 2013
Hardy J.	Data management grant	Cancer Council Queensland	\$178,650	2010 – 2013
Hardy J, O'Shea A, Shannon C, Morton A	Vitamin D deficiency in palliative care inpatients	Mater Foundation Palliative Care Research Fund	Nil funding	2012 – 2013
Hardy J, Craig J, O'Shea A, Bowler S	A pilot study to assess sleep apnoea in patients taking opioids	Mater Foundation Palliative Care Research Fund, Queensland Sleep Disorder Clinic	Nil funding	2011 – 2013
Hardy J, Jones J, Munster D, Shannon C	Pilot study of intraperitoneal bevacizumab for the palliation of malignant ascities	Mater Foundation Palliative Care Research Fund	Nil funding	2011 – 2013
Currow D, Abernethy A, Davidson T, Hardy J, Agar M, Clark K	A randomised, double-blind, multi-site, parallel arm controlled trial to assess relief of refractory breathlessness comparing fixed doses of morphine, oxycodone and placebo	Australian Government Department of Health and Ageing	\$2,881	2012 – 2013
McKeon C, Hardy J, Tapuni A	A randomised, double-blind, placebo controlled study of oral vitamin C in conjunction with opioids for cancer pain	Mater Health Services Theme 2 Grant Funding Round 2012	\$8,210	2012 – 2013
Bista S, Hardy J, Norris R, Haywood A, Charles B	Optimising pain management with fentanyl in cancer patients	Mater Health Services Theme 2 Grant Funding Round 2012	\$8,500	2012 – 2013

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Haywood A, Norris R, Hall T, Hardy J, Bruce C, Pinkerton R, Duley J, Martin J, Tapuni A, Jenkins-Marsh S, Bista S	Optimising pain management with fentanyl in patients with cancer	Griffith Health Institute Project Grant Scheme	\$10,000	2012 – 2013
Hardy J	A randomised double-blind, active controlled, double-dummy, parallel group study to determine the safety and efficacy of oxycodone/naloxone prolonged release tablets in subjects with moderate to severe, chronic cancer pain	INC Research	\$19,000	2013 - 2013
Hardy J, McKeon C, Anderson H, Lwin Z	A randomised trial of electroacupuncture versus sham acupuncture and no acupuncture for the control of acute and delayed chemotherapy induced nausea and vomiting – pilot feasibility study	Smiddy Foundation – Charitable donations		2013 - 2013
McKeon C, Hardy J, Tapuni A	Audit of Prevalence of incident pain during radiotherapy	Mater Palliative Care Research Fund	Nil funding	2013 - 2013
Bista S, Haywood A, Norris R, Hardy J, Tapuni A, Lobb M, Good P, Hall T	Adhesion of fentanyl patches in adult patients	Mater Health Services Theme 2 Grant Funding Round 2013	\$6,000	2013 - 2013

## Publications

Cataldo J.K, Paul S, Cooper B, Skerman H, Alexander K, Aouizerat B, Blackman V, Merriman J, Dunn L, Ritchie C, Yates P & Miaskowski C. Differences in the symptom experience of older versus younger oncology outpatients: a cross-sectional study. *BMC Cancer*. 2013;13:art.6.

Chan R, Yates P & McCarthy A. A prospective longitudinal survey of fatigue self-management behaviours in patients with advanced cancer. *Supportive Care in Cancer*. 2013;21(s1),S30.

Exercise for health: a randomised, controlled trial evaluating the impact of a pragmatic, translational exercise intervention on the quality of life, function and treatment-related side effects following breast cancer. *Breast Cancer Research and Treatment*. 2013;137(1),175-186.

Haberecht J, Good P, Hardy J. Centre for Palliative Care Research and Education (CPCRE) 2013, Web App – “GP Pain Help” – available at <http://www.gpainhelp.com> CPCRE launched the App at the ACRRM Conference, Cairns, Australia on 2nd November 2013. (This Application suitable for iPhone/Android phone Smart Phones/ and free to download from the internet. Technical development by the Australian College of Rural and Remote Medicine).

Hardy J, Jenkins-Marsh S, Pinkerton E, Rickett K & Good P. Corticosteroids for the management of cancer-related pain in adults (Protocol). *Cochrane Database of Systematic Reviews*. 2013;Issue 10.Art.No.: CD010756. DOI: 10.1002/14651858.CD010756.

Hardy J, Quinn S, Fazekas B, Agar M & Currow D. Can the LANSS scale be used to classify pain in chronic cancer pain trial. *Journal Supportive Care in Cancer*. 2013; Dec 21;(12):3387-91.doi:10.1007/s00520-013-1921-5. Epub 2013; Aug 10.

Hayes S, Rye S, DiSipio T, Yates P, Bashford J, Pyke C, Saunders C, Battistutta D & Eakin E. Langbecker D, Janda M. & Yates P. Health professionals' perspectives on information provision for patients with brain tumours and their families. *European Journal of Cancer Care*. 2013;22(2),179-187.

Langbecker D, Yates P & Whiffen R. Findings from a systematic review on cancer care coordinators. *Asia-Pacific Journal of Clinical Oncology*. 2013;9(Suppl.3),98.

Lou Y, Yates P, McCarthy A, & Wang H.M. Fatigue self-management: a survey of Chinese cancer patients undergoing chemotherapy. *Journal of Clinical Nursing*. 2013;22(7-8),1053-1065.

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## Publications

McCarthy A, Isenring E, Baumann S, Yates P, Skerman H, Walpole E & Thomson D. Nutrition screening and risk factors prior to chemotherapy in cancer patients 65 years and older. *Supportive Care in Cancer*. 2013;21(s1),S220.

McCarthy A.L, Tramm R, Shaban R & Yates P. Factors influencing health behaviours of younger women after menopause-inducing cancer treatment. *Public Health Nursing*. 2013;30(2),106-116.

McCarthy A.L, Yates P & Shaban R.Z. Cross-sectional survey of the health behavior of southeast Queensland women with cancer-treatment induced menopause: Implications for cancer and primary care nurses. *Collegian*. 2013;20(4), 223-231.

McKeon C, Smith C, Hardy J, Chang E. Acupuncture and/or acupressure for chemotherapy induced nausea and vomiting: a systematic review. *Australian Journal of Acupuncture and Chinese Medicine*. 2013; 8(1):2-27.

Munday J, Hines S, Wallace K, Chang A.M, Gibbons K & Yates P. The clinical effectiveness of interventions to assist perioperative temperature management for women undergoing Cesarean Section: a systematic review. *JBI Database of Systematic Reviews and Implementation Reports*. 2013;11(6),45-111.

Nikles J, Mitchell G, Hardy J, Agar M, Senior H, Carmont S, Schluter P, Good P, Vora R & Currow D. Do pilocarpine drops help dry mouth in palliative care patients? A protocol for an aggregated series of n-of-1 trials. *Journal BMC Palliative Care*. 2013; Oct 31;12(1):39,MS: 7273549871055040.

Rose P & Yates P. Person centred nursing care in radiation oncology: A case study. *European Journal of Oncology Nursing*. 2013;17(5),554-562.

Sanderson C, Hardy J, Spruyt O, Currow D. Placebo and nocebo effects in randomised controlled trials: the implications for research and practice. *Journal of Pain and Symptom Management*. 2013;S0885-3924(13)00110-3.

Senior H, Mitchell G, Nikles J, Carmont S, Schluter P, Currow D, Vora R, Yelland M, Agar M, Good P, Hardy J. Using aggregated single patient (N-of-1) trials to determine the effectiveness of psychostimulants to reduce fatigue in advanced cancer patients: a rationale and protocol. *Journal BMC Palliative Care*. 2013;12(1),17.

Yates P & Aranda S. 40 years of cancer nursing in Australia: the emergence of a specialty. *Cancer Forum*. 2013;37(1), 35-38.

Yates P, Schofield P, Zhao I & Currow D. Supportive and palliative care for lung cancer patients. *Journal of Thoracic Disease*. 2013;5(S5),S623-S628.

Yates P. Cancer. Chang E & Johnson A. (Eds) *Chronic Illness and Disability*, (2nd Ed). Elsevier: Sydney. 2013; 531-545.

Yates P. Caring for the cancer survivor. Crisp J, Taylor C, Douglas C, Rebeiro G. (Eds) *Fundamentals of Nursing* (4th Ed.) (Australian Adaptation), Elsevier: Sydney. 2013;1474-1483.

Yates P. Developing health professional's capabilities in the provision of psychosexual care. *Asia-Pacific Journal of Clinical Oncology*. 2013;9(Suppl.3), 93.

Yates P. The challenges in integrating care coordinators into cancer care – an analysis of Australian evaluation data. *Asia-Pacific Journal of Clinical Oncology*. 2013;9(Suppl.3),129.

Zhang S-Y, Edwards H, Yates P, Elder R & Guo Q. Preliminary reliability and validity testing of a Self-Efficacy Questionnaire for Chinese family caregivers. *Aging & Mental Health*. 2013;17(5),630-637.

Zhang S-Y, Edwards H, Yates P, Elder R & Guo Q. Preliminary reliability and validity testing of a Self-Efficacy Questionnaire for Chinese family caregivers. *Aging & Mental Health*. 2013;17(5),630-637.

# Safety and Quality Unit



**Therese Lee**

Acting Director,  
Safety and Quality Unit

## Overview

Safety and Quality Unit is responsible for the provision of organisational services based on a commitment to continuous quality improvement aimed at enhancing patient focussed services, and achieving the best standards of care. The unit also provides support to the Safety and Quality Committee and service lines to promote and facilitate service improvements to enhance patient focussed outcomes.

Research has focussed on acute care models for older inpatients to improve patient outcomes; the design of hospital environments to improve patient safety; and Root Cause Analysis and patient safety.

## Research staff

Name	Qualifications	Position	Interests/specialities
Mrs Prue McRae	B.Phty	Falls Risk / EBP Coordinator	Geriatrics, health service improvement
Mr Satyan Chari	BOT, Grad Cert Occ Thy, M Sc Occ Thy	Falls Risk / QH Research Fellow	Fall prevention, evidence based hospital design, intervention trials, health services improvement
Ms Karen Singh	B. HSc	Process improvement	Patient safety; Incident analysis; Organisational system safety

## Supervised post-graduate students

Name	Current studies	Research topic
McRae, P	M.Phil	Identifying interdisciplinary care needs in older surgical patients
Long, K	PhD	Patient safety and the Qld Root Cause Analysis: A document analysis
Chari, S	PhD (Candidate)	Extrinsic factors and falls in hospitalised patients

## Awards and achievements

Award	Event	Recipient
Prof. William Burnett Research Fellowship, UQ, School of Medicine		McRae, P
Prof William Egerton Surgical Research Award	2013 RBWH Healthcare Symposium	McRae, P
Allied Health Thesis Assistance Scheme		McRae, P
Australian Postgraduate Award (APA) scholarship		Singh, K
QUT Vice Chancellor grant		Singh, K

## Research grant

Investigators	Research title	Granting body	Amount awarded	Years of funding
Mudge, A., Walker, P., Donovan, P., McRae, P., Reade, M	Improving care and outcomes for older surgical inpatients	Australian Centre for Health Services Innovation Stimulus Grant	\$75,000	2012-2013
Chari S	Extrinsic factors in falls among hospitalised patients	Queensland Health OHMR Early career research fellowship 20101-2015	(\$55,000 /year)	2010-2015
Chari, S., Smith, S., Black, AA., Figuero, M., Haines, TP	Novel night lighting solution to reduce patient falls: Cluster RCT	Australian Centre for Health Services Innovation Stimulus Grant	\$82,000	2013-2014

## Publications

Chari S, McRae P, Varghese P, Ferrar K, Haines TP. Predictors of fracture from falls reported in hospital and residential care facilities: a cross-sectional study. *BMJ open*. 2013; 3(8).

Cruickshank M, McRae P, Mudge A. Eat Walk Engage: Working together for better care of elders, 10th National Allied Health Conference, October 16-18, Brisbane, 2013. PODIUM PRESENTATION

McRae P, Mudge AM, Peel NM, Walker PJ. Geriatric syndromes in older surgical patients: A literature review. *J Frailty Aging*. 2013; 2(4):205-210.

Mudge AM, McRae P, Cruickshank M. Eat Walk Engage: An interdisciplinary collaborative model to improve care in hospitalised elders. *Am J Med Qual*. 2013; Nov 22.

# Metro North Mental Health



**Assoc. Prof. Brett Emmerson**  
Executive Director,  
Metro North Mental Health  
Services



**A/Prof Lisa Fawcett**  
Nursing Director,  
Metro North Mental Health  
Services

## Overview

As the importance of mental health is recognized on the international stage, the strategic need for mental health research has never been stronger. A priority recommendation of the recently released Mckeown Report of the Strategic Review of Health and Medical Research in Australia is to “drive research activity in the health system”. As evidenced by the impressive lists of publications, grants and conference presentations below MNMH-RBWH is enacting this. Ongoing commitment to research as core business and establishment of a vibrant research environment across departments has contributed to dramatic increase in research and related activities in recent years. Publications have doubled since 2009 and MNMH-RBWH researchers currently hold funding of more than \$31 million, including prestigious NMHRC Program and Project Grants as well as grants from Queensland Health and the RBWH Foundation.

Our clinical academic staff, managers and clinicians have supported the conduct of 72 studies within the service during 2013. These studies demonstrate the breadth and depth of mental health research and the complexity of generating evidence needed to understand and treat mental illness. Studies include basic and clinical science aimed at mapping the workings of the brain, investigations of the prevalence of various ‘mental’ phenomena in the population and the burden associated with diagnosis, tests of the effectiveness of psychosocial interventions in improving outcomes for people with schizophrenia and health services research designed to support improvement in models of care and efficiency. Studies using a range of methods are examining readmission, seclusion, the physical health of people prescribed antipsychotics, the activity of mental health nurses and the experience and expectations of consumers. We were particularly pleased this year to see important work by consumer and carer consultants published and to strengthen the partnerships with academic and other organisations which are critical to embedding research in the service.

## Key departments

- » Department of Adolescent Psychiatry
- » Department of Consultation Liaison Psychiatry
- » Eating Disorder Service
- » Hospital Alcohol and Drug Service
- » Inner North Brisbane Mental Health Service
- » Older Persons' Mental Health Service
- » Queensland Forensic Mental Health Service
- » QIMR Program of Mental Health and Complex Disorders

## Executive and directing staff

**Assoc. Prof. Brett Emmerson**  
Executive Director

**A/Prof Lisa Fawcett**  
Nursing Director, Operations Director

**Dr Ian Williams**  
Director, Adolescent Psychiatry

**Dr John Linnane**  
Director, Consultation Liaison Psychiatry

**Dr Warren Ward**  
Director, Eating Disorder Service

**Dr Mark Daglish**  
Director, Addiction Psychiatry

**Dr Vikas Moudgil**  
Director, Inner North Brisbane Mental Health Service

**Prof. Gerard Byrne**  
Director, Older Persons Mental Health Service

**Dr Ed Heffernan**  
Director, Queensland Forensic Mental Health Service

**Prof. Michael Breakspear**  
Coordinator, QIMR Program of Mental Health and Complex Disorders

# Metro North Mental Health Services

## Service Line Overview

Metro North Mental Health employs over 1000 staff, has an annual budget of \$145 million to provide services to a population of over 840,000 people. Mental Health Services are located at Royal Brisbane and Women's Hospital (RBWH), The Prince Charles hospital (TPCH) and Caboolture and Redcliffe Hospitals, with community-based services working across the district. Services provided encompass acute, non-acute and continuing care across the life-span for people with diverse mental health problems. The service endorses the recovery approach and works collaboratively with consumers and carers and primary and private health providers.

The executive strongly endorses and promotes systematic evaluation of programs and interventions and the integration of basic and clinical research in development of services. In line with this, substantial investment has been made in embedding research within the culture at RBWH and establishment of partnerships with universities and other research bodies. This is evident in establishment of a multi-disciplinary team of researchers tasked with fostering research literacy and skills amongst staff, funding of evaluation activities and support provided to staff to facilitate continuing professional development. Many senior staff hold joint or adjunct posts with universities and research institutes and conduct cutting edge research within their departments and in partnership with academic and/or third sector partners. To build capacity we have hosted numerous post graduate students, two research interns (funded by grants from the PPTF and Allied Health) and a visiting researcher from Imperial College London. Metro North Mental Health-RBWH research and evaluation activities are overseen by a formally constituted committee and the service is represented on the RBWH Human Research Ethics Committee. Importantly we are strengthening mechanisms to support engagement of consumers and carers in research, as investigators and participants.



**Dr Ian Williams**  
Director,  
Adolescent Psychiatry

### Department of Adolescent Psychiatry

The adolescent mental health unit is a 12 bed unit which provides acute inpatient care for people aged 14 to 17 years from across Queensland. Psychiatrists and nurses work with allied health professionals to provide assessment of mental disorder and treatment as appropriate.

The unit is committed to evidence based practice and research is supported in various ways. We host studies led by university partners and team members are supported to participate in nursing and allied health journal clubs and the unit hosts and facilitates research examining medical, psychological and social aspects of mental illness in young people.



**Dr John Linnane**  
Director,  
Consultation Liaison  
Psychiatry

### Department of Consultation Liaison Psychiatry

Research interests of Associate Professor Jane Turner have focused on promotion of wellness after completion of cancer treatment; the emotional impact of cancer on families (in particular advanced cancer), and the development and evaluation of sustainable models of improved health care service delivery.

Dr Phil Mosely is undertaking ground breaking research related to Deep brain stimulation (DBS) for Parkinsons disease (PD). While DBS leads to substantial improvement in motor symptoms and quality of life, a sizeable proportion of patients suffer from psychiatric symptoms in the postoperative period. A particular phenomenon that seems to occur in some patients after DBS is impulsivity, the tendency to act on the spur of the moment. Phil will use a range of methods to study impulsivity after DBS, describe its effect on carer burden and examine its biological basis.

We have recently closed recruitment for the PROMPT study, an RCT which recruited more than 500 patients at four sites across Australia to receive a tailored, psychosocial intervention delivered by novel health professionals who participated in focused training and skill development and clinical supervision. This is one of the largest studies of its kind internationally and data is currently being prepared for analysis. If successful in improving depression this will provide a sustainable model of service delivery which can be implemented across diverse treatment settings.

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## Department of Consultation Liaison Psychiatry

The department has just commenced a trial of a structured survivorship intervention for patients who have completed treatment for head and neck cancer, to be delivered by a trained oncology nurse. The theoretical platform for this intervention draws on the principles of chronic disease self-management and promotion of self-efficacy to encourage patients to engage in sustained behaviour change and self-care regarding cancer-related concerns. This is the first RCT of its kind to be conducted in Australia, and will provide critical data about innovative models of survivorship care which could be implemented locally and internationally.



**Dr Warren Ward**  
Director,  
Eating Disorder Service

## Eating Disorder Service

The Eating Disorders Service, which incorporates inpatient and outpatient services based at the RBWH and the Eating Disorders Outreach Service, is a state wide tertiary service providing intake, assessment and treatment services to people with eating disorders; and consultation liaison and training for clinicians. The service is staffed by a multidisciplinary team including a psychiatrist, 2 registrars, nurses, dietitians, psychologists, social workers, and assistants in nursing.

The service is committed to ongoing evaluation of all activities and hosting a range of research projects led by university and community partners. The focus during 2013 has been on investigation of the impact and experience of community based and inpatient treatment. We have continued to work closely with partners in Australia and the US on an international study of the genetics of anorexia nervosa (for which an \$800,000 funding was secured from the Klarman Family Foundation). Additionally we continue to evaluate our own established and innovative practice, presenting our findings for discussion at national and international conferences. We were particularly pleased this year when two grant applications were successful. Ms Elaine Painter working with QUT colleagues secured funding to explore the roles and experience of carers and Shane Jeffrey, team dietitian was awarded a RBWH research grant to investigate the outcomes of assertive re-feeding of patients with anorexia nervosa admitted to medical wards. We look forward to outcomes of these studies.



**Dr Mark Daglish**  
Director,  
Addiction Psychiatry

## Hospital Alcohol and Drugs Service

The Hospital Alcohol and Drug Service (HADS) provides inpatient services for management of alcohol and drug problems. We also provide a consultation-liaison service to the rest of RBWH. The inpatient arm of the service comprises a 16-bed ward with 1200 admissions per year, with the majority being for alcohol withdrawal management.

The consultation-liaison service provides advice and assistance to the whole of RBWH, with a similar number of referrals each year. We have particularly close links with the Department of Emergency Medicine, the Psychiatric Emergency Clinic, the Chronic Pain Team and general Mental Health Services. We also provide expert input to the specialist ante-natal clinic (SHADES) for substance using women and a Drug and Alcohol Brief Intervention Team (DABIT) service to the Department of Emergency Medicine.

Our senior medical staff have joint and honorary appointments with the University of Queensland (UQ) and Queensland University of Technology (QUT). Current research projects involve collaboration with QUT, Turning Point, UQ and the University of Newcastle.



**Dr Vikas Moudgil**  
Director,  
Inner North Brisbane  
Mental Health Service

## Inner North Brisbane Mental Health Service

Inner North Brisbane Mental Health Service provides mental health assessment and treatment services to the 330,000 adults who reside in the RBWH catchment areas. The catchment area has a large homeless population, high levels of drug use (particularly amphetamines), is the busiest court liaison complex in the state and has approximately 2000 hostel/boarding house beds, three large homeless shelters and two private psychiatric hospitals which frequently refer patients with behavioural disorders. The service comprises a Psychiatric Emergency Centre (PEC), which services the busiest emergency department in the southern hemisphere, the Acute Care Team, the Homeless Health Outreach Team, Northern and Southern Community/in-patient teams and a Community Care Unit (20 beds). The hospital and community-based teams provide integrated mental health services, with 75 acute care adult beds.

A range of research, evaluation and quality improvement projects are currently underway within the service. Each project is designed to support the efficient delivery of effective services to people who need them and improve patient outcomes and experience. Dr James Scott, recognised internationally as an authority on adolescent mental health, is leading studies to improve the understanding and effective intervention with people experiencing a first episode of psychosis.

The service is sponsoring studies examining the effect of social cognition training for people with schizophrenia, the causes of readmission, participation in mental health research and the role of services in meeting physical health needs of consumers and. Meantime we have continued to implement and evaluate the 'Let's get Physical' program designed to improve the detection and treatment of physical health problems in people who use our services and work with staff to implement and evaluate evidence based interventions. Additionally we are working collaboratively with pharmacy colleagues on diverse studies designed to ensure quality use of medicines and the School of Dentistry at UQ to promote oral health of people who use our services. We support staff to participate in a range of activities designed to enhance research capacity.



**Prof. Gerard Byrne**  
Director,  
Older Persons  
Mental Health Service

## Older Persons Mental Health Service

The Older Persons Mental Health Service (OPMHS) assesses and treats older patients with serious mental disorders. The Service has 10 beds in the RBWH Mental Health Centre, runs an outpatient clinic and a busy community outreach service. It also provides a consultation/liaison service to the Geriatric Assessment and Rehabilitation Unit (GARU) and contributes to the RBWH Memory Clinic.

The OPMHS has strong links with the UQ Discipline of Psychiatry and is actively engaged in teaching students of several disciplines (medical, nursing, psychology, occupational therapy, social work). Personnel of the OPMHS are involved in clinical and health services research in relation to mental disorders in older people, including those with dementia, anxiety and depression.

In addition, the director of the OPMHS has a research program that is investigating various aspects of dementia, particularly behavioural and psychological symptoms in Alzheimer's disease. A number of competitively funded research projects are underway in collaboration with research psychologists and laboratory scientists.

Funding has been obtained from the US Alzheimer's Association, the NHMRC, the Wicking Trust, the RBWH Research Foundation and several private benefactors. Director of the OPMHS, Prof. Gerard Byrne has collaborated with Dr Christine Neville to publish a textbook for mental health staff joining older persons teams called Community Mental Health for Older People (Elsevier Churchill Livingstone). The Geriatric Anxiety Inventory (GAI), a scale to measure anxiety in older people, developed by Prof. Byrne and Prof. Nancy Pachana has now been translated into more than a dozen languages and is in widespread use around the world.



**Dr Ed Heffernan**  
Director,  
Queensland Forensic  
Mental Health Service

## Forensic Mental Health Service

The Queensland Forensic Mental Health Service (QFMHS) aims to be a leading research authority on people with a mental illness who are involved in the criminal justice system. The vision of the Service is to conduct innovative research which informs service design and delivery, and ultimately improves the experience of forensic consumers and stakeholders. The Service also prioritises the sharing of research findings with stakeholders and the wider research community, through publication and presentations.

The QFMHS Academic and Research Committee oversees the Service's research agenda, and provides a forum in which research can be discussed, prioritised, planned, and reviewed. The Committee also encourages the development of relationships with academic partners (e.g., universities) and research bodies, and the Service has strong relationships with universities such as UQ, Griffith and Bond. QFMHS staff are actively supported in their participation in relevant forensic research, and several special interest groups operate within the Service (e.g., stalking interest group, sex offender interest group). The goals of QFMHS academic and research plan are:

- To develop a vibrant research environment where there is commitment to research activities across the QFMHS organisation.
- To focus on areas of research that have the potential to improve service provision and outcomes for mentally disordered offenders, their families and the community.
- To undertake a balanced research program with short, medium and long term activities.
- To explore options for collaborative research with universities, other research bodies, other relevant departments and organisations within Australia and internationally.
- To disseminate widely the findings of research through publications and other forums.



**Prof. Michael Breakspear**  
Coordinator,  
QIMR Program of Mental  
Health and Complex  
Disorders

## QIMR Program of Mental Health and Complex Disorders

Systems Neuroscience is an approach to brain sciences that seeks the basic principles of brain organization, dynamics and function across a hierarchy of spatial and temporal scales. It is a rapidly growing field that differs considerably from the traditional reductionist paradigm in neuroscience that addresses sufficient causes for local phenomena.

The work of our group embodies these principles across three broad domains - empirical, computational and clinical neuroscience. The overarching aim of this work is to contribute towards unifying models of brain architecture, dynamics and cognitive (dys)function.

We are funded in national collaborations by the Australian Research Council (Thinking Systems), The National Health and Medical Research Council, and the Rotary Foundation and in an international collaboration by the James. S. McDonnell Foundation (BrainNRG).

