Leaders in Translational Research

Clinical Problem

Basic science &/or clinical research

Evaluation of efficacy of research results on clinical problem (including clinical trials)

Health Service Research (can the solution be applied to routine practice?)

Clinical Solution

PEOPLE INVOLVED

Scientists and Clinicians

Patients

Clinicians & Hospital / Health Managers

Regulatory Authority

Improved Medical Care
# Chairman's Report

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From almost every perspective, 2005 was a good year for research on the Princess Alexandra Hospital. We increased higher degree enrolments by 7% to over 120. Estimated total research income was $18.4M – an increase of 19.5% and we had over 335 research publications. Outstanding individual awards also came to the Campus with Professor Ian Frazer receiving the CSIRO Eureka Prize for Leadership in Science and being nominated for Australian of the Year and Associate Professor Carmel Hawley and Dr Paula Marlton receiving National Health and Medical Research Council Enabling Grants.

A very pleasing trend has been the continued development and consolidation of research collaborations bridging basic through to clinical science. This “translational” research activity is crucial for the Campus’ continued International competitiveness. Examples include the Cancer Collaborative Group, the National Health and Medical Research Council Centre of Clinical Research Excellence in Cardiovascular Disease and Metabolic Disorders and the announcement of Phase 3 clinical trials for the cervical cancer vaccine developed by the Centre for Immunology and Cancer Research under Ian Frazer.

One “downside” is that we have outgrown available basic and clinical research space. This is tangible evidence of our growth and research success and, whilst it is a “good” problem to have, it needs to be addressed. To this end, the Master Planning Process for the Ground Floor of the Research Building was completed and fitout began late in 2005. Secondly, the Centres for Health Research made a submission to Queensland Government entitled “A Translational Biomedical Research Hub for Queensland” outlining a proposal for a new Translational Research Building for the Campus.

Other areas have been characterized by change also. Dr Derek Dickey retired as Chair of the Research Ethics Committee after fifteen years of outstanding and dedicated service. On behalf of all researchers on Campus I would like to sincerely thank Derek for his efforts in shouldering a huge work load over so many years. His contribution to the high ethical and scientific standard of research at the Princess Alexandra Hospital cannot be overestimated. Derek’s role as Chair of the committee has been taken over by Ms Gwynneth Petrie, whom we welcome and offer our support. Additionally, Ms Anne Walsh has been appointed Ethics Manager and this extra expertise (and pair of hands) has led already to the gaining of much efficiency in the Ethics review process. Again, the splendid efforts of Ms Areti Gavrilidis have underwritten much of the advance and activity on the Research ethics, administrative, and future development and planning fronts and I sincerely thank her.

End of year is a time of reflection and planning. We must look to a future in a competitive environment, and be committed to continue our high quality research. Underpinning all plans are personnel, and training and mentoring of young researchers must be one of our core activities. This goes...
We must look to a future in a competitive environment, and be committed to continue our high quality research...

hand in hand with the continued development of research career paths in all areas, with support for research activities in terms of finance and time. The well recognized spinoff is the enhanced capacity to recruit and retain quality staff, with short and long term benefit to patients and the health of Queenslanders.

Finally it leaves me to acknowledge the commitment, mentorship and leadership of my predecessor as Chair of the Centres of Health Research, Professor Don Cameron. Don gave unstinting service to the Princess Alexandra Hospital research community over more than 2 decades and played a large part in shaping our current success. His integrity, humility and strategic acumen were such that there was always a very long line of us seeking sage advice! We wish him all the best in his “retirement” and hope that he continues to think fondly of our Hospital and its researchers.

Professor John Prins
Chair, Centres for Health Research
Princess Alexandra Hospital Health Service District
The year resulted in a number of highlights. Some key highlights included the award by the National Health and Medical Research Council of a five year Senior Research Fellow to Professor Michael Roberts; a Medical Bioinformatics Genomics and Proteomics Program grant to Professor Tom Gonda; an Enabling Grant to Associate Professor Carmel Hawley and an Enabling Grant to Dr Paula Marlton; and over $3.35M in project grants. In 2005 the Centres for Health Research were involved in organizing the first “Princess Alexandra Hospital Translational Research Symposium – tomorrow’s therapies today” held in the Russell Strong Auditorium. Professor John Prins was appointed and began his position as Chair of the Princess Alexandra Hospital Centres for Health Research in November.

**National Health and Medical Research Council (NHMRC) Enabling Grants**

Associate Professor Carmel Hawley was awarded $1.29M over five years for the Australasian Kidney Trials Network to facilitate clinical research and foster collaboration amongst leading researchers in kidney disease. The Network’s focus will be to answer important questions about prevention and treatment of kidney disease to improve health and quality of life outcomes. The Network will be at the forefront of knowledge creation and will address complex economic, technological and social needs relating to patient care and the translation of research into clinical practice.

Dr Paula Marlton was awarded an Enabling Grant of $1.5M over 5 years for National Leukaemia and Lymphoma Tissue Bank to commence in 2006. Dr Marlton’s initiative is on behalf of the Australasian Leukaemia and Lymphoma Group, a national clinical trials and translational research group of which Princess Alexandra Hospital is a leading member. The Leukaemia Foundation and Queensland Health Pathology Services are also supporting the project.

Recent advances in knowledge about how cancer cells differ from normal cells, why some people are susceptible to cancer and how new treatments can target cancer...
have all occurred through research on cancer cells from patients. To benefit patients with cancers of the blood and the immune system, the National Leukaemia and Lymphoma Tissue Bank was established in 2002. It is hoped that this National Health and Medical Research Council grant will result in a dramatic expansion in the size of the tissue bank, add relevant clinical data and streamline access and utility for Australian researchers. Ultimately, this will lead to better treatment and prevention of haematological cancers.

**Medical Bioinformatics Genomics and Proteomics Program**

Professor Tom Gonda, Drs’ Brian Gabrielli, Sean Grimmond and Simon Barry were awarded a National Health and Medical Research Council Program Grant of over $1.8M over 5 years for Retroviral Expression Cloning Using an Arrayed Full Length cDNA Gene Set.

Professor Gonda’s group will establish a radically modified retroviral expression cloning system that will, in principle, allow identification of all genes that confer a particular dominant phenotype. To do this they will establish an arrayed retroviral library of sequence-verified genes covering the entire human transcriptome. This technology will be used to identify genes involved in a wide range of medically-important biological processes.

The group was also awarded an Australian Research Council Linkage Infrastructure Equipment and Facilities grant for over $824K for ‘A Facility for High Throughput, Functional Gene Discovery Using Arrayed Retroviral Expression’.

**Princess Alexandra Hospital Translational Research Symposium - “tomorrow’s therapies today”**

The aim of the first Translational Research Symposium was to highlight the pioneering research being undertaken at the Princess Alexandra Hospital campus that has its roots in basic biology but has direct application to improved patient outcomes. The symposium attracted over 150 clinicians and researchers from within and outside the campus. The symposium was sponsored by the Princess Alexandra Hospital Centres for Health Research; the Princess Alexandra Hospital Foundation and The University of Queensland Centre for Immunology and Cancer Research.

**Professor John Prins, Chair Princess Alexandra Hospital Centres for Health Research**

In November 2006 Professor John Prins was appointed as Chair of the Princess Alexandra Hospital Centres for Health Research. Key roles of the position include fostering a research culture and facilitating research programs to encourage the potential for translation and application of research to clinical practice.
It is wonderful to see a continuing increase and success in the number of post-graduate PhDs’ and Masters’ students supervised by researchers based at the Princess Alexandra Hospital.

**SUAD HANNAWI**

Suad Hannawi is currently studying a PhD in clinical medicine (Rheumatology) with the school of medicine and the University of Queensland Centre of Immunology and Cancer Research. She is a Rheumatologist, studied medicine in Muscat-Oman, trained in Dubai-United Arab Emirates; and a member of Royal College of Physicians of Edinburgh, UK. Suad worked at the Royal Brisbane Women’s Hospital during 2002-2003 at the Rheumatology Department.

Suad’s PhD is being supervised by Professor Ranjeny Thomas, who is a world leader in her field, and Professor Thomas Marwick is co-adviser, who has a world wide reputation in non-invasive cardiac imaging. The topic of Suad’s thesis is the incidence of cardiovascular events and atherosclerotic disease relative to clinical outcome and joint damage in early rheumatoid arthritis.

Cardiovascular disease is the leading cause of death in many chronic diseases including rheumatoid arthritis. Hence Suad decided to look at the relationship between early rheumatoid arthritis and cardiovascular disease. The research environment created by the Centre of Immunology and Cancer Research and the Princess Alexandra Hospital is enabling Suad to have access to world leading research facilities and researchers, leading to a high level of research being conducted and importantly high level of research training.

Suad presented some of her work at the 7th World Congress on Inflammation: Inflammation, the key to much pathology, 20-24 August 2005 in Melbourne, Australia; at the Cardiac Society of Australian / New Zealand meeting held August 2005 in Perth Australia and at the 12th Annual conference of the Australian Rheumatology Association (Queensland branch), 7-9 October 2005, Gold Coast, Australia.

She has one publication as a co-author and aims to submit her thesis by early 2007. Upon submission of her PhD thesis Suad hopes to find a post-doctoral position to continue her research in addition to her clinical work to alleviate the suffering of patients with rheumatoid arthritis.
MATTHEW HORDERN
Matthew Hordern is currently studying a PhD (APA scholar) in clinical exercise physiology with the School of Human Movement Studies and the Centre of Clinical Research Excellence in Cardiovascular and Metabolic Disorders. He is being supervised by Dr Jeff Coombes, Professor Thomas Marwick and Dr. David Jenkins. The topic of Matthew’s thesis is the effect of lifestyle modification on type II diabetic myocardium and vasculature. His PhD is primarily involved with a large scale collaborative study within the Centre of Clinical Research Excellence that is assessing the effect of a diet and exercise intervention on heart function and other cardiovascular and metabolic parameters on patients with type II diabetes. The research environment created by the Centre of Clinical Research Excellence and the Princess Alexandra Hospital is enabling Matthew to have access to world leading facilities and researchers, leading to a high level of research being conducted and importantly a high level of research training. He has 3 publications in applied exercise physiology journals and has recently been awarded a Travel Grant from the National Heart Foundation to present some of his research findings at the American College of Sport Medicine Conference later this year. He has previously presented research from the Centre of Clinical Research Excellence research group at the Sports medicine Australia National Conference.

Matthew has developed specialist knowledge in exercise training for people with diabetes both through his PhD and his undergraduate degree in a Bachelor of Applied Science in Human Movement Studies in the field of Exercise Science graduating with first class honours at the University of Queensland. His undergraduate degree specialises in understanding the exercise prescription requirements for special populations including patients with diabetes and cardiovascular disease. Matthew has aspirations to further develop his expertise in relation to the clinical management of diabetes and other metabolic and cardiovascular disorders through the use of exercise prescription with the Centre of Clinical Research Excellence in Cardiovascular and Metabolic Disorders at the Princess Alexandra Hospital. This will allow him to take advantage of the state of the art technology and world leading researchers located at the Princess Alexandra Hospital.

FELICITY NEWELL
Felicity Newell is based at the Princess Alexandra Hospital in the Centre for Diabetes and Endocrine Research (Adipose Tissue Biology Unit) and her PhD supervisors are Professor John Prins, Dr Louise Hutley and Dr Jon Whitehead.

It was previously identified in the laboratory that Fibroblast Growth Factor One (FGF-1) greatly increased the growth and differentiation of human preadipocytes. In her PhD, Felicity is investigating the mechanisms whereby FGF-1 has these effects. Her interests are primarily in the
cellular signalling of FGF-1 in human preadipocytes both during proliferation and differentiation and the effects of FGF-1 on the expression of adipocyte specific genes.

Upon submission of her PhD, Felicity hopes to find a post-doctoral position in Canada to continue research into the mechanisms of cellular signalling, and in particular in relation to the determination of stem cells.

**PRABHA RAMRITU**

Prabha Ramritu is conducting a two-phased study to predict risk factors for individual and shared adverse events experienced by persons >70 years during hospitalisation. Adverse events amongst the elderly include falling, pressure ulcers, incontinence, delirium, and a decline in abilities to perform activities of daily living. The second phase of the study is to use the predictors to develop and validate a screening tool that can be used by nurses to assess patients and identify those at risk of these adverse events.

Prabha is a registered nurse, with ten years clinical experience in caring for acutely ill hospitalised adults in a variety of clinical settings. She has also held the position of a Nurse Researcher for 12 years and conducted clinical research into areas such as assessment and management of pain in children; acquired brain injury in children, maintenance of professional boundaries between nurses, children and families, and competence of new nurse graduates. As a foundation member of the Queensland Centre of the Joanna Briggs Institute for Evidence Based Nursing and Midwifery Practice, she has supported evidence based practice by conducting systematic reviews on nursing management of dysphagia in children and adults and persistent vegetative states. She is pursuing this interest in her current part-time employment at the Centre for Healthcare Related Infection Surveillance and Prevention conducting a systematic review into strategies to prevent central venous catheter–related bloodstream infections.

As a principal investigator, Prabha has been successful in obtaining a number of research grants from diverse funding sources. She has also presented papers and posters extensively at many international conferences. She has received scholarships for tertiary education as well as a travel bursary to attend and present a paper at the International Council of Nurses centennial conference in London in 1998. She is a member of the Royal College of Nursing Australia; a member of the Human Research and Ethics Committee, Mater Misericordiae Health Services Limited (Brisbane); a member of the international editorial board of the Journal of Child Health Care and an assessor for the Queensland Nursing Council Research grants.
In September 2005 Dr Andrew Barbour was appointed by the University of Queensland as a Senior Lecturer and as a Visiting Medical Officer by the Princess Alexandra Hospital. He undertook his General Surgical Registrar in Advanced Training (Year 4) in 2002 at the Princess Alexandra Hospital. He went on to complete a Senior Training Fellowship at the Bristol Royal Infirmary, United Kingdom and then Memorial Sloan-Kettering Cancer Center.

In 2005 Andrew was awarded his PhD on “The functional role of CD44 splice variants in tumour proliferation and metastasis.” His PhD was supervised by Professor David Gotley with Associate Professor Toni Antalis taking on the associate supervisory role.

Andrew held a full-time laboratory research position from 1998 to 2000 in the Cellular Oncology Laboratory based at the QIMR. During that time he gained knowledge in most molecular biological techniques including DNA, RNA and protein extraction from tissue specimens and cell lines; DNA cloning, amplification by polymerase chain reaction (PCR), DNA sequencing; reverse-transcriptase PCR (RT-PCR); DNA transfection of mammalian cells by electroporation and characterization of stably transfected cells; and Western blot analysis of protein. Andrew has experience with tissue culture of mammalian tumour cells and the study of tumour cells in vitro.

His work has been recognised by several awards, including an American Association for Cancer Research – AFLAC Scholar in training award at the 2001 ASM.

Since the completion of his PhD, Andrew has continued to play an active role in the laboratory. Current research activities include:

- Isolated Limb Infusion (ILI) for Malignant Melanoma: Predictors of Response and Outcome. This was presented as a poster at the Society of Surgical Oncology Meeting in the USA this year and is currently a manuscript in preparation.

- Patterns and Predictors of Initial Recurrence Following Resection for Adenocarcinoma of the Oesophagus and Gastro-Oesophageal Junction. This will be an oral presentation at the RACS annual scientific meeting this year and is currently a manuscript in preparation.

- Refining Oesophageal Cancer Staging after Neoadjuvant Therapy: Importance of Complete Response. This will be an oral presentation at the RACS annual scientific meeting this year and is currently a manuscript in preparation. It will also be part of a collaboration with the Bristol Royal Infirmary to test a new staging system on a separate dataset.

Andrew is supervising 3 registrar projects on Merkel Cell Cancer, Melanoma and gastric outlet obstruction.
PROFESSOR MATTHEW BROWN

Professor Matthew Brown has taken up the role of Chair in Immunogenetics based at the Centre for Immunology and Cancer Research where he now directs the Immunology Program. He is a clinician-scientist who trained initially in medicine and rheumatology in Sydney, Australia before moving in 1994 to Oxford, England. Working at the Wellcome Trust Centre for Human Genetics and the Botnar Research Centre (University of Oxford Institute of Musculoskeletal Sciences), Professor Brown pursued gene-mapping and genetic epidemiology studies in musculoskeletal diseases, including ankylosing spondylitis, rheumatoid arthritis, chondrocalcinosis and osteoporosis, along with some rarer single gene diseases. He was appointed Professor of Musculoskeletal Sciences at University of Oxford in 2004, and was a fellow of St Peter’s College Oxford from 2000.

His research group work on genetics of common musculoskeletal disease, which have either no current available treatment, or only partially effective treatment. Professor Brown’s group has achieved numerous successes in these conditions, identifying genes in each disease which have opened up new avenues of research into their causes and possible treatments. For example, chondrocalcinosis is found in 50% of patients undergoing total hip replacement for arthritis, and no treatment is available either to prevent or treat it. Similarly, ankylosing spondylitis, which is as common as type 1 diabetes mellitus, has no treatment which has been shown to prevent the long-term disability caused by this condition. Gene findings by Professor Brown’s group have in both these diseases provided new insights into their causation and identified potential therapeutic targets.

DR ROBERT FATHI

Dr Robert Fathi has recently returned to the Princess Alexandra Hospital as a Visiting Medical Officer in the Department of Cardiology. Robert specializes in the medical and procedural management and treatment of myocardial infarction. His area of expertise also includes the newly developed technique of percutaneous intervention for carotid artery stenosis.

Robert obtained his medical degree from the University of Queensland. He specialized in Cardiology at the Princess Alexandra Hospital and received his Fellowship to the Royal Australasian College of Physicians in 2003. He obtained a PhD in 2004 under Professor Thomas Marwick investigating the interaction of vascular anatomy and physiology with myocardial ischaemia. He investigated the role of serum lipid subfractions and their intense lowering on myocardial ischaemia as assessed by Dobutamine stress Echocardiography. The role of vascular function (brachial artery reactivity) and vascular anatomy (using carotid intima media thickness) as markers of vascular health and risk of future cardiovascular morbidity and mortality was also investigated.

Robert then spent two years at the Cleveland Clinic Foundation, USA, performing an advanced fellowship in coronary, carotid and peripheral intervention under the guidance of Dr Eric Topol.
The Cardiovascular Imaging Research Group at University of Queensland was established in 1998 when Professor Tom Marwick returned to Australia after working for 10 years overseas, at St Luc Hospital/University of Louvain (Belgium); St Mary's Hospital/Imperial College (London); and Cleveland Clinic Foundation/Ohio State University, USA. Professor Marwick has been involved with clinical research on the non-invasive assessment of cardiovascular function for over 20 years - predominantly involving echocardiography. He was one of the initiators of stress echocardiography as a clinical tool and more recently has pioneered the use of tissue Doppler, backscatter and strain for tissue characterization. The group has expertise in new echocardiographic imaging technologies (especially myocardial tissue characterization, contrast and 3D echo), stress echo, early detection of atherosclerosis, and studies of how cardiac imaging techniques can influence patient outcomes and cost-effectiveness of care. The clinical and research capability of the group in cardiac imaging and image processing (including multi-modality interests) are unique in the Asia-Pacific region.

Centre in Cardiovascular Disease and Metabolic Disorders

The National Health and Medical Research Council Centre of Clinical Research Excellence in Cardiovascular Disease and Metabolic Disorders, is led by Professor Marwick. In 2003, a partnership between the Cardiovascular group with successful clinical research groups in Diabetes and Endocrinology, Hypertension, Nephrology, Exercise Science and Biostatistics, in collaboration with specialists in telemedicine, was awarded one of nine Centre of Clinical Research Excellence awards by the National Health and Medical Research Council and the only Centre in Queensland. The funding has enabled the Centre in Cardiovascular Disease and Metabolic Disorders to address the interface between these diseases and to train a group of clinical researchers skilled in multi-disciplinary research. The members include Professors' John Prins and David Johnson, Associate Professor Michael Stowasser, Dr Jeff Coombes, and Ms Elaine Beller.

The Centre has provided opportunities for current and ongoing studies to explore the relationship between the metabolic dysfunction characterising several common clinical conditions and cardiovascular dysfunction. The initial collaboration, which comprised approximately 20 staff and students entails:
Cardiovascular exercise/diet intervention program for diabetic patients.

Screening programs for diabetic coronary disease.

Characterization and prevention of early diabetic myocardial disease.

Effects of hyperaldosteronism on fibrotic changes in the heart and vessels.

Subclinical myocardial and vascular damage in patients with renal failure.

Contribution of insulin resistance to cardiac dysfunction in obesity.

Currently in the 4th year of a 5 year program, the Centre has made a number of achievements in relation to the above programs:

Over 200 diabetic patients screened, 6 cohorts of 25 patients have been randomized to the exercise training/telemedicine intervention.

The screening program for diabetic coronary disease identified evidence of ischemia in about 15% of asymptomatic diabetic subjects. Coronary angiography is being performed in all these patients and intervention has followed if prognostically important disease is detected. This work was presented at a plenary session of the American Heart Association and we hope this experience will help to inform new guidelines for exercise training for diabetic subjects which the group have been invited to lead.

A clinical screening algorithm for coronary disease in End Stage Renal Failure has been developed and presented at the American Society of Nephrology.

Characterization of subclinical changes in myocardial structure and function in patients with type 2 diabetes, obesity, hyperaldosteronism and renal impairment, using non-invasive techniques.

Association of myocardial dysfunction and arterial stiffness with aldosterone (aldo) levels in patients with both hypertensive (HT) and normotensive forms of primary aldosteronism.

Improvements in myocardial function and LV fibrosis after treatment with aldo antagonists in patients with essential HT and diastolic dysfunction.

Demonstration of improvements in both metabolic dysfunction and cardiovascular function in response to lifestyle intervention in type II diabetes. Consistent with the hypothesis, those subjects with the more severe metabolic dysfunction have benefited most from the interventions.

Demonstration of improvement in subclinical LV dysfunction in asymptomatic overweight and obese patients, with weight reduction from lifestyle intervention.

In addition, the Centre has provided opportunities for:

Infrastructure development including the development of a common database for all studies, enhancing the feasibility of joint studies.

Effective interaction of laboratory researchers, clinicians, cardiovascular imaging specialists, dieticians, exercise physiologists and trialists. Highlights to date include the:

- Development of a multidisciplinary intervention for the lifestyle intervention (dietary, exercise physiology).
- Development of home-based programs using a telemedicine-based approach to supervise the patients (exercise physiology, telemedicine specialists).
- Weekly joint research meetings with presentations by experts in each field, including saving all presentations in a common location, available to all members of the group.
- Joint teaching of graduate students in each subspecialty, eg monthly statistics and trial design tutorials.
- Development of a collaboration with the exercise training/obesity program at the Queensland Institute of Technology.

Training of a number of clinical researchers in cardiovascular and metabolic disease.

Successful recruitment of clinical researchers.

Translation of the group’s work into practice by published articles in high impact journals; incorporating into guidelines and by training clinical researchers whose practice will be informed by their research.

The interaction of researchers and clinicians has led to the clinical development of a multidisciplinary intervention program for End Stage Renal Disease and another for heart failure. The telemedicine-based home programs to supervise the patients and ensure that the interventions are sustainable and translatable have been expanded outside of the Centre into similar programs in heart failure.

As results are gathered, the group will promote the benefits of activity and dietary intervention, and collaborate with evidence-based medicine groups that have successfully increased the uptake of scientific evidence into clinical practice.
The Princess Alexandra Hospital continues to support clinical research through the award of three clinical research fellowships annually. Twenty clinical research fellowships have been awarded since the scheme was first introduced in 1999.

The aim of the scheme is to allow registrars in clinical training programs to undertake a year of supervised clinical research at the Princess Alexandra Hospital.

**DR DAVID STURGESS**

Dr David Sturgess completed a research fellowship at the Princess Alexandra Hospital during 2005. His previous role was as senior registrar in intensive care. He has a fellowship diploma from the Royal Australian College of General Practice and is concurrently undertaking advanced training in both anaesthesia and intensive care medicine.

During his twelve months as a research fellow he was able to continue his research regarding the use of blood tests and echocardiography to evaluate heart function during severe infection (sepsis). Sepsis is a common reason for admission to the Intensive Care Unit. It has a high mortality rate and this is often due to impaired heart function. Research has facilitated collaboration between intensive care and echocardiography departments in this area. It is hoped that David's research will contribute to earlier detection and improved management of this severe illness.

The research fellowship was a valuable beginning to his PhD studies at the University of Queensland. In addition to a literature review publication in an Australian peer-reviewed critical care journal, he had an abstract accepted for presentation at the prestigious Matt Spence Medal session of the Australian and New Zealand Intensive Care Society Annual Scientific Meeting. He has been invited to present lectures locally and nationally, via web conferencing.

Since completing his research fellowship, he continues to make progress in his research. Analysis of all echocardiography performed in the Intensive Care Unit at the Princess Alexandra Hospital during 2003 and 2004 has been completed. The resultant manuscript is one of two papers currently submitted for publication. He was successful in attaining a registrar research grant from the Princess Alexandra Hospital Foundation for 2006 and presently has four studies underway at the Hospital.
During Dr Carolyn Van Eps’ time as Fellow in Clinical Research in 2005, she commenced her PhD studies concerning clinical, logistic and economic outcomes for patients undergoing home-based, alternate nightly, slow, long, haemodialysis (Nocturnal Haemodialysis). Morbidity and mortality rates in end stage renal failure patients on conventional dialysis regimens are extremely high compared to matched people in the general population. Much of this excess morbidity and mortality (about 50%) is related to cardiovascular disease. In an effort to improve outcomes, interest in dialysis regimens, such as Carolyn’s, involving increased session hours and frequency of dialysis has developed.

A total of forty-three patients from the Princess Alexandra Hospital have been enrolled in the Nocturnal Haemodialysis Study. These have been assessed in terms of cardiovascular structure and function and risk factor control, bone mineral metabolism management, nutrition and appetite, anaemia management, peripheral nerve function, sleep hygiene, quality of life, economic costs of therapy and adverse events. Preliminary analysis has generated promising results. The Unit has achieved significant improvements in left ventricular end diastolic and systolic volumes and brachial artery reactivity (a measure of endothelial function). Mean pre and post dialysis serum phosphate and predialysis calcium-phosphate product have normalized with more than 70% of patients not requiring prescription of phosphate binding medication. The incidence and severity of hyperparathyroidism and ectopic calcification has also significantly reduced. Requirement for erythropoietic agent supplementation has significantly reduced. There has been a trend to improvement in leptin and ghrelin, hormones involved in the control of appetite and regulation of nutritional status.

The results have generated a good level of interest from the nephrology community. Carolyn has had the opportunity to present preliminary data at several forums throughout the year including: Royal Australasian College of Physicians Annual Scientific Meeting (Invited oral presentation to compete for the Pfizer Prize); University of Queensland School of Medicine Conference Day (Joint winner of the 1st Year PhD Student Prize for Best Presentation); Australian and New Zealand Society of Nephrology Annual Scientific Meeting (3 posters presented. The cardiac structure poster was short listed for the Best Poster Prize); 5th Annual Health and Medical Research Conference of Queensland (2 oral presentations); American Society of Nephrology Renal Week (2 Poster presentations).
Committee Reports

Committee Reports

2005

research - key to health research
The momentum created in 2004 has continued in 2005 for the Cancer Collaborative Group. Significant Research progress has been made in basic, translational and clinical research.

**Research Program**

**Gene Profiling:** The group is well advanced in their research milestones. The group has two continuing projects using DNA micro-array to predict clinical outcomes: (1) Gene expression profiling in B-Chronic Lymphocytic Leukaemia and (2) Osteosarcomas. The group’s aim of facilitating translational research has progressed well resulting in two clinical trials underway: (1) The effectiveness of combination therapy of valproate + cytosine arabinoside in elderly Acute Myeloid Leukaemia patients and (2) The effectiveness of valproate alone or in combination therapies for the treatment of head and neck cancer.

**Clinical Research:** Forty-six cancer research projects were submitted to the Princess Alexandra Hospital Human Research Ethics Committee during 2005 of which twenty seven were clinical trials, twelve being investigator-initiated.

**Training and Mentoring Young Investigators**

Good progress has been made by the three PhD Scholarship recipients and the Practitioner Fellow.

**Nursing:** Ms Letitia Burridge, University of Queensland School of Population Health - Gender Differences in Lay Caregiver Needs, Burden and Support While Caring for a Patient with Recurrent Cancer.

A Draft literature review on caregiving reluctance has been prepared for comments. A paper related to the quantitative analysis for the study has also been submitted for publication.

**Science:** Mr Fang Zhou, Centre for Immunology and Cancer Research, University of Queensland – The Molecular Mechanisms of Tumour Immunotherapy.

Data is showing whether specific CTL’s can kill keratinocytes expression endogenous antigens and whether keratinocytes can act as good target cells in tumour immunotherapy. Fang Zhou has also been awarded an ANZ Scholarship to continue his research.

**Allied Health:** Dr David Brown-Rothwell, Audiology Department, PAH – Prediction of Hearing Outcomes in Acoustic Neuromas Surgery: Correlation between Audiological Results, Magnetic Imaging, Surgical findings and Histopathological Appearance.

An educational component of the research has been developed to ensure translation of proven research into clinical practice. Assessment of the quality...
of patient records and data relating to acoustic neuromas has also been undertaken.

**Practitioner Fellowship:** Good progress has been made by Dr Alex Guminski who was awarded the Practitioner Fellowship. His current research is in close collaboration with the Gene Profiling Unit. A study on Valproic Acid in recurrent head and neck cancer received approval to proceed.

**Translating Research Outcomes**

**Cochrane Reviews:** A Systematic review of the literature and meta analysis has been undertaken for Sequencing of Chemotherapy and radiation therapy for early breast cancer. The conclusion found is that current practice (adjuvant CT prior to RT) for early breast cancer is not detrimental.

**Ongoing Education:** Along with the bi-monthly Seminars continuing in 2005 the Cancer Collaborative Group participated in the Princess Alexandra Hospital Translational Research Symposium held on 30th August and in the 2-day Symposium Princess Alexandra Hospital Health Service District held on 11th-12th August along with a Community Lecture organised by the Princess Alexandra Hospital Foundation in May.

**Publications:** Members of the Cancer Collaborative Group had over fifty-five peer reviewed articles published, and had an increase in both published abstracts and book chapters.

**New Initiatives:** Two separate projects were called for and a competitive process was followed. The successful submissions were Multi-dimensional exercise to mitigate side effects of adjuvant therapy following surgery for breast cancer by T Haines, N Wetzig and P Sinnamon (Cancer Research to be undertaken by Surgeons) and Two-armed randomised trial in post-operative patients with high-risk cutaneous squamous cell carcinoma of the head and neck by S Porceddu (Pilot Clinical Research Study).

**Additional Achievements**

**Successful Grants:** In 2005 members of the Cancer Collaborative Group successfully obtained additional sources of funding.

- Dr Paula Marlton achieved funding from the National Health and Medical Research Council (NHMRC) Enabling Grant (Australasian Leukaemia Lymphoma Group (ALLG) National Leukaemia and Lymphoma Tissue Bank (NLLTB)).

- Professor Tom Gonda and Dr Brian Gabrielli were awarded a Medical Bioinformatics; Genomics; Proteomics Program Grant (Retroviral Expression Cloning Using an Arrayed Full Length cDNA Gene Set). Dr Sandro Porceddu received funding from the Queensland Cancer Fund (Post-operative chemoradiotherapy vs radiotherapy in high risk cutaneous squamous cell carcinoma of head and neck).

- Dr Andrew Fielding, Dr Brendan Healy, Dr Phillip Evans and Associate Professor Bryan Burmeister were awarded an NHMRC Project Grant (Development of Online Imaging Techniques to improve the Outcome of radiotherapy as a treatment for cancer).

- Associate Professor David Whiteman, Professor Adele Green, Professor David Gotley, Associate Professor Bernard Smithers, Professor David Watson and Associate Professor Gregory Falk gained funding from an NHMRC Project Grant (Towards Prognostic Markers for Oesophageal Cancer).

- Dr Kong-Nan Zhou was awarded a Queensland Cancer Fund Grant (Molecular mechanisms of regulatory expression of human papillomavirus L1 gene in keratinocytes).

**Planned Projects:** Two additional projects were developed to begin in 2006. Preclinical Evaluation of the epigenomic modifying agents, valproate and decitabine, in the treatment of head and neck cancers will initiate a series of preclinical tests to test the viability of using epigenomic modifiers as sensitising agents in the treatment of head and neck cancers. A Phase 1 Study of the Value of Microarray Profiling to Predict Radiation Sensitivity of Malignant Melanoma Involving Soft Tissues will analyse the genetic profile of 20 patients with soft tissue melanoma who will be undergoing a standard course of radiation therapy, either curative or palliative.
The Princess Alexandra Hospital Foundation underwent many changes in 2005, commencing with a new Chairman, Mr Michael Wille, who was appointed after serving as a Director for many years. The new Chief Executive Officer, Ms Lenore Guthrie, was also appointed. Ms Guthrie brings significant clinical and management experience, including a Masters of Health Administration.

While continuing to focus on the primary objective of raising funds to support and encourage medical research on the Princess Alexandra Hospital campus, the Board, management and staff have realised opportunities to initiate a significant commercial asset base which in the longer term will ensure a steady income stream; as well as developing fund raising capabilities.

In 2004 the Foundation developed a relationship with the Queensland Hotels Association and the Mater Foundation in the form of Hotel Care Week. This year the event raised over $175,000, more than doubling last year’s effort and is an on-going commitment for the Queensland Hotels Association highlighting their members dedication to giving back to the community by supporting medical research. Australian Liquor Marketers, another major corporate donor has contributed over $250,000 since 2002.

The Foundation allocated over $445,000 for research on the Princess Alexandra Hospital campus during the year. These grants will commence in 2006.

Thanks must go to those special researchers who always rise to the challenge when asked to speak at the research briefings or promotional talks to the major sponsors of the Foundation. In particular, the Foundation would like to thank Professor Don Cameron whose insight into the management of world class research has helped shape and build one of the most substantial and productive research organisations in the Southern Hemisphere. His efforts and support will be missed.

The Foundation is a separate statutory authority appointed under an Act of Queensland Parliament and is controlled and managed by an independent Board of Directors. Members of the Princess Alexandra Hospital Foundation Board are appointed by the Governor in Council and are drawn from the local business and medical community. The Foundation does not receive any funding from the State or Federal Governments and relies almost completely on donations from the general public and the business community.
Foundation Board
Members

Chair
Mr Michael T Wille
BA (Hons.) Eng. Phil. Bowling Green University, Yale University, Company Director

Deputy Chair
Mr Simon Lockyer
BSc (Griffith University) Managing Director, McCann Erickson Advertising

Members
Professor Ken Donald
MBBS, PhD, FRCPA, MRAC Path., FRACMA, FRACS, Professor and Head, Graduate School of Medicine, University of Queensland

Mr Richard Bowly
AFAMI (Dip.), FAIA (Dip.), FAIM, Company Director

Ms Deb Podbury,
District Manager, Princess Alexandra Hospital

Mr Anthony N. Ford
ASIA, Retired

Mr Bill Deutrom
AQ, Managing Director

Mr Gareth Evans
BA (UQ), Retired

Ms Lenore Guthrie
MHA (UNSW), Grad. Cert. Crit. Care (QUT), BN (QUT), Director and Chief Executive Officer, Princess Alexandra Hospital Foundation

A/Secretary
Ms Heather Tyrrell
Q Health Grad.Cert. Management, A/Manager Governance and District Executive Management Services, Princess Alexandra Hospital

Research Committee

Chair
Professor Ken Donald,
MBBS, PhD, FRCPA, MRAC Path., FRACMA, FRACS, Professor and Head, Graduate School of Medicine, University of Queensland.