## Research staff

Name	Qualifications	Position	Interests/specialities
Metro North Mental Health - RBWH			
Assoc. Prof. Brett Emmerson	MBBS, MHA, FRANZCP, FRACMA	Executive Director, Metro North Mental Health Services	physical health of people with severe mental illness, use of benchmarking and performance indicators to improve services
A/Prof Lisa Fawcett	RGN, Cert Psychiatric Nursing, Cert Management, Grad Dip Health Counselling, MSc (PHC).	Nursing Director, Operations Director	Risk assessment, workforce development, nursing leadership, consumer and carer engagement
Nathan Dart	BN, MMHN	Assistant Nursing Director	Workforce development. Prof Standards
Ms Nicole Goulter	BN, MMHN	Clinical Academic Fellow	Mental health nursing, health, wellbeing and outdoor activities; consumer engagement, nursing education
Dr Sue Patterson	BSc, BSocSc(Hons), Grad Cert Health, DIC, PhD	Principal Research Fellow	Service design, delivery and evaluation, research methodology, mixed-methods research
Ms Imani Gunasekara	BSc(Hons)	Consumer Consultant	Consumer experiences, engagement and outcomes, professional practice
Ms Tracey Rodgers	BA(Hons)	Carer Consultant	Carer engagement, participatory research, readmission
Department of Adolescent Psychiatry			
Dr Ian Williams	MBBS, FRANZCP	Director	Telepsychiatry, Adolescent Mental Health, Abnormal illness behaviour
Robin Counsel	Masters in Mental Health Nursing.	Nurse unit manager	Physical health of adolescents and workforce management
Department of Consultation Liaison Psychiatry			
Dr John Linnane	MBBS, FRANZCP	Director	Consult-liaison psychiatry
Dr Philip Mosley	MA (Oxon.) BMBCh (Oxon.)	Psychiatry Registrar	Neuropsychiatry
Assoc Prof Jane Turner	MBBS, PhD, FRANZCP	Associate Professor, UQ	Psycho-oncology
Eating Disorders Service			
Dr Warren Ward	MBBS, FRANZCP, GradCertMgmt	Director, Eating Disorder Service	service access, malnutrition, medical monitoring
Ms Elaine Painter	BNSc, BA, MPHc	Team Manager	national advocacy, families and carer support
Dr Rachel Bellair	BA (Hons Psych), PhD (psychology)	Senior Clinical Psychologist	team functioning, service evaluation
Ms Amanda Davis	BSc, PGDipNutDiet	Senior Dietitian	nutritional management, malnutrition, medical monitoring
Ms Carmel Fleming	BSocWk (Hons), MSW	Educator; Senior Social Worker	cognitive behaviour therapy, education
Mr Shane Jeffrey	BSc, GradDipNutrDiet	Senior Dietitian	weight management, malnutrition service evaluation,
Ms Natalie Rhodes	BA (Psychology)	Senior Psychologist	cognitive behaviour therapy, family and carer support

## Research staff

Name	Qualifications	Position	Interests/specialities
Ms Catherine Vellacott	BNurs	Clinical Nurse Consultant	inpatient management, consultation liaison services
Hospital Alcohol and Drugs Service			
Dr Mark Daglish	BSc, MBChB, MRCPsych, MD, FRANZCP	Director of Addiction Psychiatry	addiction
Prof Bruce Lawford	FRANZCP	Visiting Medical Officer	addiction, schizophrenia, genetics
Inner North Brisbane Mental Health Service			
Dr Vikas Moudgil	MBBS, FRANZCP, MMH	Clinical Director	Health service administration, physical health of people with severe mental illness
Mr David Higson	RPN,, BNurs, GradCert HM.	Operations Manager	trauma and dissociation.
Dr James Scott	MBBS, PhD FRANZCP	Senior Lecturer in Early Psychosis; Senior Staff Specialist	early psychosis, autism, psychological trauma
Deanna Erskine	BOccThy, MForMH	Team Manager Homeless Health Outreach Team	Mental Health, Homelessness, Forensic Mental Health
Barbara Baumgartner	BA (Hons Psych), MSW, PG Dip Narrative Therapy & Community Work	Senior Social Worker HHOT	Homelessness, Mental Health, Narrative Therapy
Older Persons Mental Health Service			
Prof Gerard Byrne	BSc MBBS PhD FRANZCP	Director	Mental disorders in older people; Alzheimer's disease
Elaine Collins	RPN,RN,BN	NUM	Older persons' mental health, anxiety disorders, psychosis in older people
Dr Vicki Naumann	MBBS FRANZCP	Staff specialist	Mental disorders in older people; Alzheimer's disease
Dr Rudi Tannenberg	BSc PhD	Post-doctoral fellow	Synaptic proteins in Alzheimer's disease
Dr Tarja Brita Robins Wahlin	MSc PhD	Post-doctoral fellow	Neuropsychology of Huntington's disease
Dr Nadeeka Dissanayakka	BSc PhD	Post-doctoral fellow	Non-motor manifestations of Parkinson's disease
Ms Liz Arnold	BNursing	Research Coordinator	Alzheimer's disease
Ms Lyn Isbel	MSW	Research Assistant	Alzheimer's disease
Prof Nancy Pachana	AB MA PhD	Research collaborator	Geropsychology
Dr Nancye Peel	BPhty MPH PhD	Research Officer	Dementia
Dr Katharine Vearncombe	BPsych PhD	Research Officer	Geropsychology
Assoc. Prof. Jane Turner	MBBS, PhD, FRANZCP	CL Psychiatrist	psycho-oncology
Dr Rodney Marsh	MBBS, FRANZCP	Consultant Psychiatrist	neuropsychiatry
Forensic Mental Health Service			
Dr Ed Heffernan	MBBS, BSc (Hons), MPH, FRANZCP	Director, Qld Forensic Mental Health Service	Custodial mental health, Indigenous forensic mental health, substance use disorders
Dr Elke Perdacher	B SS (Psych), Pg. Dip. Psych., DPsych (Forensic)	Program Co-ordinator, Post Graduate Training	Denial in child sexual offenders, quality of admission in child sexual offenders across the judicial system: offender, victim and offence characteristics

## Research staff

Name	Qualifications	Position	Interests/specialities
Bob Green	B Soc Wk, MSW, PhD (psych)	Program Co-ordinator, State-wide Community Risk Management	Risk assessment, arson and reoffending
Adjunct Prof Michele Pathé	MBBS, MD, FRANZCP	Senior Forensic Psychiatrist	Stalking risk, Arson Public figure harassment
Forensic Mental Health Service			
Dr Tim Lowry	BA, Grad. Dip. Sc, M Clin Psych, D Psych (Clinical)	Team Manager, CFOS	Arson risk assessment Delusions and other high risk psychotic phenomena System development
Dr Jane Phillips	MBBS (Hons). MPM. FRANZCP. Cert. Forensic Psych., Grad.Dip.For.Beh Sci	Forensic Psychiatrist	Court liaison assessment Screen for stalkers
Kimina Andersen	B Soc Wk	Program Coordinator, Forensic Indigenous Mental Health	Indigenous mental health and forensic services
Melanie Mitchell	BA (Psych), Hons, Pg. Cert. Psych Practice	Psychologist, CFOS	Assessing and managing threateners with mental illness
Fiona Davidson	B Nurs, Grad. Dip. Mental Health, M Social Sc (Health)	Program Coordinator, Research and Evaluation	Sedating psychotropic medication in custodial settings, Benchmarking Deafness and Forensic Mental Health
Amanda Ziebell		Clinical Nurse Coordinator, CFOS & QFTAC	Threat assessment and management
Bruce Hamilton	B Arts (Psych), Psych (Hons), Cert. IV WTA	Program Coordinator, Statewide DFLO Network	Detachment from the workplace
QIMR Program of Mental Health and Complex Disorders			
Professor Michael Breakspear	BA(Hons), BSc (Hons), MB BS, PHD, FRANZCP	Staff Psychiatrist, Group Leader, Systems Neuroscience Group Program Coordinator, QIMR Berghofer Medical Research Institute	Mental health Research, Neuroscience
Dr Tjeerd Boonstra	PhD	Post-doctoral research Fellow	Neuroscience
Dr Mark Schira	PhD	Post-doctoral research Fellow	Neuroimaging
Dr James Roberts	PhD	Post-doctoral research Fellow	Computational Neuroscience

## Supervised post-graduate students

Name	Current studies	Research topic
Elizabeth McVie	PhD UQ	An analysis of the decisions of the Queensland Mental Health Court- Executive function during normal ageing
Paul Maguire	PhD ANU student	Health literacy in people with chronic psychosis
Parisa Laki	MPhil UQ	Physical health of dementia carers
Natalie Mills	PhD UQ	Genetics of cytokine activity in children and adolescents.
Timothy Tattersall	PhD UQ	
Ikhlas Abdalaziz Sindi	PhD UQ)	Disruption of nerve-cell connections in Alzheimer's disease through the assay of the trans-synaptic proteins: neurexins and neuroligins
Crystal Higgs	PhD	The role of the vesicular glutamate and GABA transporters in Alzheimer's disease.
Jenifer Murphy	PhD	Treatment-resistant depression.
Beyon Miloyan	PhD UQ	
AMC Ho,	PhD	Genetics of alcohol dependence
DLO Dissabandara,	PhD	Genetics of heroin dependence
B Law	PhD, MBBS	Alcohol dependence and depression
Anne Gordon	Doctorate of Psychology, Griffith University	Social Cognition Training for people with schizophrenia
Nicole Goulter	Masters of Science	Mental health nursing practice
Stacey Dixon	Masters of Clinical Psychology, Queensland University of Technology	The process of seclusion in mental health units: The patients' perspective
Ed Heffernan	PhD	Mental health of Aboriginal and Torres Strait Islander people in custody
Tim Lowry	Masters of Forensic Mental Health	Coursework with research basis
Bruce Hamilton	Masters Organisational Psychology (GU)	Psychological detachment from workplace
Tamara Smith	PhD	The development and validation of the intellectual and cognitive impairment screen
Kimina Andersen	Professional Doctorate	Forensic Mental Health and Aboriginal and Torres Strait Islander people
Rachel Bellair	Masters of Clinical Psychology	Experience of inpatient treatment for eating disorders
Mikail Rubinov	PhD	Brain networks in health and disease
Angela Langdon,	PhD	Computational models of sensory perception
Stewart Heitmann,	PhD	Computational models of motor coordination
Karim Muhsin	PhD	Brain networks in perceptual decision making
Saeid Merhkanon,	PhD	Dynamics of Resting-State Cortical Activity
Hannah Thomas	PhD	Bullying
Julietta Castellini	Doctorate of Psychology	Emotional regulation in adolescents
Natalie Mills	PhD, The University of Queensland	The Role of Cytokines in Adolescents with Depression
Holly Erskine	PhD, The University of Queensland	Measuring the Global Burden of Disease for Childhood Disruptive Behavioural Disorders
Michael Duhig	Masters of Psychology, Queensland University of Technology	The Clinical Outcomes of patients with first episode of psychosis who have experienced trauma in childhood
Carina Capra	PhD, Queensland University of Technology	An internet-based treatment program for young people with odd or unusual thoughts and/or experiences

## Awards and achievements

Award	Event	Recipient
The inaugural Royal Brisbane & Women's Hospital Foundation Award for Clinical Education.	The Royal Brisbane & Women's Hospital Symposium 2013	Ms Nicole Goulter
Best Poster Presentation Award.	The Australian College of Mental Health Nurses 39th International Conference 2013	Ms Nicole Goulter
RANZCP Faculty of Psychiatry of Old Age Trainee Prize	RANZCP Annual Congress	Dr Philip Mosley
RANZCP Section of CL Psychiatry Trainee Prize	RANZCP CL Psychiatry Conference	Dr Philip Mosley

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Lubman, D., Best, D., Lloyd, B., Elliott, M., Hunter, B., Savic, M., Eleftheriadis, D., Allsop, S., Magor-Blatch, L., Daglish, M., Lucas, J., Gruenert, S., Casey, W.	The development of a quality framework for Australian Government Funded Drug and Alcohol Treatment Services	Commonwealth Dept. of Health	\$680,359	2013-2014
Hides, L., Kavanagh, D., Connor, J., Daglish, M., Cotton, S., Barendregt, J., Witkiewitz, K., Young, R., White, A.	Brief telephone interventions for reducing future alcohol use and related harm in young people accessing emergency departments	NHMRC Mental Health Targeted Call for Research	\$702,461	2012-2016
Heffernan, E.	The Family Business – Improving the understanding and treatment of post-traumatic stress disorder among incarcerated Aboriginal and Torres Strait Islander women	Beyond Blue	\$255,000	2012-2013
Mercuri, A., Oakenfeld, A., Izzard, C., Petch, E., Heffernan, E.	Service Plan for Forensic Mental Health Services,	Department of Health Victoria	\$258,000.20	2013 -2014
Breakspear, M.	A novel diagnostic test for schizophrenia	Queensland Health Office of Health and Medical Research	\$375,000	2010-2014
Breakspear, M., McIntosh, A.R., Jirsa, V., Deco, G., Friston, K., Price, C.	Brain network recovery group	James McDonnell Foundation, USA	\$3 million	2011-2014
Mitchell, P., Parker, G., Schofield, P., Breakspear, M	Identifying determinants of both the origins and progression of the depressive and bipolar(mood) disorders	NHMRC	\$7 million	2012-2016
Ames, D., Gibson, S., Byrne, G., Katz, B.	Randomised controlled trial of analgesic medications to modify behavioural and psychological symptoms of dementia	NHMRC 1009435	\$570,898	2011-2013

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Sarris, J., Schweitzer, I., Stough, C., Bousman, C.A., Byrne, G.	The efficacy of adjunctive S-Adenosyl Methionine (SAMe) versus a combination nutraceutical in clinical depression: A double-blind, randomised, placebo-controlled trial.	NHMRC	\$768,098	2013-2015
Ames, D., Gibson, S., Byrne, G., Katz, B.	Randomised controlled trial of analgesic medications to modify behavioural and psychological symptoms of dementia	NHMRC	\$570,898	2011-2013
Byrne, G., Pachana, N., Beattie, E.	Improving anxiety assessment and management in people with dementia	DCRC Grant	\$58,940	2011-2013
Scott, J.G., McGrath, J.J., Najman, J., Mamun, A., Alati, R., Claverino, A.	Outcomes of adolescents who hallucinate	NHMRC Project Grant	\$603,852	2013-2015
Najman, J., Williams, G., Wray, N., et al., Scott, J.	Genetic and environmental contributions to the life course of common mental disorders	NHMRC	\$1,474,527	2011-2014
Wagner, I., Strodl, E., Ward, W., Painter, E.	Supporting caregivers of those with chronic AN	QUT	\$20,000	2013
Butow, P., Thewes, B., Turner, J., Gilchrist, J., Beith, J., Girgis, A., Sharpe, L., Bell, M., Mihalopoulos, C.	Evaluation of a psychological and educational intervention for fear of cancer recurrence: A clustered randomised controlled trial	Cancer Australia Beyond Blue ID:1022584	\$496,702	2012-2014
Girgis, A., Lambert, S., Turner, J., McElduff, P., Kayser, K., Mihalopoulos, C.	Coping together: A randomised controlled trial of a self-directed coping skills intervention for patients with cancer and their partners	NHMRC ID: 1002715	\$739,087	2011-2014

## Publications

Ahire M, Sheridan J, Regbetz S, Stacey P & Scott JG. Back to basics: Informing the public of co-morbid physical health problems in those with mental illness. *Aust N Z J Psychiatry*. 2013; 47(2):177-184.

Alghowinem S, Goecke R, Wagner M, Parker G & Breakspear M. Head Pose and Movement Analysis as an Indicator of Depression Affective Computing and Intelligent Interaction (ACII), Humaine Association Conference. 2013: 283-288.

Aquino K, Robinson P, Schira M, Breakspear M. Spatiotemporal neural dynamics from fMRI: Deconvolution with a spatiotemporal HR. 2013; OHBM.

Betts KS, Williams GM, Najman JM, Scott JG, Alati R. The association between lower birth weight and comorbid generalised anxiety and major depressive disorder. *J Affect Disord*. 2013; 146(2): 231-237.

Boonstra TW, Powell TY, Mehrkanoon S, Breakspear M. Effects of mnemonic load on cortical activity during visual working memory: Linking ongoing brain activity with evoked responses. *International Journal of Psychophysiology*. 2013; 89 (3): 409-418.

Briffa D, Reedman R, Davidson F. The role of the clinical nurse specialist in deafness and mental health. *Australian College of Mental Health Nurses*. 2013; Winter.

Butow PN, Bell ML, Smith AB, Fardell JE, Thewes B, Turner J. et al., Conquer Fear: Protocol of a randomized controlled trial of a psychological intervention to reduce fear of cancer recurrence. *BMC Cancer*. 2013; 13:201.

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## Publications

- Cairns A, Dark F, Batts M. Implementing cognitive remediation therapy: lessons from two public mental health services. *Australasian Psychiatry*. 2013; 21(5):476-80. doi: 10.1177/1039856213497808.
- Capra C, Kavanagh DJ, Hides L, Scott JG. Brief screening for psychosis-like experiences. *Schizophrenia Research*. 2013; 149(1-3):104-107.
- Clubb B & Boon K. Drug Dependence/Addiction, Schizophrenia and Chronic Pain. *Drug and Alcohol Review* 2013; 32 (S1).
- Corry J, Green M, Roberts G, Frankland A, Wright A, Lau P, Loo C, Breakspear M, Mitchell PB. Anxiety, stress and perfectionism in bipolar disorder. *Journal of Affective Disorders*. 2013; 151 (3): 1016-1024.
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# Nursing and Midwifery



**Adj. Assoc. Prof. Lesley Fleming OAM**  
Executive Director,  
Nursing and Midwifery  
Services

## Overview

Nursing and Midwifery Services at RBWH governs 2752 nursing and midwifery staff. The Executive Director, Nursing and Midwifery Services Metro Hospital and Health Service and Director of Nursing and Midwifery Royal Brisbane and Women's Hospital and Service Line Nursing Directors comprise the RBWH Nursing and Midwifery Executive Council (NMEC). The Council provides service management and leadership for nurses and midwives across the RBWH by demonstrating accountability for standards of professional and clinical practice to positively influence the quality of care received by consumers and to optimise health care outcomes for the community. The key tenets of Nursing and Midwifery Services are care, and compassion for the consumer of our services. Nursing and Midwifery Services consistently demonstrate leadership through achieving optimal national and state performance measures.

The Nursing and Midwifery Council support the development of clinician research skills and as such have initiated four Research Councils to progress collaborative research studies with a number of Higher Education Partners to foster a culture of inquiry and evidence practice directed at improving patient outcomes and a research profile.

Professional development opportunities, facilitated supported workplace learning, innovative management practices and the application of evidence based research assist translate knowledge into practice. This intent is to prepare nurses and midwives for high level requisite professional, technical and operational skills required within a changing health system.

The specialist units within Nursing and Midwifery Services provide the central infrastructure to support nursing and midwifery across the facility, and maintain specific clinical services twenty four hours a day, seven days a week.

## Key departments

- » Patient Flow Unit
  - Community Interface Services
  - After-hours Hospital Management
  - Nursing Relief Pool
  - Patient Transport Unit
  - Operational Patient Flow Management Services,
  - Transit Care Centre (Transit Lounge Flex Bed Unit)
- » Workforce Planning Unit
- » Workforce Development Education Unit
- » Research and Development Unit

## Executive and directing staff

**Adj. Assoc. Prof. Lesley Fleming PhD OAM**  
Executive Director, Nursing and Midwifery Services

**Prof. Glenn Gardner**  
Director, Centre for Clinical Nursing

**Prof. Joan Webster**  
Nursing Director, Research

**Adj. Assoc. Prof. Robyn Fox PhD FCNA**  
Nursing and Midwifery Director, Education

**Anthony Nesbit**  
Nursing Director, Patient Flow Unit

**Ben Ballard**  
Assistant Nursing Director, Workforce Planning Unit

# Centre for Clinical Nursing



**Prof. Glenn Gardner**  
Director,  
Centre for Clinical Nursing

## Overview

The Centre for Clinical Nursing, which was established in 2003 in conjunction with the Queensland University of Technology, has a strong commitment to undergraduate and postgraduate education and to research. The team at the Centre for Clinical Nursing consists of a mix of education and research experts, and includes nurses who are leaders in their fields at state, national and international levels. The Centre for Clinical Nursing has two discrete units; the Workforce Development and Education Unit and the Research and Development Unit. The emphasis of the former is the maintenance of a highly skilled nursing workforce and on application of evidence based practice and the latter on the generation of new knowledge through original research and through systematically reviewing existing studies.

Our diverse research program is strengthened through our effective collaboration with the Queensland University of Technology, Griffith University and the University of Queensland. These collaborations have led to the establishment of Nursing Professorial Units in Cancer Care, Intensive Care and the Department of Renal Medicine and to the development of Honorary Research Fellow positions, which together, exponentially expands our ability to nurture early career researchers and to support higher degree students. An innovation in 2013 was the introduction of Honorary Educator Fellowship positions.

Our program of research has two major arms. The first has a strong focus on the effectiveness of nursing and midwifery interventions on patient outcomes; either through clinical trials or through the development of Cochrane systematic reviews. The second arm concentrates on health and nursing services and conducts epidemiological, basic and applied research into health service delivery models, testing service innovation and the investigation of advanced, practice nursing roles. Outcomes from these programs have impacted on the delivery of nursing and midwifery care nationally and internationally.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof Glenn Gardner	RN, PhD, FRCNA	Director, Centre for Clinical Nursing	health services research, acute care nursing, advanced practice nursing service
Prof Joan Webster	RN, BA	Nursing Director, Research	testing the effectiveness of healthcare interventions, evidence-based practice
Dr Carol Reid	RN, PhD	Nurse Researcher	effectiveness of nursing interventions, evidence based practice, nursing workforce, sexual health and HIV, alcohol and drug, community health
Nicole Marsh	RN BN	Senior Project Officer	testing the effectiveness of healthcare interventions, especially IV access related research.

## Supervised post-graduate students

Name	Current studies	Research topic
Gavin N	Masters of Advanced Practice (Health Care Research)	Peripheral venous dressings and securement devices for preventing intravenous complications
Marsh N	Masters of Advanced Practice (Health Care Research)	The effect of frequency of dressing changes for central venous access devices on the incidence of catheter-related infection

## Awards and achievements

Award	Event	Recipient
Distinguished Researcher Award	RBWH Symposium	Webster J
Encouragement Award	RBWH Symposium	Marsh N

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Chaboyer W, Bucknal T, <b>Webster J</b> , McInnes L, Banks M, Wallis M, Gillespie B, Whitty J, Thalib L, Cullum N	INTroducing A Care bundle To prevent pressure injury (the INTACT trial)	NHMRC	\$1,071,076	2013-2015
<b>Webster J</b> , Rickard C, Keogh S, Tuffaha H, Marsh N,	REplacing Peripheral intravenous Catheters (REPLACE study)	Griffith Health Institute Project Grant.	\$16,000	2013-2014
Rickard C, Fraser J, <b>Webster J</b> , Marshall A, Young J, Playford EG, McMillan D, McGrail m, Gowardman J, Thom O	Securing Arterial and Venous peripheral devices Effectively in hospitals: The SAVE Trial NHMRC \$969,024 (4 years)	NHMRC	\$969,024	2013-2016
Marsh N	Master degree of Health Research Scholarship	Griffith University	\$3,800	2013
S Keogh, J Flynn, <b>N Marsh</b> , N Higgins, K Davies, C Rickard.	A pilot study of a factorial, randomised trial of high vs low flushing frequencies and volumes.	Becton Dickinson Grant-in-aid NCREN Seed funding	\$53,000 \$15,000	2013-2014 2013-2014
<b>Reid C</b> , Fenech M, Daglish M, Jones L, Skoein R, Heyes L	Assessing alcohol use and a brief intervention for people with chronic viral hepatitis (B and C): A randomised controlled trial	Royal Brisbane and Women's Hospital Project Grant	\$25,000	2013
Williams N, <b>Reid C</b> , Williams L, Hamernik E, Bonner A	Motivational Interviewing for people with End Stage Kidney Disease (ESKD) undergoing dialysis at home to improve treatment adherence: a randomised controlled trial	RBWH Foundation Research Grant	\$28,000	2013
Kildea, S., Webster, J., Martensson, L., Stapleton, H., Homer, C., Beckmann, M.	Impact of caesarean section rates following injections of sterile water (ICARIS Trial)	NHMRC	\$456,760	2011-2013
Gardner, G., Gardner, A., Middleton, S., Considine, J., Hurst, C., Della, P., FitzGerald, G.	Prospective evaluation of the impact of the nurse practitioner role on emergency department service and patient outcomes	Australian Research Council Linkage Grant Partner Contribution	\$507,178 \$270,000	2011-2014
Gardner, A., Gardner, G., Coyer, F., Henderson, A., Gosby, H.	Educating for health service reforms: Clinical learning, governance and capability	Australian Research Council Discovery Grant	\$291,000	2012-2015
Gardner, A., Gardner, G., Henderson, A., Coyer, F., Gosby, H., Lenson, S.	Educating nurse practitioners: Advanced speciality competence, clinical learning and governance	Office for Learning and Teaching, Australian Government	\$220,000	2012-2014

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## Publications

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Almutairi A, **Gardner GE.** McCarthy AL. Practical guidance for the use of a pattern-matching technique in case-study research: a case presentation. *Nursing and Health Sciences*. 2013; Nov 20. doi: 10.1111/nhs.12096. [Epub ahead of print].

Almutairi AF, **Gardner GE,** McCarthy AL. Perceptions of clinical safety climate of the multicultural nursing workforce in Saudi Arabia: a cross-sectional survey. *Collegian*. 2013; 20(3):187-194.

**Booker C.** 2013. Nurse Leaders are the key to our looming workforce dilemma: Presentation: STTI 24th International Research Congress. Prague, Czech Republic. 22-26th July 2013.

**Booker C.** Poster displayed - ICN 25th Quadrennial Congress: Equity and Access to Health Care – 19th May 2013 (Melbourne).

Brown L, **Gardner GE,** Bonner A. A comparison of treatment options for management of end stage kidney disease in elderly patients: A systematic review protocol. *JBI Database of Systematic Reviews & Implementation*, 2013.

**Burridge C, Fox R. Bowen A.** Switching Focus-Enrolled Nurse Transition to Practice Presentation - ICN 25th Quadrennial Congress: Equity and Access to Health Care – 22nd May 2013 (Melbourne).

Chan R, **Webster J,** Chung B, Marquart L, Ahmed M, Garantziotis S. Prevention and treatment of acute radiation-induced skin reactions: a systematic review and meta-analysis of randomized controlled trials. *BMC Cancer*. 2013; 14 (53): 1-19 **JIF: 3.33.**

Chan R, **Webster J.** End-of-life care pathways for improving outcomes in caring for the dying. *Cochrane Database of Systematic Reviews* 2013; Issue 11. **JIF= 6.3.**

Foxcroft KF, Callaway LK, Byrne NM, **Webster J.** Development and validation of a pregnancy symptoms inventory. *BMC Pregnancy Childbirth*. 2013; Jan 16; 13(1):3. **JIP = 2.52.**

**Gardner GE,** Chang AM, Duffield C, Doubrovsky A. Delineating the practice profile of advanced practice nursing: a cross-sectional survey using the modified strong model of advanced practice. *Journal of Advanced Nursing*. 2013; 20-13 69(9):1931-1942.

**Gardner GE,** Gardner A, O'Connell J. Using the Donabedian framework to examine the quality and safety of nursing service innovation. *Journal Of Clinical Nursing* 2013; 23(1-2):145-155.

Jennings N, Mckeown E, O'Reilly G, **Gardner GE.** Evaluating patient presentations for care delivered by emergency nurse practitioners : a retrospective analysis of 12 months. *Australasian Emergency Nursing Journal*. 2013; 16(3):89-95.

Keogh S, Nelson EA, **Webster J,** Jolly J, Ullman AJ, Chaboyer WP. Hydrocolloid Dressings for treating pressure ulcers. *Cochrane Database Systematic Reviews*. 2013; Issue 2. **JIF= 6.3**

Lee N, Mårtensson LB, Homer C, **Webster J,** Gibbons K, Stapleton H, Dos Santos N, Beckmann M, Gao Y Kildea S. Impact on CAesarean section Rates following Injections of Sterile water (ICARIS): A multicentre randomised trial. *BMC Pregnancy and Childbirth*. 2013; 13:105. **JIP = 2.52**

**Marsh N.** Tissue Adhesive, Sutureless Securement Devices or Bordered Polyurethane for the securement and dressing of peripheral venous catheters – can we do better at preventing catheter failure? Association for Vascular Access (AVA) Conference 2013; (Tennessee, USA)

Moore Z, **Webster J.** Dressings and topical agents for preventing pressure ulcers. *Cochrane Database Systematic Reviews* 2013; Issue 8, **JIF= 6.3**

Rickard C, **Webster J,** Playford G. prevention of peripheral intravenous catheter-related bloodstream infections: the need for a new focus. *Med J Aust*. 2013; 198(10):519-20 **JIF = 3.320.**

Rickard C, Webster J, Playford G. Prevention of peripheral intravenous catheter-related bloodstream infections: the need for a new focus. *MJA*. 2013; 199(11):751-2.

Rickard C, **Webster J,** Playford G. Prevention of peripheral intravenous catheter-related bloodstream infections: the need for a new focus. *MJA*. 2013; 198(10):510-20 **JIP = 3.320.**

S Keogh, **N Marsh,** N Higgins, K Davies, C Rickard A time and motion study of peripheral venous catheter flushing practice using manual and prefilled flush syringes. *Journal of Infusion Nursing*. 2013; 37(2):96-101.

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Ullman AJ, Cooke M, Gillies DM, **Marsh N**, Daud A, McGrail M, O’Riordan E, Rickard CM. Optimal timing for intravascular administration set replacement (Review). Cochrane Database of Systematic Reviews. 2013; Issue 9. Sep 15;9: **JIF= 6.3**.

**Webster J**, (Invited speaker) Getting ready to present at the International Gynaecological Cancer Society Congress in 2014. Australian and New Zealand Gynaecological Cancer Conference. Gold Coast, March 2013

**Webster J**, Alghamdi A A. Use of plastic adhesive drapes during surgery for preventing surgical site infection (Update ) Cochrane Database Systematic Reviews, 2013; Issue 1 **JIF= 6.3**.

**Webster J**, Bell-Syer S, Foxlee R. Skin preparation with alcohol versus alcohol followed by any antiseptic for preventing bacteraemia or contamination of blood for transfusion. Cochrane Database of Systematic Reviews, 2013; Issue 1 **JIF= 6.3**.

**Webster J**, Bretherton F, Goulter N, Fawcett L. Does an educational intervention improve the usefulness of HoNOS in an acute mental health setting? International Journal of Mental Health Nursing. 2013; 22:322-8. **JIP = 1.07**.

**Webster J**, Flint AL. The use of the exit interview to reduce turnover amongst healthcare professionals. Cochrane Database of Systematic Reviews 2013; Issue 3. **JIF= 6.3**

**Webster J**, Osborne S, Gill R, Chow C, Wallin S, Jones L, Tang A. Does preoperative oral carbohydrate reduce hospital stay? A randomized trial. AORN J. 2014; Feb;99(2):233-42.

**Webster J**, Osborne S, Hall J, Rickard C. Clinically-indicated replacement versus routine replacement of peripheral venous catheters. Cochrane Database of Systematic Reviews, 2013; Issue 4, **JIF= 6.3**

**Webster J**, Mihala G. In intensive care and bone marrow transplant settings, daily bathing with chlorhexidine wash cloths reduces the risk of hospital-acquired infection. (Invited commentary) Evidence Based Nursing. 2013; May 25. [Epub ahead of print]

Zhang L, **Marsh N**, McGrail MR, Webster J, Playford EG, Rickard CM. assessing microbial colonization on peripheral intravenous catheters. J Infect. 2013 Oct;67(4):353-5. **JIF= 4.073**.

# Surgical and Perioperative Services



**Dr Barry O'Loughlin**  
Executive Director,  
Surgical and  
Perioperative Services



**Sue Cadigan**  
Nursing Director,  
Surgical and  
Perioperative Services

## Overview

Surgical and Perioperative Services incorporates all surgical specialities at the Royal Brisbane and Women's Hospital and includes inpatient, ambulatory and perioperative services. In July 2004 this was expanded to include the Department of Anaesthetics and Perioperative Medicine.

The service line is a busy and challenging area with increasing acuity and complexity. Innovations in technology and new procedures contribute to the challenges in terms of patient delivery and teaching and training.

The service line consists of approximately 220 inpatient beds in eight geographically separate areas, a perioperative service, an anaesthetic service and outpatient services. The perioperative service is responsible for approximately 18,000 surgical procedures per year, performed in 18 operating rooms.

A wide range of elective and emergency speciality surgery and other services are provided, including trauma, burns, organ retrieval, chronic pain management and an acute pain management service. The pre-admission service manages approximately 90 per cent of elective surgical patients for assessment, education and discharge planning by medical, anaesthetic and nursing staff about one week prior to admission.

## Key departments

- » Department of Anaesthetics and Perioperative Medicine
- » Department of Ear Nose and Throat Surgery
- » Department of General Surgery
- » Department of Neurosurgery
- » Department of Ophthalmology
- » Department of Oral and Maxillofacial Surgery
- » Department of Orthopaedic Surgery
- » Department of Plastics and Reconstructive Surgery
- » Professor Stuart Pegg Adult Burns Centre
- » Trauma Service
- » Department of Urology
- » Department of Vascular Surgery

## Executive and directing staff

**Dr Barry O'Loughlin** Executive Director  
Surgical and Perioperative Services; Director,  
General Surgery

**Sue Cadigan**  
Nursing Director, Surgical and Perioperative  
Services

**Assoc. Prof. Michael Steyn**  
Director, Anaesthetics and Perioperative  
Medicine

**Dr Sharon Kelly**  
Director, Ear Nose and Throat Surgery

**Dr Lindy Jeffree**  
Acting Director, Neurosurgery

**Dr John Harrison**  
Director, Ophthalmology

**Dr Martin Batstone**  
Acting Director, Oral and Maxillofacial Surgery

**Dr Sarah Watts**  
Director, Orthopaedic Surgery

**Dr Stuart Bade**  
Director, Plastics and Reconstructive Surgery

**Dr Michael Rudd OAM**  
Director, Professor Stuart Pegg Adult  
Burns Centre

**Assoc. Prof. Daryl Wall AM**  
Director, Trauma Service

**Dr Nigel Duglison**  
Director, Urology

**Professor Philip Walker**  
Professor of Clinical Surgery and Consultant  
Vascular Surgeon, Vascular Surgery

# Department of Anaesthetics and Perioperative Medicine



**Assoc. Prof. Michael Steyn**  
Director,  
Anaesthetics and  
Perioperative Medicine

## Overview

Our vision of academic and clinical excellence continues and significant achievements continue to be made. With our focus of research and quality, we have experienced significant growth in the last 5 years and continue to do so.

Professor André Van Zundert has joined the department in his role as Chairman of Anaesthetics, University of Queensland. He is also chair of BTCCRC (Burns, Trauma, and Critical Care Research Centre).

Professor Van Zundert's key area of research focus is airway management including (videolaryngoscopy; laryngeal masks), and regional anaesthesia (ultrasound-guided blocks) in his promotion of excellence in anaesthesia. His philosophy has an emphasis of hands on teaching and he is developing a Wiki-Anaesthesia website for accessible, up to date evidenced-based information which will be readily available for all practitioners.

Dr Susannah Sherlock joins the team this year bringing with her, expertise in the sub-specialty area of hyperbaric medicine. Her research concentrates on pre hospital airway management, education and the use of hyperbaric oxygen therapy in soft tissue radiation injury.

Dr David Belavy continues his research in regional anaesthesia with investigation of neurotoxicity of ultrasound gels.

Dr Adrian Chin and Dr Benjamin Crooke are investigating ultrasound-assisted neuraxial anaesthesia for Caesarean section.

Dr Rajesh Brijball continues with his obesity research in conjunction with Dr Victoria Eley. Dr Eley is also developing an obstetric database for audit purposes.

Dr Genevieve Goulding continues in her role as Deputy Director of Quality and Safety.

Our Airway Workshop Course run by Dr Linda Beckmann and Dr Hau Tan continues to be nationally recognised.

Dr Martin Culwick continues to run and develop the ANZCA web-based incident monitoring program, WebAirs.

Dr Kersi Taraporewalla works extensively with Simulation and Skills Development Centre Courses at RBWH.

Our research nurse Heather Reynolds has submitted her PhD.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof André Van Zundert	MD, PhD, FRCA, EDRA, FANZCA	Chairman of Anaesthesiology, University of Queensland, Senior Staff Specialist	airway management, regional anaesthesia, research and teaching
Assoc Prof Michael Steyn	MBChB, DRCOG, MRCGP, FFARCSI, FANZCA, MSc	Director, Anaesthetics and Perioperative Medicine	anaesthesia, perioperative medicine
Assoc Prof Kersi Taraporewalla	MBBS, FANZCA, MClinEd, Cert IV in TAA	Director, Teaching and Research	education, safety
Dr Genevieve Goulding	MBBS, FFARACS, FANZCA	Deputy Director of Quality	quality and safety
Dr Paul Gray	MBBS, PhD, FANZCA, FFPANZCA	Senior Staff Specialist	pain medicine pain of burn injury regional analgesia

## Research staff

Name	Qualifications	Position	Interests/specialities
Heather Reynolds	BA, BHlthSc (Nurs), MN, MAP (Health Care Research), CertTeach, CertCCN, CertAN, MRCNA, PhD Candidate	Research Assistant	arterial catheters
Dr Linda Beckmann	MBBS, FANZCA	Staff Specialist	difficult airway management
Dr David Belavy	BMedSc, MBBS, FANZCA	Staff Specialist	regional anaesthesia
Dr Rajesh Brijball	MBChB, FCASA, FANZCA, DipAnaes (SA)	Senior Staff Specialist	snoring, obesity studies, respiratory obstruction
Dr Adrian Chin	MBBS, FANZCA	Staff Specialist	regional anaesthesia
Dr Victoria Eley	MBBS, FANZCA	Staff Specialist	difficult airway management, obstetric anaesthesia
Dr Marc Maguire	MBBS, FANZCA	Staff Specialist	trauma, emergency surgery and blood transfusion
Dr Susannah Sherlock	BSc, MBBS, FANZCA	Staff Specialist	pre hospital airway management, education and the use of hyperbaric oxygen
Dr Hau Tan	MBBS, FANZCA	Staff Specialist	difficult airway management

## Supervised post-graduate students

Name	Current studies	Research topic
Siti Sarah Fazalul Rahiman	PhD – School of Pharmacy, University of Queensland	The potential role of dyn a (1-17) fragments as an immunotherapeutic target in peripheral inflammation
Dr Ralph Maussen	PhD	Videolaryngoscopy
Dr Ir Reuben Lee	PhD	Improving technology in Anaesthesia
Heather Reynolds	PhD	Dressing and securement of arterial catheters

## Awards and achievements

Award	Event	Recipient
Honorary Member	Dutch Society of Anesthesiology	Prof André Van Zundert
BBraun Award for Outstanding Merit in the Training of Regional Anaesthesia	Glasgow UK	Prof André Van Zundert
Best Poster	2013. Aust Soc of Perianaesthesia and Anaesthesia Nurses' Annual Conference.	Heather Reynolds

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Maguire M, Reade M, Tetsworth, K,	Thrombelastographic evaluation of coagulation changes in orthopaedic reaming	Royal Brisbane and Women's Hospital Project Grant	\$36,000	2013
Zhang Prof Y, Yi A/Prof X, He J, Pang C, Steyn A/Prof	Real-time and self-adaptive stream data analyser for intensive care management	2010 ARC Linkage Projects Scheme	\$115,000	2012-2013
Rickard C, Webster J, Marsh N, Reynolds H	Securing Arterial and Venous devices Effectively in hospitals: the SAVE trial: pilot study	Griffith Health Institute Project Grant	\$14,000	2011-2013

## Publications

### Journals

Baker J, Janda M, Belavy D, Obermair A. Differences in epidural and analgesic use in patients with apparent stage 1 endometrial cancer treated by open versus laparoscopic surgery: Results from the randomised LACE trial. *Minimally Invasive Surgery*. 2013; <http://dx.doi.org/10.1155/2013/764329>. Open access.

Belavy D, Janda M, Baker J, Obermair A. Epidural analgesia is associated with an increased incidence of postoperative complications in patients requiring an abdominal hysterectomy for early state endometrial cancer. *Gynecologic Oncology*. 2013; <http://dx.doi.org/10.1016/j.ygyno.2013.08.027>. In press.

Evans JA, Wallis SC, Dulhunty JM, Pang G. *Anaesth Intensive Care*. 2013; 41(5):1-5.

Huang G, Zhang Y, Cao J, Steyn M, Taraporewalla K. Online mining abnormal period patterns from multiple medical sensor data streams. 2013. World Wide Web DOI 10.1007/s11280-013-0103-y.

Huang G, Jing H, Cao J, Qiao Z, Steyn M, Taraporewalla K. A real-time abnormality detection system for intensive care management. 2013. ICDE Conference.

Higgins N, Taraporewalla K, Edirippulige S, Ware RS, Steyn M, Watson MO. Educational support for specialist international medical graduates in anaesthesia. *MJA* 2013; 199(4):272-274.

Janovic D, Peng P, Van Zundert A. Brief review: Piriformis syndrome: etiology, diagnosis, and management. *Can J Anaesth*. 2013; 60:1003-1012.

Reynolds H, Dulhunty J, Taraporewalla K, Tower M, Rickard CM. A snapshot of guideline compliance reveals room for improvement: A survey of peripheral arterial catheter practices in Australian operating theatres. *Journal of Advanced Nursing*. 2013; 69(7):1584-1594. doi:10.1111/jan.12018.

Van Zundert AA, Wildsmith JA. The European Society of Regional Anaesthesia and Pain Therapy (1982-2012): 30 years strong. *Reg Anesth Pain Med*. 2013; 38:436-41.

Van Zundert AA, Reina MA, Lee RA. Prevention of post-dural puncture headache (PDPH) in parturients. Contributions from experimental research. *Acta Anaesthesiol Scand*. 2013; 57:947-9.

Van Zundert TC, Van Zundert AA. Tracheal intubation of patients in non-standard positions requires training. *Minerva Anesthesiol*. 2013; 79:679-82.

Van Zundert TC, Wong DT, Van Zundert AA. The LMA-Supreme™ as an intubation conduit in patients with known difficult airways: a prospective evaluation study. *Acta Anaesthesiol Scand*. 2013; 57:77-81.

Van Zundert A, Pieters B, Doerges V, Gatt S. Videolaryngoscopy allows a better view of the pharynx and larynx than classic laryngoscopy. *Br J Anaesth*. 2012; 109:1014-15.

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## Publications

Verelst PL, Van Zundert AA. Use of the EZ-Blocker for lung separation. J Clin Anesth. 2013; 25:161-2.

Verelst P, Van Zundert A. Respiratory impact of analgesic strategies for shoulder surgery. Reg Anesth Pain Med. 2013; 38:50-3.

### **Book Reviews**

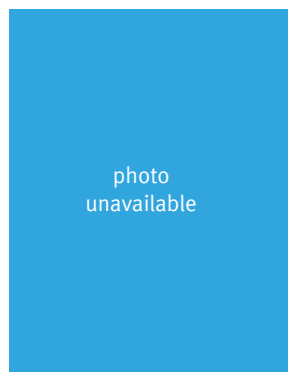
Hendrickx J, Van Zundert A, de Wolf A. Applied pharmacology of Inhaled Anaesthetics. In: Hardman, Hopkins, Struys M. Oxford Textbook of Anaesthesia. Oxford University Press, Oxford, New York, 2013.

### **Book Chapters**

Pieters BMA, Snijdelaar DG, Van Zundert AAJ, Eindhoven GB. Een mooie, nieuwe videolaryngoscoop, In: probleemgeoriënteerd denken in het luchtwegmanagement. Snijdelaar DG, Eindhoven GB (eds), de Tijdstroom 2013; 131-141.

Van Zundert AAJ. Acute postoperatieve pijnbestrijding. In: Hennis PJ, Van Dongen HPA, Van Klei WA. (editors). Leerboek anesthesiologie. 3e druk Bohn Stafleu Van Loghum, Houten, The Netherlands, 2013; 561-571.

## Department of Ear Nose and Throat Surgery



**Dr Sharon Kelly**  
Director,  
Ear Nose and Throat Surgery

### Overview

The Department of Ear Nose and Throat Surgery continues to promote research particularly in head and neck surgery.

Senior researchers have several papers in press and are involved in ongoing research in relation to early diagnosis tools.

### Research staff

Name	Qualifications	Position	Interests/specialities
Maurice Stevens	MBBS, FRACS	Consultant Surgeon	head and neck surgery
Dr Robert Hodge	MBBS, FRCS, FRACS	Consultant Surgeon; Senior Lecturer, UQCCR	head and neck surgery

## Department of General Surgery



**Dr Barry O'Loughlin**  
Executive Director,  
Surgical and  
Perioperative Services

### Overview

The Department of General Surgery is composed of five units:

- Breast/endocrine
- Laparoscopic/hepato-biliary-pancreatic
- Colorectal
- Upper GI
- Acute services.

The units provide tertiary level services in most aspects of their specialty and general surgery for the whole of the Royal Brisbane and Women's Hospital and is a major referral area for Queensland.

### Research staff

Name	Qualifications	Position	Interests/specialities
Owen Ung	MBBS, FRACS	Director, Centre for Breast Health, Head Breast Endocrine Unit	breast and endocrine surgery

# Department of Neurosurgery



**Dr Lindy Jeffree**  
Acting Director,  
Neurosurgery

## Overview

The clear focus of the neurosurgical department is on excellence in care of patients with neurosurgical conditions. The departmentally initiated research is therefore directed towards improving patient care. Several new projects have been commenced, such as a teaching project to bring peritoneal shunt insertion into the 21st century, and a project to use modern imaging techniques to improve skull reconstruction after tumour surgery.

As surgeons, our best contribution to basic research is often through collaboration with laboratory scientists to provide a clinical perspective on translational research. To this end, the Kenneth G. Jamieson Department of Neurosurgery had continued a number of productive collaborations providing tumour tissue to relevant laboratories, as well as commencing several new projects, including a new collaboration with Motor Neuron Disease specialists at RBWH and UQ.

In addition, we have a mandate to involve junior medical staff in clinical research and several resident medical officers have submitted ethics applications or achieved publication in 2013.

### On going Collaborations:

- Australian Genomics and Clinical Outcomes of Glioma (AGOG-Epi). Cancer Council Victoria & University of New South Wales, University of Western Australia  
R. L. Jeffree  
Involvement: Advisory Committee member; Associate Investigator; Recruitment of local patients.
- Biomedical imaging group. Australian e-Health Research Centre, CSIRO.  
C. Winter, R. L. Jeffree  
Involvement: Patient recruitment. Clinical input into translational research.
- Blood-Brain Barrier dysfunction following Traumatic Brain Injury: correlation of Ktrans (DCE-MRI) and SUVR (99mTc-DTPA SPECT) but not serum S100B.  
C. Winter et al  
Involvement: Principal researcher
- Brain Cancer Research Group, Prof Andrew Boyd, QIMR.  
S. Campbell, W. Findlay, G. Tolleson, C. Winter, R. L. Jeffree  
Involvement: Supply of clinical tissue and data.
- Breast Cancer Research Group, Prof Sunil Lakani, UQCCR.  
R. L. Jeffree  
Involvement: Supply of clinical tissue and data. Clinical input into translational research.
- CATNON Phase III international clinical trial.  
R. L. Jeffree  
Involvement: Member of Australian Trial Committee, Recruitment of local patients

### Research projects commenced in 2013:

- An audit of ALA fluorescence guided surgery for high grade glioma (HREC/12/ QRBW/302)  
R. L. Jeffree & M. J. Colditz
- CT / MRI fusion for image guided resection and reconstruction for spheno-orbital meningiomas.  
C. Winter et al
- A project for teaching neurosurgical registrars laparoscopic insertion of the peritoneal catheter of a ventriculoperitoneal shunt (HREC/13/QRBW/196)  
R. L. Jeffree, J. Brandenburg, L. K. Nathanson, B. Green.
- A pilot study of the role of valproate in the treatment of high grade glioma (HREC/12/ QRBW/337)  
J. Martin, M. Fay, C. Winter, R. L. Jeffree et al
- Structural and molecular analyses of muscle and neuromuscular junctions in patients with motor neuron disease (MND), to identify early abnormalities and markers for disease progression.  
R. Henderson, P. Noakes, P. McCombe, R. L. Jeffree et al.

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## Publication

### **Kenneth G. Jamieson Department of Neurosurgery**

Colditz M, Winter C. Delayed intra-tumoural haemorrhage in pineal germinoma: Case report and review. *World Journal of Neuroscience*. 2013; 3(3):186-189.

Day BW, Stringer BW, Wilson J, Jeffree RL, Jamieson PR, Ensbey KS, Bruce ZC, Inglis P, Allan S, Winter C, Tolleson G, Campbell S, Lucas P, Findlay W, Kadrian D, Johnson D, Robertson T, Johns TG, Bartlett PF, Osborne GW, Boyd AW. Glioma surgical aspirate: a viable source of tumor tissue for experimental research. *Cancers (Basel)* 2013; 5:357-71.

Colditz M, Winter C. Delayed intra-tumoural haemorrhage in pineal germinoma: Case report and review. *World Journal of Neuroscience*. 2013; 3(3):186-189.

Jeffree RL. An evaluation of websites to help neurosurgical trainees learn histopathology. *Br J Neurosurg*. 2013; 27(5):595-598.

Lamprell L, Johnson DG. Acute onset of lower limb weakness, sphincter dysfunction and sensory disturbance in an older woman. *Medical Journal of Australia*. 2013; 199(6):427.

Russell J H, Kelson N, Barry M, Pearcy M, Fletcher DF, Winter CD. Computational fluid dynamic analysis of intracranial aneurysmal bleb formation *Neurosurgery*. 2013; 73(6):1061-8; discussion 1068-9.

Toalster N, Jeffree RL. Conjunctival oedema as a potential objective sign of intracranial hypertension: a short illustrated review and three case reports. *Acta Neurochir (Wien)*. 2013; 155(11):2159-63.

Winter CD, Clough GF, Pringle AK, Church MK. Outcome following severe traumatic brain injury TBI correlates with serum S100B but not brain extracellular fluid S100B: An intracerebral microdialysis study. *World Journal of Neuroscience*. 2013; 3(2): 93-99.

# Department of Ophthalmology



**Dr John Harrison**  
Director,  
Ophthalmology

## Overview

The Department of Ophthalmology is a very busy outpatients department consisting of ten Visiting Medical Officers (VMOs), one part-time Staff Specialist, three Registrars, one Senior Registrar and two Resident Medical Officers (RMOs) in the Eye Casualty Department.

The Outpatient Department specialises in cataract surgery, retinal eye diseases, cornea, glaucoma, uveitis, neuro ophthalmology, orbital and oculo plastics, general ophthalmology and eye casualty.