Members
Professor Ranjeny Thomas
MBBS, MD, FRACP, Professor of Medicine, University of Queensland, Deputy Director, Centre for Immunology and Cancer Research.

Professor David Gotley
MD, FRACS, Professor of Surgery, University of Queensland

Professor Thomas Marwick
MBBS, PhD, FACC, FESC, FRACP, Professor of Medicine, University of Queensland

Professor Nicholas Bellamy
MB ChB., MD, MSc, FRCP (Glas.), FRCP(C), FACP, FAFRM, FRAC, Director, Centre of National Research on Disability and Rehabilitation Medicine, Department of Medicine, University of Queensland

Professor Donald P. Cameron
AO, MD, FRACP, Chair, Centres for Health Research, Princess Alexandra Hospital (to October 2005)

Professor John Prins
MBBS, FRACP, PhD, Chair, Centres for Health Research, Princess Alexandra Hospital, Professor of Endocrinology, University of Queensland, Director, Centre for Diabetes and Endocrine Research, University of Queensland (from November 2005)

Foundation Staff

Ms Lenore Guthrie,
Director and Chief Executive Officer

Ms Kath Jensen,
Director of Marketing

Ms Jennifer Cotter,
Office Manager
The Princess Alexandra Hospital Human Research Ethics Committee is constituted according to and compliant with the "National Health and Medical Research Council Guidelines and the National Statement (section 2.6). The function of the Committee is to ensure that all research practices relating to humans conducted within the Princess Alexandra Hospital, Queen Elizabeth II, Logan-Beaudesert Health and Nambour Health Service Districts are conducted in an ethical manner in compliance with National Health and Medical Research Council guidelines and relevant legislation.

The year has been a time of change for the Princess Alexandra Hospital Human Research Ethics Committee. September marked the end of an era for Dr Derek Dickey, Chair and Member of the Princess Alexandra Hospital Human Research Ethics Committee for 18 years and Dr Karen Ferguson, Human Resources Ethics Committee Secretary. Members of the Human Research Ethics Committee and the Princess Alexandra Hospital Research community are witness to the outstanding contribution made by both Dr Dickey and Dr Ferguson to the Ethics of Human Research at the Princess Alexandra Hospital. Ms Gwynneth Petrie, Director of Pharmacy was appointed as Acting-Chair of the Human Research Ethics Committee.

The appointment of Ms Anne Walsh to the newly created Ethics Manager position and Ms Helen Banks to the Executive Support Officer position will assist in the increasing workload of the Human Resources Ethics Committee. This highlights the Princess Alexandra Hospital Health District Services commitment to ensure the welfare and ethical conduct of human participants in medical research.

Other significant events of the year included:

- The attendance by Human Research Ethics Committee members at the 2005 Biennial Australian Health Ethics Conference in Canberra in May.
- The revision of the National Health and Medical Research Council “National Statement on Ethical Conduct in Research Involving Humans” (1999). This will undergo further consultation in 2006.
- The consultation and development process by the Commonwealth on a standard National Human Research Ethics Committee Application Form.
- The Queensland Health consultation process in the development of a Mutual Acceptance model for multi-site research projects with Queensland Human Research Ethics Committees.
A total of 249 research studies were submitted for review in 2005, signifying an increase of over 7% in new submissions. A high standard of ethics review is made possible by the hard work of members of the Human Research Ethics Committee. In particular, the lay members of the committee make an outstanding contribution and the Committee is grateful to lay members Ms Heather Brennan and Mr Rob Johnson who retired from the Committee after ten and two years respectively.

The Human Research Ethics Committee consists of:

Chair
Ms G Petrie, PHC. (from October 2005)
Dr D Dickey, MBBS, FRACP (to September 2005)

Members
Dr J North, MBBS, FRACS. Knowledge of and current experience in the areas of research.
Dr R Zubeshaw, MBBS, Dip RANZCOG. Knowledge of and current experience in professional care, counselling and treatment of people.
Ms J Coombes, B Pharm, MSc Pharmacy. Knowledge of and current experience in the areas of research.
Dr R Lim, MBBS, MD, MPhil, MRCP. Knowledge of and current experience in professional care.
Ms K Holzhauser, RN, B Health Sc.(Nursing) TNCC, CATN. Knowledge of and current experience in professional care, counselling or treatment of people.
Ms H Brennan, BEd – Lay female
Ms J Maxwell, Cert.Teaching. – Lay female (from September)

Mr R Johnson, DipTch, BEd, BA. – Lay male (up to October)
Ms DK Grigg, BCOM LLB, LLM – Lawyer (up to May)
Mr J Bennett, B.Com. LLB – Lawyer (from June)
Dr D Dickey, MBBS, FRACP – Alternate Lay male (from October 2005)

Staff
Dr K Ferguson, MBBS, Secretary (to September 2005)
Ms A Walsh, MA (Philosophy) Ethics Manager and Secretary (from September 2005)
Ms B King, Executive Support Officer (to June 2005)
Ms H Banks, Executive Support Officer (from October 2005)

Apart from the Chair, Secretary (Ethics Manager) and Executive Support Officer, all members act in an honorary capacity
In 2005 the Research Committee continued to foster research within the Princess Alexandra Hospital Health Service District and to promote and facilitate excellence in research on the campus and provides advice on:

- Strategic and operational policy on research direction, management and reporting;
- The development and management of allocation protocols to ensure that research infrastructure on the campus is used appropriately; process for effective management of research infrastructure including the Biological Research Facility;
- The promotion of specific initiatives to facilitate research on this campus.

Chair
Professor Donald Cameron, AO,
Chair, Centres for Health Research,
Princess Alexandra Hospital (to October 2005)
Professor John Prins,
Chair, Centres for Health Research (from November 2005)

Members
Professor Ian Frazer,
Professor of Medicine and Director, Centre for Immunology and Cancer Research, Princess Alexandra Hospital.
Professor David C. Gotley,
Professor of Surgery, University of Queensland
Professor Thomas Marwick,
Professor of Medicine, University of Queensland
Professor John Prins,
Chair, Centres for Health Research (from November 2005)
Professor Michael Roberts,
Professor of Medicine and Director of UQ Therapeutics Group
Dr Devinder Gill,
Director of Clinical Haematology

Dr Brian Gabrielli,
Centre for Immunology and Cancer Research
Dr Sarah Winch,
Nursing Education Research Unit
Ms Meaghan Walsh,
Diabetes and Endocrinology Department
Ms Anne-Louise Bulloch,
School of Medicine, University of Queensland
Mr Phil Berquier,
School of Medicine, University of Queensland
Mr David Brown-Rothwell,
Audiology, Allied Health
Professor Ian Jones,
School of Medicine, University of Queensland
Professor Kenneth Donald,
Professor and Head, Graduate School of Medicine, University of Queensland.

Staff:
Ms Areti Gavrilidis,
Business Manager and Secretary, Centres for Health Research
The Unit experienced a very successful year. In the arena of health policy, a major project which aims to examine and forecast activities at the interface of acute and aged care was commenced. A computer simulation of the interactions between acute, community and long term residential care is being constructed, which will enable exploration of a variety of policy options.

In clinical research and development, an emerging focus has been on the application of e-health techniques to geriatric medicine. With support from the Department of Veterans' Affairs and Queensland Health a variety of experimental models and evaluations are being implemented. The mission is to expand the availability and increase the reliability of assessment procedure in aged care. This involves electronic assessment, sending of images through email, and tele- and video-conferencing with staff and patients in rural settings.

The Queensland Parkinson’s Project which is associated with this unit has continued to progress this year with a National Health and Medical Research Council project grant awarded to study genetic risk factors for Parkinson’s disease and the enrolment of a research registrar in neurology and genetics working in the area of the clinical genetics and family history of neurodegenerative disease.

The Unit is building strategic relationships with both the Australasian Centre on Ageing at St Lucia, and the Centre for Online Health at Herston. Further information can be found on http://www.pa.uq.edu.au/augm.
Current Research Activities

Clinical Trials

Modelling the future: A policy flight simulator at the acute – aged care interface. (L Gray, G McDonnell, T Broe, D Gibson). This project is developing a computer simulation of the interactions between acute, residential and community care to assist in service planning. Simulation models will be developed for application at national and regional levels. Scheduled for completion in 2007. Funded by Australian Health Ministers Advisory Council/National Health and Medical Research Council.

Validation of the interRAI-AC for detection of delirium: Agreement with clinician assessment. (J Endecott, M Khateeb, J Morris, L Gray). This project will develop and test a screening tool for delirium using items within the interRAI Acute Care schedule.

Geriatric outcomes study in hospital (GOSH). (L Gray, J Hirdes, A Wilson, E Beller, I Scott, P Ramritu). A prospective study aiming to identify predictors of adverse outcomes (delirium, falls, functional decline, pressure ulcer, etc) within hospital among older medical patients. Ultimately it is aimed to develop an omnibus screening strategy that will risk profile patients at admission with an aim to better target prevention and treatment strategies.

Reliability and validity of the interRAI Acute Care protocol. (L Gray and the interRAI Collaborative). Professor Gray is coordinating this eight nation study to test the reliability and validity of the revised interRAI Acute Care assessment schedule.

Multi-centre study identifying impacts of an assessment and care planning protocol for frail older patients in acute care. (L Gray, B Nair, E Beller, S Bowler, P Varghese, P Goldstraw). This study is evaluating the impact of a multi-disciplinary geriatric consultation service centred around a standardised assessment protocol. 450 frail medical patients have been admitted to this randomised trial across two hospital sites (Mater Adult Brisbane and Townsville General Hospital). The project will conclude in late 2005.

Application of e-health strategies to support remote geriatric assessment and care planning. (L. Gray, R. Wootton, P. Scuffham, M. Martin-Khan et al). This project involves application of a comprehensive geriatric assessment instrument at the Mater Rockhampton hospital that is then accessed remotely by a geriatrician for assessment and feedback/comments to the treating doctor and hospital staff on the patient condition. This work is supported by the Department of Veterans Affairs.

Other Research (Biomedical)

Recruitment of Parkinson’s disease patients and families. (G. Mellick, A. Sellbach). This is an ongoing project developing a clinical resource for the study of genetic and environmental determinants of Parkinson’s Disease.
Financial Support

Grants
$128,540. Australian Health Minister’s Advisory Council (AHAC). Policy Flight Simulator. (Len Gray)

$30,447. Department of Veterans’ Affairs. E-health strategies for remote geriatric assessment. (Len Gray)

$70,000. Queensland Health. E-Health Strategies for remote geriatric assessment (Len Gray)

$750,750 (over 3 years). NHMRC. The Australian Parkinson’s Project (APP) – Uncovering genetic risk factors for sporadic PD. (George Mellick)

$50,000. Princess Alexandra Hospital-Neurology. “Familial PD – What does it mean to claim a family history?” (George Mellick)

$40,000. Sanofi  Synthelabo. Study of the efficacy of Xaliproden in patients with mild to moderate dementia of the Alzheimer’s type. (Paul Varghese)

$75,000. Princess Alexandra Hospital – Neurology. “Gene-Environment interactions in the aetiology of PD.” (George Mellick)

$30,447. Department of Veterans’ Affairs. E-health strategies for remote geriatric assessment. (Len Gray)

$128,540. Australian Health Minister’s Advisory Council (AHAC). Policy Flight Simulator. (Len Gray)

$70,000. Queensland Health. E-Health Strategies for remote geriatric assessment (Len Gray)

$750,750 (over 3 years). NHMRC. The Australian Parkinson’s Project (APP) – Uncovering genetic risk factors for sporadic PD. (George Mellick)

$50,000. Princess Alexandra Hospital-Neurology. “Familial PD – What does it mean to claim a family history?” (George Mellick)

$40,000. Sanofi  Synthelabo. Study of the efficacy of Xaliproden in patients with mild to moderate dementia of the Alzheimer’s type. (Paul Varghese)

Other Support

$140,000. Private donor. (George Mellick)

$60,000. Private donor. (George Mellick)

Familial Parkinson’s – What does it mean to claim a family history? (G. Mellick, A. Sellbach). By studying the familial aggregation of neurodegenerative disease in Queensland, this study hopes to yield useful information about the contribution genetic variables play in the cause of Parkinson’s Disease.

Psychiatric and non-motor symptoms of Parkinson’s Disease – What are the risk factors? (G. Mellick). A large proportion of people with Parkinson’s disease suffer from non-motor symptoms such as anxiety and depression. This project is investigating the factors that associate with these presentations in the larger Parkinson’s Disease group.

Depression in Parkinson’s Disease – Defining the phenotype. (G. Mellick). There is limited information about the similarities and differences in the type of depression suffered by people with Parkinson’s Disease compared to the general population. As there are a number of overlapping symptoms of Parkinson’s Disease and depression, this project is aiming to understand better the specific features of Parkinson’s Disease depression and develop tools to better recognize and assess this.

Gene x environment interactions and the cause of Parkinson’s Disease. (G. Mellick). Most cases of Parkinson’s Disease are thought to involve complex interactions between genetic and environmental factors. Unraveling these contributions to Parkinson’s Disease risk is the focus of this project.

Publications

Journal Articles


Published Abstracts


Lessons from epidemiological studies of Parkinson’s disease. Teaching Course, XIII World Congress of Neurology, Sydney, NSW.


Dr Paul N Varghese
Falls and Medication Management. Australian Association of Consultant Pharmacists National Meeting. Gold Coast, Queensland


Integrating the InterRAI AC and PAC into the Sub-Acute episode. Australian Association of Gerontology 38th National Conference. Gold Coast, Queensland

Post Graduate Students
Prabha Ramritu, PhD, in progress
Melinda Martin – Khan, PhD, commenced 2005
Daniel Buchanan, PhD, in progress
Nadeeka Dissanayaka, PhD, in progress
Coral Gartner, PhD, in progress
Yifu Deng, PhD, completed
Shaun McCrystal, BSc Honours, completed
Anna Sellbach, MPhil, commenced

Awards
2005 University of Queensland Award for the Enhancement of Student Learning (RSVP-Research Student Virtual Portfolio) G.Mellick (with Catherine Manathunga and Paul Lant)

Public Service Relevant to Research
Professor Len Gray
Member, Ministerial Implementation Taskforce (2004-). This group is overseeing the implementation of the most recent national aged care reforms, on behalf of the Minister for Ageing, Julie Bishop.

Associate Editor, Australasian Journal on Ageing (2003-)

Fellow, InterRAI Collaborative (2001-). InterRAI is an international working group of aged ‘care researchers that develops assessment protocols, data sets and quality tools for aged care and related fields.

Dr George Mellick
President, Parkinson’s Queensland Incorporated. Parkinson’s Queensland Incorporated is the state-based support organisation for people with Parkinson’s Disease.

Board Member of Parkinson’s Australia.

Princess Alexandra Hospital is the federated Nation-wide support and advocacy agency for people with Parkinson’s Disease.

Panel Member – Better Practice Awards, The Aged Care Standards and Accreditation Agency Ltd

Dr Paul Varghese
Member of the Clinical Reference Group advising the Australian Health Ministers Advisory Council – Care of Older Australians Working Group (COAWG) (2001-)

Member Stroke Care Pathway Expert Advisory Committee charged with the development of a Stroke Care Pathway (2004-)

Member of Transition Care Task Group advising the Care of Older Australians Working Group (COAWG) on the Transition Care program (2004-)

State Organising Committee: Annual Scientific Meeting of the Australian Society for Geriatric Medicine (2005-)

Articles Accepted for Publication


Lectures and Presentations
Professor Len Gray

The Acute Aged Care Interface: The 4th Anzac Research Institute Symposium. Sydney, NSW.

Dr George Mellick
CYP450, genetics and Parkinson’s disease: gene x environment interactions hold the key. 16th International Congress on Parkinson’s Disease and Related Disorders, Berlin, Germany.

C E N T R E S   F O R   H E A L T H   R E S E A R C H   A N N U A L   R E V I E W   2 0 0 5
The Acquired Brain Injury Outreach Service is a specialist community based rehabilitation service for people with acquired brain injury, for carers and for workers assisting people with acquired brain injury. The primary aim of the service is to facilitate successful community integration for people with acquired brain injury. It also provides training and consultancy to service providers and carers and conducts research and development activities to improve outcomes for people with acquired brain injury and their families.

Acquired Brain Injury Outreach Service research highlights during the year have centred around development and evaluation including:

- The commencement of the self management support networks project, funded through the Pathways Home initiative
- New collaboration with the Mater Hospital Rehabilitation of Brain Injury and Neurological Disorders team to develop and evaluate a model for transition care/outreach for people with brain injury moving from paediatric to adult community-based services
- Development and coordination of the inaugural Moving Ahead: Dual Diagnosis Acquired Brain Injury / Mental Health workshop in Townsville.

Current Research Activities

Other Research

Self management support networks for people with stroke and brain injury after hospital discharge: Development and evaluation.

Measuring participation and resource availability and utilisation in community-based Acquired Brain Injury rehabilitation.

A research intervention to enhance the well-being and psychosocial outcomes of patients based on the World Health Organisation International Classification of Functioning, Disability and Health- environment framework.

Evaluation of a clinical alliance between the Acquired Brain Injury Outreach Service and the Kirwan Acquired Brain Injury Service as a means of improving urban and regional collaboration and providing reciprocal staff support in managing and understanding dual diagnosis brain injury and mental illness.

Developing and implementing a model of transition care for young people moving from paediatric to adult community-based brain injury services.

Predicting care needs in the community for people with brain injury using outcome indicators collected at discharge from inpatient rehabilitation.

Staff

Mr Raymund Quinn,
Manager
Ms Melissa Kendall,
Research and Development Officer
Mrs Areti Kennedy,
Project Officer, Pathways Home
Mrs Elissa Morriss,
Clinical Neuropsychologist
Mrs Sharon Smith,
Case Coordinator
Mrs Susan Gauld,
Case Coordinator

Acquired Brain Injury Outreach Service

research - key to health
Financial Support

Publications

Journal Articles

Book Chapters

Lectures and Presentations


Post Graduate Students
Melissa Kendall, Doctor of Philosophy (rehabilitation psychology), in progress

Awards
Elissa Morriss Clinical Neuropsychologist, received the Bob & June Prickett Winston Churchill Memorial Trust Fellowship to investigate ways to support adults with brain injury and their family/carers to manage their challenging behaviour.

Public Service Relevant to Research
Melissa Kendall Member, Princess Alexandra Hospital Allied Health Research Committee
Reviewer, Disability and Rehabilitation
Joined National Ethics Approval Form Review Panel
The role of this clinical service is to assist and improve the identification, assessment and treatment of alcohol, tobacco and other drug problems encountered both within the Princess Alexandra Hospital and referred by community health practitioners. The Unit has developed, applied and evaluated cognitive and behavioural therapy approaches to substance use disorders. The Unit has extended their experience in the use of relapse prevention medications in the treatment of alcohol dependence. Their short term outcomes with combined medication (naltrexone +acamprosate) are similar to internationally reported results. Clinical evaluation includes measures of expectancy, craving and psychological function. Involvement in the Queensland Illicit Drug Diversion Initiative has extended the clinical range assessed.

Current Research Activities
The impact of cognitive behavioural therapy on health perception and psychosocial function.

Treatment effects on alcohol and cannabis related expectancies.

Applications of machine learning techniques to clinical decision making in the treatment of alcohol dependence.

Psychometric and psychosocial outcome among liver transplant recipients in whom alcohol was a contributing factor to their liver disease.

The development of valid and reliable measures of craving.
Financial Support
The Alcohol and Drug Assessment Unit has treatment funding only
National Drug Strategy Funding
Queensland Illicit Drug Diversion Initiative.

Publications

Journal Articles

Connor JP, Feeney GP (2005). Review: acamprosate and naltrexone are safe and effective but have low compliance rates for people with alcohol dependence. Evidence Based Mental Health.8 (1):14


Book Chapters

Articles Accepted for Publication


Post Graduate Students
Mare Grier, Masters Psy Clin, (in progress)
Martyn Symonds, PhD, commenced 2005
Research has continued to focus on the diagnosis and management of acoustic neuromas. In conjunction with the Ear Nose and Throat Department a major aim has been to determine the optimal timing of surgical intervention in terms of quality of life outcomes. This research has received support through a PhD scholarship awarded to the Princess Alexandra Hospital Cancer Collaborative Group as part of the Queensland Cancer Fund Collaborative Program Grant.

An important development this year has been the promotion of community education through an integrated clinician-patient conference on acoustic neuroma held in July 2005. This conference brought together clinicians, surgeons, and patients from Australia and New Zealand. Over 300 delegates attended this event which showcased current best practice for treatment and management. Presentations from patients themselves brought a fresh perspective to many issues.

External collaborations have continued. The project with the University of Queensland investigating rehabilitative aspects of balance dysfunction following tumour resection has continued to a third study. A new multi-centre study with the Lion’s Hearing Institute has commenced evaluating bone-anchored hearing aids in addressing single-sided deafness resulting from surgery. This study is being sponsored by the Queensland Acoustic Neuroma Association.

Financial Support

Public Service Relevant to Research
Evelyn Towers
Member of the Steering Committee State Services for Deaf and Hearing Impaired People

Jillian Sellers
Queensland Vice-President, Audiological Society of Australia

David Brown-Rothwell
Member, Allied Health Research Committee
Member, Princess Alexandra Hospital Research Committee
Patron, Queensland Acoustic Neuroma Association

Post Graduate Students
David Brown-Rothwell, PhD, in progress
The Breast and Endocrine Surgical Unit at Princess Alexandra Hospital provides comprehensive world-class management of breast and endocrine surgical conditions within a multi-disciplinary setting. Over 130 newly diagnosed breast cancers are treated within the unit each year. Breast cancer is managed in conjunction with the Medical Oncology and Radiation Oncology Units. Surgeons meet on a weekly basis with clinicians from the other disciplines in a combined breast oncology multi-disciplinary clinic to ensure that "state of the art" breast cancer treatment is provided in keeping with nationally accepted best practice guidelines.

The respective surgeons also work closely with the Breast Screen Queensland Brisbane South Service so that surgical expertise is provided for screening, assessment and diagnosis of early stage breast cancer to facilitate and integrate with definitive management. The Unit is also involved in collection of data for the Royal Australian College of Surgeons National Breast Cancer Audit of all breast cancers treated at the Princess Alexandra Hospital.

Endocrine disorders are also managed where appropriate in conjunction with the Department of Diabetes and Endocrinology and a weekly combined clinic is held to review difficult cases. The unit plays a role in both undergraduate and post-graduate teaching of breast and endocrine surgical conditions.

Current Research Activities

**Funded Clinical Trials**

RACS SNAC Trial: A multi-centre randomised controlled trial of Sentinel Node Biopsy versus Axillary Clearance. Approximately 25% of national total recruited in Queensland and about half of these by the Princess Alexandra Hospital Surgeons.

**Unfunded Clinical Trials**

Role of Harmonic Scalpel in Thyroidectomy: an on-going clinical audit

Ultrasound Guided Excision of Impalpable Breast Lesions: an on-going clinical audit

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**Staff**

Associate Professor Ian Bennett, 
Chairman
Dr Neil Wetzig
Dr David Wilkinson
Dr Petar Vujovic
RN Amanda Smith: 
Breast Care Nurse

**Visiting Medical Officers**

Associate Professor Ian Bennett
Dr Neil Wetzig
Dr David Wilkinson
Dr Petar Vujovic
Financial Support
$25,000, Breast Cancer Association of Queensland, RACS SNAC Trial (Qld Component), (Dr Neil Wetzig)

Publications
Journal Articles

Articles accepted for publication

Published Abstracts
Dr Ian Bennett

Presentations/Lectures
Dr Ian Bennett

Dr David Wilkinson
Programme Organiser for Clinical Oncology Society of Australia (COSA) Meeting, November 2005, Brisbane. Chaired Breast Section of Programme.

Public Service Relevant to Research
Dr Ian Bennett
Chairman, Breast and Endocrine Surgical Unit, Princess Alexandra Hospital - current
Chairman, BreastScreen Queensland Surgery Q Group 1994 – current
BreastScreen Queensland Quality Management Committee, October 1997 - current
BreastScreen Queensland Training Committee Representative 1993 - current
Clinical Director, Breast Cancer Family Clinic, BreastScreen Queensland, North Brisbane Service, Chermside

Dr Neil Wetzig
Chairman, Royal Australian College of Surgeons Section of Endocrine Surgery
Royal Australian College of Surgeons Representative, Quality Management Committee BreastScreen Queensland
Co-Chairman, RACS SNAC Trial Management Committee
Chairman, Queensland Co-operative Oncology Group Breast Group
Executive Member, Queensland Co-operative Oncology Group
Editorial Board World Journal of Surgery
Member Ministerial Advisory Council on Cancer Control Queensland Health
The Cardiology Department is a tertiary referral unit offering a comprehensive cardiac service including electrophysiology, invasive intervention and echocardiography. Consequently, the Cardiology Department consists of a Coronary Care Unit incorporating a Procedure Ward, Cardiology Step-Down Ward, 3 Cardiac Catheter Laboratories, ECG Department, Echocardiography Department and Research Department. Supporting the medical officers are adjunctive registered nurses working in Cardiology Rehabilitation, Cardiac Resuscitation and Cardiac Research, as well as Cardiac Scientists involved in echocardiography, pacemakers, ECG, holter recordings, exercise and pharmacological stress testing. In 2005 a Clinical Nurse Consultant Heart Failure was appointed to monitor and follow-up heart failure admissions, heart failure education and develop a heart failure rehabilitation programme.

The broad expertise the Cardiology Department offers has secured a large number of clinical trials from a variety of pharmaceutical companies, the National Health and Medical Research Council, the National Institute of Health and investigator-driven research over the past 15 years. Collaboration with the Cardiac Surgery Department and the University of Queensland’s Cardiovascular Imaging Research Group has ensured that a broad range of cardiology modalities can be offered to prospective research organisations to ensure their clinical trials are implemented in their entirety as well as being able to participate in substudies utilising specific diagnostic tools. Research areas cover coronary artery disease, myocardial infarction, acute coronary syndrome, cardiac arrhythmias and devices, acute/chronic systolic/diastolic heart failure, coronary angiography and percutaneous transluminal coronary angioplasty, cardiac echocardiography, cardiac magnetic resonance imaging and cardiac surgery.
Current Research Activities

Clinical Trials

Acacia Registry – Registry of Acute Coronary Syndrome patients (Dr Paul Garrahy, PI) sponsored by Sanofi-Aventis

Active Trial – Atrial fibrillation (Dr Paul Garrahy, Principal Investigator) sponsored by Sanofi-Aventis and Bristol Meyers Squibb

Adduce Trial – Diabetes mellitus with heart failure (Professor Tom Marwick, Principal Investigator) sponsored by Protemix

Apex Trial – Acute primary Percutaneous Tranluminal Coronary Angiography (Dr Paul Garrahy, Principal Investigator) sponsored by Procter and Gamble Alexicon

Beautiful Study – Stable coronary artery disease and left ventricular systolic dysfunction (Professor Tom Marwick, Principal Investigator) sponsored by Servier

Early Acute Coronary Syndrome – Early GPIIb/IIa inhibition in patients with Acute Coronary Syndrome (Dr Paul Garrahy, Principal Investigator) sponsored by Schering-Plough

HAT Study – Anterior/lateral myocardial infarctions randomised to cardiopulmonary resuscitation or home automatic defibrillators. (Professor Tom Marwick, Principal Investigator) sponsored by National Institute of Health

I-Preserve Trial – Heart Failure with diastolic dysfunction (Professor Tom Marwick, Principal Investigator) sponsored by Bristol Meyers Squibb

MAIA Study – Atrial fibrillation (Dr John Hill, Principal Investigator) sponsored by Sanofi-Aventis

OAT – Myocardial infarction with occluded coronary artery > 3 days old (Dr Paul Garrahy, PI) sponsored by National Institute of Health

OnTarget Trial – Vascular dysfunction (Prof Tom Marwick, Principal Investigator) sponsored by Boehringer-Ingelheim

Transcend Trial – Vascular dysfunction with intolerance to ACEi (Professor Tom Marwick, Principal Investigator) sponsored by Boehringer-Ingelheim

Other Research

Monash University: Burden of Care: The Support Needs of Carers of Cardiac Surgery Patients (Rosemary Robinson RN, Principal Investigator)

Central Queensland University: Comparison of Complications in Percutaneous Transluminal Intervention Patients Mobilised at 6, 4 and 3 Hours Following Femoral Arterial Sheath Removal (Walker S, Jen C, McCosker F, Cleary S, Investigators)
Publications

Journal Articles

Published Abstracts
Muelet J, Pavia S, Doneva S, Hill JN. Impact of Right Ventricular Pacing Site on Development of Atrial Tachyarrhythmias in Patients with Dual Chamber Pacemakers. PACE 2005
See also Professor T Marwick, Cardiology Imaging Research Group

Lectures and Presentations

Dr Richard Lim
Controversies in Percutaneous Coronary Intervention Decision-Making, China Interventional Therapeutics, Beijing 2005
Practical Management of Adult Congenital Heart Disease, QLD Rural Physicians Symposium, 2005

Dr Sudhir Wahi
Invited international faculty and keynote speaker at the 11th Asia Pacific Congress of Doppler Echocardiography, New Delhi, India 2005

Ms Cindy Hall
Strategies for Reducing Queries: A Site’s Perspective, Association of Regulatory and Clinical Scientists National Conference, 2005
Strategies for Reducing Queries: A Site’s Perspective, Australian Health and Research Data Managers Association National Conference, 2005

Public Service Relevant to Research

Dr John Hill
Literature Review Panel, North American Society for Pacing and Electrophysiology
Literature Review Panel, Journal of Cardiac Electrophysiology

Dr Sudhir Wahi
Member of the Scientific Committee for the 52nd Annual Scientific Meeting of the Cardiac Society of Australia & New Zealand, held in Brisbane in August 2004

Dr Richard Lim
Member of Princess Alexandra Hospital Research Ethics Committee
Reviewer, Annual Scientific Mtg, Cardiac Society of Australia & New Zealand
Reviewer, European Journal of Clinical Investigation

Ms Cindy Hall
Executive Member, Cardiac Nurses Working Group, The Cardiac Society of Australia and New Zealand
Invited to review the National Ethics Application Form, National Health and Medical Research Council
Study Coordinator Advisory Board Member, Association of Regulatory and Clinical Scientists.
Member, QHealth Annual Scientific Steering Committee
See also Professor T Marwick, Cardiology Imaging Research Group

Robinson, Rosemary and Warnick, Margaret, Invitation to post the Children’s Booklet Series onto the Australian Cardiac Rehabilitation Association website, www.acra.net.au
Current Research Activities

Clinical Trials

The Department of Cardiothoracic Surgery is collaborating with the Department of Cardiology and the Department of Intensive Care in a number of trials including:

“Latent left ventricular dysfunction in patients with asymptomatic mitral regurgitation” with Dr S Wahi. A similar study involving patients with aortic valve disease is expected to start recruiting patients in March 06

“Assessment of the effect of oral fish oil supplements on postoperative atrial fibrillation and heart rate variability” with Dr K Kostner & Prof D Colquhoun

“Use of Echocardiography of Left Ventricular Preload during Anaesthesia and Ventilation” with Dr D Sturgess

Other Research

A long term follow up study of patients operated on for endocarditis is in preparation and a prospective register of these patients is being planned.

Publications

Journal Articles


Public Service Relevant to Research

Dr Paul Peters
Reviewer for the journal Clinical & Experimental Physiology & Pharmacology.

Dr Julie Mundy
Reviewer for the journal Heart, Lung and Circulation
This group provides clinical and research capability in cardiac imaging and image processing, including multi-modality interests that are unique in the Asia-Pacific region. The Group has expertise in new echocardiographic imaging technologies, myocardial viability, early detection of atherosclerosis, assessment of contractile reserve, and studies of how cardiac imaging techniques can influence patient outcomes and cost-effectiveness of care. This work is carried out in the research echo/stress area in the Cardiology Department and image processing area in the University of Queensland, Department of Medicine.

Resources include data acquisition with 4 research echo/vascular ultrasound machines (including two 3-dimensional echo systems), equipment for exercise and pharmacologic stress testing and VO2 analysis. Some of these devices carry developmental software that we are developing in tandem with industry partners. The Group have fifteen networked imaging workstations, including software for measurement of myocardial velocity, strain and backscatter, contrast echocardiography, 3D analysis and automated measurement of vascular structure and function. Data from hospital nuclear and Magnetic Resonance Imaging equipment can be imported using optical disk and additional software is available for each modality.

There are postgraduate students and staff from Australia and overseas. The group offers research opportunities for Cardiology trainees (M.Phil or Ph.D), medical students (joint MB/PhD) and science graduates (Ph.D). Students are enrolled in the Department of Medicine and must meet appropriate admission criteria. Enquiries regarding activities should be directed to Professor Tom Marwick (tmarwick@soms.uq.edu.au).
Current Research Activities

Main Areas of Research

Evaluation of myocardial structure using ultrasound backscatter and tissue Doppler. Changes in the nature of the returning sound waves may be a marker of the underlying tissue characteristics. This work has been used to identify structural changes supporting the presence of a cardiomyopathy of diabetes and obesity, pre-clinical changes consistent with fibrosis in hypertensive patients, and evidence of ischemia (see below). This has generated unique diagnostic approaches and further developments seek to use these techniques to access the response of myocardium to various metabolic interventions including improved diabetic control.

Quantification of echo techniques for detection of myocardial ischemia, using tissue Doppler and speckle tracking techniques to measure myocardial strain and velocity.

Use of high frequency ultrasound to follow the progression of abnormal vascular structure and function. The unique aspect of this work is the use of developmental edge-tracking software for objective quantification of vessel dimensions. These studies focus on patients with diabetes and renal disease as well as patients with heart failure. Two large-scale interventional studies that examine factors influencing vascular function and thereby progression of atherosclerosis have been recently completed. This work interfaces with Dr Kostner’s expertise in lipid management, especially novel plasma markers of atherosclerosis (lipoprotein (a), markers of complement activation and various apolipoproteins).

Evaluation of myocardial perfusion using contrast echocardiography. This work is unique in Australia and promises to offer a new tool to improve the detection of myocardial ischemia, as well as coronary patency and myocardial viability after heart attacks.

Assessment of myocardial viability.

Use of echocardiography to improve clinical decision-making (mitral regurgitation, peripheral vascular disease).

New techniques of image display and recording to improve the efficiency of echocardiography and develop tele-echocardiography in Australia.

Clinical Trials

Clinical Centres of Research Excellence in Cardiovascular and Metabolic Disease – studies of cardiovascular effects of lifestyle and specific therapies for diabetes, hypertension, renal failure and obesity

STRATIFY study – A study of strategies to identify and manage cardiac risk at noncardiac surgery

Use of perhexiline to improve cardiac function in viable myocardium

Importance of transmural distribution of scar to the diagnosis of myocardial viability

New techniques for quantitation of regional left ventricular function

Hypertensive response to exercise – a study of echocardiographic and biochemical responses to anti-fibrotic therapy in left ventricular hypertrophy

Boehringer-Ingelheim – ONTARGET study and magnetic resonance imaging substudy co-investigator (2002-)

NIH – HAT (home automatic defibrillator) study.
Patents

“Apparatus and method for early detection of Cardiovascular Disease using Vascular Imaging” Provisional patent 2003904100. Submitting for national registration in USA, EU and Japan.