The department is involved in teaching undergraduate students, RMOs and Registrars.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr John Harrison	MBBS (UQ), FRANZCO, FRACS	Director Ophthalmology	neuro-ophthalmology
Assoc. Prof. Lawrence Lee	MBBS, FRACS, FRANZCO	Staff Specialist	medical and surgical retinal disease
Prof. Tim Sullivan	FRANZCO, FRACS, FRCOphth	Professor of Eyelid, Lacrimal and Orbital Disease	lid study/thyroid eye disease

# Department of Oral and Maxillofacial Surgery



**Dr Martin Batstone**

Acting Director,  
Department of Oral and  
Maxillofacial Surgery

## Overview

The Oral and Maxillofacial Surgery Unit provides the following specialist clinical services:

- Maxillofacial Trauma Management
- Maxillofacial Cancer Surgery
- Maxillofacial Reconstructive Surgery and Rehabilitation
- Oral and Maxillofacial Implantation and bone anchored prosthetic reconstruction and rehabilitation for oncology cases and wider application.
- Management of Temporo-mandibular Joint Pathology and Surgery
- Dentoalveolar Surgery (impacted teeth, bony cysts etc)
- Management of non malignant pathology of the jaws (benign)
- Management of salivary gland pathology in the maxillofacial region
- Oral medicine and rehabilitation
- Ocularist (conjoint with Ophthalmology services) and facial prosthetics
- Facial deformity surgery

Research interests within the unit cover the whole range of services offered. Specific interests include the establishment of a statewide trauma database with research into facial trauma epidemiology and the development of biomaterials and tissue engineering. The management of head and neck cancer including reconstructive surgery and associated donor site morbidity has become a focus of the unit over recent years. The Consultants within the unit are frequently asked to lecture both locally, nationally and internationally. Collaborations exist between the unit and the following research centres:

- The University of Queensland
- UQCCR

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Martin Batstone	MBBS, BDSc(Hons) MPhil (Surg), FRACDS (OMS), FRCS (OMFS)	A/Director	Head and neck oncology surgery and reconstruction
Dr Caroline Acton	BDS, FDSRCS (Eng), MDSc (Oral Surg), FRACDS (OMS)	Visiting Medical Officer	Maxillofacial oncology
Dr Geoff Findlay	BDSc (Hons), MBBS, FRACDS (OMS)	Staff Specialist	Maxillofacial surgery
Dr Edward Hsu	BDSc (Hons), MBBS, FRACDS (OMS)	Staff Specialist	Maxillofacial surgery
A/Prof Anthony Lynham	BMed (Hons) FRCS (Ed)	Visiting Medical Officer	Maxillofacial trauma and reconstructive surgery
Professor Frank Monsour,	AM, RFD, FRACDS, PhD, MDSc, BDSc (Hons)	Senior Staff Specialist	Maxillofacial trauma and reconstructive surgery
A/Prof Neil Savage	MDSc, PhD, FFOP(RCPA), FICD	Oral Pathologist/Consultant	Oral medicine and pathology
Dr Justin Collum	MBBS, BDSc	Registrar	
Dr Richard Harris	MBBS, BDSc	Registrar	
Dr Trent Lincoln (Feb - July)	MBBS, BDSc	Registrar	
Dr Zeb McNamara (Aug – Jan 14)	MBBS, BDSc	Registrar	

## Supervised post-graduate students

Name	Current studies	Research topic
Crombie, A.	Masters of Philosophy	Chemoradiotherapy for oral cavity cancer. Supervisor Dr M Batstone.
Hurrell, M.	Masters of Philosophy	Treatment delay in facial trauma Supervisor Dr M Batstone
Beech, N.	Masters of Philosophy	Dental extractions in the head and neck cancer patient. Supervisor Dr M Batstone
Jones, B.	Master of Biomechanical Engineering	Regeneration of critical sized bony defects in a sheep model. Supervisor A/Prof A Lynham
Brierly, G	Master of Biomechanical Engineering	A novel approach in prevention of BRONJ using a polycaprolactone scaffold and bone morphogenetic protein in a rat model. Supervisor A/Prof A Lynham

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Jones, B Lynham, A	Regeneration of critical sized bony defects in a sheep model	AO Stryker	\$60,000 \$10,000	2013 2013
Farah, C., Batstone, M.	Oral cavity cancer and precancer.	Queensland Government smart futures program	\$1,500,000	2011-2014
Warnke PH	Multi-Layered tissue engineering and nano-technology for stem cell delivery in degenerative diseases	Clem Jones Estate	\$3 million	2011-2015

## Publications

Batstone MD, Fox CM, Dingley ME, Cornelius CP. Cosmetic tattooing of free flaps following head and neck reconstruction. J CranioMaxFac Trauma and Recon. 2013; Mar;6(1):61-64.

Borgna S, Klein K, Harvey L, Batstone MD. Factors affecting return to work following facial trauma. Plastic and Reconstructive Surgery. 2013; Dec;132(6):1525-1530.

Collum J, Jones RH, Lynham A, Hirst J. Leontiasis ossea: a presentation of hyperparathyroidism in an indigenous Australian man secondary to chronic renal failure. J Oral Maxillofac Surg. 2013; Jan;71(1):56-61.

Johnson NR, Batstone MD, Savage NW. Management and recurrence of Keratocystic odontogenic tumor: A Review. Oral Surg, Oral Med, Oral Path, Oral Radiol. 2013; Oct;116(4):e271-6.

Johnson NR, Savage NW, Kazoullis S, Batstone MD. A prospective epidemiological study for odontogenic and non-odontogenic lesions of the maxilla and mandible in Queensland. Oral Surg, Oral Med, Oral Path, Oral Radiol. 2013; Apr; 115(4):515-522.

Jones RH, Findlay GJ. The management of benign salivary disease: a case series. Aust Dent J. 2013; Mar;58(1):112-6.

# Department of Orthopaedic Surgery

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**Dr Sarah Watts**  
Director,  
Orthopaedic Surgery

## Overview

The Department of Orthopaedic Surgery deals with all facets of orthopaedics. It comprises an orthopaedic outpatients clinic and two dedicated orthopaedic wards, as well as beds in the infectious diseases ward.

Unique facilities and services include:

- Tertiary referral service to Queensland and New South Wales
- The Centre for Trauma Management
- Reconstructive surgery and revision prosthetic surgery
- An orthopaedic service for haemophiliacs
- Subspeciality services, including hand surgery, upper limb surgery, knee surgery, spinal surgery, scoliosis surgery, foot surgery and a musculoskeletal service
- Professorial and associate positions with The University of Queensland (UQ)
- A complex total joint clinic
- A limb reconstruction clinic
- International trainee fellowship program management sponsored by Smith and Nephew.

Innovative clinical or management practises include:

- Expertise in use of Ilizarov method for trauma and elective surgery
- Fit for surgery initiative for elective surgery patients
- The Orthopaedic Transitional Care Program for streamlining of elective arthroplasty services
- Australian Orthopedic Association National Joint Replacement Registry participation
- Orthowave database of total joint surgery
- Scoliosis database management for RBWH and Royal Children's Hospital (RCH)
- Autologous cartilage implantation
- Orthopaedic elective case coordination and pre-admission assessment clinic
- Orthopaedic trauma case coordination
- Limb reconstruction service for RBWH and RCH
- Limb reconstruction coordinator role at RCH.

Key areas of interest for research in orthopaedics include fracture healing, joint replacement, venous thromboembolic events, tissue oxygenation, skin grafting, joint replacement, scoliosis, trauma, spinal trauma, fracture assessment and classification.

Department of Clinical Research Projects in the the Department of Orthopaedic Surgery include:

- Systematic review: Percutaneous anterior humeral Plating (Hohmann, E., Mehadrakumar, M., Miller, D., Tetsworth, K.)
- Case-match controlled series comparing percutaneous anterior humeral plating to: (a) IM nails, (b) ORIF and (c) closed treatment (Davies, G., Mehadrakumar, M., Hohmann, E., Navalgund, V., Sivanathlu, M., Tetsworth, K.)
- Using a medial gastrocnemius rotational myoplasty to reconstruct post-traumatic defects of the patellar tendon and extensor mechanism (Wansbrough, G., Senewiratne, S., Tetsworth, K.)
- Acute correction of very large rotational deformities (Thorsell, J., Tetsworth, K.)
- Reconstruction of chronic malunion/non-union of tibial plateau fractures (Birchely, A., Tetsworth, K.)
- Clinical investigations into the nature of intra-articular fractures:
  - Distribution of intra-articular fractures – the relationship of joint architecture to the observed pattern of injury (dome vs. vault) (Steer, R., Tetsworth, K.)
  - Opology and morphology of the articular surfaces of the talar dome (Banic, G., Tetsworth, K.)
  - Mapping osteochondral injuries of the talar dome associated with pilon fractures (Russell, G., Tetsworth, F., Tetsworth, K.)
- Staged reconstruction of chronic septic native joints using functional antibiotic spacers (Tetsworth, K.)
- Failed treatment of orthopaedic infections: Root cause analysis (Zirald, I., Tetsworth, K.)
- Management of open pelvis fractures and the associated traumatic wounds (Wullschlegger, M., Brown, J., Tetsworth, K.)
- Internal fixation of true head-splitting fractures of the proximal humerus (Rapisarda, A., Tetsworth, K.)
- Audit of acute orthopaedic clinical activity at a major metropolitan tertiary hospital: The burden of orthopaedic infection (D'Costa, E., Tetsworth, K.)
- Arthroscopic assisted reduction and percutaneous internal fixation of selected displaced calcaneus fractures (Sivakumar, B., Navalgund, V., Wong, P., Tetsworth, K.)

## Overview

- Precision step-cut technique for acute femoral shortening and lengthening (Cox, J., Tetsworth, K.)
- Survey of the distribution of deformity types in clinical practice: The prevalence of rotational deformity (Ram, R., Bhattarai, I., Tetsworth, K.)
- The burden of minor trauma cases in Queensland (Dallow, N., Lang, J., Lang, A., Tetsworth, K.)
- CROSSBAT (Harris, I., Mittal, R.)

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Sarah Watts	MBBS, FRACS	Director, Orthopaedic Surgery	orthopaedics, limb reconstruction
Prof. Kevin Tetsworth	MD, FRACS	Professor, Orthopaedic Surgery	orthopaedics, limb reconstruction
Dr Steven Yanng	MBChB, FRACS	Visiting Medical Officer, Orthopaedic Surgery	orthopaedics, spine
Dr Trevor Gervais	MBBS	Staff Surgeon	orthopaedics, upper limb
Dr Geoffrey Donald	MBBS, FRACS (Orth)	Director, Orthopaedic Surgery, Royal Children's Hospital	orthopaedics, limb reconstruction, paediatrics
Dr Brett Halliday	MBBS, FRACS (Orth)	Visiting Medical Officer	orthopaedics, limb reconstruction
Dr Paul Pincus	MBBS, FRACS (Orth)	Visiting Medical Officer	orthopaedics, limb reconstruction
Dr Michael Holt	MBBS, FRACS (Orth)	Staff Surgeon	orthopaedics
Dr Peter McCombe	MBBS, FRACS (Orth)	Visiting Medical Officer	orthopaedics, spine
Prof. Ian McPhee	MBBS, FRACS (Orth)	Visiting Medical Officer	orthopaedics, spine, scoliosis
Dr John Tuffley	MBBS, FRACS (Orth)	Visiting Medical Officer	orthopaedics, spine, scoliosis paediatrics
Dr Robert Labrom	MBBS, FRACS (Orth)	Visiting Medical Officer	orthopaedics, spine, scoliosis, paediatrics
Dr David Bade	MBBS	Registrar	orthopaedics
Dr Shailendra Dass	MBBS	Registrar	orthopaedics
Dr Christopher Bell	MBBS	Senior House Officer	orthopaedics
Dr Hamish Gray	MBBS	Registrar	orthopaedics
Dr Brett Collins	MBBS	Registrar	orthopaedics
Dr Tony O'Neill	MBBS	Senior House Officer	orthopaedics
Dr Rohan Brunello	MBBS	Registrar	orthopaedics
Dr Daniel Bopf	MBBS	Senior House Officer	orthopaedics
Dr Catherine McDougall	MBBS	Senior House Officer	orthopaedics

# Department of Plastic and Reconstructive Surgery



**Dr Stuart Bade**

Director,  
Plastics and  
Reconstructive Surgery

## Overview

The Department of Plastic and Reconstructive Surgery at Royal Brisbane and Women's Hospital provides services across the breadth of the speciality, including:

- Skin cancer management
- Head and neck cancer management, including both extirpative and reconstructive surgery for advanced cutaneous and metastatic malignancy, salivary gland tumours and oropharyngeal malignancy
- Hand surgery
- Lower limb reconstruction
- Breast reconstruction
- Orthognathic surgery and secondary cleft lip and palate surgery
- Craniomaxillofacial trauma
- Burn surgery
- Microsurgery.

Particular areas of research include the management of skin cancer and head and neck malignancy, where the department plays an integral role in the multidisciplinary Head and Neck Clinic.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Stuart Bade	MBBS, FRACS	Director, Plastics and Reconstructive Surgery	head and neck surgery, microsurgery
Dr David Campbell	MBBS, FRACS	Visiting Medical Officer	breast reconstruction, laser
Dr Eddie Cheng	MBBS, FRACS	Visiting Medical Officer	head and neck surgery, breast reconstruction
Dr William Cockburn	MBBS, FRACS	Visiting Medical Officer	head and neck surgery
Dr Raymond Goh	MBBS, FRACS	Visiting Medical Officer	orthognathic surgery
Dr Vedella Hinckley	MBBS, FRACS	Visiting Medical Officer	head and neck surgery
Dr Atul Ingle	MBBS, FRACS	Staff Specialist	burns
Dr Shireen Senewiratne	MBBS, FRACS	Visiting Medical Officer	hand surgery, lower limb reconstruction, microsurgery
Dr Robert Waiwright	MBBS, FRACS	Visiting Medical Officer	skin cancer
Dr Matthew Potter	MBBS	Fellow	
Dr Andrew Castley	MBBS	Registrar	
Dr Ajay Chahaun	MBBS	Registrar	
Dr Marcia Mickelburgh	MBBS	Registrar	
Dr Amy O'Connor	MBBS	Registrar	
Dr Matthew Peters	MBBS	Registrar	
Dr Michael Wagels	MBBS	Registrar	

# Professor Stuart Pegg Adult Burns Centre



**Dr Michael Rudd OAM**

Director,  
Professor Stuart  
Pegg Adult Burns Centre

## Overview

Research within the Professor Stuart Pegg Adult Burns Centre occurs as part of The University of Queensland (UQ) Burns, Trauma and Critical Care Research Centre (BTCCRC).

## Research staff

Name	Qualifications	Position	Interests/ specialities
Dr Michael Rudd	MBBS, FRACS, PhD, BMed Sci	Director, Professor Stuart Pegg Adult Burns Centre; Staff Specialist	sepsis, burn pathophysiology and immunobiology
Assoc. Prof. Michael Muller	MBBS, FRACS, MMed Sci	Staff Specialist	physiologic response to burns/injury and its modulation
Dr Jason Miller	MBBS, FRACS	Staff Specialist	melanoma, sarcoma
Dr Jason Brown	MBBS, FRACS, BDS (Hons)	Staff Specialist	wound healing
Dr Keith Towsey	MBBS, FRACS	Staff Specialist	trauma, burns
Michelle Spermon	BOty	MSc Student	scar maturation modulation
Anita Plaza	BPhy	Senior Physiotherapist	exercise and metabolism following burn injuries
Brooke Hoskin	BPhy	Physiotherapist	investigation of modalities for improving compliance with physiotherapy
Brooke Hoskin	BSc, GradDip Nut Diet	Dietician	energy and nutritional requirements during recovery from burns
Teresa Matthews	AO	Database Manager	reducing hospital stay and rural support outpatient burns care
Allison Hill	RN	Registered Nurse	burn management
Lauren Moody	RN	Audit Manager	audit
Troy Davey	RN	Audit Manager	audit

## Supervised post-graduate students

Name	Current studies	Research topic
Spermon, M.	Masters	Scar maturation modulation

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## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Muller, M., Paratz, J., Roberts, J., Dhanani, J., Towsey, K., Younger, J.	Can adrenergic blockade improve outcome in burns?	RBWH	\$35,000	2010-2016
Brown, J., Muller, M., Miller, J., Towsey, K.	Measurement of skin donor site healing, with clinical assessment, high resolution ultra-sound and transepidermal water loss	Royal Brisbane and Women's Hospital Project Grant	\$28,000	2013

# Trauma Service



**Assoc. Prof. Daryl Wall AM**  
Director,  
Trauma Service

## Overview

The RBWH Trauma Service is staffed by nursing graduates who work as Trauma Nurse Coordinators.

Assistant Director of Nursing: Dale Dally-Watkins.

Surgeons: Associate Professor Cliff Pollard FRACS (previous Director); Associate Professor Daryl Wall AM, FRACS (Director, May 2012-current); Dr Keith Towsey FRACS; Dr Richard Bryant FRACS; Dr Michael Muller FRACS (Deputy Director); Dr Kong Goh (Rehabilitation Physician); Dr Fran Williamson FACEM (Emergency Physician); Dr Trent Lipp FACEM; Dr Nicholas Toalster MBBS; Dr Martin Wullschleger MBBS, MD, PhD, FMH, EBSQ; Dr Wim Ronsmans; Olivia Zheng (Statistician and Data Manager); Lisa Whittaker (Administration Coordinator).

All staff are committed to:

- Training
- Teaching
- Research
- Professional development
- System advancement
- Transformational negotiations.

Clinical research in 2012 was undertaken in the following aspects of trauma:

- Queensland Trauma Registry
- RBWH Trauma Registry
- Cardiac Trauma Outcomes
- Abdominal wall reconstruction after trauma
- Management of compound and severe pelvic fractures
- Management of extreme surgical emergencies in trauma (red blanket)
- Mucormycosis infections
- Eye injuries
- Missed injuries
- Ruptured diaphragms
- Inter hospital transfers PhD study
- Resuscitation
- Long term follow up of trauma
- Preventable injuries
- State wide trauma network.

## Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. Daryl Wall AM	AM FRACS	Director, Trauma Service	trauma
Dr Keith Towsey	FRACS	Staff Specialist	trauma
Dr Richard Bryant	FRACS	Staff Specialist	trauma
Dr Michael Muller	FRACS	Deputy Director	trauma
Dr Kong Goh		Staff Specialist	trauma
Dr Fran Williamson	FACEM	Staff Specialist	trauma
Dr Trent Lipp	FACEM	Trainee	trauma
Dr Nicholas Toalster	MBBS	Resident	trauma
Dr Martin Wullschleger	MBBS, MD, PhD FMH, EBSQ	Trauma Registrar	trauma system, abdomino-pelvic trauma, soft tissue/fracture healing
Dr Wim Ronsmans		Staff Specialist	trauma

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## Supervised post-graduate students

Name	Current studies	Research topic
Ronsmans, W.	MPhil	Tyranny of distance: Delays in transfer for trauma patients
Manoharan, B.	MPhil	Microenvironment analysis of soft tissue wound healing with microdialysis

# Department of Urology



**Dr Nigel Dungleison**  
Director,  
Urology

## Overview

Research in the Department of Urology in 2012 focussed largely on prostate cancer and was dominated by novel approaches to early detection and the randomised study of open and robotic prostatectomy. This important trial continued to progress satisfactorily through most of the year, albeit with a number of procedural delays due to multiple reasons.

The early detection research embraced a slight change in direction to include other approaches to improve further the good results obtained with mRNA profiling of ejaculate. Particular attention was directed to metabolic profiling with examination of multiple parameters concurrently through NMR spectroscopy of ejaculate and post-ejaculate urine via an active collaboration with Dr Horst Schirra at The University of Queensland's Centre for Advanced Imaging at St Lucia. The generous support of the RBWH Foundation is acknowledged for this work.

One of the highlights of the year was the awarding of an MPhil to Troy Gianduzzo by The University of Queensland for his excellent thesis 'Laser robotic-assisted laparoscopic prostatectomy'.

In terms of other publications, these included a number related to developments in robotic prostatectomy with one reporting the relationship of expertise in laparoscopic prostatectomy translated to robotic prostatectomy, another describing the methodology employed in the open and robotic prostatectomy trial and several others reporting on continuing refinements to the procedure of robotic prostatectomy.

The close ongoing association of departmental members with demographic and psycho-oncological research with colleagues at Cancer Council Queensland and Griffith University continues to be evident in the research projects and publications included in this report.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Nigel Dungleison	MB BS, FRACS	Director, Urology: Visiting Medical Officer	clinical trials
Dr Renee Stirling	BSc, PhD	Postdoctoral Research Officer	molecular biology
Dr Nigel Bennett	BSc, PhD	Postdoctoral Research Officer	data recording
Clement Chow	BSc	Research Assistant	molecular biology
Robyn Medcraft	RN	Research Coordinator	clinical Trials
Maddie Fowler		Research Assistant	clinical Trials
Prof. Frank Gardiner	MB BS, MD, FRCS, FRACS	University Medical Officer	tumour markers, clinical trials
Prof. Martin Lavin	BSc (Hons), PhD, FRAMI	University Academic Researcher	molecular biology
Dr Troy Gianduzzo	MB BS, MPhil, FRACS	Visiting Medical Officer	clinical trials
Dr Geoff Coughlin	MB BS, FRACS	Visiting Medical Officer	clinical trials
Dr John Yaxley	MB BS, FRACS	Visiting Medical Officer	clinical trials

## Supervised post-graduate students

Name	Current studies	Research topic
Roberts, M.	MPhil	Early detection of prostate cancer
Gianduzzo, T.	MPhil	Laser robotic-assisted laparoscopic prostatectomy

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Chambers, S.K., Smith, D., Berry, M., Lepore, S., Foley, E., Occhipinti, S., Frydenberg, M., Gardiner, R.A.	A randomised trial of a mindfulness intervention for men with advanced prostate cancer	NHMRC	\$706,243	2012-2014
Hodges, P.W., Ashton-Miller, J.A., Christantinou, C.E., Gardiner, R.A., Coughlin, G.D., Sapsford, R.	Urinary continence and incontinence in men: New insights through new technologies	ARC	\$285,000	2010-2013
Gardiner, R.A., Chambers, S.K., Dungleison, N., Yaxley, J., Occhipinti, S., Carter, R., Williams, S., Lavin, M.F.	A randomised trial of robotic and open prostatectomy: Integrated multidisciplinary studies to guide patient management	Cancer Council Queensland Strategic Research Partnership Grant	\$1.25 million	2009-2014
Gianduzzo, T., Gardiner, R.A., Samaratunga, M.L.T.H., Chabert C.	The feasibility of a 532 nm laser surgery for unclamped partial nephrectomy and radical prostatectomy	American Medical Systems Research	\$355,000	2011-2016

## Publications

Al Olama AA, Kote-Jarai Z, Schumacher FR, Wiklund F, Berndt SI, Benlloch S, Giles GG, Severi G, Neal DE, Hamdy FC, Donovan JL, Hunter DJ, Henderson BE, Thun MJ, Gaziano M, Giovannucci EL, Siddiq A, Travis RC, Cox DG, Canzian F, Riboli E, Key TJ, Andriole G, Albanes D, Hayes RB, Schleutker J, Auvinen A, Tammela TLJ, Weischer M, Stanford JL, Ostrander EA, Cybulski C, Lubinski J, Thibodeau SN, LSchaid DJ, Sorensen KD, Batra J, Clements JA, Chambers S, Aitken J, Robert A, Gardiner RA, Christiane Maier C, Vogel W, Dörk T, Brenner H, Habuchi T, Ingles S, John EM, Dickinson JL, Cannon-Albright L, Teixeira MR, Kaneva R, Zhang H-W, Lu Y-J, Park JY, Cooney KA, Muir KR, Leongamornlert DA, Saunders E, Tymrakiewicz M, Mahmud N, Guy M, Govindasami K, O'Brien LT, Wilkinson RA, Hall AL, Sawyer EJ, Dadaev T, Morrison J, Dearnaley DP, Horwich A, Huddart RA, Khoo VS, Parker CC, Van As N, Woodhouse CJ, Thompson A, Dudderidge T, Ogden C, Cooper CS, Lophatonanon A, Southey ML, Hopper JL, English D, Virtamo J, Marchand LL, Campa D, Kaaks R, Lindstrom S, Diver WR, Gapstur S, Yeager M, Cox A, Stern MC, Corral R, Aly M, Isaacs W, Adolfsson J, Xu JF, Zheng SL, Wahlfors T, Taari K, Kujala P, Klarskov P, Nordestgaard BG, Røder MA, Frikk-Schmidt R, Bojesen SE, FitzGerald LM, Kolb S, Kwon EM, Karyadi DM, Orntoft TF, Borre M, Rinckeb A, Luedeke M, Herkommer K, Meyer A, Serth J, Marthick JR, Patterson B, Wokolorczyk D, Spurdle A, Lose F, McDonnell SK, Joshi AD, Shahabi A, Pinto P, Santos J, Ray A, Sellers TA, Lin H-Y, Stephenson RA, Teerlink C, Muller H, Rothenbacher D, Tsuchiya N, Narita S, Cao G-W, Slavov C, Mitev V, The UK Genetic Prostate Cancer Study Collaborators/British Association of Urological Surgeons' Section of Oncology, The UK ProtecT Study Collaborators, The Australian Prostate Cancer Bioresource, The PRACTICAL Consortium, Chanock S, Gronberg H, Haiman CA, Kraft P, Easton DF, Eeles RA. A meta-analysis of genome-wide association studies to identify prostate cancer susceptibility loci associated with aggressive and non-aggressive disease. *Hum Mol Genet.* 2013;22(2):408-415. [Epub 2012 Oct 12].

# Department of Vascular Surgery



**Prof. Philip Walker**

Professor of Clinical Surgery and Consultant Vascular Surgeon, Department of Vascular Surgery, RBWH

## Overview

During 2013, under the supervision of Professor Philip Walker, in cooperation with The University of Queensland (UQ), RBWH and with the assistance of a number of postgraduate research students, the Department of Vascular Surgery participated in a variety of research projects in the area of vascular disease.

Principal areas of research interest were aortic disease and peripheral arterial disease (PAD). Aortic research ranged from basic science investigation into the aetiology of aortic aneurysmal disease through to clinical trials exploring the use of medication to retard aneurysm growth and studies of devices for the endoluminal management of aortic pathology. PAD studies included investigation of angiogenesis and fatigue and blood flow in PAD.

Professor Walker is a chief investigator in the NHMRC National Centre of Research Excellence to Improve Management of Peripheral Arterial Disease (<http://ncre-pad.registry.org.au/about-ncre-pad>) and through this centre has significant research collaborations with Professor Jon Golledge's group at The James Cook University Vascular Biology Unit, Dr Chris Askew at the University of the Sunshine Coast, Professor Rob Fitridge at the University of Adelaide, Professor Bronwyn Kingwell at the Baker IDI Heart and Diabetes Research Institute in Melbourne and Professor Malcolm West's group at TPCH. These collaborations resulted in significant grant funding success in 2013, highlighted by NHMRC, BUPA Health Foundation, and QUT IHBI funding.

Research is carried out in the clinical research area in the Department of Vascular Surgery at RBWH and in The University of Queensland Centre for Clinical Research (UQCCR). Dr Brad Stefanovic completed his PhD at the University of Sunshine Coast, Faculty of Science, Health & Education with his thesis titled "Muscle fatigue in peripheral arterial disease: The roles of blood flow and muscle metabolism." Mr William Foot completed his MBBS Honours (Class I) project at the University of Queensland studying "Vascular surgery training in Australasia. Experience and competence in open surgical procedures in the endovascular era." Ms Beini Chen completed her MBBS Honours (Class I) project at the University of Queensland studying "Outcomes of small AAA under surveillance. Need for surgery, growth rates and cardiovascular events and correlations with differential white blood cell counts."

A number of publications reporting the Department members' work were concluded, highlighted by publications in JAMA: Ahimastos AA, Walker PJ, Askew C, Leicht A, Pappas E, Blombery P, Reid M, Golledge J, Kingwell BA. Effect of ramipril on walking times and quality of life among patients with peripheral artery disease and intermittent claudication: a randomized controlled trial. JAMA 2013;309(5):453-460 and a position statement on exercise prescription in PAD patients: Askew CD, Parmenter B, Leicht AS, Walker PJ, Golledge J. Exercise & Sports Science Australia (ESSA) position statement on exercise prescription for patients with peripheral arterial disease and intermittent claudication. J Sci Med Sport. 2013 Nov 11. pii: S1440-2440(13)00482-9. The Department had important presentations at the Australian and New Zealand Society of Vascular Surgery's annual national scientific meeting.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof. Philip Walker	MBBS, FRACS (Vasc)	Professor of Clinical Surgery and Head, Discipline of Surgery, UQ School of Medicine and Centre for Clinical Research; Consultant Vascular Surgeon, Department of Vascular Surgery, RBWH	Vascular surgery, aetiology and management of aortic aneurysmal disease, exercise physiology in peripheral arterial disease, vascular imaging, medical therapy for the vascular patient
Dr Brad Stefanovic	PhD, BSc Hon, BSc (Sport and Ex)		
Sr. Gillian Jagger	RN		
Sr. Julie Jenkins	RN		
Dr Jason Jenkins	MBBS, FRACS (Vasc)		

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Allan Kruger	MBBS, FRACS (Vasc)		
Dr Nicholas Boyne	MBBS, FRACS (Vasc)		
Dr Danella Favot	MBBS, FRACS (Vasc)		
Dr Simon Quinn	MBBS, FRACS (Vasc)		

## Supervised post-graduate students

Name	Current studies	Research topic
Stefanovic, Brad.	PhD. University of Sunshine Coast. Faculty of Science, Health & Education. (Awarded 2013)	Muscle fatigue in peripheral arterial disease: The roles of blood flow and muscle metabolism
Chen, Beini.	MBBS (Hons, Class 1) University of Queensland. (Awarded 2013)	Outcomes of small AAA under surveillance. Need for surgery, growth rates and cardiovascular events and correlations with differential white blood cell counts
Foot, William.	MBBS (Hons, Class 1) University of Queensland. (Awarded 2013)	Vascular surgery training in Australasia. Experience and competence in open surgical procedures in the endovascular era
Choong, Andrew.	PhD. University of Queensland.	An Investigation into the Endovascular Repair of Blunt Traumatic Thoracic Aortic Injuries.
Menses, Annelise.	PhD. University of the Sunshine Coast.	Exercise and muscle capillary growth in peripheral arterial diseases.
McRae, Prue.	MPhil. University of Queensland.	Identifying interdisciplinary care needs in older surgical patients
Iyer, Vikram.	MPhil. University of Queensland.	Coding and non-coding circulating RNAs associated with the presence and rapid expansion of abdominal aortic aneurysms.
McPhee, (Ian) Bruce	MPhil. University of Queensland.	The nature and effect of fretting corrosion of spinal implants.
Ho, Kelvin.	MBBS Honours. University of Queensland.	Median arcuate ligament syndrome.

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Golledge J, <b>Walker PJ</b> , Ahimastos A.	Fenofibrate in the management of AbdoMinal aortic aneurysm (FAME-2).	NHMRC CRE APP1000967	\$94,500	2013
Golledge, J., <b>Walker, P.J.</b> , Ahimastos, A., Muller, R.	Fenofibrate in the management of AbdoMinal aortic anEurysm (FAME)	NHMRC APP1020955	\$439,735	2012-2014
Golledge, J., Norman, P., Rush, C., <b>Walker, P.J.</b>	Interaction between parathyroid hormone, sclerostin and the wingless pathway in abdominal aortic aneurysm	NHMRC APP1021416	\$698,300	2012-2016
Golledge, J., Norman, P., <b>Walker, P.J.</b> , Ahimastos, A., Dalman, R	TElmisartan in the management of abDominal aortic aneurYsm (TEDY)	NHMRC APP1022752	\$1,105,893	2012-2016
Golledge, J., Rush, C., <b>Walker, P.J.</b> , Fitridge, R., Muller, R.	The role of the clotting cascade in aortic aneurysm and associated cardiovascular events	NHMRC 1003707	\$619,911	2011-2015

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Golledge, J., Kingwell, B., Ahimastos, A., <b>Walker, P.</b> , Norman, P., Tonkin, A., Reid, C., Bourke, B., Quigley, F.	National Small Abdominal Aortic Aneurysm Trial	BUPA Health Foundation Award	\$250,000	2011-2013
Askew, C.D., Golledge, J., <b>Walker, P.J.</b>	Muscle angiogenesis and exercise in peripheral arterial disease	NHMRC CRE in Peripheral Arterial Disease	\$30,000	2011-2013
Askew, C.D., Golledge, J., <b>Walker, P.J.</b>	Muscle angiogenesis and exercise in peripheral arterial disease	QUT Institute of Health and Biomedical Innovation	\$12,000	2011-2013
Golledge, J., Kingwell, B., Norman, P., Tonkin, A., Fitridge, R., Reid, C., <b>Walker, P.J.</b> , Hankey, G., Fletcher, J., Nelson, M.	National Centre of Research Excellence to improve management of Peripheral Arterial Disease	NHMRC Centre for Research Excellence APP1000967	\$2,499,250	2010-2014
Boyne, N., <b>Walker, P.J.</b> , Jenkins, J., Kruger, A.	ENGAGE: The Endurant Stent Graft Natural Selection Post-market Registry	Medtronic Bakken Research Center	€1700 per patient	2009-ongoing
Golledge, J., Norman, P., <b>Walker, P.J.</b> , Rush, C., Dalman, R., Ott, J.	Association between obesity, TGF $\beta$ , thrombospondin and small abdominal aortic aneurysm progression	Medtronic Bakken	\$487,500	2009-2013
Fitridge, R., Boulton, M., Golledge, J., Thompson, M., Madden, G., Barnes, M., <b>Walker, P.J.</b> (AI)	Evaluating a decision-making model for EVAR	Research Center	\$1,036,925	2009-2013

## Publications

Ahimastos AA, **Walker PJ**, Askew C, Leicht A, Pappas E, Blombery P, Reid M, Golledge J, Kingwell BA. Effect of ramipril on walking times and quality of life among patients with peripheral artery disease and intermittent claudication: a randomized controlled trial. *JAMA*. 2013; 309(5):453-460.

Askew CD, Parmenter B, Leicht AS, **Walker PJ**, Golledge J. Exercise & Sports Science Australia (ESSA) position statement on exercise prescription for patients with peripheral arterial disease and intermittent claudication. *J Sci Med Sport*. 2013; Nov 11. pii: S1440-2440(13)00482-9.

Au TB, Golledge J, **Walker PJ**, Haigh K, Nelson MR. Peripheral arterial disease: Diagnosis and management in general practice. *Australian Family Physician*. 2013; 42(6):397-400.

Brightwell RE, Choong AMTL, Barnett AG, **Walker PJ**. Changes in Environmental Temperature affect the risk of Abdominal Aortic Aneurysm Rupture. (Accepted ANZ J Surg. 2013; Oct ANZJS - ANS-2013-00458.R1 Article first published online: 2013; 26 NOV; DOI: 10.1111/ans.12446.)

Chen B, Jenkins J, Golledge J, **Walker PJ**. Association between neutrophil-lymphocyte ratio and outcome of small abdominal aortic aneurysms under surveillance. Abstracts ANZSVS Vascular 2013 Meeting. VA25 p37.

Choong A, Marjot J, Marjot T, Brightwell R, **Walker PJ**. Forecasting aortic aneurysm rupture – a systematic review of seasonal and atmospheric associations. Abstracts ANZSVS Vascular 2013 Meeting. VA53P p50.

Choong A, **Walker PJ**. Blunt traumatic thoracic aortic injury: time for a standardised grading system? Abstracts ANZSVS Vascular 2013 Meeting. VA42P p46.

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## Publications

Cronin O, Bradshaw B, Iyer V, Buttner P, **Walker PJ**, Golledge J. The association of visceral adiposity with cardiovascular events in patients with peripheral artery disease. *PLoS One*. 2013; Dec 27;8(12):e82350.

Cronin O, Morris DR, **Walker PJ**, Golledge J. The association of obesity with cardiovascular events in patients with peripheral artery disease. *Atherosclerosis*. 2013; 228(2): 316-323.

Cronin O, Morris DR, **Walker PJ**, Golledge J. The association of obesity with cardiovascular events in patients with peripheral artery disease. *Atherosclerosis*. 2013; 228:316-323.

Cronin O, **Walker PJ**, Golledge J. The Association of obesity with abdominal aortic aneurysm presence and growth. A systematic review. *Atherosclerosis*. 2013; Feb;226(2):321-7.

Foot W, Boyne N, Mitchell E, **Walker PJ**. Post-Training and Current Self-Reported Confidence for Open and Endovascular Surgery Amongst Australian Vascular Surgeons. Abstracts ANZSVS Vascular 2013 Meeting. VA61P p53.

Foot W, Boyne N, **Walker PJ**. Trends in Australian vascular surgery training in the endovascular era. Abstracts ANZSVS Vascular 2013 Meeting. VA15 p33.

Foster S, Campbell IS, **Walker PJ**. Postpartum ruptured splenic artery aneurysm treated by coil embolization. *Vascular Disease Management*. 2013; 10(5):89-91.

Haigh K, Bingley J, Golledge J, **Walker PJ**. Barriers to screening and diagnosis of peripheral artery disease by general practitioners in general practice in Queensland. *Vasc Med*. 2013; 18(6):325-30.

Haigh K, Bingley J, Golledge J, **Walker PJ**. Peripheral arterial disease - Screening in general practice. *Australian Family Physician*. 2013; 42(6):391-395.

Ho KKF, **Walker PJ**, Cavaye DM. A case of large recurrent perigraft seroma after axillobifemoral bypass. *EJVES Extra*. 2013; 26(1):e1-e3.

Hoier B, **Walker M**, Passos M, Walker PJ, Green A, Bangsbo J, Askew CD, Hellsten Y. Angiogenic response to passive movement and active exercise in individuals with peripheral arterial disease. *J Appl Physiol*. (1985). 2013; Dec;115(12):1777-87.

McRae P, Mudge A, Peel N, **Walker PJ**. Geriatric syndromes in older surgical patients – A literature review. *Journal of Frailty and Aging*. 2013; 2:205-210.

Wang Y, Krishna S, **Walker PJ**, Norman P, Golledge J. Transforming growth factor- $\beta$  and abdominal aortic aneurysms. *Cardiovasc Pathol*. 2013; 22(2):126-32.

# Women's and Newborn Services



**Richard Kennedy**  
Acting Executive Director,  
Women's and Newborn  
Services



**Tami Photinos**  
Nursing Director,  
Women's and Newborn  
Services

## Overview

Women's and Newborn Services offer a wide and diverse range of healthcare services to women and their babies in Queensland. Our dedicated team delivers a high standard of quality care to assist achieving the best and most positive outcome for you and your family. We remain a leading force in health promotion whilst continuing to provide specialist care in Maternity, Neonatology, Gynaecology and Cancer Services.

2013 was another challenging year as the need for services across all departments grows increasingly complex and demanding. Despite this, we continue to maintain an active interest in research activities as well as the provision of multiple education programs for undergraduate and postgraduate health service professionals. To that end we maintain a strong connection with local universities including The University of Queensland, Queensland University of Technology, James Cook University and Central Queensland University and the Royal Australian and New Zealand College of Obstetrics and Gynaecology (RANZCOG).

In 2013, we established the RANZCOG-ITP Research Committee. The RBWH RANZCOG ITP-Research Committee, a multidisciplinary panel of volunteers, with the prime focus on supporting the ITP-Registrars in securing their research requirements for the program, as well as promoting a research ethos amongst the ITP-Registrars and (junior) doctors in Women's Health.

## Key departments

- » Betty Byrne Henderson Women's Health Research Centre
- » Grantley Stable Neonatal Unit
- » Department of Gynaecology
- » Department of Maternity Services
- » Perinatal Research Centre
- » Queensland Centre for Gynaecological Cancer

## Executive and directing staff

**Richard Kennedy**  
Acting Executive Director, Women's and Newborn Services

**Tami Photinos**  
Nursing Director, Women's and Newborn Services

**Prof. Soo-Keat Khoo**  
Director, Betty Byrne Henderson Women's Health Research Centre

**Dr Owen Ung**  
Director, Centre for Breast Health

**Dr David Cartwright**  
Director, Neonatology

**Dr David Baartz**  
Clinical Director, Gynaecology

**Assoc. Prof. Rebecca Kimble**  
Clinical Director, Obstetric Services

**Prof. Paul Colditz**  
Director, Perinatal Research Centre

**Assoc. Prof. James Nicklin**  
Clinical Director, Gynaecological Oncology

# Betty Byrne Henderson Women's Health



**Prof. Soo-Keat Khoo**  
Director,  
Betty Byrne Henderson  
Women's Health Research  
Centre

## Overview

The Longitudinal assessment of Ageing in Women (LAW Study), initiated in 2001, as a multidisciplinary and longitudinal assessment of a cohort of women and followed for development of serious medical outcomes, is now completing 14 years.

To date, 369 of the original cohort (72%) are available for study. The master data-base is updated to analyse risk factors after recent outcomes data.

The satellite project (2013-2014) entitled 'The rate of change of arterial stiffness in women aged 40-80 over 10 years, and effects of hormonal changes', will be completed by end 2014.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof Soo-Keat Khoo	MBBS, MD, FRCOG, FRANZCOG	Director, Betty Byrne Henderson Women's Health Research Centre; Head, Obstetrics and Gynaecology, UQ	women's health
Dr Justin Oughton	MBBS	Betty Byrne Henderson Women's Health Research Centre; Registrar	imaging
A/Prof Sheila O'Neill	MB, ChB, BAO, PhD	Associate	women's health
Prof M O'Rourke	Professor Medicine	Associate	hypertension, arterial stiffness

## Supervised post-graduate students

Name	Current studies	Research topic
O'Neill, S.	PhD	Arterial stiffness during menopause transition and beyond: Assessment of hormonal and socio-demographic factors (completed 2013)
Oughton, J.	PhD	Relationship between hyper intensity lesions in the brain and central arterial stiffness in ageing women (in preparation)

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Khoo, SK	Extended LAW Study	Private	\$75,000	2011-2013
O'Neill, S, O'Rourke, M, Khoo, SK	Serial change of arterial stiffness	Private	\$200,000	2013-2014

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## Publications

O'Neill SM, Liu J, O'Rourke MF, Khoo SK. The menopausal transition does not appear to accelerate age-related increases in arterial stiffness. *Climacteric*. 2013; 16:62-69 .

Spooner D, Ho Yan Lo Ada, Khoo SK, O'Neill S, Pachana N. The relationship between hormone replacement therapy (HRT) and memory performance in women: Influences of HRT type and APOE  $\epsilon$ 4 allele status. *International Journal of Clinical Neurosciences & Mental Health*. Received: 10 Jun 2013; accepted: 25 Jul 2013; published 03 01 2014.

Spooner D, Lo AHY, Khoo SK, O'Neill S, Pachana NA. The relationship between hormone replacement therapy (HRT) and memory performance in women: Influences of HRT type and APOE  $\epsilon$  4 allele status. *International Journal of Clinical Neurosciences and Mental Health*. (accepted 05 12 2013) (in press).

# Grantley Stable Neonatal Unit



**Dr David Cartwright**  
Director,  
Neonatology

## Overview

The Grantley Stable Neonatal Unit (GSNU) at the Royal Brisbane and Women's Hospital is the tertiary referral neonatal centre for central Queensland, Brisbane to Rockhampton, specialising in the management of premature and sick babies. Its 30 intensive care beds make it the third largest intensive care nursery in Australia, and in addition there are 41 special care beds.

Admissions come mainly from the area outlined, but some are also received from southern and northern parts of Queensland, and from northern New South Wales. A retrieval service run by the unit assists in bringing outborn babies to Brisbane, transporting approximately 200 babies per year.

In 2013, there were seven full-time Neonatologists and one Visiting Medical Officer. There were two Nurse Unit Managers, two Clinical Nurse Consultants, two full-time Nurse Educators, approximately 200 Nurses (130 full-time equivalents), of whom 85 per cent hold neonatal certificates or transition, 14 registrars, two Senior House Officers and two interns.

The unit manages all varieties of neonatal problems, with only babies requiring cardiac surgery being transferred out. Close collaboration with surgeons and medical specialists of the Royal Children's Hospital (RCH), and cardiologists and cardiac surgeons from the Mater Children's (Queensland Paediatric Cardiac Service) enhances care provision to complex cases. Most surgical procedures are performed at the Royal Children's Hospital, with the babies being immediately transferred back to the GSNU for their post-operative care.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr David Cartwright	MBBS, BSc, FRACP	Director, Neonatology; Associate Professor, UQ	general neonatology, neonatal follow up, perinatal data systems. Infection
Dr Pieter Koorts	MBChB, FRACP	Deputy Director, Neonatology; Senior Staff Specialist; Senior Lecturer, UQ	milk banking, bedside echocardiography, nutrition
Dr Garry Inglis	MBBS, FRACP	Staff Specialist; Senior Lecturer, UQ	infection
Dr Donna Bostock	MBBS (Hons), BSc, FRACP	Staff Specialist; Senior Lecturer, UQ	neonatal simulation, general neonatology
Dr Adam Hoellering	MBBCh (Hons), BSc, FRACP	Staff Specialist; Senior Lecturer, UQ	general neonatology, haemodynamic support in the newborn, persistent patent ductus arteriosus, clinical applications of ultrasound in neonates
Dr Mark Davies	MBBS, DCH, PhD, FRACP	Staff Specialist Associate Professor, UQ	RACP advanced trainee research supervision, medical writing and editing
Dr Tim Donovan	MBBS, FRACP, MPH	Staff Specialist, Senior Lecturer, UQ	telehealth, infant nutrition, congenital anomalies
Dr Margo Pritchard	RN, RM, NNC, BA, PhD	Principal Clinical Trialist, Senior Lecturer, <u>Medicine, Health and Life Sciences</u> . Queen's University Belfast. UK	RCTs, high risk screening and surveillance

## Supervised post-graduate students

Name	Current studies	Research topic
Al-Theyab N	PhD UQ	Intake growth and body composition in preterm infants
Coe D	UQ Medical Student, Honours Project	Neonatal outcomes of extremely preterm birth occurring outside of a NICU

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Donovan T, Lingwood B.	Preterm Infant's Growth: When and why do the babies get fat?	Royal Brisbane and Women's Hospital Project Grant	\$38,000	2013
Pritchard MA, D Cartwright, M Delaney.	The Parent-Infant Relationships Screening Tool: for targeted delivery of early intervention. (Parent and Preterm Infant Relationship Study).	Royal Brisbane Women's Hospital Project Grant	\$22,000	2013
Colditz, P., Boyd, R., Sanders, M., Pritchard, M.A., Gray, P.	A randomised, controlled trial of enhanced parenting capacity to improve developmental outcomes in preterm infants	NHMRC 1024345 Project Grant	\$996,337	2012-2015

## Publications

Australia, and New Zealand Collaborative Groups. Oxygen Saturation and Outcomes in Preterm Infants, The BOOST II United Kingdom, N Engl J Med. 2013; 368:2094-2104 May 30, 2013 DOI: 10.1056/NEJMoa1302298.

Cumin M, Donovan T, Colditz P, Lingwood B. Body composition at 32-36 weeks corrected age in infants born before 32 weeks gestation. J Paediatrics and Child Health. 2013; 49 (Suppl. 2). 56.

Davies MW. (on behalf of Cochrane Clinical Answers Editors). What are the benefits and harms of oral prophylactic antifungal agents to prevent invasive fungal infection in very low birth weight infants? Cochrane Clinical Answers [online] 2013; DOI: 10.1002/cca.226. URL: <http://cochraneclinicalanswers.com/doi/10.1002/cca.226/full>.

Davies MW. (on behalf of Cochrane Clinical Answers Editors). What are the benefits and harms of systemic prophylactic antifungal agents to prevent invasive fungal infection in very low birth weight infants? Cochrane Clinical Answers [online] 2013; DOI: 10.1002/cca.256. URL: <http://cochraneclinicalanswers.com/doi/10.1002/cca.256/full>

Davies MW. (on behalf of Cochrane Clinical Answers Editors). What are the benefits and harms of intravenous immunoglobulin in preterm and/or low birth infants? Cochrane Clinical Answers [online] 2013; DOI: 10.1002/cca.182. URL: <http://cochraneclinicalanswers.com/doi/10.1002/cca.182/full>

Davies MW, Cartwright DW, Inglis GDT. editors. Pocket Neonatology. 3rd ed. Sydney: Elsevier Australia; 2013; App for iPhone/iPad: Version 1.0.0.

Davies MW, Dunster KR, Fraser JF, Colditz PB. Cerebral blood flow is not affected during perfluorocarbon dosing with volume-controlled ventilation. J Paediatr Child Health. 2013; 49(12):1010–1018.

Davies MW, Inglis GDT, Jardine LA, Koorts PJ. editors. Antenatal Consults: A Guide for Neonatologists and Paediatricians. Sydney: Elsevier Australia. 2013; (ISBN 978 0 7295 4108 4) [Highly Commended, Paediatrics category, 2013 BMA Medical Book Awards]

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## Publications

Davies MW. Commentary on 'Prophylactic phototherapy for preventing jaundice in preterm or low birth weight infants'. *Evid-Based Child Health*. 2013; 8:250–251.

Dodrill P, Walker-Smith K, Donovan T. The effect of non-standard teats on oral feeding in preterm infants *Cochrane Library (Protocol)*. 2013.

Endo T, Johnston T, Ellerington J, Donovan T. Gastroschisis in Queensland *StatBite*, Queensland Health. 2013; Oct.

Galvin IM, Steel A, Pinto R, Ferguson ND, Davies MW. Partial liquid ventilation for preventing death and morbidity in adults with acute lung injury and acute respiratory distress syndrome. *Cochrane Database Syst Rev*. 2013; Issue 7. Art. No.: CD003707. DOI: 10.1002/14651858.CD003707.pub3.

Gomes FP, Shaw PN, Whitfield K, Koorts PJ, Hewavitharana AK. Recent trends in the determination of vitamin D. *Bioanalysis*, 2013 Dec; 5(24) p 3063-3078.

Gunn DJ, Cartwright DW, Gole GJ. Prevalence and outcomes of laser treatment of aggressive posterior retinopathy of prematurity. *Clinical and Experimental Ophthalmology*. 2013; 12/2031, DOI:10.1111/ceo.1228.

Gunn DJ, Cartwright DW, Yuen SA, Gole GA. Treatment of retinopathy of prematurity in extremely premature infants over an 18-year period. *Clin Experiment Ophthalmol*. 2013; 41(2):159-66.

Hoellering AB, Koorts PJ, Cartwright DW and Davies MW. Determination of Umbilical Venous Catheter Tip Position With Radiograph. *Pediatric Critical Care Medicine*. 2013; 14: DOI: 10.1097/PCC.0b013e31829f5efa.

Hoellering AB, Koorts PK, Cartwright D, Davies MW. Determination of Umbilical venous catheter tip position with radiograph. *Pediatric Critical Care Medicine*. 2013; 14:1.

Kaushal A, McDonnell CG, Davies MW. Partial liquid ventilation for the prevention of mortality and morbidity in paediatric acute lung injury and acute respiratory distress syndrome. *Cochrane Database Syst Rev*. 2013; Issue 2. Art. No.: CD003845.

Manley B, Owen L, Doyle L, Andersen C, Cartwright D, Pritchard M, Donath S, Davis P. High-flow nasal cannulae vs. nasal CPAP for post-extubation respiratory support of very preterm infants: A multicenter, randomized non-inferiority trial. *N Engl J Med*. 2013;369:1425-33.

Manley BJ, Owen LS, Doyle LW, Anderson CC, Cartwright DW, Pritchard MA, Donath SM, David PG. High-Flow Nasal Cannulae in Very Preterm Infants after Extubation. *N Engl J Med*. 2013; 369:1425-33.

McLaughlin L, Inglis GDT, Hoellering AB, Davies MW. Relationship between blood culture collection method and proportion of contaminated cultures in neonates. *J Paediatr Child Health*. 2013; 49(2):105-108.

Parry M, Davies MW. The low birthweight, term infant and the need for admission to special care nurseries. *J Paediatr Child Health*. 2013; 49(12):1019–1024.

Pritchard AM, Colditz BP, Cartwright D, Gray HP, Tudehope D, Beller E. Risk determinants in early intervention use during the first postnatal year in children born very preterm. *BMC Pediatrics*. 2013; 13:201 DOI: 10.1186/1471-2431-13-201.

Pritchard MA, Colditz PB, Beller EM, Tudehope D, Gray P, Cartwright D. Preventive intervention use during the first year postnatal year in children born very preterm. *BMC Paediatrics*. 2013; 13:201. 1-5.

Pritchard MA, Kenner C. Review of Clinical Trials. *Newborn and Infant Nursing Reviews*. 2012; V 12, (3) 120-124.

Rajanayagam J, Coman D, Cartwright D, Lewindon PJ. Pediatric Acute Liver Failure: Etiology, Outcomes, and the role of serial PELD scores. *Pediatric Transplantation*. 2013; 17:362-368.