Financial Support

Current NHMRC Grants

$400,000. National Health and Medical Research Council of Australia. Clinical Centre in Research Excellence. (T H Marwick)

$160,000. National Health and Medical Research Council of Australia. STRATIFY study (peri-operative risk). (T H Marwick)

$60,000. National Heart Foundation of Australia. Impact of perhexiline in viable myocardium. (T H Marwick)

$120,000. National Health and Medical Research Council of Australia. Efficacy and mechanisms of exercise training in diastolic heart failure. (T H Marwick)

$50,000. National Heart Foundation of Australia. Echo substudy of the IDEAL trial. (T H Marwick)

$80,000. National Health and Medical Research Foundation of Australia. Development of quantitative tools for assessment of regional cardiac function by echocardiography. (T H Marwick)

$80,000. National Health and Medical Research Foundation of Australia. Importance of transmural distribution of viable myocardium to outcome after revascularization. (T H Marwick)

Other Support

$6,000. Astra Zeneca. University Study. (T H Marwick)

$10,000. Bristol-Myers Squibb. I-PRESERVE study. (T H Marwick)

$33,000. Beohringer-Ingelheim. ONTARGET study and MRI substudy. (T H Marwick)

$45,000. NIH. HAT study. (T H Marwick)

$49,000. Acusphere. (T H Marwick)


$60,000. Pfizer. Illuminate Study. (KM Kostner)

$27,000. Pfizer. Gemini study. (KM Kostner)

$30,000. Pfizer. FH – Torcetrapib. (KM Kostner)

Publications

Journal Articles


Articles Accepted for Publication
Khoury V, Marwick TH. Stress echocardiography: Completing the picture of a marmer of systolic and diastolic dysfunction. Heart 2005;91:1551-6. [12.5]
Mottram PM, Marwick TH. Assessment of diastolic function: What the general cardiologist needs to know. Heart 2005;91:581-95. [3.2]

Published Abstracts


Chan J, Leano R, Marwick TH. Can assessments of subepicardial function with myocardial strain rate imaging and integrated backscatter distinguish transmural extent of infarction? JACC 2005, 45(3):256A.


Jenkins C, Hanekom L, Chan J, Marwick TH. Serial follow-up of left ventricular parameters using real-time 3D echo is comparable to magnetic resonance imaging and superior to 2D echo. JACC 2005, 45(3):264A.


Book Chapters


Marwick TH. Risk stratification - Stress echocardiography. IN Ch 10, Chronic Coronary Disease (ed J Rutherford), ACCSAP VI, American College of Cardiology, 2005.

Marwick TH. Stress echocardiography. IN Nohiyiannopoulus, Kisslo, Clinical


Lectures and Presentations


“Prognostic value of stress echo” (Plenary session); “Stress echo and prediction of outcomes” (Moderator). American College of Cardiology 54th Annual Scientific Session, Orlando; March, 2005.

“Functional testing for coronary disease”; “Diabetic heart disease”, University of California; Irvine, March 2005

“3D echo: Pictures or numbers?” (Fireside session). Japan Circulation Society, Yokohama, Japan; March, 2005.

“Coronary artery distribution and stress echocardiography”. Queensland DMU preparation course (Faculty) Wesley Hospital, Brisbane; May 2005

ASEANZ CV and Lipid Forum (Chair, Organizing committee), Melbourne, June 2005.


Live 3D University – A live demonstration course (Organizer). Osaka, Japan, July 2005.

“Update on diastolic function measurement and interpretation in adults”; “Echo markers of LV function – systolic and diastolic – how might we use them?” (Plenary sessions). Cardiac Society of Australia and New Zealand, Perth, August 2005

“Incorporation of 3D quantitative echo of LV volumes and mass into standard transthoracic echo”; “Echo in the ERT” (Plenary session); Session moderator. 26th Congress of the European Society of Cardiology, Stockholm. September 2006.

“Post-MI heart failure – A new treatment strategy” (Plenary session); Pfizer Cardiovascular forum, Sydney, September 2005

“Basic and advanced quantitative LV and LA assessment”; “Debate – Should patients with asymptomatic severe MR always proceed to early MV surgery - Con”; “Stress echo – Current status of quantitative techniques”; “Myocardial contrast – LVQ, perfusion and more” (Plenary sessions); Echo Australia, Sydney, October 2005

“Patient selection for CRT – Echocardiography” (Plenary session); Management of the failing heart symposium, Sydney, October 2005

“How to perform contrast and stress echo” (How to session), “Emerging echo technologies” and “Diastolic dysfunction” (Moderator). AHA Scientific Sessions, Dallas; November 2005

“Cardiac resynchronization – Hope or Hype”; “Stress echo traps and tricks”; “Incorporation of new technologies into stress echo” (Plenary session), Live demonstrations. 5th Echo Hong Kong, HK, November 2005.


Post Graduate Students

Philip Mottram, PhD, completed
Charles Nelson, MPhil, completed
Neil Smart, PhD, completed
Graham Stephenson, PhD (co-super) (pending)
Lizelle Hanekom, PhD, in progress
Stuart Moir, PhD, in progress
Chiew Wong, PhD, in progress
Jonathan Chan, PhD, in progress
Dhrubo Rakht, PhD, in progress
David Sturges, PhD (co-super), in progress
Carolyn Van Eps, PhD (co-super), in progress
Brian Haluska, PhD, in progress

Awards

Dr Lizelle Hanekom
National Health and Medical Research Council Scholarship - 2004-2006

Dr Stuart Moir
National Health and Medical Research Council Scholarship - 2005-2006

Dr Chiew Wong
National Health and Medical Research Council Scholarship - 2005-2006

Dr Jonathan Chan
National Health and Medical Research Council Scholarship - 2005-2007

Public Service Relevant to Research

Professor Tom Marwick
Grant/promotions Reviewer
National Health and Medical Research Council grant reviewer
Chair, National Heart Foundation Research Committee

Committees
Chair, Scientific Committee, Cardiac Society of ANZ meeting, 2004
Echo guidelines committee, Cardiac Society of Aust NZ
Cardiovascular Society of Australia & New Zealand, National Heart Foundation
Medicare Services Advisory Committee, Department of Health and Aged Care
Cardiac Imaging group, Department of Health and Aged Care
Health Sciences Faculty Research Committee

Editorial Reviewer
Annals of Internal Medicine
American Journal of Cardiology
American Journal of Medicine
American Heart Journal, Editorial Board
Heart, Editorial Board
Circulation
European Heart Journal
European Journal of Echocardiography, Editorial Board
Journal of the American College of Cardiology
Journal of the American Medical Association
Journal of the American Society of Echocardiography, Editorial Board
Internal Medicine Journal
Korean Journal of Cardiovascular Disease
Internal Medicine Journal

Circulation
European Heart Journal
European Journal of Echocardiography, Editorial Board
Journal of the American College of Cardiology
Journal of the American Medical Association
Journal of the American Society of Echocardiography, Editorial Board
Internal Medicine Journal
Korean Journal of Cardiovascular Disease
Internal Medicine Journal

American College of Cardiology
American Heart Association
American Society of Echocardiography
American Heart Association
Cardiac Society of Australia & New Zealand
European Society of Cardiology

Centres for Health Research Annual Review 2005
Associate Professor Karam Kostner

Grant/promotions Reviewer
National Health and Medical Research Council grant reviewer

Committees
Chair, Scientific Committee, German Clinical Lipidology Society 2003
Scientific Organizing Committee, German Clinical Lipidology Society 2004
Scientific Organizing Committee, World Congress Clinical Nutrition, Brisbane, 2004
Austrian Society Cardiology, founding and nucleus member of section: Atherosclerosis Thrombosis and Vascular Biology

Editorial reviewer
Eur J Clin Investigation Editorial Board
Atherosclerosis
Atherosclerosis Thrombosis Vascular Biology
European Heart Journal
Journal of Lipid Research
Clin Chim Acta
Heart
Lipids
Journal of Lipid Research
Austrian Journal of Cardiology Editorial Board
Annual Scientific session’s reviewer
European Society of Cardiology
German Society Clin Lipidology
World Congress Clinical Nutrition
The Centre has had a successful year. Professor Ian Frazer, who leads the University of Queensland’s Centre for Immunology and Cancer Research, announced that third phase clinical trials for the world’s first cervical cancer vaccine demonstrated 100% efficacy. The vaccine has the potential to eradicate cervical cancer within a generation and is expected to be on the market mid-2006. For this outstanding achievement and his dedication to science, Ian has been nominated for the prestigious Australian of the Year Award, 2006 and has been awarded the CSIRO Eureka Prize for Leadership in Science 2005.

Professor Ian Frazer will start clinical trials for a treatment for genital warts early in 2006. This clinical trial will be conducted at sites in Brisbane and Wenzhou, China.

Professor Ranjeny Thomas and her Dendritic Cell Biology team are also getting ready to start clinical trials in the fight against rheumatoid arthritis early 2006. The trials will be aimed at re-educating the immune system to tolerate healthy cells and thereby helping those with auto-immune diseases, notably rheumatoid arthritis. Dr Ray Steptoe’s group, which is part of this team, is making significant contributions to developing a single dose injection to prevent type 1 diabetes.

The Centre for Immunology and Cancer Research were delighted by the appointment of Professor Matthew Brown in 2005. He joins the centre after a lengthy stint in Oxford as the Deputy Director of the Botnar Research Centre. Professor Brown and his Musculoskeletal Genetics group are leading the way in identifying the genes that cause ankylosing spondylitis. Professor Brown has had success in identifying non-B27 genes that lie within the major histocompatibility complex.

Dr Nigel McMillan and his Molecular Virology group have successfully inhibited cancer cell growth in vitro and in vivo using RNA interference targeting the human papillomavirus E6 and E7 oncogenes. Using a lentiviral vector to deliver the shRNA to suppress these oncogenes will be a significant
improvement from existing methods for treating a variety of tumours including cervical cancer.

Professor Thomas Gonda and Dr Brian Gabrielli from the Centre for Immunology and Cancer Research are developing the first Australian facility to create a retroviral library comprising the entire human genome which will then be screened to isolate genes of interest based on their functions. The centre received a total of $3 million funding from the National Health and Medical Research Council Medical Bioinformatics, Genomics and Proteomics Program and the ARC Linkage Infrastructure and Equipment Facilities program to enable this project. The work will be performed in conjunction with Dr Sean Grimmond Institute of Molecular Biology, at University of Queensland, and Dr Simon Barry, University of Adelaide.

Associate Professor Nicholas Saunders in conjunction with the Cancer Collaborative Group has initiated a series of trials to try to exploit the state-of-the-art technologies and advances in understanding of cancer biology in delivering improved patient outcomes. In particular the Cancer Collaborative Group is involved in using gene profiling to predict disease progression in patients with chronic lymphocytic leukaemia and to predict chemotherapeutic response in patients with osteosarcoma.

**Current Research Activities**

**Molecular Oncogenesis Group**

- Function and characterisation of the Schlafen gene family – potential regulators of haemopoietic cell proliferation, differentiation and function.
- Role of Myb in estrogen receptor-positive breast cancer.
- Identification of oncogenes in myeloid leukaemia by retroviral expression cloning.
- Development of an arrayed retroviral expression library amenable to high-throughput screening (with B. Gabrielli, S. Grimmond (IMB), S. Barry (University of Adelaide)).

**Epithelial Pathobiology Group**

The Epithelial Pathobiology Group has the following three aims:

- To understand the molecular basis for squamous differentiation.
- To exploit this knowledge in the development of novel therapeutic strategies.
- In addressing these aims the group have the following specific projects:
  - Examining the role of E2F in Squamous Cell Carcinoma development and their potential role in cancer therapy.
  - Defining the role of the glutathione peroxidases in Squamous Cell Carcinoma development.
  - Identifying the molecular events that initiate squamous differentiation.
  - Exploring the use of histone deacetylase inhibitors in the treatment of head and neck squamous cell carcinoma.
  - Exploring the use of cancer profiling as a clinical tool for aiding in patient treatment choice.
Clinical Trials in conjunction with the Princess Alexandra Hospital Cancer Collaborative Group

Using gene profiling to predict disease progression in patients with chronic lymphocytic leukaemia.

Predicting chemotherapeutic response in patients with osteosarcoma.

Cell Cycle Group

Investigation of the function of the unique form of mitotic MEK1.

Identification of how histone deacetylase inhibitors disrupt mitosis.

Investigation of the role of cyclin A/cdk2 in regulation of G2/M transition.

Investigation of the molecular responses to ultraviolet radiation in skin and how disruption of these contributes to melanoma.

Molecular Virology Group

Using microarray technology to develop a genetic profile of progression in chronic lymphocytic leukaemia.

Investigating the role of the papillomavirus oncogenes in cancer.

Developing novel therapies based on RNA interference for advanced cervical cancer.

Investigating viral evasion of the interferon response.

Dendritic Cell biology

Clinical Trials

A prospective study to evaluate the incidence of cardiovascular events and atherosclerotic disease relative to clinical outcome and joint damage in early rheumatoid arthritis.

Phase 1 clinical trial of autologous dendritic cells to induce antigen-specific tolerance.

Other Research

Induction of antigen-specific tolerance through inhibition of RelB function in dendritic cells.

Particulate systems for the co-delivery of antigen with immunomodulator for the treatment of Autoimmune Disease.

Migration and differentiation of dendritic cells and monocytes in inflammatory arthritis.

Immunotherapy Group

Clinical Trials

A phase 1b trial of HPV VLPs as immunotherapy for genital warts.

Other Research

Animal Models of immunotherapy for cancer and skin disease.

Molecular and cellular basis of tolerance to peripherally presented antigen. Codon usage as a determinant of targeted protein expression.
Musculoskeletal Genetics Group

Genomewide association mapping in AS. The Group are part of the Wellcome Trust Case-Control Consortium (http://ccc.sanger.ac.uk/). This study will initially investigate 15,000 non-synonymous and MHC tagging SNPs in 1000 AS cases and 1500 controls, giving us unprecedented data regarding genetic influences on AS-susceptibility and severity.

IL-1 genetics. The confirmed identification of the IL-1 gene complex as a major contributor to AS-susceptibility is arguably the most exciting finding in AS pathogenesis since the report of the association of HLA-B27. Our further research in this area includes both genetic and functional studies into the role of IL-1 variants in AS.

The group is coordinating an international prospective meta-analysis of IL-1 genetic variants as part of the International Genetics of Ankylosing Spondylitis Consortium, and pursuing further mapping in ethnically diverse populations to pinpoint the true disease-associated variants.

The group is studying the impact of IL-1 inhibition in models of AS.

Biomarkers and AS. The current diagnostic delay from onset of symptoms in AS to diagnosis is 10 years in the United Kingdom, and is similar in other developed countries. There is currently no means of predicting the likely severity of cases. The Group aims to develop biomarkers for diagnosis and disease prediction in AS. Current studies involved include:

- Recruiting a well-characterised cohort of 1000 AS patients and 1000 healthy controls from centres around Australia, to obtain biological samples for genetic, genomic and proteomic studies.
- Establishing an Australian Longitudinal Inception Cohort Study to develop diagnostic algorithms involving biological and imaging methods to improve the sensitivity and specificity of these measures in early AS.

Genetics Research Study on Ankylosing Spondylitis

Blood sample and clinical data collection from patients and healthy controls for genetic analysis.
with Fork head-associated domain and Ring Finger domain) mediated mitotic checkpoint arrest. (Andrew Burgess)

$113,500. NHMRC. NHMRC Research Fellowship. (Brian Gabrielli)

$181,500. NHMRC. Identification of oncogenes from myeloid leukaemias by retroviral expression cloning. (Thomas Gonda)

$565,993. NHMRC. Immunological therapies for cancer and autoimmunity. (Ian Frazer)

**Other Grants**

$5,000. University of Queensland. Dr Claudia Popa UQ Postdoctoral Fellow Maintenance Funds. (Claudia Popa)

$150,000. ARTHFA. Chair in Rheumatology. (Ranjeny Thomas)

$115,000. ARC. Function of the unique mitotic form of MEK. (Brian Gabrielli)

$65,000. LIONS. Improving vaccines against Viruses and Tumours: Optimising the cytotoxic T lymphocyte response. (Graham Leggatt)

$5,000. UQ. Dr Keith Dredge UQ Postdoctoral Fellowship Maintenance Component. (Keith Dredge)

$40,000. CORIDON. Coridon Agreed Funding for Kong-nan - Industry Fellowship from NHMRC "Codon usage, tRNA abundance and targeting gene expression": (Kong-nan Zhao)

$71,000. QCFN. Using yeast model to study the functional roles of three early genes in the life cycle of Bovine Papillomavirus Type 1. (Kong-nan Zhao)

$37,000. WESLEY. Predicting clinical response of osteogenic sarcoma to chemotherapy targeting gene expression". (Kong-nan Zhao)

$87,000. NHMRC. Matching between Codon usage and tRNA abundance determines the expression of targeting genes in mammalian cells. (Kong-nan Zhao)

$114,750. NHMRC. Development of a novel therapy for the treatment for the Epidermal Squamous Cell Carcinoma. (Nicholas Saunders)

$142,000. NHMRC. Treatment of Virally-Induced Cancers by RNA Interference. (Nigel McMillan)

$78,724. NHMRC. CJ Martin Fellowship - Characterisation of Chfr (checkpoint protein with Fork head-associated domain and Ring Finger domain) mediated mitotic checkpoint arrest. (Andrew Burgess)

$71,700. QCFN. The role of NKT and CD8 cells in tumour immunotherapy using epithelial tumour models. (Graham Leggatt)

$68,000. LIONS. Targeting Cell Cycle Checkpoints to treat Cancer. (Heather Beamish)

$166,996. CRUSA. A phase IB trial of virus like particle immunotherapy for HPV associated infection. (Ian Frazer)

$245,924. WELLAU. Study of HPV 6L 1 virus like particles as therapeutic vaccine for genital warts and recurrent respiratory papillomatosis. (Ian Frazer)

$2,500. WIT. Women in Technology – Ministerial Smart State Award – Travel Scholarship. (Ibtissam Abdul-Jabbar)

$20,000. PAH. Immunological therapies for cancer and autoimmunity. (Ranjeny Thomas)

$233,750. DENDRIGHT. BIF Grant (Ranjeny Thomas)

$16,000. Receptor for Advanced Glyceration End products and cardiovascular disease risk in subjects with Rheumatoid Arthritis. (Ranjeny Thomas)

$116,660.20. JDFINT. Prevention of diabetes by induction of tolerance in memory CD8+ T Cells. (Raymond Steptoe)

$50,000. PAH. Induction of tolerance in memory CD8+ T cells. (Raymond Steptoe)

$24,000. UQ. Mechanisms of dendritic cell-induced peripheral T-cell tolerance (Raymond Steptoe)

$30,000. RCH. A new strategy for successful liver cell transplantation for children with liver disease (A cell growth on-off switch to selectively proliferate transplanted hepatocytes: implications for the treatment of paediatric and adult liver disease) (Thomas Gonda)

$71,700. QCFN. Optimising immunotherapy in tumour antigen experienced host. (Xiao Song Liu)


Book Chapters


Post Graduate Students
PhD, in progress
Daniel Clarke
Rachel De Kluvyer
Tom Fothergill
Suad Hannawi
Aaron Irvine
Montree Jaturanpinyo
Sharmal Narayan
Brent Neumann
Lisa Putral
Robyn Warrener
Fang Joe Zhou
PhD, Commenced in 2005
Usriansyah
Dora Chan
Nor Malia Abd Warif
Masters, in progress
Lisa Carroll
Nichole Giles
Masters, Commenced in 2005
Diwakar Pattabiraman

Honours students 2005
Megan Bywater
Daryl Lim
Alice McNally
Craig Moore
Henry Tang
Honours students 2005/2006
Calvin Sum
Ashleigh Linville

Awards
Professor Ian Frazer
CSIRO Eureka Prize 2005.

Public Service Relevant to Research
Professor Ian Frazer
National Health and Medical Research Council Program Grants Committee (Chair).
National Health and Medical Research Council/Juvenile Diabetes Research Foundation Program Committee (Chair).
Editorial Board, Virology.
Directorships (For Profit organisations): Cordon Pty Ltd 2002- present.
Implicit Biosciences Pty Ltd 2005 - date; Diabetes Vaccine Development Centre 2003 – present.
Directorships (Not for Profit organisations): Queensland Cancer Fund 2000 – present.
Cancer Council Australia 2002 – present (currently vice-president).

Juvenile Diabetes Research Foundation Pancreatic Islet Transplant Program 2005 – date.

Dr Brian Gabrielli
Adjunct Associate Professor School of Biological and Biomedical Science, Griffith University.
Centre for Immunology and Cancer Research/Postgraduate Coordinator.
Member Princess Alexandra Hospital Hospital Research Committee 2003-present.
Member Centre for Immunology and Cancer Research Board 2003 – present.
Member of National Health and Medical Research Council Oncology Grant Review Panel 2001-2004.

Professor Ranjeny Thomas

Professorial
GRP Panel, National Health and Medical Research Council. 2002-present.
Panel review of grants for discipline of inflammation or immunology
Editorial Board, Wiener Klinische Wochenschrift. 2001-present. Editorial role for the field of rheumatology
Pfizer fellowship Panel. 2005. Panel review of Australia wide fellowship applications
Ad hoc reviewer for approximately 10 national and international granting bodies, including Wellcome Trust International, Whitehead Fellowships, New York, Fondazione Telethon/Juvenile Diabetes Research Foundation International (Telethon/ JDRF) partnership programme in Type 1 diabetes in Italy. 1995-present.
Media comment on rheumatoid arthritis prognosis, treatment, and research, and on tumour immunotherapy. 1994 – Present.
Mentoring young scientists and medical students. 1994 - Present. Reviewing grant applications, papers, supporting research and careers of young scientists through discussion
Scientific Committee Arthritis Foundation of Australia. 1995-present. Assess, rank and recommend funding for approximately 50 grants per year
Scientific Committee Princess Alexandra Hospital Foundation. 2004 - Present. Assess, rank and recommend funding for approximately 30 grants per year
Princess Alexandra Hospital Research Committee member. 1995-1996 and 2004-present. Strategic planning of research on Princess Alexandra Hospital campus, review grants.

Community
Lions, Rotary Club invited speaker. Provide lay persons’ overview of research work.
Annual General Meeting Speaker, Arthritis Foundation of Qld.1994-present.
Scientific Programme Committee, Australian Rheumatology Association (ARA).

Professor Thomas Gonda
Member, Australian Research Council College of Experts on Biological Sciences and Biotechnology (2003-)
Member, National Breast Cancer Foundation Expert Group on Strategic Planning (2003)

Associate Professor Nicholas Saunders
Adjunct Associate Professor School of Biomedical Sciences
Head of Cancer Profiling Unit, Centres for Health Research, PAH
Editorial Board for “Cancer Genomics & Proteomics”
Editorial Board for “Recent patent reviews on anti-cancer drug discovery”. Bentham science Publishing.

Dr Nigel McMillan
International Board Member, International Society for Interferon and Cytokine Research.
Organising committee for “New Directions in Leukaemia Research” conference.
Ad hoc reviewer for National Health and Medical Research Council, Queensland Cancer Fund.

Professor Matthew Brown
Associate Editor, Rheumatology.
Associate Editor, Genes and Immunity.
Assistant Editor, Arthritis and Rheumatism.
Arthritis Research Campaign (UK), Research Steering Committee member.
Arthritis Research Campaign (UK), Strategic Development Committee member.
Assessment in Ankylosing Spondylitis (ASAS) Consortium, Executive Council Member.
Senior Research Fellow, Botnar Research Centre, University of Oxford.
Fellow of St Peter’s College, Oxford.
With the acquisition of state-of-the-art mass spectrometry, new high-throughput techniques have been developed for tacrolimus, everolimus and mycophenolate and a method has been developed for the measurement of omega-3 fatty acids to support clinical trials using these supplements. In parallel with these research developments, the availability of the tacrolimus therapeutic drug monitoring service has now been extended to seven days per week.

Research is ongoing into the pharmacokinetics and pharmacodynamics of sirolimus, mycophenolate and tacrolimus and population studies have been performed in a range of transplant groups.

Drug utilisation evaluation and pharmacovigilance studies have included drotrecogin alfa, novoseven and ticarcillin/clavulanate and a review of our hospital’s experience with heparin-induced thrombocytopenia.

**Current Research Activities**

- Development and evaluation of high-throughput HPLC-MS/MS methods for immunosuppressant drugs
- Development and evaluation of new HPLC-MS/MS methods for aldosterone
- Drug utilisation evaluation: drotrecogin alfa; ticarcillin/clavulanate, Novoseven
- Heparin-induced thrombocytopenia
- Drug-induced acute renal failure

**Clinical Trials**

- Investigation of a relationship between free mycophenolic acid and toxicity early post renal-transplant.
**Other Research**

Established and performed a validation on a high-throughput HPLC-tandem mass spectrometric method for tacrolimus measurement. This methodology is now used in routine clinical service.

Established a rapid method for the measurement of the immunosuppressant everolimus by HPLC-tandem mass spectrometry that is suitable for current therapeutic drug monitoring practices.

Evaluation of internal standards for the measurement of cyclosporin by HPLC-tandem mass spectrometry.

Established a novel HPLC-tandem mass spectrometric method for the quantification of tacrolimus that used two scanning modes, selected reactant monitoring and MS3. Both scan modes provided quantitative results, but the use of an extra degree of fragmentation for MS3 provides another level of assurance to the lack of interference and thus quality of the result. This is particularly important in the clinical setting where patients are receiving multiple drug regimens and can be in extreme disease states. This scan combination may be useful in applying HPLC-tandem mass spectrometry to the regulated clinical environment.

Development of a method for the measurement of omega-3 fatty acids to support clinical trials on omega-3 fatty acid supplementation and coronary heart disease.

Development and validation of a HPLC-tandem mass spectrometric method for the measurement of free mycophenolic acid to support ongoing clinical trials.

**Financial Support**

$175,000. Waters Corporation (Manchester, UK). Development of HPLC-MS/MS assays of clinical significance and utility. (Paul Taylor)

$250,000. Australian Bioanalytical Services Pty Ltd Applied Biosystems – MDS SCIEX (Toronto, Canada). The development and validation of HPLC-tandem mass spectrometry methods for clinically relevant compounds. (Paul Taylor).

**Publications**

**Journal Articles**


Articles Accepted for Publication


Published Abstracts


Book Chapters

Lectures and Presentations
Paul Taylor


Clinical Applications of LCMS. Hong Kong, November 2005. Workshop (Invited Speaker): LC MS method development in the clinical laboratory.


9th International Congress of Therapeutic Drug Monitoring and Clinical Toxicology. Louisville USA, April 2005. Symposium (Invited Speaker): Mass spectrometry in the clinical laboratory.

9th International Congress of Therapeutic Drug Monitoring and Clinical Toxicology. Louisville USA, April 2005. Workshop: Introduction to HPLC-MS.


Public Service Relevant to Research

Paul Taylor
Editorial Board: Therapeutic Drug Monitoring

Peer Review for the following journals: Clinical Chemistry, Journal of Chromatography A and B, Therapeutic Drug Monitoring, Clinical Biochemistry and Rapid Communications is Mass Spectrometry.

Associate Professor Peter Pillans
Australian Drug Evaluation Committee (ADEC)

Australian Adverse Drug Reactions Advisory Committee (ADRAC)

Queensland Hospitals Drugs Advisory Committee (QHDAC)

The Clinical Services Evaluation Unit is a unit within the Safety, Quality and Risk Management directorate of the hospital. The mission of Clinical Services Evaluation Unit is to assist the Princess Alexandra Hospital Health Services District in improving clinical outcomes, efficiency of health services, and patient satisfaction. The major objectives of the unit are to:

- Foster and support evidence-based approaches to practice
- Assist clinicians with the evaluation and operationalisation of clinical care improvement
- Develop efficient methods to measure performance and outcomes
- Provide advice, support and training in clinical service evaluation and improvement methods

Current Research Activities

Project managing the pilot testing of web-based clinical audit software (Bluespier).

Support to director of Safety and Quality Risk Management in evaluating electronic clinical audit systems already existing in clinical departments at Princess Alexandra Hospital.

Support in trialling and evaluating CORPALIGN project management software and making recommendations for continued use.

Clinician training in use of clinical audit software – Audit Maker (free software from the Australian Centre for Evidenced Based Practice).

Data base development and support for cardiac resuscitation indicator data base.

Data collection and feedback for the Clinical Practice Improvement Centre Cardiac Collaborative.
Financial Support

**CSEU funded Practice Improvement Projects**

$60,000 has been provided or committed to 6 clinician initiated projects that were completed or operated throughout 2005:

- Effectiveness and cost comparison of two different methods of delivering a weight management program to overweight patients with chronic liver disease. Emma Osland, Merrilyn Banks, Dr Elizabeth Powell, NOSS and Gastroenterology; 1/7/04-14/3/05
- Bloodstream infections in haemodialysis patients: improving preventative and management strategies (Dr Geoff Playford, Renal Unit, 18/8/04-16/2/05)
- Compression Therapy Non-concordance in Patients with Venous Leg Ulceration (active or healed) within the Princess Alexandra Hospital Outpatient Wound Management Clinic (Dr Harry Gibbs, Michelle Roc, 6/9/04-2/9/05).
- Assessing quality of, and identifying gaps in information handover in ICU (Dr Bala Venkatesh, 1/11/04-9/9/05)
- Reducing waiting times in Oncology Clinic and Day Care (Vanessa Roche, Sue Hausmann, Dr Damien Thompson, Dr Devinda Gill, 13/12/05-13/6/06)
- Evaluation of a new programme for the management of neurogenic bowel in people with spinal cord injury (Dr Tim Geraghty, Ellen Eugarde, Alison New, 13/12/05-1/6/06)

**Statistical Consulting provided to Princess Alexandra Hospital staff**

- Dr Bala Venkatesh: Critical hypoxic thresholds in tissues for induction of apoptosis
- Dr Peter Kruger / Dr Maneesha Tol: Statin therapy for patients with bacteraemia
- Dr Roslyn Purcell: Indocyanine green elimination to assess liver function
- Mary Boyde / Robyn Peters: Resuscitation of patients after cardiac arrest in hospital
- Kerri Holzhauser: The effect of aromatherapy massage with music on the stress and anxiety levels of emergency nurses
- Dr Luke Garske: Physiologic study of pleural effusion
- Dr Josie Larby: Non-small cell lung cancer with synchronous cerebral metastasis – predictors of survival
- Russell Saal: A new test for early detection of relapse in leukemia patients
- Jennifer Wallace / Dr Ross Cuneo: Sweat rates for growth hormone deficient people

**Assistance in developing clinical indicators for several PIP funded projects (see below).**

**Development of evaluation framework for clinical audit software tools and new AUSLAB browser (AUSCARE).**

**Development of evaluation framework and support for data collection and analysis for:**

- Dementia care on acute wards (in assistance with NICS),
- Utilisation of outpatient clinics,
- Quality of GP referrals to hospital,
- Elective booking and correct site surgery evaluations and
- Quality of information received by GPs from Neurology and Ophthalmology.

**Assistance in developing and evaluating Nursing Assessment and Care Plan.**

- Support to program for training clinicians in management of behavioural disturbances in the elderly and implementing care protocols across Princess Alexandra Hospital.

**Development and implementation of methods for monitoring and evaluating decision-making in regards to insertion of feeding tubes.**

**Support in developing elderly risk screening tool in collaboration with Academic Unit in Geriatric Medicine.**

**Project management of roll-out of electronic discharge summary throughout Princess Alexandra Hospital.**

**Support in developing clinical practice guidelines:**

- Advance health directives and advance care planning
- Outpatients clinical guidelines
- Tracheostomy guidelines.

**Revision of patient self-management guides for cardiac conditions.**

**Support to clinical projects funded by Queensland Health / Princess Alexandra Hospital include:**

- Mouth care project
- Ordering of computerised tomograph pulmonary imaging in The Emergency Department
- Haematology-Oncology outpatient patient flows
- Redesign of outpatients and Emergency care processes.

**Analysis of utilisation of medical speciality clinics in regards to attendance rates, new/old patient ratio, and long-term patient monitoring. This project was combined with a systematic review of the effectiveness of interventions for improving clinic utilisation. Results presented at medical grand grounds and summary report produced.**

**Assistance to elective surgery booking project.**

**Assistance to multidisciplinary team (medical, nursing and allied health) currently trialling guideline and worksheets in medical wards, with procedures placed on hospital procedures intranet site.**
Researching evidence about appropriate implementation models for chronic disease management.

Production of a needs analysis and proposed strategies report for improving clinical handover and optimising patient safety. Currently participating with a working group of the Patient Safety Centre in developing and implementing state wide handover protocols.

Project management of the Venous Thromboembolism Project sponsored by National Institute of Clinical Studies aimed at improving rates of use of VTE prophylaxis in hospitalised patients.

Publications

**Associate Professor Ian Scott**  
(already listed under Department of Internal Medicine)

**Journal Articles**


**Articles Accepted for Publication**


**Lectures and Presentations**

**Associate Professor Ian Scott**  
(listed under Internal medicine and Clinical Epidemiology research report)

Mark Jones  
“Quality of life measurement in cancer clinical trials”; Presented at the Princess Alexandra Hospital Cancer Collaborative Group monthly meeting, February 2005.

**Awards**

**Associate Professor Ian Scott**  
(listed under Internal Medicine and Clinical Epidemiology Research report)

Mark Jones  

**Public Service Relevant to Research**

**Associate Professor Ian Scott**  
(listed under Internal Medicine and Clinical Epidemiology Research report)
The Colorectal Unit at the Princess Alexandra Hospital was formed in 1990, and aims to provide a comprehensive adult colorectal service to the Southern Area Health District and referring centres. The Unit receives elective, urgent and emergency referrals. The consultant surgical staff provide a continuous on call service supported by junior surgical staff. The year 2005 has again seen Jodi Cooper in the Acting Assistant Director of Nursing role, with Catherine Bent and Cheryl Butterworth undertaking the role of Acting Nurse Unit Manager during her absence. Displays were set up in the foyer by nursing staff for the Crohn’s/Colitis Awareness week and for Bowel Cancer week; both were very well received. Jodi Cooper, Cheryl Butterworth and Brooke McCurley continue to lecture at the Queensland Cancer Fund in relation to bowel cancer and the role of surgery. 4E has also seen the new appointment of five graduate nurses throughout the year. Additionally in 2005 Dr Brian Miller, Jodi Cooper, Cheryl Butterworth and Catherine Bent travelled to North America to visit the Colorectal Unit at the Cleveland Clinic, Ohio for one week. The visit was partially financed by the Queensland Cancer Fund and the Princess Alexandra Hospital Society, and allowed the Unit to sustain strong international links with the American organisation. Both nursing and medical staff were able to introduce best practice initiatives into the Colorectal Unit at Princess Alexandra Hospital thus ensuring better patient outcomes.

The clinical focus of the Unit is on difficult colorectal problems such as rectal cancer, complicated inflammatory bowel disease and complex perianal problems. An audit is conducted monthly relating to the clinical indicators for the Unit, namely wound infection, thrombo-embolic disease, anastomotic leaks and mortalities. The rates in all of these areas are very favourable compared to reports from other major centres. The Colorectal Project has been collecting data on colonic and rectal cancer cases handled through the Unit and at Princess Alexandra Hospital for more than 25 years, and the computer system for this was updated during 2005. In addition the unit has the largest readily available and fully categorized clinical photo database at this hospital with over 2400 digital photos dating back to 1998. These extensive databases have produced and enhanced much of the Unit’s research output over the past decade, and continue to do so now with clinical studies underway on local excision for rectal cancer, the predictive value of Carcino Embryonic Antigen in recurrent bowel cancer, intestinal endometriosis, diverticular disease in young people, Gastro Intestinal Stromal Tumour, and indeterminate colitis.

The Unit plays an active role in graduate and postgraduate general surgical teaching at all levels in the hospital. The major thrust at the graduate level is with the 3rd year medical students who spend 5 terms, each of six weeks, at the Princess Alexandra Hospital in General Surgery. They are administered by Dr Brian Miller and tutored by consultants on the Colorectal Unit every week. The Unit also participates in, with Dr Jon Cohen as their administrator, the clinical training sessions for all general surgical registrars at this hospital.
Current Research Activities

The Colorectal Unit’s main focus is with clinical studies of long term outcome in certain key areas of colonic and rectal disease such as cancer and inflammatory bowel disease. All cancer patients being treated and followed by the Unit are assembled on a data base by a dedicated research assistant, and this has been used extensively for generating retrospective studies. A list of interesting topics requiring investigation that could be tackled by a junior surgical trainee is kept and distributed to incoming basic surgical trainees as necessary, both on the Colorectal Unit and other general surgical Units at the Princess Alexandra Hospital. Several of the registrars have taken these through to completion and publication in refereed surgical journals. Current topics include retrospective studies on diverticular disease in young people, Gastro Intestinal Stromal Tumour, volvulus (accepted for publication in Canadian Journal of Surgery), indeterminate colitis, intestinal endometriosis, angiodysplasia and the influence of Carcino Embronic Antigen measurement on the treatment of colorectal carcinoma. The results of stapled haemorrhoidectomy at the Princess Alexandra Hospital are under investigation, and a prospective study comparing short and long course radiotherapy given preoperatively for rectal cancer is also underway in conjunction with the Department of Radiotherapy.

A study measuring the effectiveness of general surgical teaching at Princess Alexandra Hospital of University of Queensland graduate students using voluntary pre- and post-testing in 3rd year, is coordinated by consultant staff on the Colorectal Unit. The results are distributed as a comparative bar graph to all teaching hospitals in the Brisbane area including Nambour, Caboolture, Redcliffe, Royal Brisbane Hospital, Princess Alexandra Hospital, Mater, Greenslopes, Queen Elizabeth II, Logan and Ipswich, in the form of an annual audit.

Clinical Trials

Prospective trial of ‘short course’ versus ‘long course’ pre-operative radiotherapy for low rectal cancer. In collaboration with The Department of Radiotherapy at Princess Alexandra Hospital. Dr David Schache is a member of the Management Committee for this trial.

Other Research

Colonic Stenting for Malignancy. Is This the Way To Go?

Stapled Haemorrhoidectomy:- The Princess Alexandra Hospital Results.

Indeterminate Colitis; Treatment and Outcome at Princess Alexandra Hospital.

Intestinal Endometriosis:- Presentation and Outcome at Princess Alexandra Hospital.

Value of Carcino Embronic Antigen estimations in the Management of Recurrent Colorectal Cancer.

Gastro Intestinal Stromal Tumour – Local Results at Princess Alexandra Hospital.

Incidence and Outcome of Volvulus at Princess Alexandra Hospital. (Accepted for publication).

Outcome of Younger Patients with Untreated Diverticulitis at Princess Alexandra Hospital.
Longterm Outcome of Entero-Vesical Fistula at Princess Alexandra Hospital.

Influence of Perforation of Colorectal Carcinoma on Outcome.

Local Excision for Rectal Cancer:- Results at Princess Alexandra Hospital.

Angiodysplasia at Princess Alexandra Hospital:- Aetiological Factors and Outcome.

Financial Support

Grants
- $50,000. Royal Australian College of Surgeons - Conrod Trauma Fellowship for 2005. (Dr David Theile)
- $40,000. Donation to Colorectal Project from the family of a patient, raised through public auction. (Dr Jon Cohen)
- $6,000. Ethicon (Johnson & Johnson Ltd) for the Colorectal Project at Princess Alexandra Hospital. Ongoing annual grant. (Dr Jon Cohen)
- $6,000 Tyco, for the Colorectal Project at Princess Alexandra Hospital. Ongoing annual grant. (Dr Jon Cohen)
- $1000. Johnson & Johnson Ltd, Ethicon Division, awarded in 2005:- Prize to the winner of the annual Neville Davis Registrar Research Competition. Ongoing grant for this competition. (Dr Brian Miller)
- $2000. Society Nursing Scholarship for assistance with international travel expenses.(Cheryl Butterworth)
- $6000. Queensland Cancer Fund Nursing Scholarship for assistance with study improving patient outcomes in relation to caring for patients with cancer.(Jodi Cooper)

Publications

Journal Articles

Articles Accepted for Publication
Lau K, Miller BJ: - “Tangles in the Dark: A Study of Large Bowel Volvulus”. Accepted for publication by the Canadian Journal of Surgery.
The Department of Diabetes and Endocrinology at the Princess Alexandra Hospital houses the Centre for Diabetes and Endocrine Research and the Diabetes and Endocrinology clinic.

The Centre for Diabetes and Endocrine Research, an independently-funded research centre, was established in 2004 and is part of the School of Medicine, University of Queensland. Its mission is to provide cutting edge research, from bench to bedside, for the treatment and prevention of endocrine disorders.

The Centre for Diabetes and Endocrine Research brings together a number of allied research programs in Diabetes, Endocrinology and Metabolism. The Centre’s main research interests include Diabetes (Type I and II), Obesity, Cell Signalling, Liver Metabolism, Bone Research, Pregnancy, Functional Genomics and Endocrine Cancers. The Centre for Diabetes and Endocrine Research is internationally recognised for research into obesity and is one of the few laboratories in the world to carry out research on human adipose tissue and cells. Research from the centre has led to the formation of a venture backed, ‘start-up’ company; Adipogen Pty Limited. Adipogen’s interest is the development of novel treatment strategies for obesity and the overweight.

In 2005 the Centre for Diabetes and Endocrine Research underwent significant growth to approximately fifty researchers, students and support staff. Major highlights for the Centre for Diabetes and Endocrine Research during the year included three National Health and Medical Research Council grants and three prestigious postdoctoral fellowships. In addition, progress on the adiponectin project has been outstanding during year with several key publications in press which are expected to be published in early 2006.
Clinical

The Diabetes and Endocrinology Department provides a tertiary level in- and out-patient clinical service in diabetes and endocrinology. The service includes consultancy to other departments and services within the hospital and an outreach service every two months to Mt Isa Base Hospital. The clinical service is supported by a laboratory providing a genetic screening service for Australasia for inherited disorders of endocrine tumours and of calcium regulation abnormalities.

Teaching

Professor John Prins, Associate Professor Graeme Macdonald and David McIntyre, Drs Trisha O’Moore-Sullivan, Anthony Russell, Clair Sullivan and Janelle Nisbet have extensive roles in the education and training of clinicians, scientists, graduate and undergraduate students, involving lectures, tutorials and clinical bedside coaching.

Current Research Activities

Clinical Trials

A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Determine the Efficacy and Safety of SYR110322 (SYR-322) When Used in Combination with Sulfonylurea in Subjects with Type 2 Diabetes

A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Determine the Efficacy and Safety of SYR110322 (SYR-322) When Used in Combination with Pioglitazone in Subjects with Type 2 Diabetes

A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Determine the Efficacy and Safety of SYR110322 (SYR-322) Compared with Placebo in Subjects with Type 2 Diabetes

A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Determine the Efficacy and Safety of SYR110322 (SYR-322) When Used in Combination with Insulin in Subjects with Type 2 Diabetes

A Study to Evaluate AMG 162 in the Treatment of Posmenopausal Osteoporosis

A Randomised, Double-Blind, Placebo-Controlled, Study to Assess the Safety, Tolerability and Efficacy of L-001037536 (Cathepsin-K Inhibitor) in the Treatment of Postmenopausal Women with Osteoporosis

A Randomised, Double-Blind, Two-Arms, Placebo-Controlled, Parallel-Group, Multicentre Study of Rimonabant 20mg/day in the Treatment of Atherogenic Dyslipidemia in Abdominally Obese Patients

The Long Term Efficacy and Safety Assessment of a Three Year Oral Administration of S12911 in Osteoporotic Postmenopausal Women having Participated Either in Spinal Osteoporosis Therapeutic Intervention “SOTI” Study or Treatment of Peripheral Osteoporosis “TROPOS” Study

A Double-Blind, Randomised, Placebo-Controlled, Phase 3 Study to Determine the Efficacy of Arzoxifene 20mg/day to reduce the Incidence of Vertebral Fractures and Invasive Breast Cancer Incidence in Postmenopausal Women with Osteoporosis or with Low Bone Density without Osteoporosis

A Phase 2B, Randomised, Double-Blind, Placebo-Controlled Study to Assess the Efficacy, Safety and Tolerability of 24 Weeks Treatment with Different Doses of AOD9604 Tablets on Weight Loss in Obese Adults
A One-Year, Open, Randomised, Parallel, Three-Arm Study Comparing Exubera (Insulin, Dry Powder Pulmonary Inhaler) Vs Avandia (Rosiglitazone Maleate) and an Add-On Therapy Vs Exubera Substitution of Sulphonylurea in Patients with Type 2 Diabetes, Poorly Controlled on Combination Sulphonylurea and Metformin Treatment

A 24-Week Randomised, Double-Blind, Parallel-Group, Multi-Centre, Placebo-Controlled Study to Evaluate the Efficacy, Safety and Tolerability of Tesaglitazar Therapy when added to the Therapy of Patients with Type 2 Diabetes Poorly Controlled on Sulphonylurea Alone

A 24-Week Randomised, Double-Blind, Parallel-Group, Multi-Centre, Placebo-Controlled Study to Evaluate the Efficacy, Safety and Tolerability of Tesaglitazar Therapy when added to the Therapy of Patients with Type 2 Diabetes Poorly Controlled on Metformin Alone

Trial to Reduce Cardiovascular Events with Aranesp Therapy

Other Research

The current areas of interest in the department include:

Characterisation of the role of FGF-1 in human adipogenesis with a view to identify therapeutic targets for the treatment of obesity.

Investigation of the effects of improving insulin sensitivity by lifestyle interventions or drug therapies on markers of vascular and cardiac function, in patients with obesity, T2DM and after renal transplantation.

Investigation of the mechanisms by which insulin receptor substrate-1 (IRS-1) localisation and function is regulated.

Role of IMPDH in fatty acid storage and lipid body dynamics.

Regulation of the Ser/Thr kinase Akt, which plays an important role in many of insulin’s metabolic effects, in human tissues.

Insulin action and signalling in human liver - the effects of obesity, free fatty acids and adiponectin.

Investigation of metabolic differences in omental and subcutaneous adipose tissue by comparing insulin action and signalling, and adipokine release and action in adipose tissue biopsies from patients with and without insulin resistance.

Role of 11β-Hydroxysteroid Dehydrogenase in Insulin Resistance

Investigation of appropriate testing criteria for multiple endocrine neoplasia Type 1 and insights into the epidemiology of the disease.

Identification of novel genes for familial hyperparathyroidism syndrome

Identification of activating and inactivating mutations of the calcium sensing receptor in patients with familial hyperparathyroidism.

Investigation of the mechanisms of appetite regulation and in particular elucidating mechanisms regulating ghrelin release and in vitro studies investigating the affects of ghrelin on the adipocyte.

Influence of the medium collected from thiazolidinedione-treated adipose tissue explants on the insulin sensitivity of human muscle cells.

Investigation of the relationship between Type 2 diabetes and chronic liver disease looking at the role of metabolic factors in the development and progression of chronic liver disease.
Improving the success and cost-effectiveness of lifestyle intervention for weight reduction in patients with obesity-related chronic disease.

Investigation of the production of the peptide hormone, Adiponectin, by human fat cells (adipocytes) and its post-translational modification and multimerisation within the secretory pathway of cells.

Investigation of the effects of insulin resistance on hepatic stellate cells and development of cirrhosis in response to liver injury; mechanisms of hepatic carcinogenesis in relation to liver injury; and clinical projects examining symptom profiles and quality of life in liver disease.

Contribution of novel glucose transporters and activated GLUT4 to basal and insulin-stimulated glucose uptake in human subcutaneous and omental adipose tissue.

Study of impaired non-insulin mediated glucose uptake in obesity and pregnancy examining the mechanisms regulating hyperosmolar induced glucose uptake in human adipose tissue.

Exploring the long term consequences of pregnancy related disorders such as pre-eclampsia, the role of ghrelin in appetite regulation in pregnancy, the impact of obesity on maternal and fetal outcomes, and the consequences of increasing maternal age on pregnancy outcomes.

**Financial Support**

**Patents**

- US Patent Application number: PCT/AU03/00826 entitled “Differentiation modulating agents and uses thereof” (granted)
- Australia patent number: PCT/AU2005/000008 entitled “Differentiation modulating agents and uses thereof” (granted)
- US Patent Application number: 60/601797 filed on 16/Aug/2004 entitled “metabolism modulating agents and uses therefore”

**Current NHMRC Grants**

- $400,000. NHMRC CCRE Grant. “Centre of Clinical Research Excellence in Cardiovascular Disease and Metabolic Disorders” (T Marwick)
- $70,000. NHMRC project grant. Insulin action and signalling in human liver - the effects of obesity, free fatty acids and adiponectin. (J Prins, J Whitehead)
- $150,000. NHMRC partnership. The Diabetes Health Research Program - A Collaborative research-based program of education, intervention and scientific discovery in Type 2 Diabetes. (J Prins)
- $70,000. NHMRC. Human Hepatic Insulin resistance. (GA Macdonald)

**Other Grants**

- $10,000. Princess Alexandra Hospital Foundation. The relationship between serum adiponectin and inflammatory state in obese adults. (GA Macdonald)
- $50,000. Princess Alexandra Hospital Foundation. Metabolic complications of liver transplantation. (GA Macdonald)
- $17,000. The George Weaber Foundation Trust. Molecular Co-ordination of IRS-1 Function. (J Whitehead)
- $45,000. Diabetes Australia Research Trust Grant. IMPDH – a potential target for inhibition of adipogenesis and obesity related problems. (J Whitehead)
- $45,000. Diabetes Australia Research Trust Grant. Multimerization and secretion of Adiponectin; potential implications for a promising anti-diabetic. (A Richards)
- $37,033. Australian Research Council. Depression and Diabetes. (J Kenardy, J Prins, C Leong)
- $10,000. Princess Alexandra Hospital Foundation. Investigation into the role of IMPDH in lipid accumulation and adipogenesis. (J Whitehead)
- $50,000. University of Queensland Venamore Bequest Fund. Develop Research into Osteoporosis. (J Prins)
- $50,000. University of Queensland Mayne Bequest Research Programme. A Research Program in the Metabolic Syndrome. (J Prins)
- $65,000. Lions Senior Medical Research Fellowship. Investigation into Insulin Action and Insulin Resistance. (J Whitehead)


McIntyre HD, Principal Investigator, Mater Health Services Site, ADVANCE Collaborative Group. ADVANCE – Action in Diabetes and Vascular Disease: patient recruitment and characteristics of the study population at baseline. Diabet Med. 2005 Jul;22(7):882-8


**Lectures and Presentations**

**Dr Leanne Callaway**

Hypertensive disorders in pregnancy - Diploma of Obstetrics and Gynecology Course -RANZCOG, 2005 (Invited)

Radiation in pregnancy - Annual Scientific Meeting, Queensland State Committee, Royal Australasian College of Physicians.

**Dr Edith Gardiner**
Vitamin D Working Group at the 26th Annual Scientific Meeting of the American Society for Bone and Mineral Research, Nashville TN, USA (oral presentation selected from abstracts)

Bone and Joint Decade Queensland Research Day

Research Seminar, Rheumatology Department, Princess Alexandra Hospital

**Dr Ingrid Hickman**
Welcoming address and keynote speaker: 4th Medical Update University of Queensland and Gleneagles Intan Medical Centre Kuala Lumpur, Malaysia, September 2005

Australian Gastroenterological Society, Single Topic Conference, August 2005 “Lifestyle intervention as a treatment for non-alcoholic fatty liver disease”

Gastroenterology Society of Queensland, August 2005, Annual Dinner presentation “Strawberry ice cream, Fairy Floss and Dagwood Dogs – Achieving Weight Loss in our Obesogenic World”. (Invited)

Australian Pituitary Foundation Ltd, July 2005 “Weight management in pituitary disease”. (Invited)

Dietitian’s Association of Australia, National Conference Full Day Workshop, May 2005 “Dietetic management of acute and chronic liver disease”.

Dietitians Association of Australia May 2005 “Obesity Interventions in the Real World”. Oral Presentation

American Association for the Study of Liver Disease (AASLD), Raised alanine transaminase and decreased adiponectin are features of the metabolic syndrome in patients with type 2 diabetes. San Francisco, November 2005.


**Dr Louise Hutley**
“Role of FGF-1 in human adipogenesis,” South East Queensland Endocrine Group meeting, July 2005


Targeting Fat Cell Number as an Obesity Treatment. Presentation to Queensland Government officials including Minister for State Development and Innovation and press representatives, Princess Alexandra Hospital, Brisbane June 2005

Research Today – Treatments for the Future. Presentation to supporters of the Princess Alexandra Hospital Foundation, Brisbane February 2005

Career in Medical Research. Presentation to senior students from regional secondary schools as part of a science/health careers awareness program organized by Princess Alexandra Hospital Public Relations Unit, Brisbane January 2005

**Dr David McIntyre**

The DAFNE programme of intensive insulin therapy in Type 1 diabetes

May 2005. Eli Lilly Directions in Diabetes Meeting, Gold Coast. Diabetes in Pregnancy


Common Traps and Pitfalls in the management of Type 2 diabetes.

Royal Australian College of Physicians Queensland lecture series – Osteoporosis. September 2005

Australian Diabetic Educators Association Perth. Insulin replacement therapy in Type 1 diabetes – the DAFNE approach. September 2005


Continuing Medical Education web lecture on Obesity in four parts. http://cmeeondiabetes.com.au

Obesity. Respiratory Grand Rounds. The Prince Charles Hospital Oct 2005

**Dr Trish O’Moore-Sullivan**
My Pituitary and My Body. Pituitary Foundation Pituitary Awareness Week. July 2005


**Professor John Prins**
European Association for the Study of Diabetes Annual Scientific Meeting. Major Symposium Talk – “Adipose Tissue and Inflammation – Role in Insulin Resistance”

International Society for Thrombosis and Hemostasis Annual Scientific Meeting. Major Symposium Talk. “Adipokines as predictors of the Metabolic Syndrome”

Six Invited Lectures at National Scientific Meetings to date

**Dr Anthony Russell**
Endocrinology Society of Australia Seminar Meeting “Other Endocrine Effects of Antipsychotics”, Yarra Valley, Victoria, 16th April, 2005

Australian Diabetic Educators Association Seminar Meeting, “Pre-diabetes” Mercure, Brisbane, 3rd June 2005

Adiponectin. Invited Lecture to Hunter Area Pathology Service, Grand Rounds, Newcastle, NSW. 3rd August 2005

**Dr Jon Whitehead**
The Queenstown Molecular Biology Meeting, September 2005

1st Asia Pacific Diabetes and Obesity Study Group

Invited talks also given at Royal Melbourne Institute of Technology (Melbourne) Centre for Immunology and Cancer Research, School of Bio Medical Science and South East Queensland Endocrine Group

**Post Graduate Students**

- PhD, completed 2005
  - Anthony Russell

- PhD, in progress
  - Trisha O’Moore Sullivan
  - Janet Warner
  - Hayley Charlton
  - Alison Sweet
  - Felicity Newell
  - Matthew Stephenson
  - Yang Zhe
  - Matthew Stephenson
  - Hua Su
Public Service Relevant to Research

**Professor John Prins**
Scientific Director, Adipogen Pty Ltd. 

**Dr Anthony Russell**

**Dr Jon Whitehead**
National Health and Medical Research Council GRP member. Editorial Advisor to the Biochemical Journal.

**Dr Edith Gardner**

**Dr Ingrid Hickman**

**Dr Louise Hutley**
Reviewer for both National Health and Medical Research Council and NHF Project Grants. Australian representative on organising committee for Satellite Meeting 3 (Recent Progress in Adiposcience). International Conference on Obesity to be held in 2006.

**Dr Graeme McDonald**

**Dr Trisha O’Moore-Sullivian**
Scientific Organising Committee, International Congress of Obesity, Sydney 2006, High Cost Drug Committee

**Dr David McIntyre**

**Dr Clair Sullivan**
Co-Chair Queensland Trainees Committee, Royal Australasian College of Physicians. Member Queensland State Committee, Royal Australasian College of Physicians

**Dr Leonie Callaway**
Chair, Basic Training Curriculum Writing Group, Royal Australasian College of Physicians. Member, Education Strategy Implementation Board, Royal Australasian College of Physicians. Member, Congenital Anomalies Subcommittee, Queensland Health. Member, Planning Group for workshops regarding linking assessment to training for specialist trainees, Australian Medical Council. Reviewer -Internal Medicine Journal.

**Dr Charlotte Widberg**
Reviewer for Journal of Endocrinology
2005 was an exciting time in the Division of Diagnostic Radiology. The Division was the dominant institution at the Royal Australasian and New Zealand college of Radiologists 2005 Sydney meeting with nine posters (one in twelve).

Dr Yu Ming Tang was awarded the prestigious Mayne Health best paper presentation prize at this meeting. Many quality publications were accepted during 2005 in a variety of high impact international journals. The Department is now a strong advocate of the philosophy that participation in research and quality service delivery are symbiotic.

Current Research Activities

The Radiology Department has many active research projects including; the utility of whole spine magnetic resonance imaging in spinal infections, the cost effectiveness of using non-enhancing cortical signal abnormality on FLAIR to differentiate glioma from metastasis and a retrospective comparison of shoulder magnetic resonance imaging with arthroscopy.

Clinical Trials

The Radiology Department is involved in several dozen collaborative projects with various units within the Princess Alexandra and external institutions.
Publications

Journal Articles


Articles Accepted for Publication

Gandi M, Tang YM, Panizza B. Myxoma of the masticator space. Australasian Radiology

Leggett DAC, Sinnott SJ, Kienzle HN. Pseudoaneurysm and DVT complicating Femoral Osteochondroma: Multimodality imaging. Australasian Radiology


Ong B. Retrospective study of PICC line thrombosis. Australasian Radiology


Published Abstracts


Crowe B, Sim L. Productivity and PACS – Fact or Fiction, 2005 RANZCR Annual Scientific Meeting

Du L, Chan J, Stuckey SL. Validation of multi-detector computed tomography in the quantitative assessment of cardiac left atrial size: a comparison to echocardiography. 2005 RANZCR 56th Annual Scientific meeting.


2005

research - key to health

Visiting Medical Officers
Dr John Earwaker
Dr Mitesh Gandhi
Dr Michelle Nottage
Dr Roger Livsey
Dr Bronwyn Rogers
Dr Demi Seneviratne
Dr Lora Medoro


Lectures and Presentation

Dr David Leggett
Vascular supply of Hepatocellular carcinoma: a basis for radiological diagnosis and therapy.

AGW 2005, Gastroenterological Society of Australia, Brisbane Convention and Exhibition Centre, South Brisbane.

Interventional radiology and Hepatocellular carcinoma.

Royal Australasian and New Zealand College of Radiologists ASM 2005, Sheraton Hotel, Noosa.

Vascular anatomy: Aneurysm management – Early post-op care; and Follow up protocols. First Brisbane Neurointerventional Conference, Education Centre, Royal Brisbane Womens Hospital.

Dr Lawrence Sim
Workflow before and after picture archive and communications system;

Awards


Public Service Relevant to Research

Associate Professor Stephen Stuckey
Reviewer for Australasian Radiology.
Professor William B. Coman, Head & Neck Unit Princess Alexandra Hospital, and his team have been actively engaged in frontier research in preoperative prognostic markers for head and neck and skin cancers. The group has published eleven papers in peer review journals in 2005. With a paper published in International Journal of Cancer featured in the front cover with editorial reviews.

The group is the first to identify Crystalline A & B as sensitive marker for poor prognosis in head and neck cancer.

Current Research Activities

Clinical Trials
Surgical Trial: Quality of Life, cost effectiveness, and functional speech and swallowing outcomes, following differential management of laryngeal cancer.
Chief Investigator: Professor W.B.Coman

Ongoing Laboratory Research
Establishing Head and Neck Squamous Cell Carcinoma cell lines with knock out Crystalline A & B gene
Translating findings in Head and Neck prognostic marker to skin cancers: Squamous Cell Carcinoma and melanoma.
Establishing tissue array technique for head and neck squamous cell carcinoma molecular profiling.
Dr. David Hall Ear Nose and Throat trainee PhD thesis on further validation and identifying preoperative prognostic marker in head and neck squamous cell carcinoma with Dr. David Chin
Epstein Barr Virus in developing vaccine for nasopharyngeal carcinoma. PhD thesis for Ear Nose and Throat trainee, Dr. Mark Smith and Professor Denis Moss, Epstein Barr Virus laboratory, Queensland Institute of Medical Research.
Karin Annetz Ear Nose and Throat surgeon, Lund University, Visiting Swedish Ear Nose and Throat surgeon and PhD candidate validating prognostic marker.
Financial Support
$90,000. Garentt Passe and Rodney Williams Memorial Foundation Project. Quality of Life, cost effectiveness, and functional speech outcome, following differential management of laryngeal cancer. (Professor W Coman)
$60,000. Garentt Passe and Rodney Williams Memorial Foundation Project. Validation of novel prognostic markers in Head and Neck Cancer. (Professor W Coman)

Publications
Journal Articles

Articles Accepted for Publication

Published Abstracts
ANZ Journal of Surgery ASC Perth 2005; Molecular introduction to Head and Neck Cancer (HNSCC) carcinogenesis. David Chin, Glen Boyle, David Theile, Peter G. Parsons, William B. Coman. Institution: Head & Neck Unit, Princess Alexandra Hospital and Dept of Plastic Surgery, Princess Alexandra Hospital and Melanoma Genomics Group, Queensland Institute of Medical Research
ANZ Journal of Surgery ASC Perth 2005; Novel preoperative prognostic markers for poor prognosis in Head and Neck Cancer. David Chin, Glen Boyle, David Theile, Peter G. Parsons, William B. Coman Institution: Head & Neck Unit, Princess Alexandra Hospital and Dept of Plastic Surgery, Princess Alexandra Hospital and Melanoma Genomics Group, Queensland Institute of Medical Research
ANZ Journal of Surgery ASC Perth 2005; Microarrays and gene expression profi ling, the power, limitations and pitfalls for the surgeon. David Chin, Glen Boyle, David Theile, Peter G. Parsons, William B. Coman.

Institution: Head & Neck Unit, Princess Alexandra Hospital and Dept of Plastic Surgery, Princess Alexandra Hospital and Melanoma Genomics Group, Queensland Institute of Medical Research.

Book Chapters
Head and Neck Cancer. 2005: By Professor Coman for Professor Nick Saunders.

Lectures and Presentations
Professor William Coman
Course Director - Chairman Head and Neck Cases – Total Glossectomy. Upover Downunder II Internation Ear Nose and Throat Meeting. Campitello, Italy January 2005.
Guest Speaker -Treatment of Advance Cancer of the Larynx in Developing Countries – Molecular biology of laryngeal cancer. XVIII International Federation of Surgeons World Congress Rome, Italy, June 2005.
Guest Speaker – Treatment of Laryngeal Cancer. Voice Symposium, Sydney 2005
Chairman – Thyroid Cancer Symposium. Hyatt, Coolum Queensland, November 2005

Post Graduate Students
David Hall, PhD, commenced 2005
Mark Smith, PhD, in progress

Awards
Dr David Chin
The Department is a designated level 6-Trauma centre with 42,000 annual attendances and 14,000 admissions. It is an acute clinical department with responsibility for Emergency Department presentations, Observation Bay admissions, and attendance at cardiac arrests occurring within the hospital environs.

Department research is hampered by lack of funding for trained and dedicated research assistants, and a heavy service commitment which impacts on Consultants and Registrars non-clinical time.

Current Research Activities

Other Research

Trauma Registry

National Institute of Clinical Studies

Mathematical modelling of flows in Emergency Department – James Collier, Michael Sinnott and Prof Erhan Kozan from Queensland University of Technology

Patents

Dr Sinnott is involved (privately) with commercialisation of Intellectual Property developed by Qlicksmart and other third parties, including:

- Qlicksmart Scalpel Blade Remover,
- Qlicksmart Single-use Sterile Scalpel blade remover,
- Bladeserver Passing Tray (UK company),
- Check-Clip device for reducing medication errors (Gold Coast Paramedics),
- Syringe Aspiration Device (Brisbane Maxillary Facial Surgical Trainee),
- Syringe Aspiration Pen (Dr Neville Henry).

Publications

Journal Articles


Lectures and Presentations

‘Impact of a co-located after hours General Practice on Emergency Department activity’ Powrie D, Collier J, Page C. presented at Australian College of Emergency Medicine – Qld Faculty Faculty Symposium, Twin Waters June 2005


“Retrieval Medicine.” Presentation to the Department of Anaesthesia Staff Group, Royal Brisbane and Women’s Hospital, Wednesday 13th July 2005.

“Emergencies in Medicine.” Presentation to the Australian Podiatry Association (Qld) Inc. continuing education seminar, Saturday 23rd July 2005.

**Michael Sinnott**

“Commercial Success for the Smart State’s Biotechnology and Medical Device Industries is Hiding Right Below our Noses” Presenter at 5th Annual Medical Research Conference of Queensland. 2-11-05

Panellist of the “New Inventors” section of the 5th Annual Medical Research Conference of Queensland Sinnott, M 3rd of November 2005

“Commercialisation: Myths and Misconceptions.” Presenter at Science Industry Australia’s Pathways to Success Seminar, in Brisbane, 3rd of October 2005

“Product Realisation Working Group – Medical Device Innovation Action Agenda.” Invited member of Federal Government Think Tank 2005


**Hector Fuentes**

“Scalpel Safety - a comparison of safety devices to reduce scalpel blade injuries.” Western Australia Faculty Meeting. Perth, Australia, 2005.

**Julie Finucane**


**J Ward**

The Department of Gastroenterology and Hepatology had a productive research year. The Liver Group within the Centre for Diabetes and Endocrine Research has been consolidating. In conjunction with Dr Ingrid Hickman, Post-Doctoral Research Fellow in the Liver Group, a research program examining liver disease in relation to type II diabetes has commenced. Some grant funding has been secured for 2006 to employ research staff to assist with this project. Studies of the role of adiponectin in human disease are ongoing, with a number of publications arising. Further project grant funding has been secured from the National Health and Medical Research Council to continue studies into the biology of adiponectin. The Liver Group have also established collaborations with the School of Human Movement at the Queensland University of Technology to examine the effect of different types of exercise on liver injury. The other new area of research is related to outcomes in liver transplant recipients, focusing on long term metabolic complications. Associate Professor Macdonald has secured a Princess Alexandra Hospital Foundation new Investigator Grant for 2006 for this project.

The laboratory of Associate Professor Darrell Crawford, Dr Linda Fletcher and Dr Kim Bridle has amalgamated with the Liver Group, to form a larger group with complimentary interests in the pathogenesis of liver disease and the role of host and environmental factors in disease progression. Interest in the inherited iron overload disease haemochomatosis continued with specific focus on the non-HFE mutations and the interrelationships between iron and alcohol in liver disease. Together with collaborators at Queensland Institute of Medical Research, they were the first to describe a ferroportin mutation in an Australian family leading to non-HFE related iron overload disease. Stressing the importance of the effect of alcohol on iron metabolism, it was demonstrated that alcohol downregulated the iron sensor peptide hepcidin, in an animal model of alcoholic liver injury, and this is currently in press in the alcohol literature. In 2005, with National Health and Medical Research Council funding, a project examining the effect of immunosuppression on the post-transplant hepatic response was initiated. Collaborations with Professor Mike Roberts and his group continued, with experiments describing the hepatic pharmacokinetics of propanol in an animal model of arthritis accepted for publication. This successful collaboration has attracted further National Health and Medical Research Council funding for 2006-2008.
Current Research Activities

Clinical Trials

PEG-Intron™ Plus REBETOL® For the Treatment of Subjects With Chronic Hepatitis C Who Failed to Respond to Previous Combination Therapy (Any α Interferon Treatment In Combination With Ribavirin).

PEG-Intron™ as Maintenance Therapy vs. an Untreated Control Group in Adult Subjects With Compensated Cirrhosis (METAVIR F4), Secondary to Chronic Hepatitis C, Who Have Failed to Respond to Therapy With Any α Interferon Plus Ribavirin.

PEG-Intron™ Maintenance Therapy vs. an Untreated Control Group for Prevention of Progression of Fibrosis in Adult Subjects With Chronic Hepatitis C with Hepatic Fibrosis (METAVIR Fibrosis Score of F2 or F3), Who Failed Therapy with PEG-Intron plus REBETOL® (in Protocol No.P02370).

Randomized, Multicenter, Open Label, Phase IV Study Evaluating the Efficacy and Safety of 16-Week Versus 24-Week Treatment with PEGASYS® in Combination with Copegus® in Interferon-naïve Patients with Chronic Hepatitis C Genotype 2 or 3 Virus Infection.

A Randomized, Double Blind Trial of Ldt (Telbivudine) versus Lamivudine in Adults with Compensated Chronic HepatitisB.

Randomized, Double-Blind Trial of Telbivudine (LdT) versus Lamivudine in Adults with Decompensated Chronic Hepatitis B and Evidence of Cirrhosis.

NV-02B-022 Idenix 2005/071. An Open-Label Trial of Telbividine (LdT) in adults with Chronic Hepatitis B previously treated in Idenix-sponsored Telbividine studies.

A randomized, open label trial of Telbividine (LdT) versus Adefovir Dipivoxil in adults with HBeAg-positive, Compensated Chronic Hepatitis B.

An extension protocol to evaluate the long-term effects of treatment with peginterferon alfa-2a (PEG-IFN) - or interferon (IFN) - based therapies for patients with chronic hepatitisC.

A Double-Blind, Randomised, Placebo-Controlled Study of Adefovir Dipivoxil for the Treatment of Patients with HbeAg (+) Chronic Hepatitis B Virus Infection.

Gilead A phase 3b, long-term, observational study of the durability of seroconversion in patients with chronic hepatitis virus infection who have seroconverted while participating in a previous Gilead-Sponsored study of Adefovir Dipivoxil.

A prospective non-randomised dual arm longitudinal cohort within which all subjects will be given the option of undergoing treatment involving a 24 week course of pegylated interferon monotherapy (180 mcg / weekly at entry to study.

Phase IV study of tailored therapy with Peg Interferon alpha 2b and Ribavirin for patients with Genotype 3 and high viral load. Genotype 3 Extended Treatments for HCV.