Stewart A, Inglis G, Jardine L, Koorts P, Davies MW. A randomised controlled trial of blended learning to improve the newborn examination

# Department of Gynaecology



**Dr David Baartz**  
Clinical Director,  
Gynaecology

## Overview

The Department of Gynaecology at RBWH continues to provide secondary, tertiary, and quaternary care in all disciplines of gynaecology including general gynaecology colposcopy, advanced laparoscopic surgery and endometriosis services, as well as acute and emergency care, prolapse and incontinence surgery.

A paediatric and adolescent gynaecology statewide service is provided by Associate Professor Rebecca Kimble to patients from Queensland and northern New South Wales. This multi-disciplinary service is supported by specialists from the Royal Children's Hospital and Dr David Baartz, Clinical Director, Department of Gynaecology.

Reproductive endocrinology and infertility is a division of the Department of Gynaecology. A fertility service is provided and includes investigations, medication and counselling, but does not include IVF / Assisted Reproductive Technology

Dr David Baartz is the Executive Officer of the Australasian International Society of the Study of Trophoblastic Diseases.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr David Baartz	MBBS, FRANZCOG	Clinical Director, Gynaecology Director, Qld Trophoblastic Centre	gynaecology, urogynaecology, gestational trophoblastic disease
Associate Professor Rebecca Kimble	MBBS, FRANZCOG, GradCert Training and Assessment (IPS), Certificate in Simulation Instruction (Harvard)	Clinical Director, Obstetric Services and State Paediatric and Adolescent Gynaecology Service, and Associate Professor, The University of Queensland (UQ) School of Medicine.	clinical governance, maternity emergencies in a simulated environment, adolescent gynaecology
Assoc Professor Mark Erian	LRCPLRCS, LRCPS, DOBstRCPI, MD (Univ Qld), FRANZCOG, FRCOG, FACOG, Grad Cert Education (Univ Qld)	Staff Specialist, Obstetrics and Gynaecology	gynaecological operative endoscopy, surgical gynaecology, high-risk obstetrics, medico-legal consultation
Dr Kar Hin Ooi	MBBS, MRCOG, FRANZCOG	Staff Specialist, Gynaecology	gynaecology, urogynaecology
Dr Akram Khalil	MBBS, DRACOG, FRANZCOG	Staff Specialist, Gynaecology	gynaecology, colposcopy, urogynaecology
Dr Yogesh Chadha	FRCOG, MSc, FRANZCOG	Staff Specialist, Obstetrics and Gynaecology and Senior Lecturer, UQ	perinatology, incontinence, medical audit, health services research
Dr Lee Minuzzo	MBBS, FRANZCOG, Grad Cert Education	Staff Specialist, Obstetrics and Gynaecology	general obstetrics and gynaecology
Dr Ken Law	MBBS Hons, FRANZCOG	Staff Specialist	gynaecology, laparoscopic surgery, endometriosis, myomectomy, minimally invasive gynaecology, electrosurgery
Dr Bart Schmidt	MBBS, FRANZCOG	Staff Specialist, Obstetrics and Gynaecology	general obstetrics and gynaecology
Dr Wai Lum Yip	MBBS, FRANZCOG	Staff Specialist, Obstetrics and Gynaecology	general obstetrics and gynaecology, medical education, high risk obstetrics
Associate Professor Anusch Yazdani	MBS (Hons), FRANZCOG, CREI	VMO Gynaecology	reproductive endocrinology and infertility
Associate Professor Christopher Maher	MBBS, FRANCOG	VMO Urogynaecology	urogynaecology
Dr Owen Ung	FRACS	Director, Centre for Breast Health	breast health

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Abbott, J., Ledger, W., Lyons, S., Law, K.	Bladder care following laparoscopy for benign non-hysterectomy gynaecological conditions: a randomised controlled trial	AGES Research Foundation	\$13,000	2013

## Publications

Barber MD, Maher C. Apical prolapse. *Int Urogynecol J*. 2013; 24(11):1815-33.

Barber MD, Maher C. Epidemiology and outcome assessment of pelvic organ prolapse. *Int Urogynecol J*. 2013; 24(11):1783-90.

Cheon C, Maher C. Economics of pelvic organ prolapse surgery. *Int Urogynecol J*. 2013; 24(11):1873-6.

Dietz V, Maher C. Pelvic organ prolapse and sexual function. *Int Urogynecol J*. 2013; 24(11):1853-7.

Gutman R, Maher C. Uterine-preserving POP surgery. *Int Urogynecol J*. 2013; 24(11):1803-13.

Haya N, Christopher M. Polypropylene Mesh for Pelvic Organ Prolapse Surgery. *Curr Obstet Gynecol Rep*. 2013; 2:129-38.

Haylen BT, Maher C, Deprest J. IUGA/ICS terminology and classification of complications of prosthesis and graft insertion-rereading will revalidate. *Am J Obstet Gynecol*. 2013; 208(1):e15.

Jones I, Crandon A, Sanday K. Sarcoma of the vulva. *Open J Obstet Gynecol*. 2013; 3:37-40.

Jones I, Crandon A, Sanday K. Squamous cell carcinoma of the vulva: A comparison between women aged 35 years or less and 90 years or more. *J Lower Genital Tract Disease*. 2013; 17:267-272.

Jones I, O'Connor, A. Non-obstetric vulvar trauma. *Emerg Med Australasia*. 2013; 25:36-39

Jones I. Could this vulval lump be malignant? A clinical case review. *Medicine Today*. 2013; 14:66-67.

Jones I. Non-obstetric vaginal trauma. *Open J Obstet Gynecol*. 2013; 3:21-23.

Karram M, Maher C. Surgery for posterior vaginal wall prolapse. *Int Urogynecol J*. 2013; 24(11):1835-41.

Law K.S.K. Lyons, S.D. Comparative studies of energy sources in gynecologic laparoscopy. *Journal Of Minimally Invasive Gynecology*, 2013; 20(3):308-318.

Law K.S.K., et al., A comparative study assessing the efficacy and acceptability of anorectal swabs for antenatal GBS screening. *Journal Of Medical Screening*, 2013; 20(1): 46-48.

Lyons, S.D, Law K.S.K. Laparoscopic vessel sealing technologies. *Journal Of Minimally Invasive Gynecology*, 2013; 20(3):301-307.

Maher C, Baessler K, Barber M, et al. Pelvic Organ Prolapse Surgery. In: Abrams, Cardozo, Khoury, Wein., eds. 5th International Consultation on Incontinence. Paris: ICUD-EAU 2013; 2013:1379-442.

Maher C, Haya N. The transvaginal mesh decade. *Expert Review of Obstetrics & Gynecology* 2013; 8(5):485-92.

Maher C, Schmid C, Baessler K, Feiner B. Surgical management of pelvic organ prolapse in women. *Cochrane Database of Systematic Reviews (Online)* 2013; (issue 4): Art. No.: CD004014. DOI:10.1002/14651858.CD004014.pub4 .

Maher C. Anterior vaginal compartment surgery. *Int Urogynecol J*. 2013; 24(11):1791-802.

Maher C. ICI 2012: Pelvic organ prolapse surgery. *Int Urogynecol J*. 2013; 24(11):1781.

Nesbitt-Hawes, E.M, et al., Urinary retention following laparoscopic gynaecological surgery with or without 4% icodextrin anti-adhesion solution. *The Australian & New Zealand Journal Of Obstetrics & Gynaecology*, 2013; 53(3):305-309.

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## **Publications**

Nesbitt-Hawes, E.M., et al., Laparoscopic subtotal hysterectomy: evidence and techniques. *Journal Of Minimally Invasive Gynecology*, 2013; 20(4):424-434.

Schmid C, Orourke P, Maher C. Laparoscopic sacral colpopexy for recurrent pelvic organ prolapse after failed transvaginal polypropylene mesh surgery. *Int Urogynecol J Epub*. 2012; Sept 14.

Schmid C, Orourke P, Maher C. Vaginal invagination: definition, clinical presentation and surgical management. *Int Urogynecol J*. 2013; 24(2) 313-7.

# Department of Maternity Services



**Assoc. Prof. Rebecca Kimble**  
Clinical Director,  
Obstetric Services

## Overview

The Department of Maternity Services at RBWH encompasses many major multidisciplinary services. It has continued to have increasing activity over the last few years.

It remains the largest provider of tertiary and quaternary obstetric care in Queensland with a referral base for tertiary transfers of care primarily from around Central Queensland; however northern New South Wales patients continue to be serviced through RBWH Maternity Services.

The multidisciplinary services include:

- Birthing Services
- Birth Centre
- Antenatal Day Assessment Service
- Obstetric Review Centre
- Obstetric Medicine Services and Obstetric Telehealth Services
- Maternal Fetal Medicine and Centre for Advanced Prenatal Care
- Maternity Outpatients Service
- Endocrine Service
- Young Parents Program
- General Practitioner shared care program
- Team midwifery models in conjunction with obstetric care
- Extended Midwifery Services
- Inpatient Unit
- Lactation Service.

Maternity Services collaborate closely with the Perinatal Research Centre for ongoing multi-centre research projects.

The Maternal Fetal Medicine unit provides a comprehensive and competitive environment to provide prospective and retrospective research/audit.

The Obstetric Medicine Unit at the RBWH is active in clinical and basic science research across all medical problems which occur throughout pregnancy. A number of PhD candidates are currently undertaking research in areas related to maternal medical conditions in pregnancy and the effects on pregnancy outcomes. The unit has been successful in numerous research grant / funds.

### Statewide Paediatric and Adolescent Gynaecology Service

Established by Associate Professor Rebecca Kimble, this is the only service in Queensland, and supports patients from northern New South Wales. This service provides super-specialty care to girls between the ages of eight years to mid twenties with complex congenital surgical conditions, disorders of sexual development, disabled patients, menstrual abnormalities and many other gynaecological conditions.

It has been awarded site-specific grants by Queensland Health commencing in 2011, recognising it as a super-specialty. The Commonwealth Department of Health and Aging (DoHA) has granted it a RANZCOG accredited funded Fellow's position commencing 2011 for six years, with a high likelihood for continuation indefinitely.

Further support for the expanding service has been provided by Queensland Health in funding a new specialist position which commenced in 2013 after negotiation between Professor Kimble and Queensland Health Director-General.

## Research staff

Name	Qualifications	Position	Interests/specialities
Associate Professor Rebecca Kimble	MBBS, FRANZCOG, GAICD, GradCert Training and Assessment (IPS), Certificate in Simulation Instruction (Harvard)	Clinical Director, Obstetric Services and State Paediatric and Adolescent Gynaecology Service, and Associate Professor, The University of Queensland (UQ) School of Medicine. Queensland Founder and Director, Queensland Maternity and Neonatal Clinical Guidelines Program since 2008, Chair, Statewide Maternity and Neonatal Clinical Network	clinical governance, maternity emergencies in a simulated environment, adolescent gynaecology
Dr Yogesh Chadha	FRANZCOG, MSc, FRCOG	Staff Specialist, Obstetrics and Gynaecology and Senior Lecturer, UQ	perinatology, incontinence, medical audit, health services research
Dr Karin Lust	MBBS, FRACP	Clinical Director of Obstetric Medicine and General Physician	medical disorders in pregnancy, preconception counseling, contraception
Professor Leonie Callaway	MBBS, FRACP	General Physician and Obstetric Physician Head, Royal Brisbane Clinical School	obstetric medicine, obesity
Dr Carol Portmann	MBBS, FRANZCOG, CMFM, MSc	Staff Specialist, Maternal Fetal Medicine	previable intrauterine growth restriction, termination of pregnancy, fetal medicine
Dr Greg Duncombe	MBBS, FRANZCOG, CMFM	Staff Specialist, Maternal Fetal Medicine	maternal fetal medicine
Dr.Renuka Sekar	MBBS, DGO, FRANZCOG, CMFM	Staff Specialist MFM	Multiple pregnancies Still birth Gastroschisis
Dr.Johanna Laporte	FRANZCOG,	Staff Specialist MFM	Monochorionic twins
Dr Andreas Lee	FRANZCOG	Staff Specialist	radiology and ultrasound
Dr Narelle Fagermo	MBBS, FRACP	General Physician and Obstetric Physician	obstetric medicine
Dr Penny Wolski	MBBS, FRACP	Endocrinologist and Obstetric Physician	obstetric medicine
Dr Helen Barrettt	MBBS, FRACP	Endocrinologist and Obstetric Physician	obstetric medicine
Dr Margo Pritchard	PhD, BA, RN, RM, NNC	Principal Perinatal Research Trialist, Honorary Research Consultant, Health and Behavioural Sciences, School of Nursing and Midwifery UQ, Senior Honorary Research Fellow, Medicine and Biomedical Studies, School of Medicine, UQCCR, Visiting Senior Research Lecturer, Medicine, Health and Life Sciences, Queen's University Belfast, Northern Ireland UK	high risk child-parent screening, surveillance, intervention, neurodevelopment, mental health

## Research staff

Name	Qualifications	Position	Interests/specialities
Lisa McKeown	RN	Research Nurse co-ordinator NEST	neonatal seizures, child development
Donna Hovey	RN,NNC,BN(Hons)	Research Nurse co-ordinator PEDS_DM studies	neonatal ventilation, child development
Erin Brown	BPsychSc(Hons)	Research Psychologist co-ordinator attachment studies	early attachment relationships, mental health
Professor Nicholas Fisk	PhD, MBA, MBBS,FRANZCOG, CMFM, DDU, GAICD	Staff Specialist	monochorionic placentation, fetal stem cells
Dr David Danon	MD, DGO, UDG	Registrar, Maternal Fetal Medicine	fetal stem cells
Mr Jatin Patel	PhD	Post-doctoral Researcher	fetal stem cells
Dr Rebecca Pelekanos	PhD	Post-doctoral Researcher	fetal stem cells
Ms Ho Yi Wong	BBiotech(Hons)	Research Assistant	fetal stem cells
Mr Weili Wang	MSc	Research Assistant	fetal stem cells
Dr Karen New	RN PhD	Midwifery Clinical Academic Fellow	Preconception and Early Pregnancy Care
Angela Swift	Diploma in Midwifery, RM	Clinical Midwife	intrapartum care, perineal care and indigenous health
Prof Joan Webster	RN, RM, BA	Nursing Director Research	
Annette Conroy	BN, RM	Clinical Midwife	
Sue Hampton	RN, RM, BA (HONS)	Clinical Midwife Consultant	
Sarah Kirby	RN, RM, BSc (HONS)	Midwifery Unit Manager	
Dr Lee Minuzzo	MBBS, FRANZCOG	Senior Staff Specialist Obstetrics	
Dr Karin Lust	MBBS, FRACP	Clinical Director of Obstetric Medicine & Staff Specialist General medicine	Medical Disorders in pregnancy, preconception counseling, contraception
Dr Narelle Fagermo	MBBS, FRACP	Staff Specialist General & Obstetric medicine	Obstetric medicine
Prof Leonie Callaway	MBBS(Hons), FRACP, PHD, GCE Lead	Head , Northern Academic Cluster, Uni of Qld. Staff Specialist General & Obstetric medicine	Obstetric Medicine Obesity in pregnancy Probiotics in pregnancy
Dr Penny Wolski	MBBS, FRACP	Staff Specialist Endocrinology & Obstetric medicine	Obstetric medicine
Dr Helen Barrett	BSc( Hons)MBBS(Hons) FRACP	Staff Specialist Endocrinology & Obstetric medicine	Obstetric medicine Lipids in pregnancy
Katie Foxcroft	RN, RM, MApp Sc (Research)	Coordinator Nurse Research	Obstetric medicine, clinical trials
Marloes Dekker Nitert	MSc Biomedicine	Senior postdoctoral researcher at UQCCR	Obesity pregnancy complications and pregnancy outcomes

## Supervised post-graduate students

Name	Current studies	Research topic
Dr Salma Sabdia		Review of all paediatric and adolescent gynaecology patients who have had surgery for the TRIAD of, Uterus didelphys Obstructed hemivagina and ipsilateral renal anomaly, published Journal of Paediatric and Adolescent Gynecology Feb 2014
Dr Peta Wright	Paediatric and Adolescent Gynaecology Fellow	Comparision of MRI findings with surgical and clinical findings for patients with Mullerian anomalies
Dr Masih Ashrafy	RANZCOG Trainee	Obesity and Pregnancy, Audit of Interhospital transfer for increased BMI pregnant women
Dr Naman Dahiya	DRANZCOG Trainee	Development of Clinical Protocol RBWH “ Cord Prolapse”
Dr Tegan Draheim	DRANZCOG Trainee	Survey at first antenatal clinic visit of women’s knowledge of the correct positioning of seatbelts and safety of use in pregnancy
Dr Karen Baker	RANZCOG Trainee	Ten year retrospective study of outcomes for pregnant women involved in a Motor Vehicle Accident at a Tertiary trauma and obstetric centre
Dr Vinay Rane	RANZCOG Trainee	Fulbright Scholarship 2015 recipient
Bianca Devsam	Winter Student, SONM	Parenting in co-morbidity study
Tahae Song	Summer Student, SON, UQCCR	Longitudinal autism study
Aleksandra Staneva	PhD Student. SONM UQ	Psychological antecedents of preterm delivery
Mr Julien Legrand	PhD	Skin stem cells
Ms Varda Sardesai	MPhil	Placental stem cells
Susan deJersey	PhD	Are we missing opportunities: understanding health behaviours associated with overweight in pregnancy
Kerina Denny	PhD	Role of C5a in Fetal and Maternal Health
Helen Barrett	PhD	Maternal Lipids in Pregnancy
Lisa Harris	PhD	Pre-Eclampsia: Early identification of at-risk patients and clinical implications
Naomi Achong	PhD	Type 1 Diabetes Mellitus and Breastfeeding
Fiona Britten	PhD	Type 1 Daibetes Mellitus and peripartum insulin requirements
Catherin Kilgour	PhD	Breastfeeding in mothers with type 2 diabetes: Breastfeeding rates, maternal benefits and factors affecting success
Kristine Matusiak	Master of Philosophy Scholar	Postnatal follow up of women after a pregnancy with gestational diabetes mellitus (GDM).
Cara Odenthal	Master of Philosophy Scholar	Does preconception weight loss alter the neonatal stress response to heel stick? A pilot study

## Awards and achievements

Award	Event	Recipient
Visiting Senior Lecture.	Medicine, Health and Life Sciences. Queen's University Belfast. Nth Ireland. UK	Margo Pritchard
SOMANZ Travel grant	SOMANZ Annual Scientific meeting Sydney 2013	Jessica Phillips Yelland
AWE-Novo Nordisk Travel Award	Endocrine Society of Australia for US ENDO conference 2013	Helen L Barrett

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Kimble, R.	Queensland Clinical Guidelines Program	Queensland Government	\$500,000	2011-2014
Kimble, R.	STP training in Statewide Paediatric and Adolescent Gynaecology	Commonwealth	\$12,000	2012-2013
Kimble, R.	Fellow in Statewide Paediatric and Adolescent Gynaecology	Commonwealth	\$110,000	2011-2013
Kimble, R.	NeoResus Program	Queensland Government	\$42,000	2012-2013
Kimble, R.	Development of Learning Package: Perinatal Social and Emotional Wellbeing for Indigenous Health Care Workers	Queensland Health	\$102,480	2011-2013
Pritchard, M., Cartwright, D., Delaney, M.	The parent-infant relationships screening tool: for targeted delivery of early intervention	Royal Brisbane Women's Hospital Project Grant	\$22,000	2013
Colditz, P., Boyd, R., Sanders, M., Pritchard, M., Gray, P.	A randomised controlled trial of enhanced parenting capacity to improve developmental outcomes in preterm infants.	NHMRC 1024345 Project Grant	\$996,337	2012-2015
Khosrotehrani, K., Chan, J., Fisk, NM.	Fetal endothelial progenitors from the placenta as a source for cell therapy	NHMRC	\$371,250	2012-2014
Weinstein, P., Fisk, NM., Cook, A., Nieuwenhuijsen, M., Nassar, D., Dobson, A.	Prospective study of birth defects from fetotoxic agents in the public water supply	NHMRC	\$703,000	2011-2014
Fisk, NM., Pettit, A., Khosrotehrani, K., Raggatt, L.,	Preclinical optimisation of intrauterine transplantation of fetal mesenchymal stem cells for osteogenesis imperfecta	NHMRC	\$579,000	2010-2013
Rose, S., Crozier, S., Whittaker, A., Langton, C., Salvado, O., Obermair, A., Farah, C., Coulthard, A., Gardiner, RA., Lakhani, S., Kenny, L., Macfarlane, DJ., Laughter, R., Fay, M., Boyd, A., Fisk, NM., Lavin, M., Mitchell, M., Rice, G.	Molecular Oncology Translational Technology Imaging Facility	Australian Cancer Research Foundation (ACRF)	\$2M	2012-2014

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Rose, S., Boyd, A., Whittaker, A., Thomas, P., Fay, M., Fisk, NM	Multiple imaging technology The development of innovative multiplexed molecular imaging technology targeting improved diagnostic imaging of glioblastoma multiforme	NHMRC	\$389,925	2012-2015
with 11 others  Fisk, NM., Rose, S., Breakspear, M., Crozier, S., Reutens, DC., Langton, CM., Salvado, O., Lakhani, S., McFarlane, DJ., Boyd, A., Russell, PJ.,	Herston Imaging Research Facility and Molecular Cancer Diagnostics	Queensland Smart Futures Co- Investment	\$3,500,000	2012-2014
Chan, J., Choolani, MA., Fisk, NM.	Generation of highly osteogenic bone tissue-engineering graft for treatment of clinical bone defects	NMRC (Singapore)	SG\$1.4M	2011-2013
Cooper-White, J., Fisk, NM., Grondahl, L., Wolvetang, EJ.	Scalable, high throughput microfluidic platforms for tissue specific biomaterials development and tissue genesis	Australian Research Council (ARC)	\$400,000	2010-2013
Pelekanos, R., Fisk, NM., Cahill, Z., Colditz, P., Boyd, R., Rose, S.,	Stem cell therapy and neurostimulation repair of white matter injury to prevent cerebral palsy	Cerebral Palsy Alliance Research Foundation	\$145,000	2013-2014
Pelekanos, R. (Fisk, NM : supervisor)	NHMRC Training (Postdoctoral) Fellowship: Strategies to enhance the migratory and therapeutic potential of mesenchymal stem cells	NHMRC	\$308,000	2010-2015
Angela Swift	The CUT Trial	Royal Brisbane and Women's Hospital Project Grant	\$38,000	2013
Barrett HL, Dekker Nitert M, Callaway LK.	Placental Lipases.	Pfizer Australia Cardiovascular Lipid Research Grant	\$39,000	2012-2013
HL Barrett	PHD studies	Medical and Dental Research Scholarship for PhD studies	\$128,000	2011-2014
Taylor SM Woodruff TM Callaway LK Finnell RH	Inflammation and Placental Dysfunction. Inflammation of the womb during pregnancy and reproductive consequences.	NHMRC	\$967,750	2009-2013
Mamun AA O'Callaghan M Najman JM Alata R Williams GM Clavarino A McIntyre HD (Associate Investigator: Callaway L)	Early origins, progression and aetiology of obesity, metabolic syndrome and diabetes: A 30 years follow-up study.	NHMRC	\$1,151,675	2010-2014

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Willmott L White BP Gallois C Parker M Graves N Winch S (Industry Partner: Callaway L)	Futile treatment at the end of life: legal, policy, sociological and economic perspectives.	ARC Metro North	\$268,000 \$150,000	2012-2014
Callaway L McIntyre HD Dekker Nitert M Tobin J O'Rourke P Wilkinson S McSweeney C	Probiotics and gestational diabetes mellitus.	NHMRC  APP1028575	\$828,718	2012-2014
Barrett HL Callaway LK Dekker Nitert M McIntyre HD De Jersey SJ Lingwood B E'Emden M	Validation of a triglyceride meter for home monitoring of triglyceride levels in pregnancy.	Royal Brisbane and Women's Hospital Project Grant	\$13,000	2013
Lust K, Callaway L K, Dekker Nitert M, Barrett HL, Lingwood B, Foxcroft K. Matusiak K.	Does preconception weight loss alter the neonatal stress response to heel stick? A pilot study	Royal Brisbane and Women's Hospital Project Grant	\$31,000	2013
Britten F, Duncan E, Callaway LK, Brodribb W, Lust K.	Breastfeeding in mothers with type 2 diabetes: Breastfeeding rates, maternal benefits and factors affecting success.	Royal Brisbane and Women's Hospital Project Grant	\$25,000	2013
Callaway LK, Dekker Nitert M, Barrett HL, Foxcroft K.	The gut microbiome: A secret ingredient in the development of gestational diabetes?	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013
Achong NM Callaway LK	Insulin requirements in women with Type 1 Diabetes Melitus during the peripartum period and lactation.	Royal Brisbane and Women's Hospital Project Grant	\$15,000	2013
Dekker-Nitert, M.	New Specialist Scholarship. The gut microbiome: A secret ingredient in the development of gestational diabetes?	Royal Brisbane and Women's Hospital Post Doctoral Fellowship	\$80,000	2013
Callaway L.K. McIntyre H.D.	A randomised controlled trial of probiotics to prevent gestational diabetes.	NHMRC	\$828,717	2012-2015
Lust K. Callaway L.K. Matusiak K.R. Dekker M.	Placental expression of lipoprotein lipase, endothelial lipase and hormone sensitive lipase in pregnancies complicated by pre-eclampsia or intrauterine growth retardation.	Research Grants Pfizer Australia	\$42,900	2012-2013
Callaway L.K. Humphrey M.	Prospective study of validity of an obstetric risk score revision.	Qld Health	\$100,000	2011-2016

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Callaway L.K. McIntyre D. Dekker M. Tobin J. Wilkinson S. O'Rourke P.K. McSweeney C.	A randomized controlled trial of probiotics to prevent gestational diabetes.	Canadian Institutes of Health Research	\$828,719	2011-2016

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Achung N, Lust KM, et al. Insulin requirements in late pregnancy in women with type 1 diabetes mellitus: a retrospective review. *Diabetes Research and Clinical Practice*. 2013; Dec;98(3):414-421

Al Mamun A, Mannan M, O'Callaghan MJ, Williams GM, Najman JM, Callaway LK. Association between gestational weight gain and postpartum diabetes: evidence from a community based large cohort study. *PLOS ONE*. 2013; 11:8(12).