Hepatitis C in South East Asians: The association between novel genotypes and response to Pegylated-Interferon and Ribavirin therapy.

A phase IV, Randomised, Multicentre, Efficacy and Safety Study Examining the Effect of Induction Dosing with the Combination of Peginterferon Alfa-2a and Ribavirin in Patients with Chronic Hepatitis C Infected with Hepatitis C Genotype 1.

Collaborators

Professor John Prins
(Centre for Diabetes and Endocrine Research, The University of Queensland)

Dr Jon Whitehead
(Centre for Diabetes and Endocrine Research, The University of Queensland)

Professor Michael Roberts
(Department of Medicine, The University of Queensland)

Emeritus Professor Lawrie Powell
(Department of Medicine, The University of Queensland/ Queensland Institute of Medical Research)

Associate Professor Greg Anderson
( Queensland Institute of Medical Research)

Associate Professor Grant Ramm
( Queensland Institute of Medical Research)

Dr Nathan Subramaniam
( Queensland Institute of Medical Research)

Dr David Whiteeman
( Queensland Institute of Medical Research)

Associate Professor Michael Dunne
(School of Public Health, Queensland University of Technology)
A phase III, Randomised, Multicenter, Efficacy and Safety Study Examining the Efficacy of the Combination of Peginterferon alfa-2a and Ribavirin versus Peginterferon alfa-2a monotherapy in liver transplant recipients with Recurrent Hepatitis C Virus Infection.

A Phase 2b, Randomized, Multicentre, Active controlled Open Label Study to Evaluate the Efficacy and Safety of Albuferon in Combination with Ribavirin in Interferon Alfa Naïve Subjects with Chronic Hepatitis C Genotype 1.

A Randomised, Double-blind, Controlled Evaluation of Tenofovir DF versus Adefovir Dipivoxil for the Treatment of Presumed Pre-core Mutant Chronic Hepatitis B.

A Randomised, Double-blind, Controlled Evaluation of Tenofovir DF versus Adefovir Dipivoxil for the Treatment of HBeAg Positive Chronic Hepatitis B.

Other Research

The regulation of hepatic insulin signalling and action.

The role of iron in hepatic insulin resistance.

The regulation of Adiponectin multimerisation and secretion.

The structure and function of the adiponectin receptors, AdipoR1 and AdipoR2.

The role of adiponectin multimers in human disease.

Symptoms in people living with hepatitis C infection.

Liver disease in type 2 diabetes.

The effect of aerobic versus resistance exercise on human liver disease.

Factors that influence the development of renal failure in liver transplant recipients.

Long term metabolic complications following liver transplantanation.

Interrelationships between alcohol and liver disease.

Immunosuppresion and the post-transplant hepatic fibrogenic response.

Non-HFE related iron overload.

Screening for the iron-overload disease, haemochromatosis.

Altered hepatic pharmacokinetics and hepatic vascularity in liver disease.

Publications

Journal Articles


Published Abstracts


Articles Accepted for Publication


Post Graduate Students

Janet Warner, PhD, submitted 2005
Pencheng Li, PhD, in progress
Carolyn Lang, PhD, in progress
Matthew Stephenson, PhD, in progress
Hayley Charlton, PhD, in progress
John (Chia-En) Yeh, Honours
Katherine Stuart, PhD, awarded in 2005

Public Service Relevant to Research

Associate Professor Graeme Macdonald
Member, National Health and Medical Research Council Grant review Panel, 3d Reviewer for Hepatology, Journal of Hepatology, Endocrine, Journal of Gastroenterology and Hepatology, Medical Journal of Australia

Associate Professor Darrell Crawford
Head, Australian Liver Association, Gastroenterological Society of Australia Convener, Australian Liver Association workshop, Gastroenterological Society of Australia Annual Meeting, Brisbane, October 2005
Associate Professor Crawford, Dr Fletcher, Dr Bridle Assessors National Health and Medical Research Council Grants.
The Haematology Department serves as a tertiary level referral centre and is the “hub” for the Southern Zone of Queensland covering a population of more than 1.5 million. The Unit provides state-of-art clinical care encompassing chemotherapy, stem cell transplantation and immunotherapy. Patient care is based on the multidisciplinary team model in which groups of experts combine their skill and experience to manage patients with blood disorders. The Princess Alexandra Hospital Haematology Unit includes nationally recognised experts who conduct an extensive clinical research programme in leukaemias, lymphomas, myelomas and amyloidosis. The overall mission is to improve patient outcomes through the generation of high quality clinical trial data. The large clinical trials program incorporates 23 ongoing trials (14 in Lymphoma, 6 in leukaemia including 2 national investigators initiated trials and 2 international trials with Australasian principal investigator based at Princess Alexandra Hospital). The unit is recognized as a leading contributor to studies conducted through the Australasian Lymphoma and Leukaemia Group and others groups. The Unit has been instrumental in fostering translational research to be conducted in association with national clinical trials. As well as the research program at the hospital, the Unit nurtures and supports a wide range of laboratory based research through the development of the National Leukaemia and Lymphoma Tissue Bank housed at the hospital. This includes immunotherapy and DNA microarrays in leukaemias and lymphomas.

Significant growth resulted in Clinical and Translational research activity. The number of publications has more than tripled in the last 2 years. The highlights in the Laboratory Program includes ongoing recognition as the Acute Myeloid Leukaemia reference centre for detection of minimal residual disease in core binding factor acute myeloid leukaemia, development of wt-1 assay for minimal residual disease in non-core binding factor acute myeloid leukemia. In addition, funding has been secured for a Queensland Cancer Foundation Clinical Fellowship, new investigator initiated national trials (AML M13), Amyloidosis, and cell therapy. in Haematology Department and also from National Health and Medical Research Council Enabling grant for Australasian Leukaemia & Lymphoma Group tissue bank.

**Current Research Activities**

Large scale assessment of WT1 as a marker of MRD in patients with acute myeloid leukaemia treated uniformly in a clinical trial.

Quantitative Molecular assessment of Minimal Residual Disease in core binding factor, AML in conjunction with ALLG AML-M13 Clinical Trial.

Fluorogenic High Resolution Fragment Analysis of IgH and TCR Gene Rearrangements
Prognostic value of ZAP-70 in chronic lymphocytic leukaemia.

Comparison of commercially available RNA extraction and stabilisation solutions.

DNA microarrays in predicting clinical outcomes in chronic lymphocytic leukaemia

Role of PKR in chronic lymphocytic leukaemia

Tumour stem cells in chronic lymphocytic leukaemia

Clinical Trials

Investigator initiated studies designed and authored from The Princess Alexandra Hospital.

AML M13: High dose cytosine arabinoside and fludarabine without anthracycline for core binding factor (CBF) acute myeloid leukaemia (AML). National multi-centre Phase II study. (Principal investigator: P. Marlton)

NHL 11: A Phase II study of a modified HyperCVAD frontline therapy for patients with poor prognosis diffuse large B-cell lymphoma and peripheral T-cell non-Hodgkin’s lymphoma. (Principal investigator: P. Marlton)

MM8: A Phase II Study of Risk-Adapted IV Melphalan in AL Amyloidosis. (Principal Investigator: P. Mollee)

Multi-centre Trials The Princess Alexandra Hospital is Participating in:

International

PRIMA: A multicentre, phase III, open-label, randomized study in patients with advanced follicular lymphoma evaluating the benefit of maintenance therapy with Rituximab (MabThera*) after induction of response with chemotherapy plus Rituximab in comparison with no maintenance therapy. (Site PI: P. Marlton)

OCRELIZUMAB: (Site Principal Investigator: P. Marlton)

VISTA: An open-label, randomized study of VELCADE/Melphalan/Prednisone versus Melphalan/Prednisone in subjects with previously untreated Multiple Myeloma. (Site Principal Investigator: P. Marlton)

CLL8: Phase III trial of combined immunochemotherapy with Fludarabine, Cyclophosphamide and Rituximab (FC-R) versus chemotherapy with Fludarabine and Cyclophosphamide (FC) alone in patients with previously untreated chronic lymphocytic leukaemia (Site Principal Investigator: P. Marlton)

PTLD1: Treatment of Patients with Post-transplant lymphoproliferative disorder (PTLD) with a sequential treatment consisting of Anti-CD20 Antibody Rituximab and CHOP + GCSF chemotherapy (Site Principal Investigator: P. Mollee)

National

AML M12: A Randomised Trial of Idarubicin Dose Escalation in Consolidation Therapy Following Intensive Induction Chemotherapy Incorporating High Dose Cytarabine in Patients with Untreated Adult Acute Myeloid Leukaemia. (Site Principal Investigator: P. Marlton)

ALL3. Site Principal Investigator: P. Marlton
LY03: A Randomised Trial of Chlorambucil Versus Fludarabine as Initial Therapy of Waldenstrom’s Macroglobulinaemia and Splenic Lymphoma with Villous Lymphocytes (Site Principal Investigator: P. Marlton)

Other Research

Australasian Leukaemia and Lymphoma Group National Leukaemia and Lymphoma Tissue Bank Project

The group has established Australia’s first national tissue bank for malignant haematopoietic tissues collected in conjunction with Australasian Leukaemia and Lymphoma Group national clinical trials for the purposes of supporting laboratory based research. With initial seed funding from the Leukaemia Foundation, this project is now funded by the National Health and Medical Research Council.

Investigation of in vitro activity of Valproic acid (VA) and low dose cytosine arabinoside (Ara-C) in Acute Myeloid Leukaemia

Aggressive cutaneous squamous cell carcinoma in chronic lymphocytic leukaemia

Chronic lymphocytic leukaemia (CLL) Stem Cells

Defining the effect of anti-CD20 antibody therapy in non-Hodgkin’s lymphoma patients on the Epstein-Barr virus-specific cytotoxic T cell response and Epstein-Barr virus DNA load

Efficacy of in vivo G-CSF primed viral-peptide Specific T cells

Effect of the “Hyper-CVAD” chemotherapy regimen on female fertility

Safety and efficacy of pegfilgrastim compared to granulocyte colony stimulating factor (G-CSF) supporting a dose-intensive, rapidly cycling antimitobolite containing chemotherapy regimen (Hyper-CVAD) for lymphoid malignancy

Increased lipid concentration is associated with increased level of haemolysis

Effects of hyperlipidaemia on plasma sodium, potassium and chloride measurements by an indirect ion selective electrodes (ISE) measuring system

LAG-3 and Follicular Lymphoma

Palifermin induced acanthosis nigricans

Can immunosuppression be safely ceased during chemotherapy for post-transplant lymphoproliferative disorder in renal transplant patients?

Assessment of a New Immunoturbidometric Assay of Von Willebrands Factor Activity

research - key to health
Financial Support

Total Amount of funding from Pharmaceutical Industry for Clinical Trials in 2005 was $206,957.02 in addition to the following:

Grants

$50,000. Leukaemia Foundation of Australia. Molecular assessment of good prognosis AML in conjunction with ALLG AML-M13 trial. (P Marlton)

$280,000 over 5 years. Leukaemia Foundation of Australia. Molecular assessment of good prognosis AML in conjunction with ALLG AML-M13 trial. (P Marlton)

$20,000 Cancer Council Australia. Molecular assessment of good prognosis AML in conjunction with ALLG AML-M13 trial. (P Marlton)

$5,800. QHPS SERTF. Fluorogenic High Resolution Fragment Analysis of IgH and TCR Gene Rearrangements. (R Saal)

$107,000. Leukaemia Foundation of Australia. Molecular assessment of good prognosis AML in conjunction with ALLG AML-M13 trial. (P Marlton)

$5,000. Amgen. Pegfilgrastim in HyperCVAD. (P Mollee)

$5,000. Roche. PTLD1. (P Mollee)

$5,000. Leukaemia Foundation of Australia. Bank. (P Marlton)

$280,000 over 5 years. Leukaemia Foundation of Australia. Molecular assessment of good prognosis AML in conjunction with ALLG AML-M13 trial. (P Marlton)

$50,000. Leukaemia Foundation of Australia. Molecular assessment of good prognosis AML in conjunction with ALLG AML-M13 trial. (P Marlton)

$107,000. Leukaemia Foundation of Australia. ALLG National Leukaemia Lymphoma Tissue Bank. (P Marlton)

$5,000. Leukaemia Foundation of Australia. MMB. (P Mollee)

$5,000. Amgen. MMB. (P Mollee)

$5,000. Roche. PTLD1. (P Mollee)

$20,000. Amgen. Pegfilgrastim in HyperCVAD. (P Mollee)

Other

$300,000. ALLG National Leukaemia Lymphoma Tissue Bank. (P Marlton)

Publications

Journal Articles


Lane SW, Gill D, Mollee PN. Role of VAD in the initial treatment of multiple myeloma. Blood


Published Abstracts


Hall S, Tate J, Gill D, Mollee P. Significance of Abnormal Protein Bands in Patients with Multiple Myeloma Following Stem Cell Transplantation. Dept of Chemical Pathology and Haematology, QHPS, Princess Alexandra Hospital, Brisbane. 10th International Myeloma Workshop, Sydney (poster)


Middleton H, Mollee P, Bird R, Mills A, Marlton P, Gill D. Accelerated Delivery of Rituximab is Safe on an Out-Patient Basis. Princess Alexandra Hospital, Brisbane, Queensland, Australia Annual Scientific Meeting of the Haematology Society of Australia and New Zealand (oral presentation)

Mollee P, Marlton P, Mills A, Bird R, Gill D. Unexpected Haematologic Toxicity Associated with the Use of Intravenous Intermediate Dose Melphalan and Dexamethasone in Patients with Cardiac AL Amyloidosis. Dept of Haematology, Princess Alexandra Hospital, Brisbane, 10th International Myeloma Workshop, Sydney (poster)

Mollee P, Marlton P, Mills A, Bird R, Gill D. Low Serum Free Light Chain Concentration in Patients with Monoclonal Light Chain Diseases. Princess Alexandra Hospital Annual Scientific Meeting of the Haematology Society of Australia and New Zealand (poster)


Nagy, M, Crump, A, Keating, Princess Margaret Hospital, Toronto, Canada. 9th International Conference on Malignant Lymphoma, Lugano 2005.
Assessment of A New Immunoturbidometric Assay of Von Willebrands Factor Activity
Annual Scientific Meeting of the Haematology Society of Australia and New Zealand (oral presentation)

Utility of Serum Free Light Chains for Monitoring Myeloma Post-Autologous Stem Cell Transplantation..Dept of Chemical Pathology and Haematology, QHPS, Princess Alexandra Hospital, Brisbane.10th International Myeloma Workshop, Sydney (poster)

Book Chapters

Lectures and Presentations
Dr Devinder Gill
Aggressive lymphomas. Indo-Australian Update October 2005, Bangalore, India
Acute myeloid leukaemia. Indo-Australian Update October 2005, Bangalore, India
Overview of BMT in Haematological Malignancies. Indo-Australian Update October 2005, Bangalore, India
Interim analysis of Multicentre International Trial in Aggressive Lymphoma: Australasian Leukemia Lymphoma Group Meeting. Adelaide 2005
Salvage chemotherapy R-ICE vs R-DHAP in relapsed Diffuse Large B-Cell Non-Hodgkin’s Lymphoma (CORAL Study) Adelaide 2005
Gene expression profiling in B-CLL Australasian Leukemia Lymphoma Group Meeting.
Australasian Leukemia and Lymphoma Group November 2005 Sydney
Advances in Leukemia. The Princess Alexandra Hospital Centres for Health Research Translational Research Symposium – tomorrow’s therapies today August 2005

Dr P Marlton
The Australasian Leukemia and Lymphoma Group Tissue Banking Initiative: Roche investigators workshop Basel June 2005. P Marlton
Minimal Residual Disease in Acute Leukaemia: Princess Alexandra Hospital data:

Public Service Relevant to Research
Dr Devinder Gill
Executive Member of Australasian Leukaemia & Lymphoma Group (ALLG)
Chair of Aggressive Lymphoma & Hodgkin’s Lymphoma Group (Clinical Trials - ALLG)
Founding Member of Australasian Chronic Lymphocytic Leukemia Research Group
Member of Medical Advisory Committee Leukaemia Foundation of Qld
Member of the Princess Alexandra Hospital Research Committee
Research Fellow, Centre for Immunology and Cancer Research, Princess Alexandra

Dr Russell J Saal
Review Leukaemia and Lymphoma

Dr Paula Marlton
National Health and Medical Research Council grant reviewer
Leukaemia Foundation of Australia grant review panel
National Medical Advisory Committee Leukaemia Foundation of Australia
State Medical Advisor and Board Member Leukaemia Foundation of Queensland
Medical Journal of Australia reviewer
Australia and New Zealand Medical Journal reviewer

Dr Peter Mollee
Councillor for Qld on the Haematology Society of Australia and New Zealand
Member of the subcommittee for Aggressive Lymphoma & Hodgkin’s Disease
Member of the subcommittee for Indolent Lymphoma/ Chronic Lymphocytic Leukemia /Myeloma
The Princess Alexandra Hospital Hypertension Unit conducts internationally recognised clinical research into the pathogenesis and management of hypertension, and especially of endocrine forms. The Unit is considered a world authority on primary aldosteronism, a specifically treatable and potentially curable form of hypertension, and has made major contributions to the understanding of its pathogenesis (including genetic basis), prevalence and accurate diagnostic workup. This has led to frequent invitations to speak at national and international meetings, contribute reviews to major journals and collaborate with national and international research groups in areas relating to aldosterone, primary aldosteronism and other salt-dependent forms of hypertension.

Major research highlights and achievements by the Princess Alexandra Hospital Hypertension Unit during 2005 included:

- The appointment as Research Assistants to the Unit of a new scientist (Ms Livia Kelemen) who is highly experienced in molecular biology techniques.
- The strengthening of its research collaboration into the genetics of primary aldosteronism with Dr David Duffy and the commencement of collaborative research with Dr Grant Montgomery, both from the Queensland Institute of Medical Research.
- Ongoing Project Grant funding from the National Health and Medical Research Council to conduct further research into the Genetics of primary aldosteronism.
- Significant progress in the Unit’s quest to elucidate the genetic basis of primary aldosteronism: Previous work performed by the Greenslopes Hospital Hypertension Unit (of which the Director of Princess Alexandra Hospital Hypertension Unit is also a senior member and was Director in 2005) involving one large family with primary aldosteronism identified a region within the family members’ DNA which probably contains the abnormal gene. Recent work performed at Princess Alexandra Hospital Hypertension Unit as part of Dr Albertina So’s PhD thesis found evidence to suggest that the same region of DNA may also be involved in two other affected families, and by studying the original large family in more detail, has been able to significantly shorten the region of DNA that must be searched to find the abnormal gene, allowing around one-half of the genes contained in this area to be ruled out as causing primary aldosteronism. Ongoing work has been centering around refining this region further using single nucleotide polymorphism analysis in order to gradually home in on the responsible gene and direct sequencing of candidate genes in this region. This work has the potential to lead to new tests that will make it much easier to detect people with this condition, so that they can then be given specific and often curative treatment. It will also increase understanding as to how primary aldosteronism develops in the first place.
New findings on the adverse cardiovascular effects of aldosterone excess: Recent evidence, mainly from animal studies, suggests that too much aldosterone can harm the heart and arteries directly, through means that don’t necessarily involve high blood pressure. The Princess Alexandra Hospital Hypertension Unit, in collaboration with Professor Tom Marwick’s Cardiovascular Imaging Research Group as part of the Clinical Centre of Research Excellence in Cardiovascular Disease and Metabolic Disorders at Princess Alexandra Hospital, is studying whether this is the case in humans. In 2003, the Unit found that people with hypertension due to primary aldosteronism had abnormal heart function, the severity of which related directly to the serum level of aldosterone hormone (and not just to severity of hypertension). Work in 2004-5 demonstrated evidence of reduced heart function in patients with an inherited form of primary aldosteronism who hadn’t yet developed hypertension. These findings are of major importance as they raise an argument for giving “anti-aldosterone” treatment to people whose adrenals produce too much aldosterone, whether or not they have high blood pressure. Ongoing work is focussing on the effects of such treatment in people with primary aldosteronism.

A major research grant was awarded to the Princess Alexandra Hospital Hypertension Unit by the Golden Casket Foundation.

The Princess Alexandra Hospital Hypertension Unit received additional funding to allow the appointment of a second Hypertension Nurse, which has permitted greater nurse involvement in the Unit’s clinical research activities, and a Hypertension Unit Registrar, who will also participate in Princess Alexandra Hospital Hypertension Unit research.

Current Research Activities

Other Research

Associate Professor Stowasser has sixteen years of clinical and research experience in the pathogenesis, diagnostic workup and management of various forms of hypertension and especially of endocrine varieties, including primary aldosteronism, renovascular hypertension, pheochromocytoma, renin-secreting tumors, and the syndrome of hypertension and hyperkalemia with normal glomerular filtration rate, also known as pseudo-hypoaldosteronism type 2 (PHA-2) or Gordon’s syndrome. The Princess Alexandra Hospital Hypertension Unit is the only clinical Unit within the Queensland public sector dedicated to the management of, and research into hypertension. Main recent topics of publication and presentation have included:

- Epidemiological, clinical, biochemical, morphological and genetic aspects of primary aldosteronism. Using meticulous new diagnostic approaches, the Greenslopes Hospital Hypertension Unit was first to demonstrate worldwide that primary aldosteronism is approximately 10 times more common than previously thought. The combined Princess Alexandra Hospital Hypertension Unit / Greenslopes Hospital Hypertension Unit have the largest number of patients (currently over 1200) with primary aldosteronism worldwide who have been thoroughly studied and documented. This provides a unique resource for further research into the causes, diagnosis and treatment of mineralocorticoid hypertension. The Princess Alexandra Hospital Hypertension Unit is the only facility in Eastern Australia offering genetic testing for a familial variety (FH-I) which can cause severe hypertension and early death from stroke, but which is easily controlled by giving small doses of specific “glucocorticoid” medication.
Genetic forms (i) FH-I: clinical, biochemical and genetic approaches to detection, various aspects of aldosterone biosynthesis, determinants of hypertension severity, treatment, and seeking evidence of non-blood pressure related adverse cardiovascular effects of aldosterone excess in normotensive subjects with FH-I.

Genetic forms (ii) the Princess Alexandra Hospital Hypertension Unit is involved in collaborative research with the Queensland Institute of Medical Research, the National Institutes of Health, Bethesda and the Mount Sinai School of Medicine, New York, USA in order to determine genetic mutations responsible for a new familial variety of primary aldosteronism (FH-II) described by the Greenslopes Hospital Hypertension Unit in 1991.

Non-BP dependent adverse cardiovascular effects of aldosterone excess, which are being sought in patients with primary aldosteronism and other forms of hypertension by measuring procollagen propeptides as a marker of cardiovascular fibrosis, pulse wave velocity as an indicator of arterial stiffness, and using state-of-the-art echocardiographic techniques (performed in Professor Thomas Marwick’s laboratory, University of Queensland Department of Medicine, Princess Alexandra Hospital) to study function, fibrosis and remodelling of the heart.

The therapeutic potential of aldosterone antagonists in a variety of clinical situations (including hypertension and diastolic heart failure).

The genetic basis of fibromuscular dysplasia of the renal arteries, which causes a renovascular form of hypertension.

The detailed pathophysiology and genetic basis of Gordon’s syndrome.

The diagnosis of renin-secreting tumors.

Pathogenesis and diagnosis of pheochromocytoma, a tumor that secretes catecholamines (including adrenaline and noradrenaline), leading to extremely dangerous hypertension and cardiac arrhythmias.

Publications

Journal Articles


Book Chapters

Published Abstracts
Articles accepted for Publication


Lectures and Presentations

Invited - international


Invited - national

Competitive by abstract submission - oral presentations


Competitive by abstract submission - poster presentations


Post Graduate Students

Albertina So, PhD, in progress

Award

Honorary Professor to the Xinjiang Institute of Hypertension

Public Service Relevant to Research

Associate Professor Michael Stowasser

Member, Blood Pressure and Vascular Disease Advisory Committee for the National Heart Foundation of Australia (1998 - )

Member, Editorial Board for Clinical and Experimental Physiology and Pharmacology (1998 - )

President, Queensland Hypertension Association (1995 - )

Reviewer, National Heart Foundation of Australia Clinical Research Scholarship applications

Member, Grant Review Panel, National Health and Medical Research Council

Reviewer of Scientific Papers submitted for publication in the following journals: Journal of Clinical Endocrinology and Metabolism, American Journal of Hypertension, Human Genetics, Journal of Hypertension, Journal of Human Hypertension, Clinical Endocrinology

Invited to visit the Xinjiang Institute of Hypertension to help them establish clinical protocols for the diagnostic workup and management of primary aldosteronism and was appointed Honorary Professor to the Institute in recognition of this assistance
The Infection Management Services is comprised of a series of divisions including Clinical Infectious Diseases, Infection Control, Sexual Health and the Alternate Site Infusion Service. Each division of the Department provides services to the entirety of the Southern Zone of Queensland Health, except the Gold Coast. The Department provides undergraduate and post-graduate teaching in all areas of Infectious Diseases, Infection Control as well as some Microbiology to Medical, Pharmacy and Science students of the University of Queensland. Post graduate education and activities are undertaken with a range of professional groups including Doctors, Nurses, Pharmacists and Laboratory Scientists.

The research program of the Department has three major foci:

- Epidemiology of healthcare associated infection including development of new epidemiological and statistical techniques for the early detection of adverse outcomes of an infective nature. There is particular interest in both community and hospital-acquired Methicillin-resistant Staphylococcus aureus and healthcare associated yeast and fungal infections. Antimicrobial resistance patterns, particularly in major hospital pathogens.
- Pharmacokinetics and pharmacodynamics of newer antimicrobial agents.

Current Research Activities

Development of statistical and epidemiological methods for the early detection of adverse infective event of healthcare related infection.

Epidemiology pathogenicity treatment and resistance development and community acquired Methicillin-resistant Staphylococcus aureus infections.

Statistical analysis and epidemiological assessment of fungal and yeast infections in the intensive care setting.

Mathematical modelling of multi-resistant organism transmission in healthcare institutes.

Pharmacoconomics of home intravenous therapy.

Behaviour in healthcare workers – needlestick injury and handwashing.

Clinical Trials

A Phase 3, Randomised, Double-Blind, Multinational Trial of Intravenous Televancin versus Vancomycin for Treatment of Complicated Gram-Positive Skin and Skin Structure Infections with a focus on Patients with Infections due to Methicillin-resistant Staphylococcus aureus.

The Australian Community-Acquired Pneumonia Study.

Publications

Journal Articles

Published Abstracts
Munckhof WJ. Continuous infusion of ticarcillin-clavulanate for home treatment of serious infections: clinical efficacy, safety, pharmacokinetics and pharmacodynamics. Australasian Society for Infectious Diseases Annual Scientific Meeting, Busselton, Western Australia, April 2005.
Munckhof WJ. Continuous infusion of ticarcillin-clavulanate for home treatment of serious infections: clinical efficacy, safety, pharmacokinetics and pharmacodynamics. Australasian Society for Infectious Diseases Annual Scientific Meeting, Busselton, Western Australia, April 2005.
Munckhof WJ. Continuous infusion of ticarcillin-clavulanate for home treatment of serious infections: clinical efficacy, safety, pharmacokinetics and pharmacodynamics. Australasian Society for Infectious Diseases Annual Scientific Meeting, Busselton, Western Australia, April 2005.
Munckhof WJ. Continuous infusion of ticarcillin-clavulanate for home treatment of serious infections: clinical efficacy, safety, pharmacokinetics and pharmacodynamics. Australasian Society for Infectious Diseases Annual Scientific Meeting, Busselton, Western Australia, April 2005.
Playford EG, Webster AC, Sorell TC, Craig JC. Antifungal agents for preventing fungal infections in solid organ transplant recipients. European Journal of Clinical Microbiology and Infectious Diseases (in press)


Post Graduate Students

Karen Taylor, Masters, in progress
Gail Neilson, PhD, in progress
Kanchanamala Ranasinghe, PhD, in progress
Brahmaputra Marjadi, PhD, in progress

Public Service Relevant to Research

Dr David Looke
Therapeutic Guidelines: Antibiotic — Member of Writing Group.
Pathology – Editorial Board.

Dr Michael Whitby
International Journal of Infectious Diseases — Editor for South East Asia and Australasia
It is with pride and joy that the Unit once again submit their annual research report for 2005. This year has seen a considerable expansion in the Unit’s research workload, an increase in collaborations, award of several grants from foundations and industry, an increase in the publications and international and national presentations. This year also sees the development of the experimental intensive care facility and initiation of trials through the National Clinical Trials Group driven by the Princess Alexandra Hospital Intensive Care Unit. The emphasis of the research is on both clinical and basic science related work. There has also been an increase in the number of research staff and PhD enrolment.

Despite the clinical workload, the research output strides forth. The publication rate has continued to increase. Not only is it a great tribute to the research team, but so too, to each and every member of the multi-disciplinary team that makes up the Intensive Care Unit. This report is a credit to all the research team members as well as to everyone working in the Department of Intensive Care Medicine.

For those reading this report, Associate Professors Joyce and Venkatesh trust you will find it refreshing. They certainly enjoy seeing the fruits of their endeavours.

Current Research Activities

Clinical Trials

DECRA (Decompressive craniectomy) study: Multi-centre prospective randomised trial of early decompressive craniectomy in patients with severe traumatic brain injury

VALID study: Venticute® (rSP-C Surfactant) in patients with pneumonia or aspiration of gastric contents leading to intubation, mechanical ventilation, and severe oxygenation impairment (VALID Study). A randomised, multinational, multicentre, parallel group, double blind, control group study.

Study of risk assessment to reduce cardiac events in patients following major surgery (STRATIFY)

Procalcitonin. Optimal duration of antimicrobial therapy in the critically ill: A prospective evaluation
Changes in Body fluid dynamics and drug behaviour in critically ill patients – currently looking at neuromuscular blocking drugs (Cisatracurium) and antibiotic dosing in sepsis

hydroxymethylglutaryl coenzyme A Reductase inhibitors (Statins) in critical illness

Assessment of medical and nursing handover during critical care ward rounds

The use of echocardiography of the left ventricular load during anaesthesia and ventilation. Assessment of fluid responsiveness of patients following coronary artery bypass grafting

Echocardiographic features of myocardial dysfunction in severe sepsis. A retrospective, blinded, case controlled study

Comparison of brain natriuretic peptide and tissue Doppler imaging in the prediction of fluid responsiveness in septic shock

Comparison of predictive value of brain natriuretic peptide, troponin and tissue doppler imaging in the prognosis of septic shock

Cerebrospinal fluid Magnesium. An investigation into the correlation between serum and cerebrospinal fluid levels of magnesium administered after aneurysmal subarachnoid haemorrhage

The effectiveness of family-centred-care as a model for best practice nursing in adult Intensive Care Units.

Laboratory trials

Optimal antibiotic dosing in animal models of burns

Development of an experimental intensive care facility

Financial Support

Current NHMRC Grants

$115,000. NHMRC. Optimal antibiotic dosing in burns: fluid dynamics and drug tissue pharmacokinetics. (Sheree Cross)

$115,000. NHMRC. Study of Risk Assessment To reduce complications In patients Following noncardiac surgery (STRATIFY) (Tom Marwick)

Other Grants

$40,000. ANZCA. Optimal antibiotic dosing in burns: fluid dynamics and drug tissue pharmacokinetics.(Bala Venkatesh)

$25,000. ANZCA. Assessing quality of and identifying gaps in the information handover during the ICU ward rounds. (Bala Venkatesh)

$35,000. ANZCA. Optimal duration of antibiotic therapy in critical illness: A prospective study (Bala Venkatesh)

$50,000. Princess Alexandra Hospital Research Foundation. Development of an Experimental Intensive Care Facility (Bala Venkatesh)

$7,500. Princess Alexandra Hospital Research Foundation. Vancomycin dosing in the critically ill – can we do better. (Peter Kruger)

$8,000. Princess Alexandra Hospital Research Foundation. The assessment of the pharmacokinetics and pharmacodynamics of cisatracurium in critically ill patients with severe sepsis. (Peter Kruger)
Publications

Journal Articles


Published online: 10 November 2005


Book Chapters


Articles Accepted for Publication

Cheung B, Conrad M, Jones M, Venkatesh B. Information on the internet about head injury pertaining to intensive care: Less quantity and more quality is needed. Accepted for publication in Medical Journal of Australia 2006.


Foot CL, Coucher J, Stickley M, Mundy J, Venkatesh B. The imaginary line method is not reliable for identification of prosthetic heart valves on AP chest radiographs. Accepted for publication in Critical Care and Resuscitation 2006.


Purcell R, Kruger P and Jones M. Indocyanine green elimination - A comparison of the LiMon and serial blood sampling methods. Accepted for publication in Australian and New Zealand Journal of Surgery.

Purcell R, Kruger PS (2006) Indocyanine green elimination as a measure of liver function: how does the LiMon compare to conventional methods. Accepted for publication in Australian and New Zealand Journal of Surgery.


Sturgess D, Venkatesh B, Marwick T, Joyce C. Brain natriuretic peptide in critical illness. Accepted for publication in Anaesthesia and Intensive Care 2006.

Sturgess D, Venkatesh B, Marwick T, Joyce C. B-type natriuretic peptide concentrations and myocardial dysfunction in critical illness. Accepted for publication in Anaesthesia and Intensive Care.


White HW, Venkatesh B. Transcranial doppler in critical illness. Accepted for publication in Intensive Care Medicine.

White HW, Cook D, Venkatesh B. Hypertonic saline in neurocritical care. Accepted for publication in Anaesthesia and Analgesia.

Lectures and Presentations
Ms Jane-Louise Cook

Dr David Cook

Dr Paul Kruger
Cell Physiology, Primary FANZCA examination Long Course, Brisbane

Intravenous Induction Agents. Primary FANZCA examination Long Course, Brisbane

Intensive Care Unit Topics / Trauma management. Fellowship FANZCA examination Short Course, Brisbane


The adventures of the spinal cord injured person in Intensive Care Unit. Australian and New Zealand Spinal Cord Society, National meeting, Gold Coast, 2005.

Dr Marion Michell
Mitchell M, Valks K, and Ingles-Simons C. The current status of family bereavement programs in Australian Intensive Care Units. Poster presentation at 9th World Congress of the World Federation of Societies of Intensive and Critical Care Medicine, Buenos Aires, August 2005.

Dr David Sturgess
Echocardiographic indicators of myocardial performance are prognostically more important than those of left ventricular filling pressure in critically ill patients. Matt Spence Medal session, Australian and New Zealand Intensive Care Society Annual Scientific Meeting, Adelaide, October 2005.


Indices of left ventricular filling. Invited to present via national internet and telephone conference to Australian intensive care trainees, Lilly web, August 2005.

Associate Professor Bala Venkatesh


Assessment of regional perfusion. ANZCA Annual Scientific Meeting, Auckland 2005

Getting grants for research – Tricks of the trade – ASA Annual Scientific Meeting, Gold Coast 2005


Data Interpretation in critical care medicine: Philosophy and pitfalls. 4th Indo-Australian Critical Care Medicine Refresher Course, Kolkata, India, December 2005.

Coagulation problems in intensive care. 4th Indo-Australian Critical Care Medicine Refresher Course, Kolkata, India, December 2005.

Biochemical problems in intensive care. 4th Indo-Australian Critical Care Medicine Refresher Course, Kolkata, India, December 2005.

The Intensive Care Examination. 4th Indo-Australian Critical Care Medicine Refresher Course, Kolkata, India, December 2005.

Dr Sarah Wetzig

Post Graduate Students
David Sturgess, PhD, in progress
Michael Abbey, Masters, in progress
Kanchana Ranasinghe, PhD, in progress
Jeremy Cohen, PhD, in progress
Gihan Gunawardene, PhD, in progress

Public Service Relevant to Research

Associate Professor Chris Joyce
Co-Convenor of the Australian Intensive Care Medicine Clinical Refresher Course Sep, 2005

Associate Professor Bala Venkatesh

Dr David Cook
Peep Review, Anaesthesia and Intensive Care, Chest, Critical Care Medicine

Dr Peter Kruger
Peer Review, Anaesthesia and Intensive Care, Respiratory, Anaesthesia and Intensive Care

Ms Alison Juers
Peer Review, Australian Critical Care Medicine

Dr Paul Kruger
Cell Physiology, Primary FANZCA examination Long Course, Brisbane

Intravenous Induction Agents. Primary FANZCA examination Long Course, Brisbane

Intensive Care Unit Topics / Trauma management. Fellowship FANZCA examination Short Course, Brisbane


The adventures of the spinal cord injured person in Intensive Care Unit. Australian and New Zealand Spinal Cord Society, National meeting, Gold Coast, 2005.

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Dr David Sturgess
Echocardiographic indicators of myocardial performance are prognostically more important than those of left ventricular filling pressure in critically ill patients. Matt Spence Medal session, Australian and New Zealand Intensive Care Society Annual Scientific Meeting, Adelaide, October 2005.


Indices of left ventricular filling. Invited to present via national internet and telephone conference to Australian intensive care trainees, Lilly web, August 2005.

Associate Professor Bala Venkatesh
In 2005, the Department undertook quality improvement research in the areas of acute cardiac care, cardiac rehabilitation, evidence-based health policy making, use of clinical indicators derived from administrative data in assessing variation in hospital quality of care, clinical interpretation of published trials and systematic reviews, clinical handover and patient safety, use of clinical practice guidelines, and screening tools for geriatric assessment.

The Department also focussed internally on methods for maximising effective bed utilisation throughout the southern zone via the Southern Area Health Service General Medicine Clinical Services Network, on developing and implementing an electronic discharge summary system throughout Princess Alexandra Hospital, and expanding safety and quality initiatives such as mortality reviews, indicator feedback and evidence appraisals. An extensive teaching program comprised activities in bedside clinical skills, clinical epidemiology, critical reasoning and quality improvement methods.

Current Research Activities

**Clinical Trials**

The use of cholestAnol to cholesterol Ratio to GuidE Therapy: LDL Lowering. The TARGET LDL Study Group. Steering Committee: Michel R. Hoenig, Karam Kostner, Ian A. Scott, John Atherton, William Parsonage. A multicentre trial aimed at determining relative efficacy of combinations of statins, resins and ezetimibe in patients with underlying coronary disease and suboptimal cholesterol levels who are categorised, according to serum cholestanol levels, as to whether they are synthesizers or absorbers of cholesterol or show a mixed pattern.
Other Research

Cochrane systematic review of routine vs selective (ischaemia-guided) invasive interventions in patients with non-ST elevation acute coronary syndromes.

Ongoing research into methods for optimising care of patients hospitalised with acute coronary syndromes and congestive heart failure. This research is being conducted under the auspices of a 25-site public hospital collaboration, the Cardiac Collaborative, one of 6 disease-focussed collaboratives under the banner of the Queensland Health Clinical Practice Improvement Centre. Recently published analysis detailing variations in indicated care among different subpopulations of patients hospitalised with acute coronary syndromes and congestive heart failure.

Ongoing research into methods for optimising delivery of outpatient cardiac rehabilitation services to patients recently discharged from hospital following acute coronary syndromes or coronary revascularisation surgery. This research has received funding from Election Commitment funding 2004 and is being conducted under the auspices of a collaboration of 15 cardiac rehabilitation programmes throughout Queensland under the auspices of the Cardiac Rehabilitation Collaborative, one of 6 disease-focussed collaboratives under the banner of the Queensland Health Clinical Practice Improvement Centre.

Ongoing research into methods for improving systematic assessment of, and appropriate healthcare responses to, the special needs of hospitalised elderly patients with multi-system disease and/or dementia. The department is participating in the national Evidence-based Dementia Management project sponsored by the National Institute of Clinical Studies.

Research into clinical epidemiologic methods for improving the clinical interpretation of studies of therapy, diagnosis and prognosis, with publication of a guide to assist practising clinicians in interpreting therapy trial reports.

Research into organisational methods for improving quality and safety of patient care in hospital settings, with submission to the Bundaberg Hospital Commission of Inquiry.

Research into the roles and methods of clinical handover in maintaining patient safety, with submission of an issues paper to Queensland Health Medical Quality Program Board.

Research into the benefits and risks of public reporting of hospital performance data, with submission of an issues paper to Minister of Health and Director-General of Health, and submission of summary findings for journal publication.

Research into means for integrating evidence of benefit, affordability and equity into health services policy making, using invasive cardiac services in Queensland public hospitals as a case study. Presentation to Queensland Health scientific meeting and submission for journal publication.

Research into evidence-based approach to pre-operative medical assessment and perioperative care of medical complications, with development of an evidence-based manual of perioperative care and submission of an evidence-based guide in perioperative medicine for publication.

Research into the role and functions of general physicians within the modern healthcare system with publication of a joint position statement from the Royal College of Physicians and the Internal Medicine Society of Australia and New Zealand.
Research into practical and reliable methods for screening elderly patients for geriatric assessment based on internationally validated tools, in collaboration with the Academic Unit in Geriatric Medicine.

Retrospective study on the coronary artery disease risk factors among older adults with intellectual disability who have community support in collaboration with University of Rochester, New York.

Research in collaboration with the Liver Unit, Princess Alexandra Hospital into assessment of whether treatment of insulin resistance and metabolic syndrome impacts on survival and outcomes of patients with chronic liver diseases such as hepatitis B and C.

Financial Support

$70,000. Queensland Health. Quality improvement in Cardiac Care. (Ian Scott)

$33,000. Queensland Health (with support from Qld Branch National Heart Foundation of Australia). Quality improvement in cardiac rehabilitation. (Ian Scott)

$3,000. Australian Association for the Study of Intellectual Disability. Retrospective study of coronary artery disease risk factors among older Australian adults with intellectual disability. (Robyn Wallace)

Publications

Journal Articles


Scott IA, Ward M. Public reporting of hospital performance data: Could it do more harm than good? (2005) Submission to Director-General Queensland Health and Health Minister, October 2005.


Wallace R, Beange H (editors) Health Surg Newsletters January, June 2005


Articles Accepted for Publication


Lectures and Presentations

Associate Professor Ian Scott

Acetylcholinesterase inhibitors on trial. Grand Rounds presentation, Princess Alexandra Hospital, Brisbane, February 28.

Evidence-based quality improvement – the essentials. Presentation to University of Auckland Optimising Quality of Care Workshop, Auckland, March 11.(invited)

Update on Cardiac Indicators; Prioritising patients with acute coronary syndromes for transfer for invasive intervention. Presentations at the CPIC Cardiac Collaborative Forum VI, Brisbane, April 7 (invited)

Introduction to EBM technology; Plucking the Heart Strings – Case Studies. Presentations to National Prescribing Service Evidence-based Medicine Workshop, Redcliffe, April 9. (invited)

Use of clinical indicators in a quality improvement program targeting cardiac care. Presentation to Royal Australian College of Physicians Clinical Indicators Review Workshop, Sydney, April 28. (invited)

Critically appraising clinical studies; Using research evidence in clinical decision-making. Lectures delivered to Royal Australian College of Physicians (Qld) College Lecture Series, Brisbane, April 28.

Internal Medicine for the 21st Century. Presentation at Royal Australian College of Physicians Annual Scientific Meeting, Wellington, May 10. (invited)

Evolution and Future of Internal Medicine – an Antipodean Perspective. Presentation to the Society of General Internal Medicine Annual Scientific Meeting, New Orleans, May 12. (invited)


Introduction to EBM technology; Plucking the Heart Strings – Case Studies. Presentations to National Prescribing Service Evidence-based Medicine Workshop, Mooloolaba, June 25. (invited)

Improving utilisation of outpatient clinics. Presentation to Grand Rounds, Princess Alexandra Hospital, Brisbane, July 11.

Linking Evidence-based Medicine with Evidence-based Quality Improvement. Presentation at Teach the Teachers Evidence-based Medicine Workshop, Bond University, Gold Coast, July 27. (invited)

Not Another Chest Pain. Grand Rounds presentation, Princess Alexandra Hospital, Brisbane, August 1.

Clinical Handover – Ensuring Safe Continuous Care. Presentation to Queensland Health Quality and Safety Board, Brisbane, August 18. (invited)

Teaching and assessing professional attitudes and behaviours. Presentation to Australian National Medical Education Colloquium, Brisbane, August 23.

Practical Approaches to Clinical Practice Evaluation and Improvement; Restoring the Balance – A Blueprint to Ensuring the Practice of General Internal Medicine. Presentations to the Internal Medicine Society of Australia and New Zealand Annual Scientific Meeting, Alice Springs, September 2-3. (invited)

‘Reconciling effectiveness, affordability, and equity in health policy-making: a case study.’ Presentation at 5th Queensland Health Medical and Scientific Meeting, Brisbane, Nov 4.

Update on cardiac care indicators; Future directions for the Cardiac Collaborative Presentations at the Vth Cardiac Collaborative Forum, Brisbane, Nov 10. (invited)

Update on cardiac rehabilitation indicators, Presentation to Cardiac Rehabilitation Forum, Brisbane, November 5. (invited)

Dr Robyn Wallace

Helicobacter pylori in adults with intellectual disability- Institute of Basic Science research in Developmental Disabilities, Staten Island, New York. May (invited)

Gastrointestinal conditions in adults with intellectual disability. Institute of Basic Science research in Developmental Disabilities, Staten Island, New York. May (invited)

Symposium (panel member) for medical students at University of Queensland on healthcare for adults with intellectual disability February (invited)

Helicobacter pylori in adults with intellectual disability- Institute of Basic Science research in Developmental Disabilities, Strong Centre in Developmental Disabilities, University of Rochester, New York, May 2005 (invited)


Physical health of ageing adults with intellectual disability (invited), Pacific IASSID conference, Taipei and Kaishaung, Taiwan, August 2005

Workshop on physical health for adults with intellectual disability (invited), Taiwan, August 2005
Home-hospital interface for adults with intellectual disability, Grand Rounds, Princess Alexandra hospital, Brisbane

Gastrointestinal conditions in adults with Down syndrome, health SIRG, IASSID, Melbourne, Sept 2005

Coronary artery disease risk factors among ageing adults with intellectual disability, Health SIRG, IASSID, Melbourne, Sept 2005

The hospital process for adults with intellectual disability, Health SIRG, IASSID, Melbourne, Sept 2005

Keynote speaker and Workshop in Ireland national symposium on intellectual disability, November 2005 on Physical healthcare for Adults with Intellectual Disability (invited)

Grand Rounds Princess Alexandra Hospital – audit of gastrointestinal conditions among a cohort of adults with intellectual disability

Hospital level care for adults with intellectual disability, Tasmanian Royal Australian College of Physicians conference, October 2005 (invited)

Dr Su Mein Yeoh
Therapeutic options in type 2 diabetes mellitus. Internal Medicine Society of Australia and New Zealand Annual Scientific Meeting, Alice Springs, September 2. (invited)

Type 2 diabetes mellitus in the Asian population. Presentation to the Southside Division of General Practitioners, July 29. (invited)

Management of the Metabolic Syndrome and Obesity. Presentation to the Southside Division of General Practitioners, July 7. (invited)

Post Graduate Students
Phillip Kidd, PhD in doctor-manager relations. (commenced 2005)

Awards
Associate Professor Ian Scott
Best Presentation award, Queensland Health Annual Scientific Meeting, Brisbane. Nov 4 2005.

Public Service Relevant to Research
Associate Professor Ian Scott
Editor in Internal Medicine for Internal Medicine Journal
Reviewer, Medical Journal of Australia
Commentator, Evidence-Based Medicine journal
Member, Medical Quality Program Board, Queensland Health.
Program Sponsor, Clinical Practice Improvement Centre, Queensland Health.
Chair, Cardiac and Cardiac Rehabilitation Collaboratives.
Chair, Southern Area Health Service General Medicine Clinical Services Network
Member, Royal Australian College of Physicians, Better Practice Co-ordinating Committee.
Chair, Royal Australian College of Physicians Adult Medicine Scientific Program Organising Committee, 2006.
Visiting faculty, Queensland Health Skills Development Centre.
Teaching faculty, National Prescribing Service.

Dr Robyn Wallace
Manuscript reviewer for Journal of Intellectual Disability Research, Acta Paediatrica, Cerebral palsy

Development of clinical service for adults with an intellectual disability in hospital at Mater and Princess Alexandra Hospital.
The Liver Research Group is investigating mechanisms of hepatic fibrosis in response to chronic liver injury, where normal liver cells are replaced by collagen-containing scar tissue which results in a deterioration of liver function. Hepatic fibrosis can lead to cirrhosis and ultimately, liver transplantation may be required for patients with advanced cirrhosis. For patients with chronic liver injury, hepatic fibrosis can be a very slowly progressing disease and while some patients may develop cirrhosis within 10 years, for others it may take 30–40 years. The focus of the research is to try to determine why there is such a great difference between patients in their rate of disease progression. In particular we are interested in (1) defining the role of the renin angiotensin system in hepatic fibrosis caused by chronic Hepatitis C infection and non-alcoholic steatohepatitis, (2) determining the relationship between body mass index, liver fat and fibrosis progression and response to treatment in chronic Hepatitis C infection and other chronic liver diseases and (3) defining the role of hepatocyte senescence, hepatic progenitor cells and the ductular reaction in promoting fibrogenesis in human liver disease.

Key achievements for 2005 include: President’s Prize (Poster of Distinction) at the American Association for the Study of Liver Disease Annual Scientific Meeting to Ms Michelle Richardson; invited lecture by Dr Elizabeth Powell at 6th International Meeting on Therapy of Liver Diseases, Barcelona, Spain; invited oral presentations by Dr Elizabeth Powell, Dr Julie Jonsson and Dr Andrew Clouston at the Australian Liver Foundation Single Topic Conference, Brisbane; invited oral presentation by Dr Andrew Clouston at the Banff International Consensus Meeting on Allograft Pathology, Edmonton Canada; invited oral presentation by Dr Andrew Clouston at the Australasian Gastroenterology Week, Brisbane; the continuation of international collaborations with Dr Herbert Tilg, University of Innsbruck, Dr Elizabeth Brunt, University of St Louis and Drs C Balabaud and P Bioulac-Sage, Bordeaux.

Current Research Activities

Clinical Trials
Role of MRI in monitoring hepatic steatosis and visceral adiposity during treatment.

Other Research
Investigation of the mechanisms by which steatosis contributes to fibrosis progression in chronic liver disease.

The influence of host genetic factors on disease progression and response to treatment in chronic hepatitis C.

Investigation of the mechanisms by which steatosis and obesity impair response to antiviral therapy in chronic hepatitis C.

The role of the renin angiotensin system in hepatic fibrosis.

Investigation of the role of hepatocyte senescence, hepatic progenitor cells and the ductular reaction in promoting fibrogenesis in human liver disease.
Publications

**Journal Articles**


**Other Support**

$65,000. Lions Medical Research Foundation. Senior Medical Research Fellowship. (J Jonsson)

Lions Laboratory tours February and August

Dr Andrew Clouston
Australian Liver Foundation Single Topic Conference, Brisbane
Banff International Consensus Meeting on Allograft Pathology, Edmonton Canada
Australasian Gastroenterology Week, Brisbane

**Post Graduate Students**

Meagan Walsh, PhD, in Progress
Michelle Richardson, PhD, commenced 2005

**Awards**

Ms Michelle Richardson
President’s Prize (Poster of Distinction) at the American Association for the Study of Liver Disease Annual Scientific Meeting, San Francisco, USA.

**Public Service Relevant to Research**

Dr Elizabeth Powell
Hepatitis C virus projections working group (national representative of the Australian Liver Association)
Steering Committee of the Immunovirology Research Network
Journal reviewer Hepatology, Journal of Hepatology
Assessor – National Health and Medical Research Council project grants

Dr Julie Jonsson
Chairperson or panel member of review panels for several confirmations of candidature for postgraduate students at the University of Queensland, School of Medicine, Southern Division.
Assessor – National Health and Medical Research Council project grants
Judging committees for the International Postgraduate Research Scholarship and Australian Postgraduate Award.

Financial Support

**Current NHMRC Grants**

$135,500. NHMRC. The role of steatosis in promoting cellular injury and fibrogenesis in human liver disease. (E Powell)

$50,000. NHMRC. Practitioner Fellowship. (E Powell)

**Other Grants**

$50,000. UQ Foundation Research Excellence Award. Determination of the molecular mechanisms by which angiotensin II contributes to hepatic apoptosis and fibrogenesis. (J Jonsson)

$30,000. Sasakawa Foundation RCH. Long-term paediatric liver allograft function: role of obesity and metabolic factors. (E Powell)

**Other Support**

$65,000. Lions Medical Research Foundation. Senior Medical Research Fellowship. (J Jonsson)

**Lectures and Presentations**

**Dr Elizabeth Powell**
6th International Meeting on Therapy of Liver Diseases, Barcelona, Spain
Australian Liver Foundation Single Topic Conference, Brisbane
Prograf Liver Transplant Meeting, Sydney
Gastroenterology Medical Education Weekend for General Practitioners, Gold Coast
Member of Faculty, Keynote speaker in the Hepatology Advanced Training Programme, Sydney

**Dr Julie Jonsson**
Australian Liver Foundation Single Topic Conference, Brisbane
The Princess Alexandra Hospital Nephrology Department enjoys the best patient survival rates of any dialysis and kidney transplant centre in Australia and New Zealand. The unit performs over 110 renal transplants per year (more than any other unit in the southern hemisphere) and cares for approximately 600 established transplant patients and 350 dialysis patients. Each year, the unit provides over 20,000 occasions of outpatient service. The team is heavily involved in providing education to patients, allied health professional staff, general practitioners, graduate medical students, interns, residents, registrars and both renal and non-renal specialists.

A large number of research activities are conducted at both the clinical and basic science levels. The aim of the clinical research is to further improve outcomes for patients with kidney disease. In 2004, The Princess Alexandra Hospital Renal Research Group received the endorsement of Kidney Health Australia and the Australian and New Zealand Society of Nephrology to act as the co-ordinating centre for the Australasian Kidney Trials Network, which will run investigator-initiated and industry-sponsored multi-centre renal clinical research trials in Australasia. Subsequently, the group received a National Health and Medical Research Council Enabling Grant in 2005 to be able to run the clinical trials network.

In 2003, the Cardiovascular, Metabolic and Renal Research Groups received funding for 5 years from the National Health and Research Council as a “Centre of Clinical Research Excellence”.

There are over 100 projects currently underway in the Department, examining such diverse areas as infection control, anaemia management, cardiac risk factor intervention, optimal timing of dialysis commencement, obesity and kidney disease, enhancement of dialysis adequacy, novel prevention strategies for acute renal failure, preservation of kidney function, monitoring healthcare delivery quality, optimization of the safety of anti-rejection drug protocols in transplantation, immunosuppressive drug pharmacokinetic studies, and skin cancer and lymphoma prevention in kidney transplant patients.
Over the last 4 years, several of the research trials have earned national research awards including the Australian Kidney Foundation Clinical Research Award and prompted changes in clinical practice guidelines.

The renal group’s basic science research focus is the investigation of mechanisms underpinning pathological kidney cell growth and fibrogenesis with a view to developing novel therapeutic strategies for the management of acute renal failure, chronic renal scarring and failure, and renal cell carcinoma.

**Current Research Activities**

**Clinical Trials**

**A. PERITONEAL DIALYSIS**

The balANZ trial - A multicentre randomised controlled trial of Balance® in Australian and New Zealand PD patients (Johnson DW, Brown F, Woods F, Pidcock R).

Predictors of peritonitis in the Australian and New Zealand PD patient populations (Johnson DW, McDonald S, Collins J).

Effect of previously failed kidney transplantation on peritoneal dialysis outcomes in the Australian and New Zealand patient populations. (Badve S, McDonald SP, Hawley CM, Johnson DW)

Effect of PD modality on clinical outcomes in Australia and New Zealand. (Badve S, McDonald SP, Hawley CM, Johnson DW)

The impact of peritoneal transport status on peritoneal dialysis patient outcomes in Australia and New Zealand. (Johnson DW, McDonald S, Rumpsfeld M).

The impact of peritoneal small solute transport on peritoneal dialysis patient outcomes in Australia and New Zealand. (Johnson DW, McDonald S, Rumpsfeld M).

The impact of peritoneal transport status on subsequent haemodialysis patient outcomes in Australia and New Zealand. (Johnson DW, McDonald S, Rumpsfeld M).

Predictors of residual renal function decline in Australian and New Zealand peritoneal dialysis patients (Johnson DW, McDonald S, Rumpsfeld M).

Predictors of recovery of dialysis-independent renal function in patients commencing peritoneal dialysis in Australia and New Zealand (Johnson DW, McDonald SP, Wiggins K).

Outcomes for scleroderma renal crisis in Australia and New Zealand (Johnson DW, McDonald SP).

The impact of peritoneal ultrafiltration volumes on peritoneal dialysis patient survival (Johnson DW, Wiggins K).

Anti-infective agents to prevent peritonitis in peritoneal dialysis: a systematic review of randomized controlled trials. (Strippoli GFM, Tong A, Johnson DW, Schena FP, Craig JC).

Catheter-related interventions for the prevention of peritonitis in peritoneal dialysis: A systematic review of randomized controlled trials. (Strippoli GFM, Tong A, Johnson DW, Schena FP, Craig JC).

A retrospective observational cohort study assessing the clinical outcomes of amputation in dialysis patients (Hawley C, Isbel N, Campbell SC, Johnson DW).

B. HAEMODIALYSIS

Nocturnal Home Haemodialysis performed alternate nightly: assessment of multiple outcomes. (Hawley C, Van Eps C, Jeffries J)

Temporary vascular access in haemodialysis: reasons for process failure in incident dialysis patients (Hawley C, Nicholas P, Derhy A, Duke A for the Collaborative for Healthcare Improvement)

A randomised controlled trial of fludrocortisone for the treatment of hyperkalaemia in haemodialysis patients. (Johnson DW, Wiggins K)

A randomized controlled trial of Medihoney versus mupirocin in haemodialysis patients with tunneled, cuffed haemodialysis catheters (Mudge D, Hothersall E, Isbel N, Campbell SB, Hawley C, Johnson DW).

The impact of nocturnal home haemodialysis on patient outcomes (Hawley C, Isbel N, Campbell SB, Johnson DW).

A pharmacokinetic study of pre- versus post-haemodialysis dosing of aminoglycosides (Teigen M, Duffull S, Johnson DW).

Contemporaneous outcomes of bacteraemias in haemodialysis patients (Isbel N, Hawley C, Campbell SB, Johnson DW).

Efficacy and side-effect profile of sevelamer hydrochloride used in combination with conventional phosphate binders. (Sturtevant JM, Hawley CM, Reiger K, Johnson DW, Campbell SB, Burke JR, Bofinger A, Isbel NM.).

A retrospective observational cohort study assessing the clinical outcomes of amputation in dialysis patients (Hawley C, Isbel N, Campbell SC, Johnson DW).

A prospective controlled trial of superfllux versus high flux dialysis membranes on homocysteine clearance in haemodialysis patients (Mudge D, Johnson DW, Campbell SB, Petrie JJ, Isbel N, Hawley C).

A prospective trial of intradermal hepatitis B vaccination in dialysis patients who have failed to seroconvert following standard subcutaneous vaccination (Wiggins K, Hothersall E, Johnson DW, Campbell SB, Isbel N, Playford G, Hawley C).

A Double-Blind, Randomised, Placebo-Controlled Study of an Oral Calcimimetic Agent (AMG073) in Secondary Hyperparathyroidism of End-Stage Renal Disease (ESRD) Subjects (Johnson DW, Sudak, J).

A Placebo-controlled, Double-blind, Extension Study to Assess the Long-term Safety of an Oral Calcimimetic Agent (AMG073) in Secondary Hyperparathyroidism of End Stage Renal Disease. (Johnson DW, Sudak J).

A Multicentre, Randomised, Open-label Study to Compare the Efficacy and Safety of an Oral Calcimimetic Agent (AMG073) When Two Different Vitamin D Regimens are used in Subjects with Secondary Hyperparathyroidism of End-stage Renal Disease (ESRD). (Johnson DW, Sudak J)
Oral Calcimimetic Agent (AMG073) When Two Different Vitamin D Regimens are Used in Subjects with Secondary Hyperparathyroidism of End-stage Renal Disease (ESRD). (Johnson DW) (Sudak J)

A pure red cell aplasia surveillance program in haemodialysis patients receiving erythropoietin (Sudak J, Johnson DW).

A Double-Blind, Randomised, Placebo-Controlled Study of the effect of Rosuvastatin on cardiovascular outcomes haemodialysis patients (AURORA Trial) (Isbel N, Martin A)

A controlled crossover study comparing homocysteine clearance in FX class high flux and standard high-flux.

A randomized, placebo-controlled study to assess the effects of Cholesterol-lowering therapy with a combination of simvastatin and Ezetimibe on the Risk of Major Cardiovascular Complication Among Individuals with Chronic Kidney disease. (Johnson DW, Sudak J).

A randomized, controlled, open-label, multi-center, parallel-group study to demonstrate the efficacy and safety of RO0503821 when administered intravenously for the maintenance treatment of anemia in patients with chronic kidney disease who are on dialysis. (Johnson DW, Sudak J).

The initiating dialysis early and late (IDEAL) study. (Johnson DW, Martin A).

A Double-Blind, Randomised, Placebo-Controlled Study of the effect of Rosuvastatin on cardiovascular outcomes in haemodialysis patients (AURORA Trial) (Isbel, N., Martin A).

Can the PG-SGA predict morbidity/mortality in haemodialysis patients. (Orazio,L)

C. TRANSPLANTATION

A randomised, open-label, prospective controlled trial of multiple risk factor intervention on atherosclerosis, vasoreactivity and cardiac ischaemia in renal transplant recipients. Transplant LANDMARK Trial (Armstrong K, Isbel N, Johnson DW, Marwick T, Pidcock R).

Pharmacokinetic and pharmacodynamic investigation of free mycophenolic acid and its glucuronide metabolite in renal transplant recipients. (Atcheson BA, Taylor PJ, Mudge DW, Johnson DW, Pillans PI, Tett SE).

A formula for the prediction of renal allograft function following renal transplantation. (Hawley C, Isbel N, Campbell SB, Johnson DW, Nicol DL).

The role of free mycophenolic acid monitoring in renal transplant recipients with hypoalbuminaemia. (Atcheson BA, Taylor PJ, Kirkpatrick CMJ, Duffull SB, Mudge DW, Pillans PI, Tett SE, Johnson DW).

A prospective, non-controlled study of the role of memory T cells for Epstein-Barr virus in renal allograft rejection. (Johnson DW, Campbell SB, Franzen K, Burrows S).


The role of tumourectomised kidneys as a potential source of allografts for renal transplantation (Nicol DL, Johnson DW, Campbell SB, Isbel N, Hawley C, Martin A).


Polycystic kidneys as a potential source of allografts for renal transplantation (Nicol DL, Johnson DW, Campbell SB, Isbel N, Hawley C).

A randomized, open label, comparative evaluation of conversion from calcineurin inhibitors to sirolimus versus continued use of calcineurin inhibitors in renal allograft recipients.

A 1 year multicentre, randomized, open label parallel group study of the safety, tolerability and efficacy of two doses (1.5 and 3mg/day) of Certican (RAD001) with Simulect, corticosteroids and optimized administration of Neoral in de novo renal transplant recipients.

A 1 year Double-Blind, Double-Dummy and 2 year open-label, randomised, multicentre, parallel group study of the efficacy and safety of SDZ RAD tablets versus Mycophenolate Mofetil as part of triple immunosuppressive therapy in de novo renal transplant recipients (extended to 5 yrs) (Renal Transplant Unit Team) (Franzen, K)

A One Year, Randomized, Open label, Parallel Group Study to Investigate the Safety and the Effect of Myfortic (ERL080) in Combination with Either Full Dose or Reduced Dosed Neoral, in De Novo Kidney Transplant Recipients.


Sirolimus Protocol 0468H1-310-AU: A Randomized, Open-label Study of Continuous Therapy with Cyclosporine and Sirolimus versus Induction with Cyclosporine and Sirolimus Followed by Continuous Therapy with Sirolimus in Renal Allograft Recipients (Campbell SB, Martin A).

A randomized, open-label, comparative evaluation of conversion from calcineurin inhibitors to sirolimus versus continued use of calcineurin inhibitors in renal allograft recipients (incorporating amendment 1 to protocol) 0468H1-316-AP. (Campbell SB Martin A).

An observational long-term, multicentre, study of the impact of therapeutic decision making for transplant recipients prescribed Neoral under conditions of normal clinical practice. (Campbell SB, Martin A).

A one year, randomised, open label, parallel group study to investigate the safety and the effect of Myfortic™ (ERL080) in combination with either full dose or reduced dose Neoral™ in de novo kidney transplant recipients CERL080A2405AU01. (Campbell SB, Martin A).

A twelve-month, randomized, multicenter, open-label study to investigate the clinical outcomes of two immunosuppressive regimens of Myfortic™ with short-term steroid use or free of steroids compared with a regimen of Myfortic™ with standard steroids in de novo kidney recipients receiving Simulect® and Neoral® - FREEDOM Study (Martin A).

An Open, prospective, randomized, controlled multi-centre study comparing Fixed Dose vs Concentration Controlled mycophenolate mofetil regimens for de novo patients following renal transplantation. (Campbell SB, Martin A).
Pre-transplant pharmacokinetics as a predictor of dose requirement post renal transplantation. A multicentre, open, prospective, 2-arm, phase IV study of Prograf (tacrolimus) in renal transplant patients. (Campbell SB, Martin A).

Quantification of free mycophenolic acid and its glucuronide metabolite in human plasma by high-performance liquid-chromatography using mass spectrometric and ultraviolet detection. (Atcheson B, Tett S, Pillans P, Johnson DW)

Peritonitis in Aboriginal patients compared to non-Aboriginal patients with end-stage renal failure maintained on peritoneal dialysis in Australia: Analysis of ANZDATA. (Lim W, McDonald SP, Johnson DW).


Effect of donor kidney side on renal transplant outcomes. (Johnson DW).

Relationship of cardiorespiratory fitness in insulin resistant renal transplant recipients to physical inactivity, metabolic risk factors and atherosclerotic burden. (Armstrong K, Prins J, Johnson DW, Isbel N).


Free fatty acids are associated with obesity, insulin resistance and atherosclerosis in renal transplant recipients. (Armstrong K, Hiremagalur B, Campbell S, Hawley C, Prins J, Marks L, Marwick T, Johnson DW, Isbel NM).


Abnormal glucose tolerance is highly prevalent in renal transplant recipients and is associated with other cardiovascular risk factors. (Armstrong K, Prins J, Johnson DW, Isbel N).


Renal transplant recipients with impaired glucose tolerance - gluttony versus sloth. (Armstrong K, Prins J, Johnson DW, Isbel N).

Assessment of exercise and dietary factors associated with abnormal glucose tolerance in renal transplant recipients (Orazio, L).
Assessment of Everolimus in addition to Calcineurin Inhibitors Reduction in Maintenance Renal Transplant Recipients (ASCERTAIN). (Campbell S, Franzen K)

Valcyte in CMV-disease treatment of solid organ recipients. (VICTOR) (Campbell S, Martin A.)

A randomised, open-label, comparative evaluation of the safety and efficacy of Sirolimus versus Cyclosporine when combined in a regimen containing Basiliximab, Mycophenolate Mofetil, and Corticosteroids in primary de novo renal allograft recipients (Campbell S, Martin A.)

A Randomized, Open-Label Study to Compare the Rate of New Non-Melanoma Skin Cancer in Maintenance Renal Allograft Recipients Converted to a Sirolimus-based Regimen versus Continuation of a Calcineurin Inhibitor-based Regimen (Campbell S, Martin A.)

D. GENERAL NEPHROLOGY

A multicentre, randomized controlled trial of the effect of cholesterol reduction on cardiovascular end-points in patients with chronic renal failure. (Neal B, Johnson DW, Pollock C, Walker R, McDonald S)

Initiation of Dialysis Early and Late (IDEAL) Trial (Johnson DW, Martin A).

Risk Stratification of Patients with End Stage Renal Disease: Results of Screening Strategies Incorporating Clinical Risk Scoring and Dobutamine Stress Echocardiography. (Rakhit D, Isbel N, Johnson DW, Armstrong K, Marwick TH).

Prediction of Events using Abnormal Diastolic Filling and Systolic Velocity by Tissue Doppler Imaging and Left Atrial Size in Patients with Chronic Kidney Disease. (Rakhit D, Isbel N, Johnson DW, Marwick TH).

Aggressive Risk Factor Modification Does Not Influence Changes in Strain Rate and Integrated Backscatter in Patients with Chronic Kidney Disease. (Rakhit D, Isbel N, Johnson DW, Marwick TH).

Progression of increased valve density by backscatter analysis in early stage renal failure. (Isbel N, Johnson DW, Marwick TH).


Irbesartin Versus Placebo in Combination with Standard Cardiovascular Protection ACE-I Therapy with Ramapril for the treatment of Albuminuria in Subjects at Elevated Cardiovascular Risk (Isbel N, Pidcock R)

The Effect of Sulodexide in Patients with Type 2 Diabetes and Microalbuminuria (Isbel, N., Martin, A)

The Effect of Sulodexide in Overt Type 2 Diabetic Nephropathy (Isbel, N., Martin, A.)

Other Research

E. BASIC SCIENCE RESEARCH

Erythropoietin as a novel renoprotective agent in in vitro and in vivo models of acute renal failure. (Johnson DW, Vesey D, Gobe G, Endre Z).
The role of darbepoetin alpha as a novel renoprotective agent in a rat model of ischaemic acute renal failure (Johnson DW, Vesey D, Gobe G, Endre Z).

The effect of erythropoetin alpha on delayed graft function in a dog model of renal transplantation (Forman C, Nicol DL, Johnson DW).

The role of macrophages and secreted interleukin-1β in renal tubulo-interstitial fibrosis (Vesey DA, Cheung C, Johnson DW).


The role of siliibin in renal cell carcinoma (Cheung C, Vesey DA, Johnson DW, Nicol DL).

Cordyceps sinensis as a novel renoprotective agent in experimental acute and chronic renal failure (Gobe G, Johnson DW).

Modulating apoptosis in renal cell carcinoma (Johnson DW, Gobe G).

The myofibroblast as a target for controlling renal fibrosis using in vitro and in vivo models (Cuttle, Endre Z, Johnson DW, Gobe G).

The role of reactive oxygen species and protein kinase C in in vitro models of human renal failure.

Targeting the myofibroblast to limit renal fibrosis after cancer therapies.

Strategies for targeted renal delivery of viral vectors for controlled and long-term gene therapy against chronic renal failure (Johnson DW, Gobe G).