Barrett HL, Dekker Nitert M, Jones L, O'Rourke P, Lust K, Gatford KL, et al. Determinants of maternal triglycerides in women with gestational diabetes mellitus in the Metformin in Gestational Diabetes (MiG) study. *Diabetes Care*. 2013; Jul;36(7):1941-6.

Barrett HL, Dekker Nitert M, Wolski P, Fagermo N, Lust K, Callaway LK. The conundrum of eclampsia and fitness to drive. *Aust N Z J Obstet Gynaecol*. 2013; Dec;53(6):540-3.

Barrett HL, Gatford KL, Houda CM, de Blasio MJ, McIntyre HD, Callaway LK, Dekker Nitert M, Coat S, Owens JA, Hague WM, Rowan JA. Maternal and neonatal circulating markers of metabolic and cardiovascular risk in the Metformin in Gestational diabetes (MiG) trial: responses to maternal metformin versus insulin treatment. *Diabetes Care*. 2013; 36(3):529-36.

Chay J, Lust K, Callaway L. When conventional treatment fails: The role of Intravenous immunoglobulin in recurrent pregnancy loss secondary to antiphospholipid syndrome. *Obstetric Medicine: The medicine of pregnancy*. June 2013; 6:76-79.

Co Clinical lead, Hypertensive disorders of pregnancy, Queensland Maternity and Neonatal Clinical Guideline. Update June 2013; [http://www.health.qld.gov.au/qcg/documents/g\\_hdp5-0.pdf](http://www.health.qld.gov.au/qcg/documents/g_hdp5-0.pdf)

Danon D, Sekar R, Hack KE, Fisk NM. Increased Stillbirth in Uncomplicated Monochorionic Twin Pregnancies: A Systematic Review and Meta-analysis. *Obstetrics and Gynecology*. 2013; 121(6):318-1326.

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Dekker Nitert M, Barrett HL, Foxcroft K, Tremellen A, Wilkinson S, Lingwood B, Tobin MJ, McSweeney C, O'Rourke P, McIntyre HD, Callaway KL, SPRING: an RCT study of probiotics in the prevention of gestational diabetes mellitus in overweight and obese women *BMC Pregnancy and Childbirth*. 2013; 13:50 DOI: 10.1186/1471-2393-13-50.

d'Emden MC, Fagermo ND, Love AJ, Lust KM. Gestational diabetes needs to be managed. *Med J Aust*. 2013; Jun;17;198(11): 595-6.

Denny KJ, Callaway LK, Finnell RH, Taylor SM, Woodruff TM. Elevated Complement 5a in Maternal and Umbilical Cord Plasma in Preeclampsia. *J Reprod Immunol*. 2013; 97(2):211-6.

Denny KJ, Coulthard LG, Liso S, Simmons D, Jeanes A, Callaway LK, Wlodarczyk B, Finnell RH, Woodruff T, Taylor SM. C5a Prevents folate deficiency-induced neural tube defects in mice. *J Immunol*. 2013; 190(7):3493-0.

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Erian M, McLaren G. Be wary of “natural” therapy in gynaecological surgery. *International Journal of Women’s Health*. 2013; 5:345-349  
Foxcroft K, Callaway LK, Byrne NM, Webster J. Development and validation of a pregnancy symptoms inventory. *BMC Pregnancy and Childbirth*. 2013; 13(1): 3.

Heron-Delaney M, Sidhu R, Pritchard M, Bogossian F, Cartwright D, Rose M, Kenardy Newman, L Jardine C. The Relationship between Maternal Mental Health and Quality of Preterm Infant-Mother Interaction. The Australasian Human Development Association Conference, Gold Coast. Australia 1-4 July 2013.

Karin Lust & Luke Jardin -Authors Chapter 14. Maternal Diabetes Mellitus, in book Antenatal Consults: A Guide for Neonatologists and Paediatricians, By Davies Mark, Inglis Garry, Jardine Luke, Koorts Pieter. Elsevier. 2012.

Mamun AA, Sutharsan R, O’Callaghan M, Williams G, Najman J, McIntyre HD, Callaway L. Cesarean delivery and the long-term risk of offspring obesity. *Obstet Gynecol*. 2013; 122(6):1176-83.

Manley B, Owen L, Doyle L, Andersen C, Cartwright D, Pritchard M, Donath S, Davis P, High-flow nasal cannulae vs. nasal CPAP for post-extubation respiratory support of very preterm infants: A multicenter, randomized non-inferiority trial. *N Engl J Med*. 2013; 369:1425-33.

Manley B, Owen L, Doyle L, Andersen C, Cartwright D, Pritchard M, Donath S, Davis P, High-flow nasal cannulae vs. nasal CPAP for post-extubation respiratory support of very preterm infants: A multicenter, randomized non-inferiority trial. Perinatal Society of Australia and New Zealand (PSANZ) Adelaide. Australia. April 2013.

Manley B, Owen L, Doyle L, Andersen C, Cartwright D, Pritchard M, Donath S, Davis P, High-flow nasal cannulae vs. nasal CPAP for post-extubation respiratory support of very preterm infants: A multicenter, randomized non-inferiority trial. Pediatric Academic Societies (PAS) Washington. USA November 2013.

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Moschidou D, Mukherjee S, Blundell MP, Jones GN, Atala AJ, Thrasher AJ, Fisk NM, De Coppi P, Guillot PV. Human mid-trimester amniotic fluid stem cells cultured under embryonic stem cell conditions with valproic acid acquire pluripotent characteristics. *Stem Cells Development*. 2013; 1;22(3):444-58.

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Parambi A, Allen J S, Faber-Swensson A P, Lust K. and Callaway LK. Hypoxaemia in the peripartum period in a woman with undiagnosed pulmonary arteriovenous malformations. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 2013; 53(6):593-4.

Patel J, Seppanen E, Chong MSK, Yeo JSL, Teo JSL, Chan JKY, Fisk NM, Khosrotehrani K. Prospective surface marker based isolation and expansion of fetal endothelial colony-forming cells (ECFC) from human term placenta. *Stem Cells Translational Medicine*. 2013; 2(11):839-47.

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Pritchard MA, Colditz PB, Beller EM, Tudehope D, Gray P, Cartwright D, Six-week postpartum depression predicts parenting stress profiles in mothers of preterm children. *Journal of Reproductive and Infant Psychology*. 2012; 30(3):303.

Pritchard MA, de Dassel T, Beller E, Bogossian F, Song T, Crothers C, Hovey D, Russo S, Cartwright D, Johnston L, Scot J2, Paynter J. M-CHAT and Follow-up Interview Screening and ADOS Diagnosis of Autism In VPT Children Attending a Developmental Follow-up Program The 8th International Neonatal Nursing Conference. Belfast Ireland. UK. September 2013.

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## Publications

Queensland Clinical Guidelines Program [www.health.qld.gov.au/qcg](http://www.health.qld.gov.au/qcg), Primary Postpartum Haemorrhage Guideline and Supplement

Queensland Clinical Guidelines Program [www.health.qld.gov.au/qcg](http://www.health.qld.gov.au/qcg), Therapeutic Termination of Pregnancy Guideline and Supplement

Ryan JM, Pettit AR, Guillot PV, Chan JKY, Fisk NM. Mesenchymal Stem Cells: Oct-4 Expression and The Case Of The Emperor's New Clothes. *Stem Cells Review and Reports*. 2013; 9(4):408-21.

Sekar Renuka. Managing multiples. *O&G*. 2013; 15(4).

Seppanen E, Fisk NM, Khosrotehrani K. Pregnancy-acquired fetal progenitor cells. *Journal of Reproductive Medicine*. 2013; 97(1):27-35

Seppanen E, Roy E, Ellis R, Bou-Gharios G, Fisk NM, Khosroterani K. Distant Mesenchymal Progenitors Contribute to Skin Wound Healing and Produce Collagen: Evidence from a Murine Fetal Microchimerism Model. *PLOS One*. 2013; 1;8(5).

Staneva A, Bogossian F, Pritchard M, Wittkowski A, Marie-Paule. Happy mothers for happy babies: the evidence for antenatal psychosocial interventions to prevent preterm birth. Australian College of Midwives 18th Biennial Conference: Hobart, Tasmania, Australia, (S38-S38). October 2013.

Swift A, Webster J. et al Curved versus straight scissors to avoid 3rd and 4th degree perineal tears: A randomised feasibility study. *Women and Birth* – accepted for publication 2013, date to be confirmed

Tsui NB, Hyland CA, Gardener GJ, Danon D, Fisk NM, Millard G, Flower RL, Lo YM. Noninvasive fetal RHD genotyping by microfluidics digital PCR using maternal plasma from two alloimmunized women with the variant RHD(IVS3+1G>A) allele. *Prenatal Diagnosis*. 2013; 33(12):214-6.

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# Perinatal Research Centre



**Prof. Paul Colditz**  
Director,  
Perinatal Research Centre

## Overview

The Perinatal Research Centre (PRC), under the direction of Professor Paul Colditz, is committed to improving health through world class biomedical and clinical research. Their multidisciplinary research team, consisting of clinicians, scientists, allied health professionals and engineers, aims to translate research advances into clinical practice and better health outcomes for mothers and babies.

Research within the PRC covers several related areas including systems physiology led by Dr Barbara Lingwood, seizure prevention and neuroprotection led by Dr Tracey Bjorkman, signal processing led by Dr Ghazem Azemi, neuroprotection and astrocyte biology led by Dr Susan Sullivan and clinical trials led by Dr Margo Pritchard.

There are several clinical trials of international importance currently underway with chief investigators at the PRC. One of these is the NEST (neonatal electrographic seizure trial) trial.

Neonatal encephalopathy remains a significant cause of morbidity and mortality in the perinatal period; for the survivors it is often associated with disabling neurodevelopmental deficits. Neonatal seizures are the most common manifestation of encephalopathy although they are difficult to reliably detect. The management of neonatal seizures has changed little over the last 20 years and treatment is relatively ineffective. However, there is increasing evidence that the seizures themselves may be harmful. Prognosis is also dependent on the aetiology of the encephalopathy, rather than symptom severity, which creates uncertainty about whether or not seizures need treatment at all. The advent of continuous bedside monitoring by amplitude integrated electroencephalography (aEEG), has allowed the detection of electrographic seizures which are not accompanied by visible clinical seizures. This has increased confusion regarding the need for treatment. Anticonvulsants are powerful drugs and there is some evidence that they may be harmful to the developing brain.

The NEST study will provide the information that is urgently needed to improve the current clinical management. We are in the second year of recruitment for this important trial and look forward to discussing outcomes in the future.

The NEST study is also underpinned at the PRC by basic research on the origin and treatment of seizures as well as by EEG signal analysis in collaboration with Professor Boashash which has attracted international research grants.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof Paul Colditz	MBBS, MBiomedE, DPhil (Oxford), FRACP FRCPC	Director of Perinatal Research Centre (PRC), Deputy Director (Clinical) University of Queensland Centre for Clinical Research	Clinical neonatology, neuroscience, biomedical signal processing.
Prof David McIntyre	MB BS FRACP	Director of Endocrinology and Obstetric Medicine Mater Health Services And Head of Mater Clinical School, University of Queensland. PRC Senior Research Fellow	Medical disorders of pregnancy, regulation of fetal growth and intensive therapy of Type 1 diabetes.
Prof Leonie Callaway	MBBS (Hons), FRACP, PhD, GCE Lead	Head, Northern Academic Cluster, Uni of Qld, Staff Specialist General and Obstetric Medicine, PRC Senior Honorary Research Fellow	Obstetric Medicine Obesity in pregnancy Probiotics in pregnancy Complement in pregnancy

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof Boualem Boashash	BE/B.Sc., M.Sc., Dr. Ing. (Ph.D.)	Prof, College of Engineering, Qatar University. Signal Processing Group Leader, PRC.	Time-frequency signal analysis, biomedical signal processing, spectral estimation, signal detection and classification.
Prof Eugene Lumbers	MBBS, MD, DSc	Emeritus Scientia Professor, UNSW. Conjoint Professor Uni of Newcastle. Honorary PRC Senior Research Fellow.	Fetal origins of adult diseases, hypertension, development of control of the circulation, exercise and training, and renal development and function.
Prof Barbara Dodd	PhD, LACST	PRC Senior Honorary Research Fellow	Speech and Language Pathology.
Prof Stephen Taylor	PhD	Professor of Pharmacology at SBMS, UQ PRC Senior Honorary Research Fellow	The role of the complement system in inflammatory disease.
Prof Chris East	RN, RM, DAppSc, BAppSc, MMSc, Grad Cert Health stud, PhD	Prof Midwifery, Monash University & Southern Health. PRC Senior Honorary Research Fellow	Midwifery
A/Prof Stephen Rose	BSc PhD	Principal Research Fellow	Development and application of advanced MRI techniques to aid the detection and monitoring of disease processes,
A/Prof Vicki Flenady	MMed Sc (Clin Epid)	PRC Senior Honorary Research Fellow	Perinatal researcher at the Centre for Clinical Studies.
A/Prof Nigel Barnett	MSc DPhil (Oxon)	PRC Senior Honorary Research Fellow	The effects of hypoxia/ischaemia in visual development and disease.
Dr Michael Colditz	MBBS	PRC Honorary Research Fellow	
Dr Michael Gunn	MBBS	PRC Honorary Research Fellow	
Dr David Holcombe	MBBS	PRC Honorary Research Fellow	
Dr Tim Donovan	MB, BS, MPH, FRACP (Paed) Neonatal Paediatrician, RBWH, Associate Professor UQ	Neonatologist, Royal Brisbane and Women's Hospital. PRC Senior Honorary Research Fellow.	Improving outcomes for preterm infants particularly in the area of nutrition, growth/ body composition and development. Ongoing research in the use of telemedicine to provide outreach care of sick infants in regional hospitals. Epidemiology of gastroschisis.
Dr Aven Lee	BSc and PhD	NHMRC Research Officer	Molecular biology and protein biology of the brain.
Dr Barbara Lingwood	MSc PhD	Research Fellow	Cardiovascular function in the preterm infant.
Dr Ghazem Azemi	PhD	Research Fellow	Digital signal processing, time-frequency signal analysis, biomedical signals, classification systems
Dr Mark Davies	PhD	Neonatologist, Royal Brisbane and Women's Hospital. PRC Senior Honorary Research Fellow.	Improving outcomes for preterm infants, particular in the area of Partial Liquid Ventilation (PLV) Optimisation for use in Preterm Infants.

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Janet Hammill	AM PhD MTH RN	Coordinator	Collaboration for Alcohol Related Developmental Disorders.
Dr Leith Moxon-Lester	BSc PhD	Research Fellow	One carbon metabolism and its impact on maternal, foetal and neonatal health. Disruption of one carbon metabolism by hypoxia-ischemia (HI) (reduced oxygen and blood supply).
Dr Margo Pritchard	RN EM ANNC BA PhD	Principal Trialist. Perinatal Research Centre and RBWH; Honorary Research Consultant School of Nursing and Midwifery and School of Medicine. Senior Lecture, Queen's University Belfast, UK	Child health surveillance and intervention.
Dr Simon Finnigan	PhD	Senior Research Fellow (NHMRC Career Development Awardee)	Brain monitoring techniques to improve outcomes for critically ill patients (e.g., extremely premature babies; stroke patients).
Dr Susan Sullivan	BSc (Hons), PhD	NHMRC Research Fellow	The role of astrocytes in perinatal hypoxia/ischemia.
Dr Tracey Bjorkman	BSc MPhil PhD	Lions Medical Research Foundation Senior Research Fellow	Hypoxic-ischemic brain injury and seizures in the neonate.
Dr Marloes Dekker Nitert	MSc PhD	Senior Research Fellow	Metabolism and epigenetics in complications of pregnancy
Dr Yvonne Eiby	BSc (Hons) PhD	NHMRC Research Officer	The cardiovascular system of preterm infants.
Dr Layne Wright	PhD	Research Assistant	Cardiovascular system of preterm infants in order to reduce hypoxic/ischemic brain injury.
Mr Amir Omidvarnia	BSc MSc	Research Assistant	Medical signal processing, image processing, pattern recognition.
Mr Mohammed Khelif	BSc MSc	Research Assistant	Digital signal processing, time-frequency signal analysis, biomedical signals, classification systems.
Ms Donna Hovey	RN, NNC, BN Hon (1)	Research Assistant	Clinical Trials.
Ms Karen Taylor	RN, Endorsed Midwife, Neonatal Intensive Care	Research Nurse	Clinical Trials Group supporting 'Enhanced parenting to improve developmental outcomes in preterm infants'.
Ms Leisa Brooks	Bachelor of Nursing and health services management (Honours) Endorsed Midwife (Distinction)	Research Assistant	Clinical Trials Group, supporting the coordination of the 'Ambulatory Fetal Monitoring Predicts Clinical Outcome' study.
Ms Stephanie Miller	BSc (Hons)	Senior Research assistant/PhD Student	Hypoxic-ischemic injury and neonatal seizures in the term infant.
Erin Brown	BPsychSc(Hons)	Research Psychologist co-ordinator attachment studies	Early attachment relationships, mental health
Ms Lisa McKeowen	RN, BSc	Research Nurse	Clinical Trials Group

## Supervised post-graduate students

Name	Current studies	Research topic
Ms Kerina Denny	Doctorate	The role of C5a in pathophysiology.
Ms Nada Al-Theyab	Doctorate	
Ms Susan De Jersey	Doctorate	Are we missing opportunities: understanding health behaviours associated with overweight in pregnancy
Ms Min Kim	Doctorate	Cardiac maturation and local renin angiotensin systems in preterm birth in pigs.
Ms Brigid Knight	Doctorate	Effects of the DAFNE programme on dietary composition in patients with Type 1 diabetes.
Ms Doreen Awabdy	Doctorate	AMPA-KA receptor expression after hypoxic-ischaemia in the neonatal piglet.
Mr Mohamed Khelif	Doctorate	Neonatal seizure characterisation: detection, localisation, study of seizure site synchrony and seizure propagation.
Mr Siamak Layeghy	Doctorate	Digital signal processing, digital image processing, biomedical signal processing, pattern recognition, time frequency signal analysis.
Ms Helen Barrett	Doctorate	Maternal Lipids in Pregnancy.
Mr Amir Omidvarnia	Doctorate	Theoretical development and necessary concepts of nonstationary multivariate connectivity measures for newborn EEG analysis.
Ms Maryam Odebaee	Doctorate	EEG Source Localization: refining a non-invasive method for measuring brain activity.
Ms Hanna Reinebrant	Completed Doctorate in 2013	The central serotonergic system in the preterm neonate following hypoxic-ischemic brain injury.
Ms Stephanie Miller	Doctorate	Examining the maturation of the GABA system in the neonatal brain and its role in hypoxic-ischaemic brain injury.
Mr Shiyong Dong	Doctorate	Biomedical signal processing of ECG and EEG using time-frequency analysis in babies exposed to hypoxic/ischaemic episodes.
Ms Kerstin Pannek	Doctorate	Development of novel structure-function connectivity analysis strategies to improve identification of brain injury and neural plasticity in the neonate brain.
Dr Norman Ma	Masters	Developmental changes in expression of KCC2 and NKCC1 in normal and hypoxic ischaemic neonatal piglet brain.
Ms Sonia Sam	Doctorate	Investigation of the early cardiovascular system function of very premature infants and its relationship to neurodevelopmental outcome.
Dr Raymond Chuk	Masters	Impact of preterm birth on neurodevelopment- MRI study in very preterm babies at early postnatal age.
Ms Rebecca Caesar	Doctorate	Early predictors for neurodevelopmental outcome and prioritisation of service delivery for at risk premature infants.
Ms Tracey Evans	Doctorate	Improving mother and child attachment patterns following preterm birth: An RCT of Prem Triple-P.
Ms Joanne George	Doctorate	Prediction of motor outcomes based on early brain structure.
Mr Michael Herd	Doctorate	Efficacy of Prem Triple P as an intervention to support families of very preterm infants.
Ms Emma Schleiger	Doctorate	Predicting outcomes of cerebral ischaemia from pre-discharge EEG and clinical assessment measures
Dr Nabeel Sheikh	Doctorate	Role of quantitative EEG in the prognostication of cerebral ischaemia: optimising parameters

## Supervised post-graduate students

Name	Current studies	Research topic
Mr MD Abdul Awal	Doctorate	
Mr Kartik Iyer	Doctorate	Predicting clinical outcome in post-natal hypoxia: modelling and understanding the brain's electrical activity
Kerina Denny	Doctorate	Role of C5a in Fetal and Maternal Health
Lisa Harris	Doctorate	Pre-Eclampsia: Early identification of at-risk patients and clinical implications
Naomi Achong	Doctorate	Type 1 Diabetes Mellitus and Breastfeeding Type 1 Diabetes Mellitus and peripartum insulin requirements
Fiona Britten	Doctorate	Breastfeeding in mothers with type 2 diabetes: Breastfeeding rates, maternal benefits and factors affecting success
Catherine Kilgour	Doctorate	Postnatal follow up of women after a pregnancy with gestational diabetes mellitus (GDM).
Kristine Matusiak	Masters of Philosophy Scholars	Does preconception weight loss alter the neonatal stress response to heel stick? A pilot study
Cara Odenthal	Masters of Philosophy Scholars	Can MRI at 3 and 5 years after first demyelinating event detect reduction in rain volume in patients who progress to clinically definite MS compared to those who do not?

## Awards and achievements

Award	Event	Recipient
Visiting Senior Lecture	Medicine, Health and Life Sciences. Queen's University Belfast. Nth Ireland. UK	Margo Pritchard
SOMANZ Travel grant	SOMANZ Annual Scientific meeting Sydney 2013	Jessica Phillips Yelland
AWE-Novo Nordisk Travel Award	Endocrine Society of Australia for US ENDO conference 2013	Helen L Barrett

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Boashash B. Colditz P.B. Rahman S.	Localization of EEG abnormalities for improving brain monitoring of newborn babies at risk of brain injury using a multichannel time-frequency signal processing approach.	Qatar National Research Fund	\$1,000,000	2013
Lingwood B.E. Colditz P.B.	High precision catheters for measuring blood pressure	RBWH Auxilliary	\$18,750	2013
Bjorkman S.T.	Dash3000 patient monitoring system from GE Healthcare	Lions Medical Research Foundation/Lions Club Burleigh Heads	\$9,500	2013
Barrett, H. Callaway, L. Dekker-Nitert, M. McIntyre, D. D'Emden, M. Lingwood, B. De Jersey, S.	Validation of a triglyceride meter for home monitoring of triglyceride levels in pregnancy.	Royal Brisbane and Women's Hospital Project Grant	\$13,000	2013

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Pritchard, M. Cartwright, D. Delaney, m. Kenardy, J. Bogossian, G.	Development of the parent-infant relationships screening tool for targeted delivery of early intervention.	Royal Brisbane and Women's Hospital Project Grant	\$22,000	2013
Lust, K. Callaway, L. Matusiak, K. Dekker-Nitert, M. Barrett, H. Lingwood, B. Foxcroft, K.	Does preconception weight loss alter the neonatal stress response to heel stick? A pilot study.	Royal Brisbane and Women's Hospital Project Grant	\$31,000	2013
Colditz, P. Elby, Y.	Preclinical trial of a non-adrenergic inotropic agent (levosimendan) for treatment of poor cardiovascular function in preterm neonatal piglets.	Royal Brisbane and Women's Hospital Project Grant	\$34,000	2013
Donovan, T. Lingwood, B.	Preterm infant's growth: When and why do the babies get fat?	Royal Brisbane and Women's Hospital Project Grant	\$38,000	2013
Callaway, L. Dekker-Nitert, M. Barrett, H. Foxcroft, K.	The gut microbiome: A secret ingredient in the development of gestational diabetes?	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013
Dekker-Nitert, M.	The gut microbiome: A secret ingredient in the development of gestational diabetes?	Royal Brisbane and Women's Hospital Post Doctoral Fellowship	\$80,000	2013
Achong N.M Callaway L.K.	Insulin requirements in women with Type 1 Diabetes Melitus during the peri-partum period and lactation.	Royal Brisbane and Women's Hospital Project Grant	\$15,000	2013
Colditz P.B. Sanders M. Boyd R. Pritchard M. Gray P. O'Callaghan M. Slaughter V. Whittingham K.	Enhanced parenting capacity to improve developmental outcome in preterm infants.	NHMRC	\$996,335	2012-2016
Callaway L.K. McIntyre H.D.	A randomised controlled trial of probiotics to prevent gestational diabetes.	NHMRC	\$828,717	2012-2015
Lingwood B. Wright I. Lumbers E. Colditz P.B.	Supporting heart function in preterm babies.	NHMRC	\$670,920	2012-2014
Willmott L White BP Gallois C Parker M Graves N Winch S (Industry Partner: Callaway L)	Futile treatment at the end of life: legal, policy, sociological and economic perspectives.	ARC Metro North	\$268,000 \$150,000	2012-2014
Brown L. McIntyre H.D.	Northern Territory Diabetes in Pregnancy Project	NHMRC	\$1,497,324	2012-2015

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Callaway L McIntyre HD Dekker Nitert M Tobin J O'Rourke P Wilkinson S McSweeney C	Probiotics and gestational diabetes mellitus.	NHMRC	\$828,718	2012-2014
Barrett HL, Dekker Nitert M, Callaway LK	Placental Lipases.	Pfizer Australia Cardiovascular Lipid Research Grant	\$39,000	2012-2013
Lust K. Callaway L.K. Matusiak K.R. Dekker M.	Placental expression of lipoprotein lipase, endothelial lipase and hormone sensitive lipase in pregnancies complicated by pre-eclampsia or intrauterine growth retardation.	Research Grants Pfizer Australia	\$42,900	2012-2013
Bjorkman, S.	Seizures and injury in the newborn hypoxic-ischemic brain	Lions Medical Research Foundation	\$330,000	2011-2014
Whittaker A. Rose S. Peng H.	MRI molecular imaging agents – from fundamental design to in-vivo applications	ARC	\$979,230	2011-2013
Callaway L.K. Humphrey M.	Prospective study of validity of an obstetric risk score revision.	Qld Health	\$100,000	2011-2016
Callaway L.K. McIntyre D. Dekker M. Tobin J. Wilkinson S. O'Rourke P.K. McSweeney C.	A randomized controlled trial of probiotics to prevent gestational diabetes.	Canadian Institutes of Health Research	\$828,719	2011-2016
Hunt R; Colditz P.B. Inder T Badawi N. Simmer K. Liley H. Osborn D. Cheong J. Wright I.	A study of the impact of treating electrographic seizures in term or near-term infants with neonatal encephalopathy	NHMRC	\$1,301,309	2011-2015
Colditz P.B. Boashash B.	Design of a computer-automated system for foetal movement classification in the case of high-risk pregnancies using advanced signal processing algorithms	Qatar National Research Fund / University of Qatar	\$949,282	2010-2013
Colditz P.B. Boashash B.	EEG signal classification for newborn outcome prediction after perinatal brain injury	Qatar National Research Fund / University of Qatar	\$1,013,860	2010-2013
Finnigan S.	Protecting newborn brains via innovative monitoring technology	NHMRC	\$390,000	2010-2013
Mamun A. O'Callaghan, M. Najman J. Alati R. Williams G. Clavarino A. McIntyre D.H.	Early origins, progression and aetiology of obesity, metabolic syndrome and diabetes: 30 years follow-up study	NHMRC	\$1,151,675	2010-2014

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Taylor S.M. Woodruff T.M. Callaway L.K. Finnell R.H.	Inflammation and placental dysfunction. Inflammation of the womb during pregnancy and reproductive consequences	NHMRC	\$967,750	2009-2013
Britten F, Duncan E, Callaway LK, Brodribb W, Lust K.	Breastfeeding in mothers with type 2 diabetes: Breastfeeding rates, maternal benefits and factors affecting success.	Royal Brisbane and Women's Hospital Project Grant	\$25 000	2013
Barrett HL, Callaway LK, Dekker Nitert M, McIntyre HD, de Jersey SJ, Lingwood B, D'Emden M.	Validation of a triglyceride meter for home monitoring of triglyceride levels in pregnancy	Royal Brisbane and Women's Hospital Project Grant	\$13,000	2013

## Publications

Al MA, Mannan M, O'Callaghan MJ, Williams GM, Najman JM, Callaway LK. Association between gestational weight gain and postpartum diabetes: evidence from a community based large cohort study. *PLoS One*. 2013; 8(12):e75679.

Barrett HL, Dekker Nitert M, Jones L, O'Rourke P, Lust K, Gatford KL, et al. Determinants of maternal triglycerides in women with gestational diabetes mellitus in the Metformin in Gestational Diabetes (MiG) study. *Diabetes Care*. 2013; Jul;36(7):1941-6.

Barrett HL, Gatford KL, Houda CM, De BMJ, McIntyre HD, Callaway LK, et al. Maternal and neonatal circulating markers of metabolic and cardiovascular risk in the metformin in gestational diabetes (MiG) trial: responses to maternal metformin versus insulin treatment. *Diabetes care*. 2013; Mar;36(3):529-36.

Barrett HL, Nitert Dekker M, Lust K, Fagermo N, Wolski P, Callaway LK. The conundrum of eclampsia and fitness to drive. *Aust N Z J Obstet Gynaecol*. 2013; Dec;53(6):540-3.

Baskaran A, Milev R, McIntyre RS. A review of electroencephalographic changes in diabetes mellitus in relation to major depressive disorder. *Neuropsychiatric disease and treatment*. 2013; 9:143-50.

Bjorkman ST, Ireland Z, Fan X, van dWWM, Roes KC, Colditz PB, et al. Short-term dose-response characteristics of 2-iminobiotin immediately postinsult in the neonatal piglet after hypoxia-ischemia. *Stroke*. 2013; Mar;44(3):809-11.

Chay J, Lust K, Kubler P, Callaway L. When conventional treatment fails: The role of intravenous immunoglobulin in recurrent pregnancy loss secondary to antiphospholipid syndrome *Obstetric Medicine: The medicine of pregnancy*. 2013; (6):76-9.

Chirila TV, Suzuki S, Bray LJ, Barnett NL, Harkin DG. Evaluation of silk sericin as a biomaterial: in vitro growth of human corneal limbal epithelial cells on Bombyx mori sericin membranes. *Progress in Biomaterials*. 2013; 2(14):1-10.

Collins CT, Reid J, Makrides M, Lingwood BE, McPhee AJ, Morris SA, et al. Prediction of body water compartments in preterm infants by bioelectrical impedance spectroscopy. *Eur J Clin Nutr*. 2013; Jan;67:S47-S53.

Davies MW, Dunster KR, Fraser JF, Colditz PB. Cerebral blood flow is not affected during perfluorocarbon dosing with volume-controlled ventilation. *Journal of paediatrics and child health*. 2013; Jun 19.

de JSJ, Nicholson JM, Callaway LK, Daniels LA. An observational study of nutrition and physical activity behaviours, knowledge, and advice in pregnancy. *Bmc Pregnancy Childb*. 2013; 13:115.

Denny KJ, Coulthard LG, Finnell RH, Callaway LK, Taylor SM, Woodruff TM. Elevated complement factor C5a in maternal and umbilical cord plasma in preeclampsia. *Journal of reproductive immunology*. 2013; Apr;97(2):211-6.

Denny KJ, Coulthard LG, Jeanes A, Lisgo S, Simmons DG, Callaway LK, et al. C5a receptor signaling prevents folate deficiency-induced neural tube defects in mice. *Journal of immunology*. 2013; Apr 1;190(7):3493-9.

East CE, Smyth RM, Leader LR, Henshall NE, Colditz PB, Lau R, et al. Vibroacoustic stimulation for fetal assessment in labour in the presence of a nonreassuring fetal heart rate trace. *Cochrane Database Syst Rev*. 2013; 1:CD004664.

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- Eiby YA, Wright LL, Kalanjati VP, Miller SM, Bjorkman ST, Keates HL, et al. A pig model of the preterm neonate: anthropometric and physiological characteristics. *PLoS One*. 2013; 8(7):e68763.
- Finnigan S, van Putten MJ. EEG in ischaemic stroke: Quantitative EEG can uniquely inform (sub-)acute prognoses and clinical management. *Clinical neurophysiology: official journal of the International Federation of Clinical Neurophysiology*. 2013; Jan;124(1):10-9.
- Foxcroft KF, Callaway LK, Byrne NM, Webster J. Development and validation of a pregnancy symptoms inventory. *Bmc Pregnancy Childb*. 2013; 13:3. PubMed PMID: 23324494.
- Khlif MS, Colditz PB, Boashash B. Effective implementation of time-frequency matched filter with adapted pre and postprocessing for data-dependent detection of newborn seizures. *Med Eng Phys*. 2013; Aug 21.
- Lane A, Chuk LM, Colditz PB, Coulthard A. The MRI-compatible neonatal incubator in practice. *Journal of paediatrics and child health*. 2013; May 17;49(9):E377-80.
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- Li R, Coulthard LG, Wu MC, Taylor SM, Woodruff TM. C5L2: a controversial receptor of complement anaphylatoxin, C5a. *Faseb J*. 2013; Mar;27(3):855-64.
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- Manley BJ, Owen LS, Doyle LW, Andersen CC, Cartwright DW, Pritchard MA, et al. High-flow nasal cannulae in very preterm infants after extubation. *N Engl J Med*. 2013; Oct 10;369(15):1425-33.
- Maple-Brown LJ, Brown A, Lee IL, Connors C, Oats J, McIntyre HD, et al. Pregnancy And Neonatal Diabetes Outcomes in Remote Australia (PANDORA) Study. *BMC Pregnancy Childbirth*. 2013; 13:221.
- Mathew P, Pannek K, Snow P, D'Acunto MG, Guzzetta A, Rose SE, et al. Maturation of corpus callosum anterior midbody is associated with neonatal motor function in eight preterm-born infants. *Neural Plast*. 2013; 2013:359532.
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- Nitert MD, Barrett HL, Foxcroft K, Tremellen A, Wilkinson S, Lingwood B, et al. SPRING: an RCT study of probiotics in the prevention of gestational diabetes mellitus in overweight and obese women. *BMC Pregnancy Childbirth*. 2013; 13:50.
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- Omidvarnia A, Fransson P, Metsaranta M, Vanhatalo S. Functional Bimodality in the Brain Networks of Preterm and Term Human Newborns. *Cereb Cortex*. 2013; May 5.
- Pannek K, Colditz PB, Boyd RN, Rose SE. Structural connectivity in the preterm brain at term equivalent age using diffusion MRI and T2 relaxometry: a network-based analysis. *PLoS One*. 2013; 8(8):1-8
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Wilkinson SA, van der Pligt P, Gibbons KS, McIntyre HD. Trial for Reducing Weight Retention in New Mums: a randomised controlled trial evaluating a low intensity, postpartum weight management programme. *Journal of human nutrition and dietetics: the official journal of the British Dietetic Association.* 2013; Nov 25.

### **Book Chapters and Guidelines**

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Karin L, Jardin L Chapter 14. Maternal Diabetes Mellitus, in Davies M; Inglis G, Jardine L, Koorts Pieter. book *Antenatal Consults: A Guide for Neonatologists and Paediatricians,* Elsevier. 2012

Position Statement, Diabetes in pregnancy, QLD Maternity and Neonatal Clinical Guidelines Programme. 2013. April <http://www.health.qld.gov.au/qcg/documents/o-diabetes-position.pdf>

# Queensland Centre for Gynaecological Cancer



**Assoc. Prof. James Nicklin**  
Clinical Director,  
Gynaecological Oncology

## Overview

The Queensland Centre for Gynaecological Cancer (QCGC) is a state-wide service for the management of women with gynaecological cancer. QCGC Research is the research branch of QCGC. The Director of QCGC Research is Professor Andreas Obermair who leads and develops the unit to produce meaningful research outcomes.

QCGC Research's mission is to research and develop the best standard of care for women experiencing gynaecological cancer. This may include finding causes for and preventing gynaecological cancer; and finding better treatment options to cure women affected by gynaecological cancer.

QCGC Research's focus is on conducting surgical clinical trials in the field of gynaecological cancer but we also perform groundbreaking work outside the conventional clinical trials framework. Additionally we teach and train new researchers (M.D. and Ph.D. programs) who will then take over as the research elite of tomorrow.

Our research is funded partly by competitive research grants (NHMRC project grants, smart state research grants, Cancer Australia), by support from individual and corporate donors as well as from fundraising events.

## Research staff

Name	Qualifications	Position	Interests/specialities
Assoc Prof James Nicklin	MBBS, FRANZCOG, CGO	Clinical Director, Gynaecological Oncology	gynaecological oncology
Prof Andreas Obermair	MD, FRANZGOG, CGO	Director of Research	gynaecological oncology
Dr Russell Land	MBBS, FRANZCOG, Grad Dip (Palliative Care), CGO	Visiting Medical Officer	gynaecological oncology
Dr Andrea Garrett	MBBS, MSc, FRANZCOG, Dip Pall Care	Visiting Medical Officer, Assistant Director Gestational Trophoblastic Centre	gynaecological oncology, gestational trophoblastic disease
Dr Andreas Hackethal	MD, PhD	Advanced Trainee in Gynaecological Oncology	gynaecological oncology
Dr Donal Brennan	MB, BCh, BAO (Hon), BMedSc (Hon), PhD (Cancer Biology)	Advanced Trainee in Gynaecological Oncology	gynaecological oncology
Dr Archana Rao	MBBS, MMed (ClinEpi)	Advanced Trainee in Gynaecological Oncology	gynaecological oncology
Judith Eddy	RN, RM	Gynaecological Oncology Case Manager	oncology nurse specialist
Shona Morrison	BNurs, RN	Gynaecological Oncology Clinical Nurse	gynaecological oncology, gestational trophoblastic disease
Karen Sanday	BSc, HIM	Gynaecological Oncology Data Manager	gynaecological oncology
Trudi Cattley	BAppSc, GradCert (Clinical Trial Management)	Clinical Research Manager	clinical trials
Fiona Menzies	BSc, Dip Pharmacy Technician	Clinical Trial Manager	clinical trials
Vanessa Behan	BNurs	Clinical Trial Manager	clinical trials
Dana Middleton	BNurs, GradCert (Clinical Trial Management)	Clinical Trial Manager	clinical trials
Kerry Millgate	BNurs, Grad Dip (Respiratory Sc)	Clinical Trial Coordinator	clinical trials
Anne Hughes	BSc	Clinical Trial Monitor	clinical trials

## Supervised post-graduate students

Name	Current studies	Research topic
Yen Tan	PhD, The University of Queensland	Australia Cancer Genetics – Motivators and Barriers of Referral

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Hackethal A	The prognostic value of serum HE4 and CA125 in endometrial carcinoma patients	Royal Brisbane and Women's Hospital Project Grant	\$36,000	2013
Hackethal A	The prognostic value of serum HE4 and CA125 in endometrial carcinoma patients	Cherish Women's Cancer Foundation & The University of Queensland	\$40,000	2013
Obermair A	Clinical Trial Data Management	Cancer Council Queensland	\$161,280	2013
Obermair A, Janda M, GebSKI V	A phase II randomised clinical trial of Mirena ± metformin ± weight loss intervention in patients with early stage cancer of the endometrium	Royal Brisbane and Women's Hospital Project Grant	\$40,000	2013
Obermair A, Janda M, Hawkes A, Chen C, Armes J	A phase II randomised clinical trial of Mirena ± metformin ± weight loss intervention in patients with early stage cancer of the endometrium	Queensland University of Technology	\$556,800	2013-2015
Brennan D	Relationship between obesity, steroid receptor signalling and serum inflammatory markers in endometrial cancer	Cherish Women's Cancer Foundation & The University of Queensland	\$40,000	2013
Garrett A	Prophylactic hysterectomy to prevent gynaecological cancers in breast cancer patients	Cherish Women's Cancer Foundation & The University of Queensland	\$30,149	2013
Thomas P, Obermair A	Impact of gated PET-CT on the diagnosis of distant metastases of advanced epithelial ovarian, fallopian tube, and primary peritoneal cancer	Cherish Women's Cancer Foundation & The University of Queensland	\$40,000	2013

## Publications

Baker J, Janda M, Belavy D, Obermair A. Differences in Epidural and Analgesic Use in Patients with Apparent Stage I Endometrial Cancer Treated by Open versus Laparoscopic Surgery: Results from the Randomised LACE Trial. *Minim Invasive Surg.* 2013; 2013:764329.

Belavy D, Janda M, Baker J, Obermair A. Epidural analgesia is associated with an increased incidence of postoperative complications in patients requiring an abdominal hysterectomy for early stage endometrial cancer. *Gynecol Oncol.* 2013; Nov;131(2):423-9.

Fung JN, Jeffery PL, Lee JD, Seim I, Roche D, Obermair A, Chopin LK, Chen C. Silencing of ghrelin receptor expression inhibits endometrial cancer cell growth in vitro and in vivo. *Am J Physiol Endocrinol Metab.* 2013; Jul 15;305(2):E305-13.

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Hackethal A, Brennan DJ, Land R, Nascimento M, Nicklin J, Obermair A. Feasibility and outcomes of ureteroureterostomy and extravesical ureteroneocystostomy as part of radical surgery for infiltrating gynecologic disease. *Int J Gynecol Cancer*. 2013; Jul;23(6):1139-45

Jordan S, Steer C, DeFazio A, Quinn M, Obermair A, Friedlander M, Francis J, O'Brien S, Goss G, Wyld D, Australian Ovarian Cancer Study Group, Webb P; Ovarian Cancer Patterns of Care Study Group. Patterns of chemotherapy treatment for women with invasive epithelial ovarian cancer--a population-based study. *Gynecol Oncol*. 2013; May;129(2):310-7.

Kondalsamy-Chennakesavan S, Hackethal A, Bowtell D; Australian Ovarian Cancer Study Group, Obermair A. Differentiating stage 1 epithelial ovarian cancer from benign ovarian tumours using a combination of tumour markers HE4, CA125, and CEA and patient's age. *Gynecol Oncol*. 2013; Jun;129(3):467-71.

Nagle CM, Marquart L, Bain CJ, O'Brien S, Lahmann PH, Quinn M, Oehler MK, Obermair A, Spurdle AB, Webb PM; Australian National Endometrial Cancer Study Group. Impact of weight change and weight cycling on risk of different subtypes of endometrial cancer. *Eur J Cancer*. 2013; Aug;49(12):2717-26

Neill AS, Nagle CM, Protani MM, Obermair A, Spurdle AB, Webb PM; Australian National Endometrial Cancer Study Group. Aspirin, nonsteroidal anti-inflammatory drugs, paracetamol and risk of endometrial cancer: a case-control study, systematic review and meta-analysis. *Int J Cancer*. 2013; Mar 1;132(5):1146-55.

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Shen H, Fridley BL, Song H, Lawrenson K, Cunningham JM, Ramus SJ, Cicek MS, Tyrer J, Stram D, Larson MC, Köbel M; PRACTICAL Consortium, Zogas A, Zheng W, Yang HP, Wu AH, Wozniak EL, Woo YL, Winterhoff B, Wik E, Whittemore AS, Wentzensen N, Weber RP, Vitonis AF, Vincent D, Vierkant RA, Vergote I, Van Den Berg D, Van Altena AM, Tworoger SS, Thompson PJ, Tessier DC, Terry KL, Teo SH, Templeman C, Stram DO, Southey MC, Sieh W, Siddiqui N, Shvetsov YB, Shu XO, Shridhar V, Wang-Gohrke S, Severi G, Schwaab I, Salvesen HB, Rzepecka IK, Runnebaum IB, Rossing MA, Rodriguez-Rodriguez L, Risch HA, Renner SP, Poole EM, Pike MC, Phelan CM, Pelttari LM, Pejovic T, Paul J, Orlov I, Omar SZ, Olson SH, Odunsi K, Nickels S, Nevanlinna H, Ness RB, Narod SA, Nakanishi T, Moysich KB, Monteiro AN, Moes-Sosnowska J, Modugno F, Menon U, McLaughlin JR, McGuire V, Matsuo K, Adenan NA, Massuger LF, Lurie G, Lundvall L, Lubiński J, Lissowska J, Levine DA, Leminen A, Lee AW, Le ND, Lambrechts S, Lambrechts D, Kupryjanczyk J, Krakstad C, Konecny GE, Kjaer SK, Kiemeny LA, Kelemen LE, Keeney GL, Karlan BY, Karevan R, Kalli KR, Kajiyama H, Ji BT, Jensen A, Jakubowska A, Iversen E, Hosono S, Høgdall CK, Høgdall E, Hoatlin M, Hillemanns P, Heitz F, Hein R, Harter P, Halle MK, Hall P, Gronwald J, Gore M, Goodman MT, Giles GG, Gentry-Maharaj A, Garcia-Closas M, Flanagan JM, Fasching PA, Ekici AB, Edwards R, Eccles D, Easton DF, Dürst M, du Bois A, Dörk T, Doherty JA, Despiere E, Dansonka-Mieszkowska A, Cybulski C, Cramer DW, Cook LS, Chen X, Charbonneau B, Chang-Claude J, Campbell I, Butzow R, Bunker CH, Brueggmann D, Brown R, Brooks-Wilson A, Brinton LA, Bogdanova N, Block MS, Benjamin E, Beesley J, Beckmann MW, Bandera EV, Baglietto L, Bacot F, Armasu SM, Antonenkova N, Anton-Culver H, Aben KK, Liang D, Wu X, Lu K, Hildebrandt MA; Australian Ovarian Cancer Study Group; Australian Cancer Study, Schildkraut JM, Sellers TA, Huntsman D, Berchuck A, Chenevix-Trench G, Gayther SA, Pharoah PD, Laird PW, Goode EL, Pearce CL. Epigenetic analysis leads to identification of HNF1B as a subtype-specific susceptibility gene for ovarian cancer. *Nat Commun*. 2013; 4:1628.

Tan YY, McGaughan J, Ferguson K, Walsh MD, Buchanan DD, Young JP, Webb PM, Obermair A, Spurdle AB; ANECS Group. Improving identification of lynch syndrome patients: a comparison of research data with clinical records. *Int J Cancer*. 2013; Jun 15;132(12):2876-83

Terry KL, Karageorgi S, Shvetsov YB, Merritt MA, Lurie G, Thompson PJ, Carney ME, Weber RP, Akushevich L, Lo-Ciganic WH, Cushing-Haugen K, Sieh W, Moysich K, Doherty JA, Nagle CM, Berchuck A, Pearce CL, Pike M, Ness RB, Webb PM; Australian Cancer Study (Ovarian Cancer); Australian Ovarian Cancer Study Group, Rossing MA, Schildkraut J, Risch H, Goodman MT; Ovarian Cancer Association Consortium. Genital powder use and risk of ovarian cancer: a pooled analysis of 8,525 cases and 9,859 controls. *Cancer Prev Res (Phila)*. 2013; Aug;6(8):811-21.

Wills A, Obermair A. A review of complications associated with the surgical treatment of vulvar cancer. *Gynecol Oncol*. 2013; Nov;131(2):467-79.

# Centre for the Advancement of Clinical Research



**Prof. Lawrie Powell AC**  
Director,  
Research

## Overview

The Centre for the Advancement of Clinical Research continues to expand, reflecting the increase in research activity on campus. It promotes innovative clinical research within the district, assists current and future researchers participating in research programs and provides links between researchers and funding opportunities, including the RBWH Foundation, UQCCR, QIMR, QUT and the Office of Health and Medical Research. The Centre is complementary to, and liaises closely with the RBWH Foundation whose key role is to raise funds for research and manage any grants placed through the Foundation.

The Centre assists researchers in the preparation of applications for funding and ethical approval of research. Applications for research funding are facilitated by administrative staff familiar with the relevant legal, ethical, regulatory, scientific and financial requirements for research activity within the complex. All applications are then reviewed by the Research Advisory Committee (see below).

RBWH currently separates the functions of Research Governance and Ethics, which is undertaken by the RBWH Human Research Ethics Committee (HREC). Research governance is the framework by which the institution oversees and administers research to ensure that it complies with relevant legislation and meets appropriate standards of quality, safety, privacy, risk and financial management. These activities are increasing substantially as the research activities on campus increase in number and complexity.

In 2013, the Centre continued to assume the role of coordinating the review process of low and negligible risk research, processing more than 100 applications. This activity has been facilitated by the appointment of Anitha Dinesh who has appropriate background in business and finance.

## Research staff

Name	Qualifications	Position	Interests/specialities
Prof. Lawrie Powell AC	MD, PhD, DUniv (Griff), FRACP, FRCP (Lond), FRCPT	Director, Research	liver disease, haemochromatosis, research and research governance
Jennifer Lonton	BN, BBus, GCHM	Research Support Officer (until June 2013)	research governance
Jacqueline Robinson	RN, BAA, LLM	Research Governance Officer (from September 2013)	research ethics and research governance
Anitha Dinesh	MBA (Finance), PGDBF (Banking and Finance)	Assistant Research Support Officer/ Assistant Business Manager Research	financial management
Estelle Ellis		Executive Assistant	
Mimy Andree	Dip. Business Management	Administration Officer (from June 2013)	research governance administration

## Research Advisory Committee

Following the recommendations of the Ryan Review in 2004, a Research Advisory Committee was established to advise the hospital on matters of research and research funding and also to advise the RBWH Foundation on the allocation of grants. The composition of the Research Advisory Committee for 2013 was as follows:

- Associate Professor Gerard Byrne BSc (Med), MBBS (Hons), PhD (Chair) FRANZCP. Head, Academic Discipline of Psychiatry, UQ and Director, Older Persons' Mental Health Service, Metro North Mental Health Services
- Professor Lawrie Powell AC, MD, PhD, DUniv (Griff), FRACP, FRCP (London), FRCPT. Director, Research, RBWH
- Professor Ron Dickinson BSc Hons, PhD. Professorial Research Fellow and Director, Centre for Studies in Drug Disposition, The University of Queensland

## Research Advisory Committee

- **Professor Murray Mitchell DPhil, DSc, FRSNZ.** Director, The University of Queensland Centre for Clinical Research
- **Dr Jacobus Ungerer MBChB, MMed (Chem Path), MBL, FRCPA.** Acting Director, Chemical Pathology, Pathology Queensland
- **Dr Ian Wilkey MBBS, BSc, LLB, FRCPA, FAFPHM.** Chair, QIMR Ethics Committee
- **Professor Glenn Gardner RN, PhD, FRCNA.** Professor of Clinical Nursing and Director, RBWH/QUT Centre for Clinical Nursing (until August 2013)
- **Dr Peter Roeser MD, FRACP, FRCPA.** Retired Physician, The University of Queensland Department of Medicine
- **Professor Robert Tindle PhD.** Professor Emeritus, The University of Queensland and Former Director, Sir Albert Sakzewski Virus Research Centre, RCH and Clinical Medical Virology Centre, The University of Queensland
- **Associate Professor Roger Allison MBBS, DOBst, MRCP, FRCR, FRACR, FACHPM.** Executive Director, Cancer Care Services, RBWH
- **Judith Catherwood BComm, BSc (Hons) Dietetics, PG Cert Strategic Workforce Planning.** Executive Director, Allied Health Professions, RBWH. (until August 2013)
- **Professor Grant Ramm, BSc, PhD.** Group Leader, Hepatic Fibrosis Laboratory, QIMR Berghofer (since February 2013)
- **Professor Joan Webster, RN, BA.** Nursing Director, Research, RBWH (since February 2013)
- **Professor Claire Rickard, PhD.** NHMRC Centre of Research Excellence in Nursing Interventions (since August 2013)

## Research grants

Investigators	Research title	Granting body	Amount awarded	Years of funding
Delatycki, M. et al (three centres)	Venesection or expectant management for moderate iron overload in HFE related hereditary haemochromatosis	NHMRC	\$820,000	2012-2014
McLaren, C. et al (eight centres)	Genetic modifiers of iron status in hemochromatosis <i>HFE</i> C282Y homozygotes	NIH	\$1.2M	2013

## Publications

Wood MJ, Gadd VL, **Powell LW**, Ramm GA, Clouston AD. Ductular reaction in hereditary hemochromatosis: The link between hepatocyte senescence and fibrosis progression. *Hepatology*. 2013; 59(3):848-857.

Wood MJ, **Powell LW**, Dixon JL, Subramaniam VN, Ramm GA. Transforming growth factor- $\beta$  and toll-like receptor-4 polymorphisms are not associated with fibrosis in haemochromatosis. *World Journal of Gastroenterology (WJG)* 2013; 19(48):9366-9376.



## Support research at Queensland's largest hospital by making a donation to RBWH Foundation.

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