The role of protease activated receptors (PARs) in progressive renal fibrosis (Johnson DW, Gobe G).

Strategies for modifying acute renal ischemic injury: increasing the mobilisation and maturation of endothelial progenitor cells. (Pat B, Johnson DW, Gobe GC).

The role of herbal medicines in preventing progressive chronic kidney scarring and failure. (Wocjikowski K, Johnson DW, Gobe GC).

The therapeutic application of adult mesenchymal stem cells in renal regeneration. (McTaggart S, Gobe GC, Johnson DW).

Financial Support

**Current NHMRC Grants**

$258,000. NHMRC. The Australasian Kidney Trials (AKT) Network. (CM Hawley)

$84,000. NHMRC / AHMAC / Industry. IDEAL Trial. (CA Pollock)

$27,000. NHMRC CCRE grant. A randomised, open-label, prospective controlled trial of multiple risk factor intervention on atherosclerosis, vasoreactivity and cardiac ischaemia in renal transplant recipients. Transplant LANDMARK Trial. (TH Marwick)

$40,000. NHMRC Project Grant. A randomized placebo-controlled study to assess the effects of Cholesterol-lowering therapy with a combination of simvastatin and Ezetimibe on the Risk of Major Cardiovascular Complication among Individuals with Chronic Kidney disease. (DW Johnson)

**Other Grants**

$50,000. Kidney Health Australia. The Australasian Kidney Trials (AKT) Network. (CM Hawley)

$67,000. Amgen. The role of darbepoetin alpha as a novel renoprotective agent in a rat model of ischaemic acute renal failure. (DW Johnson)

$20,000. Janssen-Cilag. Erythropoietin as a renoprotective agent in renal transplantation. (DW Johnson)

$90,000. UQ. A research program into the metabolic syndrome. (JB Prins)

$25,000. Roche Organ Transplant Research Grant. The relationship between mycophenolate mofetil pharmacokinetics and clinical outcomes in renal transplant recipients. (DW Johnson)


**Other Support**

$258,000. NHMRC. The Australasian Kidney Trials (AKT) Network. (CM Hawley)

$84,000. NHMRC / AHMAC / Industry. IDEAL Trial. (CA Pollock)

$27,000. NHMRC CCRE grant. A randomised, open-label, prospective controlled trial of multiple risk factor intervention on atherosclerosis, vasoreactivity and cardiac ischaemia in renal transplant recipients. Transplant LANDMARK Trial. (TH Marwick)

$40,000. NHMRC Project Grant. A randomized placebo-controlled study to assess the effects of Cholesterol-lowering therapy with a combination of simvastatin and Ezetimibe on the Risk of Major Cardiovascular Complication among Individuals with Chronic Kidney disease. (DW Johnson)

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$20,000. Janssen-Cilag. Erythropoietin as a renoprotective agent in renal transplantation. (DW Johnson)

$90,000. UQ. A research program into the metabolic syndrome. (JB Prins)

$25,000. Roche Organ Transplant Research Grant. The relationship between mycophenolate mofetil pharmacokinetics and clinical outcomes in renal transplant recipients. (DW Johnson)


**Publications**

**Journal Articles**


Lim WH, Johnson DW, McDonald SP (2005). Higher rate and earlier peritonitis in Aboriginal patients compared to non-Aboriginal patients with end-stage renal failure maintained on peritoneal dialysis in Australia: Analysis of ANZDATA. Nephrology 10:192-197.


Published Abstracts

Armstrong K, Campbell S, Hawley C, Johnson DW, Isbel NM. Body Mass Index Predicts the Progression of Proteinuria in Renal Transplant Recipients. Presented at the 23rd Annual Scientific Meeting of the Transplantation Society of Australia and New Zealand, Canberra, Australia, 10-13 May 2005.


Armstrong K, Elliott AM, Prins J, Beller E, Campbell S, Hawley C, Johnson DW, Isbel NM. Fasting blood glucose is an unreliable screening tool for predicting impaired glucose tolerance in renal transplant recipients. Presented at the 23rd Annual Scientific Meeting of the Transplantation Society of Australia and New Zealand, Canberra, Australia, 10-13 May 2005.


Armstrong KA, Campbell SB, Johnson DW, Hawley CM, Isbel NM. Does uric acid have a pathogenic role in graft dysfunction and hypertenion in renal transplant recipients? Presented at the Australia and New Zealand Society of Nephrology, Wellington, September 2005.

Armstrong KA, Johnson DW, Mudge DW, Hawley CM, Campbell SB, Prins J, Isbel N. Defining the metabolic syndrome in renal transplant recipients – how useful is the new definition? Presented at the American Society of Nephrology, Philadelphia, November 2005.

Armstrong KA, Johnson DW, Mudge DW, Hawley CM, Campbell SB, Prins J, Isbel N. Defining the metabolic syndrome in renal transplant recipients – how useful is the new definition? Presented at the American Society of Nephrology, Philadelphia, November 2005.

Armstrong KA, Prins JB, Beller E, Elliott AM, Campbell SB, Hawley CM, Johnson DW, Isbel NM. An oral glucose tolerance test optimises detection of abnormal glucose tolerance in renal transplant recipients. Presented at the 41st Annual Scientific Meeting of the Australian and New Zealand Society of Nephrology, Wellington, New Zealand, 5-8 September, 2005.


Johnson DW, Pat B, Vesey DA, Guan Z, Endre Z, Gobe GC. Delayed bolus administration of darbepoetin or erythropoetin protects against ischaemic acute renal injury. Presented at the 41st Annual Scientific Meeting of the Australian and New Zealand Society of Nephrology, Wellington, New Zealand, 5-8 September, 2005.


Vesey DA, Kruger W, Poronnik P, Gobé GC, Johnson DW. PAR-2 activation promotes cortical fibroblast proliferation and matrix


Book Chapters


Articles Accepted for Publication
Armstrong KA, Campbell SB, Johnson DW, Isbel NM, Hawley CM. Does uric acid have a pathogenetic role in hypertension and graft dysfunction in renal transplant recipients? Transplantation. (In press)


Armstrong KA, Prins JB, Beller E, Campbell SB, Hawley CM, Johnson DW, Isbel NM Should an oral glucose tolerance test be performed routinely in all renal transplant recipients? Clinical Journal of the American Society of Nephrology. (In press).


Brown F, Johnson DW. A randomized controlled trial to determine whether treatment with a neutral pH, low glucose degradation product dialysate (Balance) prolongs residual renal function in peritoneal dialysis patients. Peritoneal Dialysis International. (In press)


Kaisar MO, Johnson DW. Validation of a nomogram for predicting the likelihood of delayed graft function in Australian adult deceased donor renal transplant recipients. Nephrology. (In press)


Rakhi DJ, Marwick TH, Armstrong KA, Johnson DW, Leanor M, Isbel NM. Effect of Aggressive Risk Factor Modification on Cardiac Events and Myocardial Ischemia in Patients with Chronic Kidney Disease. (In Press American Heart Journal)

Rakhi DJ, Armstrong KA, Beller EB, Isbel NM. Marwick TH. Risk Stratification of Patients with Chronic Kidney Disease: Results of Screening Strategies Incorporating Clinical Risk Scoring and Dobutamine Stress Echocardiography (In press American Heart Journal)


Lectures and Presentations
Professor David Johnson


“Estimated GFR calculation,” Dialysis Nephrology Transplant Workshop, Couran Cove, 6-9 March, 2005

“Estimated GFR – what we should use and why,” Australasian Association of Clinical Biochemists, Brisbane, 19 April 2005

“Novel renoprotective effects of erythropoietin,” Asia Pacific Forum in Nephrology, Gold Coast, 29 April – 1 May 2005

“Clinical conundrums,” Asia Pacific Forum in Nephrology, Gold Coast, 29 April – 1 May 2005

“Microalbuminuria,” Sanofi-Aventis Scientific Symposium, Gold Coast, 6-8 May, 2005

“Management of Hypertension,” Sanofi-Aventis Scientific Symposium, Gold Coast, 6-8 May, 2005


“TJ Neale Award Body of Work Presentation,” Australian and New Zealand Society of Nephrology Annual Scientific Meeting, Wellington, 5-7 September 2005


Dr Nicole Isbel

Invited speaker Australian Atherosclerosis Society Annual meeting, Darwin 2005

Invited speaker and organising committee Queensland Transplant Symposium 2005
Invited speaker Thoracic Organ Failure Symposium, Annual Scientific Meeting, Australian Society of Cardio-thoracic Surgeons, 2005
Invited speaker post graduate education meeting for Nephrology Trainees 2005
ASEANZ Cardiovascular & Lipid Forum, Melbourne 2005

Dr Scott Campbell

Post Graduate Students
Catherine Cheung, PhD, completed
Kirsty Armstrong, PhD, in progress
Carolyn Van Eps, PhD, commenced
Colin Forman, Masters, commenced
Marcus Rumsfeld, PhD, commenced
Ken Wocjikowski, PhD, commenced
Christudas Morais, PhD, commenced
Dr Dhrubo Rakit, PhD, completed
Ms Linda Orazio, MPhil, commenced

Awards
Dr Carolyn van Eps
Finalist, Royal Australasian College of Physicians Advanced Trainee Research Award 2005
Princess Alexandra Hospital Research Fellowship 2005
Finalist, Kidney Health Australia Clinical Nephrology Research Award 2005
Finalist, Best Clinical Research Poster Award, Australian and New Zealand Society of Nephrology Annual Scientific Meeting 2005

Dr Kirsty Armstrong
Best Oral Presentation, Transplant Society of Australia and New Zealand (TSANZ) Annual Scientific Meeting, May 2005
Finalist, Kidney Health Australia Clinical Nephrology Research Award 2005

Dr Christudas Morais
Queensland Cancer Fund Scholarship 2005-2007

Dr Jenny Wong
Finalist, Kidney Health Australia Clinical Nephrology Research Award 2005
Christine Percy Finalist, Best Laboratory Science Poster Award, Australian and New Zealand Society of Nephrology Annual Scientific Meeting 2005

Zealand Society of Nephrology Annual Scientific Meeting 2005
Dr Omar Kaisar
Richard Kemp Prize for best oral presentation at the Qld Royal Australian College of Physicians Advanced Trainees’ Annual Scientific Meeting 2005

Professor David Johnson
TJ Neale Award (awarded to a member of the Australian and New Zealand Society of Nephrology for “outstanding contributions to nephrological science”)
Finalist, Kidney Health Australia Clinical Nephrology Research Award 2005
Finalist, Amgen Basic Science Research Award 2005

Dr David Vesey
Finalist, Best Laboratory Science Poster Award, Australian and New Zealand Society of Nephrology Annual Scientific Meeting 2005

Dr Nicole Isbel
Winner Kidney Health Australia Clinical Nephrology Research Award 2005

Public Service Relevant to Research
Professor David Johnson
Founding Member, Australasian Kidney Trials Network 2004
Member of Operations Secretariat, Australasian Clinical Trials Network in Nephrology 2004 – present
Senior Founding Member, National Health and Medical Research Council Cardiovascular and Metabolic Centre for Clinical Research Excellence (CRCMCE) 2002 - present
Chair, Kidney Check Australia Taskforce 2004 – present
Co-Chair, Australasian Creatinine and GFR Consensus Working Party 2004 - present
Chair, National Chronic Kidney Disease Strategy Early Kidney Disease Working Group 2004 - present
Caring for Australians with Renal Impairment (CARI) Clinical Practice Guidelines Steering Committee Member 2000 – present
Australian and New Zealand Dialysis and Transplant Association (ANZDATA) Registry Management Committee Member 2000 – present
Australian and New Zealand Dialysis and Transplant Association Registry Peritoneal Dialysis Advisory Committee Member 2000 – present
Australian and New Zealand Dialysis and Transplant Committee Member 2000
Peritoneal Dialysis Project Manager, Australian and New Zealand Dialysis and Transplant Association Registry 2001 – present
Australian and New Zealand Society of Nephrology Representative on Dialysis Transplant Committee 2001-2005
Pure Red Cell Aplasia Global Scientific Advisory Board 2003 – present
Baxter Healthcare, Global Dialysis Research Advisory Board 2003 - present
Working Party Member, ANZSN Caring for Australians with Renal Impairment Guidelines for Peritoneal Dialysis Adequacy 1999 – present
Convenor, ANZSN Caring for Australians with Renal Impairment Guidelines for Evaluation of Renal Function, 2004 - present
Convenor, Caring for Australians with Renal Impairment Guidelines for Peritoneal Dialysis Adequacy 2003 – present
Working Party Member, ANZSN Caring for Australians with Renal Impairment Guidelines for Prevention of Renal Failure Progression 2000 – present
Working Party Member of Australian Cancer Network National Clinical Practice Guidelines for Post-Transplant Lymphoproliferative Disorder and Other Immunodeficiency-Related Lymphomas 2001 – present
Queensland Renal Collaborative Steering Committee Member 2004-present
Working Party Member of Australian and New Zealand Clinical Practice Guidelines on Icodextrin Usage in Peritoneal Dialysis 2001 – present
Queensland Government Advisory Committee for Strategies for Prevention of Progressive Renal Failure 2000 – present
Head of Renal Research Laboratory, Princess Alexandra Hospital 1998 – present
Review Committee Member for Australian Kidney Foundation Bootle Grant Applications 2002 - present
Editorial Board Member for Peritoneal Dialysis International 2003 – present
Editorial Review Board member for Haemodialysis International 2005 – present
Editor for Evidence-based Nephrology (part of British Medical Journal series of evidence-based medicine textbooks)
Reviewer for Nephron 1998 – present
Reviewer for Nephrology 1999 – present
Reviewer for Experimental Nephrology 1999 – present
Reviewer for the Australian and New Zealand Journal of Medicine / Internal Medicine Journal 1999 – present
Reviewer for Nephrology Dialysis and Transplantation 1999 – present
Dr Nicole Isbel
Member of National Vascular Disease Prevention Alliance 2001-present
Member of Scientific Programme and Education Committee, Australian and New Zealand Society of Nephrology 2001- present
Organiser of Post graduate education meeting Transplantation Society of Australia and New Zealand 2006
Chairman CARI guideline working group on ‘Urine protein as a diagnostic test’, 2002-
Reviewer for Nephrology 1998- present
Reviewer for Journal of American Society of Nephrology 2001- present
Reviewer for Nephrology, Dialysis and Transplantation  2004- present
Reviewer for Cochrane Renal Group
Reviewer for National Health and Medical Research Council Project Grants 2005- present
Member, National Health and Medical Research Council Cardiovascular and Metabolic Centre for Clinical Research Excellence (CCRE) 2002 - present

Dr David Vesey
Manager, Department of Nephrology Endotoxin Testing Service 2003 – present
Reviewer for Nephrology 2004 – present
Reviewer for Experimental Nephrology 2004 – present
Reviewer for Kidney International 2004 – present
Reviewer for The Journal of Laboratory and Clinical Medicine 2005 – present
Member of the National Kidney Research Fund UK External Referee Panel 2004 – present

Associate Professor Carmel Hawley
Founding Member, Australasian Kidney Trials Network 2004.
Chair, Operations Secretariat, Australasian Clinical Trials Network in Nephrology 2004 – present.

Board Member, Kidney Health Australia, 2004 – present.
Co-Chair, Caring for Australians with Renal Impairment (CARI) Clinical Practice Guidelines Biochemical and Haemato logical Targets Group.
Working Party Member Member, Caring for Australians with Renal Impairment (CARI) Clinical Practice Guidelines Bone Disease Group.
Amgen, Advisory Board (Bone Disease) – current.
Lead Clinician Queensland Renal Collaborative Steering Committee Member 2001 – present.
Editorial Board Member for Nephrology 2003 – present.
Reviewer for Nephrology 1999 – present.
Reviewer for the Australian and New Zealand Journal of Medicine / Internal Medicine Journal 1999 – present.
Reviewer for Nephrology Dialysis and Transplantation 1999 – present.
Reviewer of research grant applications for the National Health and Medical Research Council: 2000 – present.
Reviewer for Kidney International 2000 - present
Reviewer for Journal of the American Society of Nephrology 1999 – present
Reviewer for Blood Purification 2005 – present
Reviewer for Medical Science Monitor 2005 – present
Reviewer for Cytokine 2004 – present
Reviewer of research grant applications for the Australian Kidney Foundation / Kidney Health Australia 1998 – present
Reviewer of research grant applications for the National Health and Medical Research Council 1998 – present
Reviewer of research grant applications for Diabetes Australia 1999 – present
The Department of Neurosurgery has continued to expand its research programme and 2005 has been notable in two aspects. Firstly the acceptance into the first prospective multicentre international Phase 3 drug trial. Secondly building strong collaborations with both the Queensland Brain Institute and the Institute of Molecular Biology.

Three staff were invited to present at overseas meetings and Dr Gurgo presented at an international meeting while undertaking a Fellowship in Canada. The first notable paper was published from the minimally invasive spine surgery programme.

**Current Research Activities**

**Clinical Trials**


A Phase 3 multicenter study of intratumoral / interstitial therapy with TransMID™ compared to best standard of care in patients with progressive and / or recurrent, non-resectable glioblastoma multiforme.

**Other Research**

The role of slow cycling tumour stem cells in malignant glioma. Collaboration with the Queensland Brain Institute – University of Queensland.

The clinical importance of alternative lengthening of telomeres status and its expression in high grade glioma. Collaboration with the Institute of Molecular Biology – University of Queensland.

Percutaneous pedicle screw fixation using frameless stereotactic image guidance.

Minimally invasive lumbar decompression for the treatment of lumbar canal stenosis.

The utility of computerised tomographic angiography versus lumbar puncture for the confirmation of aneurysmal subarachnoid haemorrhage in the setting of a normal CT scan.

Correlation between cerebrospinal fluid and serum Mg levels in aneurysmal subarachnoid haemorrhage.
Publications

Journal Articles


Lectures and Presentations

Associate Professor Leigh Atkinson

Medical Ethics for Young Neurosurgeons. 13th World Congress of Neurosurgery. Marrakech Morocco. June 2005

Chronic back pain and sciatica. Mater Hospital GP Education Program. Brisbane August 2005

Genetics, Clones and the Next Generation. Annual Scientific Meeting of the Neurosurgical Society of Australasia. Gold Coast September 2005

Dr Ross Gurgoo

Surgical Management of Rheumatoid Cervical Spine Disease. AO Fellows Meeting. Banff, Canada March 2005

Surgical Management of Rheumatoid Cervical Spine Disease. Canadian Congress of Neurological Sciences. Ottawa, Canada June 2005

Advances in Spinal Surgery GP Lecture Series, Greenslopes Private Hospital November 2005

Dr Bruce Hall


Dr Adrian Nowitzke


Minimally invasive spine surgery course. Written and directed. Invited by Medtronic Sofamor Danek Pty Ltd and conducted at Royal Australasian College of Surgeons Melbourne, June 2005


Patents

The Nursing Practice Development Unit is committed to building research capacity, promoting evidence based practice, and creating strategic research partnerships to conduct research for nurses in the Southern Zone of Queensland. The Unit also advises on research governance and policy and provides training and consultation in clinical and research ethics. A number of the staff are research active and are building research programs in ethics, carer support, clinical teaching, workforce planning, emergency nursing and getting evidence into practice.

Current Research Activities

The Ethical Dilemmas Study

Dr S. Winch, Prof. L. Shields (Hull University, UK), Ms K. Pearson, (Q Health) Prof K. Lutzen (Sweden), Holzhauser, K.

The value of nursing: a cross-national and multi-stakeholder study of the cultural value parameters relevant to the recruitment and retention of nurses.

Prof. K. Lutzen - Sweden (project co-leader), Ms S. Aiken & Dr W. Knibb, UK, Prof. A. Norberg: Sweden; Ms M Bohinc: Slovenia; Prof A. Sawada: Japan; Prof. D. Olsen: U.S.A; Prof. S. Pang & Dr Xue Lan: China; Dr D. Ryan – Ireland; Prof. J. Storch & Dr P. Rodney, Canada; Dr S Winch, Australia.

Enhancing the health, wellbeing, job satisfaction and retention of hospital based registered and enrolled nurses working shift work

Dr A. Pisarski, Prof C. Gallois, Dr B. Watson, Prof P Bohle, Dr S Winch

Developing Evidence-Based Workforce Models for Nursing Services in Acute Care Hospitals.

Chaboyer, W., Courtney, M.D., Duffield C.M., Seaton-Sykes, P.C., Forrester K.E., Wallis, M.C. & Holzhauser, K.

The impact of ‘best practice’ principles when used to assist registered nurses in ‘buddying’ student nurses in the practice setting.

Henderson A., Twentyman M. & Creedy D.
Financial Support
$10,000. National Institute Clinical Studies. Barrier analysis of implementation of evidence with dementia care stakeholders. (Winch S)

$23,290. Queensland Health. The impact of ‘best practice’ principles when used to assist registered nurses in ‘buddying’ student nurses in the practice setting. (A Henderson)

Publications

Journal Articles


Book Chapters

Lectures and Presentations

Post Graduate Students
Ms Letitia Burridge, PhD, commenced 2005

Public Service Relevant to Research
Dr Amanda Henderson

Ms Kerri Holzhauser
Member, Princess Alexandra Hospital Ethics Committee.

State Editor & Review for Australasian Emergency Nursing Journal.

Dr Sarah Winch
Member, Nursing Research and Evidence Based Practice Committee, Queensland Health.

Reviewer, Social Science and Medicine.
The Department has 17.2 FTE dietitians, who provide nutrition services to all inpatients and to outpatients referred through specialised clinics or requiring home enteral nutrition. Malnutrition screening and assessment of all inpatients is a key feature of the clinical role. The Unit provides nutrition support in enteral and parenteral nutrition, a range of nutrition supplements, texture and fluid modifications through our food services and counselling on all aspects of nutrition care. The service also includes an outreach program to Charleville Health Service District, supported by videoconferencing.

Research focuses on the application of clinical nutrition in the practical care of patients. This includes nutrition support in cancer, liver disease, pressure ulcers, development and implementation of validated nutrition tools and assessment of nutrition requirements. The staff teach nutrition and dietetic students from Queensland University of Technology and Griffith University through lectures and supervised placements in clinical nutrition and food service. Currently there are five postgraduate students on staff.

Current Research Activities

Clinical Trials

Development and implementation of validated dehydration screening tool:

This ongoing study of dehydration in older people in acute care aims to develop a valid screening tool. (Vivanti A, Ash S, Roberts M, Edwards H, Battistutta D).

Malnutrition and Pressure ulcer: Ongoing assessment of malnutrition and incidence with pressure ulcer. (Banks M, Ash S, Vivanti A, Cruickshank D, Atkinson K, Hill J, Logan T)

Screening for malnutrition in Australian Hospitals and residential aged care facilities: The study aims to establish the association between malnutrition and pressure ulcers, the economic consequences of malnutrition, and the extent of malnutrition screening implementation in Australian hospitals and residential aged care facilities. Data on barriers and strategies for screening implementation will be investigated. (Banks M, Patterson C, Bauer J, Gaskill D)

Quality of life, cost effectiveness, and functional speech and swallowing outcomes, following differential management of laryngeal cancer: Two modalities for initial treatment of glottic cancer will be compared. The study will compare outcomes including nutrition in addition to voice quality, quality of life, cost and clinical outcome. Nutritional assessments are completed periodically up to 2 years post treatment with patients randomly treated with either a course of radiotherapy or overnight-stay laser therapy. (Professor W Coman, Coman S, Cooney T, Panizza B, Perry C, Bova R, Thomas D, Hickey B, Cahill L, Hancock K, Davidson W, Dutkowski K, Galvin L).

Staff

Senior Staff
Merrilyn Banks, Manager
Nora Ramos, Senior Dietitian Nutritionist
Winsome Abbott, Senior Advanced Level Dietitian (on leave)
Angela Vivanti, Research and Development Dietitian

Research Staff
Angela Vivanti, Research and Development Dietitian
Linda Orazio, Dietitian Nutritionist
Azmat Ali, Dietitian Nutritionist

Research Focuses on the application of clinical nutrition in the practical care of patients. This includes nutrition support in cancer, liver disease, pressure ulcers, development and implementation of validated nutrition tools and assessment of nutrition requirements. The staff teach nutrition and dietetic students from Queensland University of Technology and Griffith University through lectures and supervised placements in clinical nutrition and food service. Currently there are five postgraduate students on staff.
Dark adaptation in vitamin A deficient in patients assessed for liver transplantation. (W Abbott)

LIVACT study: To assess if nutritional status (anthropometry, grip strength and dietary assessments) will be improved for liver patients randomised to receive nocturnal branch chain amino acids in addition to nutritional supplementation. (D Crawford, P Kerlin, G Cleghorn, A Ali)

Haemochromatosis study: The Role of Steatosis and Increased body mass index in chronic liver disease: Steatosis and fibrosis in haemochromatosis. To assess whether steatosis is associated with increased fibrosis in patients with haemochromatosis (E Powell, A Ali, A Clouston, J Dixon, D Lincoln, D Purdie, L Fletcher, J Jonsson).


Physiotherapy intervention and the balance and safety of rehabilitation patients: The influence of nutritional status upon falls risk to also be assessed. Haines T, Vivanti A, Horgan N

Other Research

Assessment of the sensitivity and specificity of scored and un-scored screening questions against malnutrition assessment using validated subjective global assessment (SGA), upon application to a tertiary acute care hospital environment (Banks M, Vivanti A)

Food service research was initiated and is co-ordinated from the Princess Alexandra hospital. It investigates practical foodservice issues including barriers to receiving oral intake, patient assistance with meals, patient average lengths of stay, patient preferences and food service systems with the aim of improving oral intakes and managing malnutrition (Banks M, Vivanti A, Bauer J, Aliakbari J, Cruickshank D, Suter M, Hanna-Jones M, Wright O).

Financial Support

Grants

$1,500. Queensland Health. Effectiveness of diet and exercise post breast cancer. (Kathleen McGuane)

$3,000. QH Allied Health Evidence Based Practice Review Grant. Clinical outcomes of nutrition therapy in adults with cancer cachexia. (Wendy Davidson)

Other Sources

0.2 FTE. NHMRC ($250,000 over 3 years) & Pfizer (60,000 over 3 years). Landmark II. (Nicky Isbel)

$10,000 Wesley Research Institute. MRI liver fat analysis. (Elizabeth Powell)
Publications

Journal Articles

Published Abstracts
Banks M, Vivanti A. Conferences - Oral presentations (Presenter bolded, departmental authors underlined). Occupied bed days vs length of stay - implications for services Proceeding of the Dietitians Association of Australia National Conference, Perth 2005
Riddle B, Davidson W, Elliott R, Balsillie F, Porceddu S. Collaborative management of acute side effects for head and neck cancer patients receiving radiotherapy. Clinical Oncological Society of Australia. 32nd Annual Scientific Meeting, Brisbane, 16-18 Nov 05

Conference - Poster Presentations
Banks M, Vivanti A, Suter M, Bauer J, Aliakbari J. on behalf of the Food Services Research Group Intake affected if assistance with meals required. Proceeding of the Dietitians Association of Australia National Conference, Perth 2005
Bauer J, Banks M, Suter M, Vivanti A on behalf of the Food Services Research Group. Barriers to achieving intake - can our food service systems deliver? Proceeding of the Dietitians Association of Australia National Conference, Perth 2005

Lectures and Presentations
Azmat Ali

Merrilyn Banks
Nutrition and pressure ulcers. Geriatrics beyond the boundaries. Sept 2005 PAH

Post Graduate Students
Winsome Abbott, PhD, in progress
Merrilyn Banks, DHlthSc, in progress
Angela Vivanti, DHlthSc, in progress
Linda Orazio, MPhil, commenced 2005
Azmat Ali, MPhil, commenced 2005

Public Service Relevant to Research
Angela Vivanti.
Princess Alexandra Hospital Health Service District Allied Health Research Committee
In 2005, research activity in the Occupational Therapy Department was concentrated in the areas of catastrophic injury rehabilitation incorporating acquired brain injury and spinal cord injury research, aged care assessment and management, and hand and upper limb rehabilitation.

Occupational Therapy aims to improve or maintain performance in activities of daily living that may be affected by injury, illness or treatment procedures. Through developing research strength in the above areas, Princess Alexandra Hospital Health Services District occupational therapists are a major contributor to the Occupational Therapy clinical knowledge base, are creating a strong research profile nationally and internationally, and enhancing evidenced based clinical decision making locally.

Current Research Activities

Clinical Trials
Evaluation of rehabilitation strategies for prospective memory in individuals with traumatic brain injury
Community based rehabilitation after traumatic brain injury: a comparison of home and hospital based outpatient intervention
Clinical trial of stretching after traumatic brain injury

Other Research
Catastrophic injury
A research intervention to enhance the well-being and psychosocial outcomes of patients based on ICF “environment” framework
Objective and behavioural assessment of the emergence from post-traumatic amnesia
A study of impaired self-awareness and employment outcome following acquired brain injury
The relationship between compensation status, symptom endorsement, readiness to change and strategy behaviour for individuals with traumatic brain injury

Using occupation to facilitate self-awareness after acquired brain injury

Self-awareness and emotional distress in adults with traumatic brain injury during the transition from hospital to home

A qualitative study of self-awareness in traumatic brain injury

A metacognitive intervention to improve employment outcome for individuals with long-term unemployment following acquired brain injury

Test-retest reliability of the Comprehensive Assessment of Prospective Memory with a normative sample

Prospective memory of people with traumatic brain injury: an analysis of ways of remembering

Predictors of prospective memory performance in adults with traumatic brain injury

Behaviours and cognitive processes underlying fitness to drive in on-road assessments

Determining driving outcome in traumatic brain injury survivors: Predictors of driving success

Allied health professionals’ perspectives about the presence, assessment and management of risk when providing rehabilitation to clients with acquired brain injury in home and community settings: A qualitative investigation

Goal setting by individuals with acquired brain injury

Executive functioning following traumatic brain injury

Perceived causes of change in function and quality of life for people with long duration spinal cord injury

A survey of computer literacy of people with spinal cord injury

**Aged care assessment and management**

The validity of cognitive assessments in an aging rehabilitation population

Reliability of the original and revised version of the Assessment of Living Skills and Resources

An investigation of clients experiences of an upper limb treatment group

Reliability and validity of the Occupational Therapy Adult Perceptual Test

Review of visual perceptual functioning of people following traumatic brain injury using the Occupational Therapy Adult Perceptual Test

The readability and comprehensibility of occupational therapy written materials for elderly people

Evaluating best practice written education materials for older people

**Hand and upper limb rehabilitation**

Predictors of outcome with mobilising splinting

Does splinting of the hand improve the hand function of people with C6 and C7 tetraplegia?
Wearing of splints post-discharge: factors contributing to sustainability of use following brain injury

The impact of an alert system on positioning and handling of the client’s stroke affected upper limb

An investigation of clients experiences of an upper limb treatment group

**Publications**

**Journal Articles**


**Published Abstracts**


**Lectures and Presentations**

**Invited**

Amanda Purcell
Presenter at workshop titled “Palliative Assessment and Intervention for Allied Health Professionals” at the Royal Brisbane and Women's Hospital, 30 November, 2005

Kylie Parry
Presented Neuroanatomy classes to Occupational Therapy students at the University of Queensland.

Beth Dermer
Presented Occupational Therapy Assistants in Bundaberg on the occupational therapist's role in stroke rehabilitation, Yangulla Centre, Central Zone Rural Health Training Unit

Marianne Hodder
Presenter and discussion panel member at the Australian Hand Therapy Conference, Sydney, October, 2005.

**Post Graduate Students**

Celeste Glasgow, PhD – Occupational Therapy (in progress)

Emma Doig, PhD – Occupational Therapy (in progress)

Miranda Banks, PhD – Neuropsychology (in progress)

**Awards**

Nicole Weir
Allied Health Research Scholarship, November 2005, for project titled “Behaviours and cognitive processes underlying fitness to drive in on-road assessments”.

**Public Service Relevant to Research**

Jenny Fleming
Review panel for the Queensland Health Allied Health Research Scholarships in 2005.

Editorial Board for the journal Brain Impairment.
Research is primarily that performed now part time by Dr Quansheng Jing. He has been using his acquired skills of dissecting the cornea to separate the endothelial layer which is vital to corneal clarity. The cell layer has been stripped and stained on a large number of corneas. These have primarily been from the outer rim of donor tissue remaining following a corneal transplant. This will allow collection of cell counts and cell shape to see how well those transplants progress. It will also allow a review of the size population of cells that we have available for cell culture studies. Significant effort has been spent trying to improve image analysis to analyse photographic images of endothelial cells. A best fit program is being used after carrying out pre-processing by manual amendment. The storage of organ cultured corneas in defined media continues.

There is now collaboration established with scientists at the Mater to work on joint projects and share experience and knowledge. This will be particularly beneficial in the culture of cells and is an exciting development. Collation of information regarding why next of kin say ‘no’ to transplantation has been a background study. Records not only from Queensland but also from the United Kingdom have been collated to give a large scale review of these approaches.

**Current Research Activities**

**Clinical Trials**

Assistance with audit and preparation of operating procedures of trial of new methods to treat pterygia. Queensland Eye Institute.

**Other Research**

The storage of tissues by refrigeration or freezing to improve methods of transplantation.

Cell biology of the corneal endothelium.

Methods of eye banking and eye tissue handling.

Corneal cell culture and use for corneal transplant material.

**Awards**

Dr Peter Madden

Member of the Order of Australia. Queens Birthday Honours list 13th June 2005. For service to medicine in the establishment and administration of the Queensland Eye Bank.

**Public Service Relevant to Research**

Dr Peter Madden

Phd Assessor, Griffith University.
The Princess Alexandra Hospital Pharmacy Department is a national leader in the implementation of clinical services, innovative methods of drug distribution, and research and implementation of “Quality Use of Medicines” activities. Quality Use of Medications is described in the National Medicines policy as a partnership between government, industry, health workers and patients to use medications judiciously, appropriately, safely and efficaciously. During 2005 the department provided leadership participation in a National Multicentre Drug Use Evaluation Project to improve the prescribing of medications in Community Acquired Pneumonia (CAPTION).

The Pharmacy department provides services to all specialties within the hospital including: Renal/Liver Transplants; Cardiothoracic medicine and surgery; Oncology and Haematology; Colorectal surgery and gastroenterology; Spinal Injuries; Critical care; Elderly care; Respiratory Medicine; and General Medicine.

The Clinical Trials Pharmacist, Oncology Unit and Sterile Production centre perform a support role for clinical trials taking place in the hospital. Activities include preparation for a trial such as training in manufacture, record keeping and randomisation procedures particular to individual trials. During the trial, medication storage, randomisation, manufacture, dispensing and medication record keeping can be provided. Pharmacy Staff members are involved in teaching undergraduate and postgraduate pharmacy students as well providing in house education to staff and patients.
Current Research Activities

Clinical Trials
Dispensing, production and record keeping support for Clinical Trials during 2005 has involved about 120 trials. About 35 of these trials have had aseptic and safe handling production provided by the Sterile Production Centre.

Other Research
CAPTION (Community Acquired Pneumonia Towards Improved Outcomes Nationally) in Collaboration with Pharmacy School UQ and Queensland Health Drug Advisory Committee

Drug Use Evaluation projects
Timentin Use
Post Operative Nausea and Vomiting
Urokinase in Vascular Catheters
Proton Pump inhibitor dosage
Audit of intervention recording
Audit of medication profiles provided to patients and General Practitioners

Financial Support
$4,000. National Prescribing Service. CAPTION-Community Acquired Pneumonia: Towards improving Outcomes Nationally. (Belinda Corfield)

Publications

Journal Articles
McKauge L, Coombes JC. Quality use of medicine experiential placements for fourth year pharmacy students. Pharmacy Education 2005; 5: 137-142

Published Abstracts
Dimiskovska S. The discharge process getting it right with pharmacy assistants/technicians. Proceedings of the SHPA Federal Conference 2005
Frend V. Statin induced rhabdomyolysis and the role of the pharmacist. Proceedings of the Society of Hospital Pharmacists of Australia Federal Conference 2005
McKay J. Keeping Pharmacists out of the pharmacy and at the bedside. Proceedings of the Society of Hospital Pharmacists of Australia Federal Conference 2005
Samios P. Web vision; developing a pharmacy website saving more than just paperclips. Proceedings of the SHPA Federal Conference 2005
Sandhu G. The paradoxical events of HITTS. Proceedings of the Society of Hospital Pharmacists of Australia Federal Conference 2005
Lectures and Presentations

Peter Samios
CPD and Competency: the perspective of the newly qualified pharmacist. Society of Hospital Pharmacists of Australia Federal Conference November 2006

Jo Sturtevant
Malaysian Renal Pharmacy Attachment Program organized by Pharmaceutical Division, Ministry of Health November 2005

Acute Renal Failure for Post Graduate Diploma in Clinical Pharmacy, Pharmacy School University of Queensland

Chronic Renal Failure for Post Graduate Diploma in Clinical Pharmacy, Pharmacy School University of Queensland

Transplant Nurses Association Conference October 2005 – Medication Mischief following transplantation-what you can expect

Saira Mould
Advances in Depression. Post Graduate Diploma in Clinical Pharmacy, Pharmacy School University of Queensland

Janet Weir
Atrial Fibrillation & Heart Failure. Post Graduate Diploma in Clinical Pharmacy, Pharmacy School University of Queensland

Jennie McKay
Hepatic Failure. Post Graduate Diploma in Clinical Pharmacy, Pharmacy School UQ

Post Graduate Students

Judith Coombes, Graduate Certificate in Higher Education, completed 2005

Peter Samios, Graduate Diploma in Hospital Pharmacy, commenced 2005

Awards

Jenny McKay
Best Paper Award, National Conference, Society of Hospital Pharmacists of Australia, Brisbane November 2005

“Keeping Pharmacists out of the pharmacy and at the bedside”

Public Service Relevant to Research

Pharmacy Department supplied a member to the Princess Alexandra Hospital Research Ethics Committee

Pharmacy Department supplied a member to the University Of Queensland, School of Pharmacy Ethics Committee

Gwyneth Petrie
Completed reviews for articles published in The Journal of Pharmacy Member of review panel for Society of Hospital Pharmacists of Australia clinical pharmacy awards.

Member of Queensland Health Hospital Pharmacy Advisory Committee- Objectives include; create an environment that supports pharmacists’ active engagement in teaching and research leading to publication and recognition with a view to supporting evidence based practice.

Christine Maclean
Represents Queensland on Federal Council, Society of Hospital Pharmacists of Australia (SHPA)
A focus of incorporating research into the core work culture within the physiotherapy department has taken place over the past twelve months. This has resulted in growth in the research capacity across several work areas within the department. A total of ten members of the physiotherapy department have been involved in successful research grant applications with many others attempting to attract funding for the first time this year. $167,542 has been attained in competitive grants and tenders for both research ($158,542) and evidence based practice projects ($9,000).

A range of study designs have been employed and are planned for 2006 including randomised trials, prospective cohort studies, multi-centre trials, retrospective audits, cross-sectional surveys, case control studies, and qualitative research. Research projects are currently spread across rehabilitation and acute care sectors, with several projects involving collaboration with investigators from other health care disciplines.

Current Research Activities

Clinical Trials

Domiciliary versus centre-based community rehabilitation – randomised trial with economic evaluation. T Comans, T Haines, M Curren, F Bourke, C Peters, C Doran, S Brauer.

Other Research


ABIPA a new tool for an old problem. L Passier, J Gesch, M Nascimento, T Haines.

Epidemiology of falls in the aged care setting. A Barker, J Nitz, N Low Choy, T Haines.


Post-operative shoulder mobilization protocols. N Simmons, F Harbison, T Haines, J Coffey.


Financial Support

Grants
$33,985. Princess Alexandra Hospital Cancer Collaborative Group. Enhancing health after surgery for breast cancer. (T. Haines)
$9,450. Queensland Health Allied Health Advisory. Abdominal binders: Giving breath and voice to spinal cord injured patients. (B. Wadsworth)
$12,000. University of Queensland New Staff research start-up fund. Physiotherapy intervention and the Balance and Safety of Rehabilitation Patients. (T. Haines)
$29,500. Queensland Health, Community Rehabilitation Demonstration Project Grant. Domiciliary versus centre-based community rehabilitation – Randomised trial with economic evaluation. (T. Haines)
$3,000. Queensland Health Allied Health Advisory (EBP grant). Post-operative shoulder mobilization protocols. (N Simmons)
$3,000. Queensland Health Allied Health Advisory (EBP grant). Diet and exercise in women receiving chemotherapy for breast cancer. (K McGuane)
$3,000. Queensland Health Allied Health Advisory (EBP grant). Mirror box therapy in stroke rehabilitation. (G Morrison)
$1,000. Dorothy Hopkins award for clinical research (APA QLD branch). The immediate effect of physical activity on postural control. (T. Egerton)

Other Support
$48,177. Disability Services Queensland. Experiences of transitioning between hospital and home for people with brain injury. (L. Worral)


Musculoskeletal complications following cardiac surgery. S Chatterton, T Haines.

Mirror box therapy in stroke rehabilitation. G Morrison, S Kuys, T Haines.

Publications

Journal Articles

Published Abstracts

Articles Accepted for Publication
Haines T, Hill K, Bennell K, Osborne R. A new instrument for targeting falls prevention interventions was accurate and clinically applicable in a hospital setting. Journal of Clinical Epidemiology. (in press)

Post Graduate Students
Brooke Wadsworth, MPhil, commenced 2005
Steven McPhail, MPhil, commenced 2005
Suzanne Kuys, PhD, in progress
Thorlene Egerton, PhD, commenced 2005

Public Service Relevant to Research
Dr Terry Haines
Princess Alexandra Hospital Falls Prevention Steering Committee
Princess Alexandra Hospital Cancer Collaborative Group Steering Committee
Princess Alexandra Hospital Physiotherapy Research Committee
Princess Alexandra Hospital Allied Health Research Committee
Reviewer, Australasian Journal of Ageing
Reviewer, Prince Charles Hospital Research Fund
Reviewer, Australian Physiotherapy Association Research Scheme
The Plastic and Burns Unit in conjunction with Professor William B. Coman, Head & Neck Unit Princess Alexandra Hospital, have been actively engaged in frontier research in preoperative prognostic markers for head and neck and skin cancers. Five papers have been published in peer review journals in 2005. One article was from the top five cancer journal and was featured as a front cover article with editorial review. The papers in the British Journal of Plastic Surgery held the top three positions in the top 25 most downloaded articles ranking in 2005.

The unit is the first to identify Crystalline A & B as sensitive marker for poor prognosis in head and neck cancer. With recent publications and citations by those working in breast cancer of the unit’s findings, the unit has inspired to cell line work to study the nature of this novel marker at molecular level.

**Current Research Activities**

- Ongoing laboratory research
- Establishing Head and Neck Squamous Cell Carcinoma cell lines with knock out Crystalline A & B gene
- Translating findings in Head and Neck prognostic marker to skin cancers: Squamous Cell Carcinoma and melanoma.
- Establishing tissue array technique for Head and Neck Squamous Cell Carcinoma molecular profiling.
Publications

Journal Articles


Articles Accepted for Publication


Published Abstracts

ANZ Journal of Surgery ASC Perth 2005; Molecular introduction to Head and Neck Cancer (HNSCC) carcinogenesis. David Chin, Glen Boyle, David Theile, Peter G. Parsons, William B. Coman. Institution: Head & Neck Unit, Princess Alexandra Hospital and Dept of Plastic Surgery, Princess Alexandra Hospital and Melanoma Genomics Group, Queensland Institute of Medical Research

ANZ Journal of Surgery ASC Perth 2005; Microarrays and gene expression profiling, the power, limitations and pitfalls for the surgeon. David Chin, Glen Boyle, David Theile, Peter G. Parsons, William B. Coman. Institution: Head & Neck Unit, Princess Alexandra Hospital and Dept of Plastic Surgery, Princess Alexandra Hospital and Melanoma Genomics Group, Queensland Institute of Medical Research.

Lectures and Presentations

David Chin

ASC Perth 2005; Molecular introduction to Head and Neck Cancer carcinogenesis.


ASC Perth 2005; Microarrays and gene expression profiling, the power, limitations and pitfalls for the surgeon.


Queensland Health 5th Annual Health and Medical Scientific Meeting November 2006. Novel Prognostic Markers for Cancers.


Poster presentation

Cameron Mackay, Glen Boyle, David Chin, David Theile. ASC Perth, Absent of urokinase plasminogen activator in Dupuytren's disease.

Awards

David Chin


The Queensland Health Pathology Services Microbiology Department at Princess Alexandra Hospital provides laboratory diagnostic and consultative services in clinical microbiology to Princess Alexandra Hospital, Queen Elizabeth II Hospital, Logan and Redland Hospitals. The laboratory holds a Therapeutic Goods Administration licence for tissue transplantation screening and provides screening services for all Queensland Health tissue banks and for Queenslanders Donate. It also has special expertise in identification and typing of multi-resistant bacteria and in antimicrobial susceptibility testing. Members of staff participate in teaching activities for the University of Queensland, Griffith University and the Royal College of Pathologists of Australasia.

The major research activities in the laboratory relate to antimicrobial resistance, multiresistant organisms and hospital infection. Collaborative research is undertaken with the Australian Group for Antimicrobial Resistance and the CRC for Diagnostics. The department also participates in a number of collaborative studies funded by the pharmaceutical industry. Collaborative research into community-acquired methicillin resistant staphylococcus aureus (MRSA) has included development of novelle typing techniques. Studies of the epidemiology of community-acquired methicillin resistant staphylococcus aureus (MRSA) are ongoing. Application of real-time nucleic acid amplification techniques to screening for multiresistant organisms in the clinical laboratory is being investigated.

Current Research Activities

Clinical Trials

Theravance/ATLAS1-Protocol 0017. Randomised, double-blinded, multinational trial of intravenous Televancin versus Vancomycin for treatment of complicated Gram-positive skin and skin structure infections with a focus on patients with infections due to MRSA.

The Australian Community Acquired Pneumonia Study (ACAPS)

The Australian Scedosporium (AUSCEDO) study.

Other Research

Merck's Global Study for monitoring antimicrobial resistance trends (SMART) study

Australian Group on Antimicrobial Resistance (AGAR) Annual studies S.pneumoniae, S. aureus and bacteremia caused by enterococci. Other periodical studies include Gram negatives (E. coli, Klebsiella spp. And Entewrobacter spp.) and more detailed syudies on enterococci.

The National VRE Network (NaVREN) Study. We are the Queensland reference laboratory for the collection and study of Vancomycin Resistant Enterococci (VRE) and work in conjuction with the National reference laboratory, The Women's and Children's Hospital in Adelaide

Aventis PROTEKT-6 (HMR 3647 A/V001) Prospective resistant organism tracking and epidemiology for the ketolide Telithromycin.

Australian Caspofungin Study
Financial Support

$29,193 QHPSS SERTIF. Epidemiological and microbiological characterisation of infections caused by community-acquired methicillin-resistant Staphylococcus aureus (cMRSA) in southeast Queensland (SEQ), with particular reference to pathogenicity. (Wendy Munckhof, Graeme Nimmo)

$20,000. Ipswich Hospital Foundation. Epidemiological and microbiological characterisation of infections caused by community-acquired methicillin-resistant Staphylococcus aureus (cMRSA) in southeast Queensland (SEQ), with particular reference to pathogenicity. (Wendy Munckhof, Graeme Nimmo)

$7,967. QHPSS Study, Education and Research Trust Fund. Bacterial nosocomial screening using selective enrichment broth and real time PCR vs proprietary RT PCT (IDI-MRSATM). (Jacqueline Schooneveldt)

$25,000. Communicable Diseases Branch, Queensland Health. Nasal Carriage Study. (Wendy Munckhof, Graeme Nimmo)

Publications

Journal Articles


Articles Accepted for Publication


Published Abstracts


Gibb R, Bazeley S, Mason R, Tinniswood R, Nimmo G. Evaluation of Hepatitis B surface antigen assays performed on the Abbott Architect and Bayer ADVIA Centaur analysers and detection of HBsAg mutants in a local population. 22\textsuperscript{nd} NRL Workshop on Serology, Adelaide, 2\textsuperscript{nd} to 5\textsuperscript{th} August, 2005.

Lectures and Presentations


Conjoint Meeting of Capricornia Medical Science Association and Australasian College of Tropical Medicine, 10-13 June 2005, Yeppoon, Queensland: “Methicillin-resistant Staphylococcus aureus in the community: an evolving epidemic”.


Huygens F, Stephens AJ, Nimmo GR, Schooneveldt JM, Coombs GW, Price EP, Giff ard PM. Efficient Genotyping of Methicillin Resistant Staphylococcus Aureus Using a Combination of Single Nucleotide Polymorphisms and Binary Markers. European Congress of Clinical Microbiology and Infectious Diseases, Copenhagen


Post Graduate Students

Karen Johnson, Masers, Public Health and Tropical Medicine, in progress

Awards

Dr Jacqueline Harper, Microbiology Department, Princess Alexandra Hospital. bioMérieux ASA 2005 Identifying Resistance Award Awarded for following presentation at Antimicrobials 2005 conference, 24-26 February 2005, Lorne, Victoria


Public Service Relevant to Research

Associate Professor Graeme Nimmo Member of the editorial board of Pathology Chairman of the Australian Group for Antimicrobial Resistance

Vice-President of the Australian Society for Antimicrobials
Member of the National Pathology Accreditation Advisory Council
Member of the Public Health Laboratory Network
Reviewer for the Medical Journal of Australia
Reviewer for European Journal of Clinical Microbiology and Infectious Diseases
Reviewer for Emerging Infectious Diseases
Reviewer for Clinical Microbiology and Infection

Dr Jacqueline Harper
Member of the Australian Society for Microbiology Foundation Committee (until Nov 2005)

Ms Jacqueline Schooneveldt
Member of Australian Group on Antimicrobial Resistance (AGAR)
One of the main focuses for the Queensland Clinical Trials Centre in 2005 was the promotion of its collaboration with the Australasian Kidney Trials Network. This Queensland consortium of kidney disease researchers, including the Queensland Clinical Trials Centre, involves a trans-Tasman collaboration of 30 nephrology units in Australia and New Zealand. In 2005 the researchers, including Elaine Beller, reviewed all 14 trial proposals the unit has received since setting up in September 2004 and gave two exciting new trials the go-ahead for 2006. The Australasian Kidney Trials Network was also the recipient of National Health and Medical Research Council funding of $1.29M over five years, and facilitated the creation of two additional positions within the Queensland Clinical Trials Centre. Other significant 2005 National Health and Medical Research Council funding was awarded to Mark Jones in conjunction with his colleagues at the University of Sydney for their work in stuttering treatment research.

The Centre continues to conduct research into methodological and statistical aspects of clinical trials, as well as coordinating and managing controlled trials of major health importance, and providing expert advice to smaller clinical trials conducted by independent investigators. Close links have continued with many researchers including the Princess Alexandra Cancer Collaborative Group, the Centre of Clinical Research Excellence in cardiovascular and metabolic diseases, and the Clinical Services Evaluation Unit.

Current Research Activities

Clinical Trials

Timing of androgen deprivation in relapsed or non-curable prostate cancer patients. (With G Duchesne, H Gurney, J Denham, A Stapleton - Trans-Tasman Radiation Oncology Group)

Trial comparing chemoradiotherapy versus radiation in the treatment of bladder cancer. (With K Gogna, E Walpole – Princess Alexandra Hospital, G Duchesne, E Nicol, M Berry - Trans-Tasman Radiation Oncology Group)

Randomised study of radiotherapy or chemoradiotherapy to palliate symptoms of advanced oesophageal cancer. (With J Harvey – Princess Alexandra Hospital, and M Penniment - Royal Adelaide Hospital)

Multi-centre study identifying impacts of an assessment and care planning protocol for frail elderly patients in acute care. (With L Gray – University of Queensland, B Nair - John Hunter Hospital, and co-investigators from the Mater Hospital)

Optimising preterm infant outcomes: a randomised controlled trial to evaluate two screening and surveillance methods. (With P Colditz, M Pritchard – Royal Brisbane Women's Hospital, D Tudehope, C Jackson - Mater Hospital)

A randomised controlled trial of the Lidcombe Program for early Stuttering.
Financial Support

Current NHMRC Grants
$383,000, NHMRC project grant. Telehealth version of the Camperdown Program for treatment of stuttering (2005-07)
NHMRC. Oesophageal cancer trial
$65,000, NHMRC. Bladder cancer trial
$400,000, NHMRC. Centre for Clinical Research Excellence (T Marwick)

Other Grants
$50,000, Kidney Health Australia. Australasian Kidney Trials Network
$30,000, Australia and New Zealand Society of Nephrology (ANZSN). Australasian Kidney Trials Network.
$400,000. QCF. PA Cancer collaborative Group (D Gill)

Other Research

Cost-effectiveness and Quality of Life study for the ADVANCE clinical trial. (With P Glassziou – Oxford University)
The prevalence of functional and psychosocial problems in the older hospital population. (With L Gray, I Scott, A Wilson, GI Carpenter)
Statistical consulting for Princess Alexandra Hospital researchers in various fields, including oncology, haematology, hepatology, dietetics, geriatrics, nursing, diabetes & endocrinology, pharmacy, cardiology, emergency medicine, respiratory medicine, intensive care medicine.

Publications

Journal Articles

Post Graduate Students
Christine East, PhD, in progress
Margo Pritchard, PhD, in progress
Leanne Bissett, PhD, in progress
Valerie Smith-Orr, MPhil, in progress
Liu Yi, MPH, completed 2005
Michael Keogh, MPH, completed 2005
Catrian Codd, MPH, in progress

Cardiovascular exercise/diet intervention program for diabetic patients. (With staff from the Centre of Clinical Research Excellence in Cardiovascular and Metabolic Disease)
The contribution of insulin resistance to cardiac dysfunction in obesity. (With staff from the Centre of Clinical Research Excellence in Cardiovascular and Metabolic Disease)
Randomised trial of metformin, exercise and diet in patients with obesity. (With staff from the Centre of Clinical Research Excellence in Cardiovascular and Metabolic Disease)
A phase II study of risk-adapted IV Melphalan in patients with AL amyloidosis. (With P Mollee)

(With staff at Australian Stuttering Research Centre - University of Sydney)
Randomised controlled trial of continuing versus discontinuing statin therapy in patients with sepsis. (With staff from Intensive Care Unit – Princess Alexandra Hospital)
Randomised controlled trial of physiotherapy and corticosteroid injections for lateral epicondylalgia. (With B Vincenzino, M Yelland – University of Queensland)
A randomised clinical trial of the physiotherapy management of acute whiplash associated disorders. (With G Jull – University of Queensland)
The Queensland Liver Transplant Services was involved in several pharmaceutical company sponsored trials during the year related to dosing strategies and new agents to reduce long term nephrotoxicity.

Collaboration continues with colleagues in Clinical Pharmacology at The Princess Alexandra Hospital and the School of Pharmacy at University of Queensland. The focus of this research involves optimising monitoring of critical dose immunosuppressive agents.

**Current Research Activities**

**Clinical Trials**

A long term follow up study to evaluate the safety and efficacy in transplant recipients treated with modified release tacrolimus, FK506E (MR4), based immunosuppression regimen. Chief Investigator: Assoc. Professor S.V.Lynch

A Randomised, Open-label, Comparative Evaluation of Conversion from Calcineurin Inhibitors to Sirolimus, versus Continued Use of Calcineurin Inhibitors in Liver Allograft Recipients on Maintenance Therapy. Chief Investigator: Professor Jonathan Fawcett

“A multicenter, randomised open-label pilot study to explore the benefit of a conversion from twice a day administration of Neoral® to a once a day administration and to identify the C2 ranges to target after conversion in stable liver transplants” Protocol Number: COLO400A2421. Chief Investigator: Associate Professor Stephen Lynch.

**Other Research**

**Current Research Projects Dr. D. Wall**

Evaluation of recipient life style contribution to success in liver transplantation

Analysis of theatre cancellations in cost effectiveness of theatre time

Evaluation of left-handedness in surgeons

Generation of a surgical audit, Diagnostic Related Groups and clinical summary in the ward setting using an original computer programme

Evaluation of colour-blindness in surgeons

Cost effectiveness of laparoscopic appendicectomy compared to open appendicectomy carried out in a prospective control trial at the Princess Alexandra Hospital

Investigation of use of diseased kidneys for transplantation

Investigation of bile duct reconstruction after liver transplantation

Investigation of Mycophenolate Mofetil in Renal Transplantation

Investigation of theatre safety standards

Investigation of ultrasound surveillance of AV fistulae

Investigation of gel diathermy technique for haemostasis in liver surgery

Investigation of laparoscopic incisional hernia repairs
A Randomised, Open-label, Comparative Evaluation of Conversion from Calcineurin Inhibitors to Sirolimus, versus Continued Use of Calcineurin Inhibitors in Liver Allograft Recipients on Maintenance Therapy. (J Fawcett)

A multicenter, randomised open-label pilot study to explore the benefit of a conversion from twice a day administration of Neoral® to study to explore the benefit of a conversion A multicenter, randomised open-label pilot regimen. (S. Lynch)
2000 – Current Section Editor for Transplantation of the ANZ Journal of Surgery.
2001 – Current Member of International Council Asian Transplantation Society.
2003 – Current Member of Credentialing Committee, Auckland District Health Board Credentialing of Intra-abdominal Transplant Service, New Zealand.
2004 – Current Advisor to Novartis Pharmaceutical Basel Switzerland and Australian Chief Investigator “NEWROAD” study.

Dr Darryl Wall
1985 – present Director, Royal Australian College of Surgeons / University of Queensland Postgraduate Anatomy Training Programme
1989 – present Medical Officer, World Transplant Games
1990 - present Director of Royal Australian College of Surgeons EMST Training Course
1990 – present Instructor EMST Training Course
1991 – present Invited member - Emergency Health Services Coordination Advisory Committee
1996 - present Councillor of Australian Medical Association, Queensland Branch
1998 – present Instructor Basic Surgical Skills Course Royal Australian College of Surgeons
1998 – present Reviewer of ANZ Journal of Surgery
1999 – present Board Member General Surgeons Australia
1999 – present Board Member General Surgeons Australia
1999 - present Chairman of the SAFE Hours Committee for Surgeons, AMA
1999 – present Chairman of the Section of General Surgery of the Royal Australasian College of Surgeons
1999 – present Examiner Second Part (Exit) Fellowship Exam Royal Australia
1999 – present Instructor, Definitive Surgery for Trauma Course, royal Melbourne. Hospital, Victoria, Liverpool Hospital
1999 – present Medical Officer, Transplant Australia
1999 – present Reviewer of Injury Journal
1999 – present Reviewer of Medical Journal of Australia
2000 – present Chairman of the Trauma Committee of Queensland
2000 – present Examiner Basic Surgical Training Royal Australian College of Surgeons
2000 – present Examiner Final Year Medicine, University of Queensland Graduate Medical School
2000 - present Instructor, Care of the Critically Ill Surgical Patient Training Course Royal Australian College of Surgeons (CCrISP)
2000 – present Member Public Health Committee AMA Qld
2001 – present Chairman Training Committee General Surgeons Australia
2001 – present Chairman Training Committee General Surgeons Australia
2002 – present Chairman The Surgeons Group Princess Alexandra Hospital
2002 – present President – Princess Alexandra Hospital Society Inc
2003 – present Chairman of the Royal Australian College of Surgeons Road Trauma Advisory Committee
2003 – present Member Public Hospitals Committee AMA Qld
2004 – present Advisor, Policy Issues AMAQ

Professor Jonathan Fawcett
Membership of Professional Societies 2005
The International HepatoPancreatoBiliary Association
The Transplantation Society
The International Liver Transplantation Society
The Asian Surgical Association
The Transplantation Society of Australia and New Zealand
General Surgeons Australia
The Spinal Injuries Unit, along with the Transitional Rehabilitation Program and the Spinal Outreach Team make up the Queensland Spinal Cord Injuries Service. Queensland Spinal Cord Injuries Service has developed a unique continuum for the acute care, rehabilitation and ongoing management of individuals with spinal cord injuries, representing a best practice model in this field. All three components of the Queensland Spinal Cord Injuries Service have active and expanding research programs.

Spinal Injuries Unit

The Spinal Injuries Unit continued to undertake a variety of research projects in 2005. These projects span a spectrum from spinal cord regenerative research, through acute management issues to areas of rehabilitation research.

Current Research Activities

Clinical Trials


A phase II, double-blind, placebo controlled, multicentre study to assess the efficacy and safety of HP184 at 100, 200 and 400mg. Doses administered orally once daily for twenty-four weeks in adult subjects with chronic spinal cord injury (CSCI). Geraghty, T., Douglas, D., Maugham, L., Simmons, J., Eugarde, E., and Le Good, H.
Other Research


Ethics approval granted to commence multidisciplinary research project ‘Professional Boundaries: Staff knowledge, comfort, attitudes and behaviour. Design and evaluation of an education program’ in 2006.

Does Splinting of the hand improve the hand function of people with C6 and C7 quadraplegia? - Multi-site study – Price G.

The effect of an abdominal binder on respiratory and speech function in people who have suffered a spinal cord injury. Wadsworth B.

Financial Support

$75,000. Princess Alexandra Hospital Foundation. The regenerative potential of olfactory glial cells in human spinal cord injury – Phase 1 Trial. (T Geraghty & A Mackay-Sim)

$10,000. Princess Alexandra Hospital Research Foundation. Longitudinal Tracking of anxiety amongst people with spinal cord injury who are approaching community re-entry. A study of two rehabilitation units. (M Kendall & T Geraghty)

$40,000 Pfizer. A 12-week randomized, double-blind, placebo-controlled, parallel-group multicentre study of Pregabalin for the treatment of chronic central neuropathic pain after spinal cord injury. (T Geraghty)

$20,000. Pfizer. An open-label extension to evaluate the safety and efficacy of Pregabalin for the treatment of chronic central neuropathic pain after spinal cord injury. (T Geraghty)

$55,000 Sanofi-Aventis. A Phase II, Double-blind, Placebo controlled, Multicentre study to assess the efficacy and safety of HP184 at 100, 200 and 400mg Doses administered orally once daily for twenty-four weeks in adult subjects with Chronic Spinal Cord Injury (CSCI). (T Geraghty)


Publications

Journal Articles


Lectures and Presentations

Paper Presentations


Lectures

Patricia Fronek - SWSP7082 Program Development and Management for the Human Services, School of Social Work and Human Science, University of Queensland, Masters Program

Post Graduate Students
Ms Patricia Fronek, Doctor of Philosophy, in progress
Ms Beth Baird, Graduate Certificate in Health Mgt, in progress
Ms Brooke Wadsworth, Masters of Philosophy, commenced 2005

Public Service Relevant to Research
Dr Tim Geraghty
Scientific Program Committee, Australasian Faculty of Rehabilitation Medicine, 2003

Spinal Cord Injury and other Neurological Conditions Research and Grants Assessment Committee, NSW Health, 2003 –

Patricia Fronek
Queensland Health’s Panel of External Expert Reviewers (PEERS) to assist Queensland Health Human Research Ethics Committees.
The Spinal Outreach Team supports people with spinal cord injury, their families and service providers throughout Queensland. It is part of the unique continuum of care model of the Queensland Spinal Cord Injuries Service. The team provides consultancy and early intervention services and consists of physiotherapists, occupational therapists, social workers and a clinical nurse. The Spinal Outreach Team aims to enhance access to specialist spinal cord injury services for people living outside Brisbane and to assist in preventing human and financial costs of complications. The team achieves these aims through service provision, education, training, evaluation and research.

Spinal Outreach Team’s core research objectives include: Understanding and addressing the consequences of long term spinal cord injury; Reducing the incidence, severity and life impact of secondary complications experienced by people with spinal cord injury, and; Gaining insight into the role played by significant others in the lives of people with spinal cord injury.

The Spinal Outreach Team’s major research achievement for 2005 is the completion of the second year of data collection in the Long Term Outcomes in spinal cord injury study. This is a longitudinal study involving annual in depth telephone interviews with 270 participants with spinal cord injury. It is planned that data will be collected for five years. The Spinal Outreach Team was also successful in obtaining an Evidence Based Review Grant from the Health Advisory Unit, Queensland Health to review the effectiveness of non pharmacological treatment for neuropathic pain.

**Current Research Activities**

- Outcomes in long duration spinal cord injury: Documentation of multiple integrated trajectories of wellbeing and comparative analysis of outcome measures. [D Amsters, K Pershouse, P Kuipers (CONROD), M Kendall (TRP)]
- Validation of telephone application of the Clinical Outcomes Variables Scale. [D Amsters, K Pershouse, P Kuipers (CONROD), M Kendall (TRP), J Campbell (TRP).]
- Exploring the efficacy of coping mechanisms employed by the partners of people with spinal cord injury. [D Amsters, G Carlson (DSQ), M Foster (GU).]
- Pain after spinal cord injury: Reliability of the Spinal Outreach Team Multidisciplinary Pain Assessment Tool. [J Nitz, C Mak, C Bayliss]
Financial Support
$20,000. CONROD. Outcomes in long duration spinal cord injury: Documentation of multiple integrated trajectories of wellbeing and comparative analysis of outcome measures. (D Amsters)

$3,000. Health Advisory Unit. The effectiveness of non pharmacological treatment for neuropathic pain. (Carey Bayliss)

Publications
Journal Articles

Articles Accepted in 2005 for publication

Lectures and Presentations


Post Graduate Students
Ruth Barker, PhD, in progress
Cathy Mak, Masters of Physiotherapy, completed 2005

Public Service Relevant to Research
Delena Amsters
Reviewer for Disability and Rehabilitation

Kiley Pershouse
Member of the Princess Alexandra Hospital Allied Health Research Committee

Nicola Hunter
Member of the Australian and New Zealand Spinal Cord Society Annual Scientific Meeting Organising Committee
Transitional Rehabilitation Program

The Transitional Rehabilitation Program provides post-primary rehabilitation services for people with spinal cord injuries, who have undergone inpatient rehabilitation in the Queensland Spinal Injuries Unit. Transitional Rehabilitation Program forms an integral part of the Queensland Spinal Cord Injuries Service. Rehabilitation services are provided in the community in client's homes or in the home-like setting of Transitional Rehabilitation Program accommodation. The program is designed to relocate the final weeks of rehabilitation from the hospital setting to the community.

In 2005, highlights included a new collaborative study with the Spinal Injuries Unit to develop and evaluate an intervention aimed at addressing professional boundaries. Another collaborative study with the Spinal Injuries Unit and CONROD was commenced looking at dual diagnosis spinal cord injury and traumatic brain injury.

Current Research Activities

Other Research

- Longitudinal tracking of anxiety among people with spinal cord injury who are approaching community re-entry
- Predicting community mobility outcome from hospital-based assessments: Is the COVS a useful predictor?
- Social support following spinal cord injury: A qualitative examination of friendships
- Long term effectiveness of training on staff knowledge, comfort and attitudes towards sexuality in a spinal cord injury rehabilitation unit: A follow-up study
- Professional boundaries: Development and evaluation of an intervention to address staff knowledge, comfort, attitudes and behaviour
- Dual diagnosis traumatic brain injury and spinal cord injury: A study investigating demographic factors and outcomes
Financial Support
$21,000. Princess Alexandra Hospital Foundation. Longitudinal tracking of anxiety among individuals with spinal cord injury approaching community re-entry. (M Kendall)
0.5 FTE Medical Officer. CONROD. Dual diagnosis: traumatic brain injury and spinal cord injury. (M Tadros)

Publications
Journal Articles

Lectures and Presentations
Melissa Kendall

Post Graduate Students
Melissa Kendall, Doctor of Philosophy, in progress

Public Service Relevant to Research
Melissa Kendall
Member, Princess Alexandra Hospital Allied Health Research Committee
Reviewer, Disability and Rehabilitation
Joined National Ethics Approval Form Review Panel
The Radiation Oncology Unit at the Princess Alexandra Hospital provided services to an increased number of patients. In 2005 the unit treated 1147 patients with cancer (up from 994 in 2004) and of these 113 (9.9%) consented to be part of clinical trials. A third radiation therapy shift was established in April, with appropriate human resources, to provide services to the patients accessing the oncology unit. An anticipated increase in trial activity has not resulted in line with workload increases mainly due to clinical commitments but patients participating in clinical trials continuous to be high. Plans are currently underway to build an additional bunker for a third linear accelerator at Princess Alexandra Hospital which will further assist clinical services and research.

Adam Stoneley, Clinical Trial Co-ordinator for many years, was appointed as Research Manager and will supervise trial co-ordination across all three oncology disciplines. A number of new trials were approved by the Princess Alexandra Hospital Human Research Ethics Committee for commencement. The post-operative skin trial has received a multi-state cancer grant and is both financially secure and accruing slowly. The melanoma trial TROG 02.01 continues to be one of the most successful radiation trials in the country with an average of eight patients being recruited monthly. Forty-five percent are recruited from the Princess Alexandra Hospital.

One of the key decisions during the year was the approval for a State-wide oncology information system. This will initially be rolled out in radiation oncology within the Princess Alexandra Hospital and Mater campuses. Implementation of the system across the Northern and Central Areas will follow. This information system is anticipated to be result in benefits to clinical services and research by providing outcome data on all oncology patients within Queensland Health facilities.

The Princess Alexandra Hospital has established strong links with the Queensland Cancer Control and Analysis Team which is reviewing outcomes in major cancers across Queensland. It is expected that with the investment in additional human resources including the establishment of a radiation oncology fellow position that translational research will increase under the auspices of the Princess Alexandra Hospital Cancer Collaborative Group.
Research

Inter Group Studies 2005

TROG 99.03 A randomised trial of involved field radiotherapy versus involved field radiotherapy plus chemotherapy for Stage I – II low grade follicular lymphoma.

TROG 99.04 A prospective non-randomised study of chemotherapy and radiotherapy for osteolymphoma

TROG 99.05 Tumour volume as an independent prognostic factor in patients with non-small cell lung cancer.

TROG 01.04 A randomised trial of preoperative radiotherapy for stage T3 adenocarcinoma of rectum

TROG 02.01 A randomised clinical trial of surgery versus surgery plus adjuvant radiotherapy for regional control in patients with completely resected macroscopic nodal metastatic melanoma

TROG 03.01 A randomised phase III study in advanced oesophageal cancer to compare quality of life and palliation of dysphagia in patients treated with radiotherapy versus chemo-radiotherapy.

TROG 03.02 A feasibility study to evaluate combined chemoradiotherapy as an adjunct to surgery for gastric cancer.

TROG 03.04 A randomised trial investigating the effect on survival and prostate specific antigen control of different durations of adjuvant androgen deprivation in association with definitive radiation treatment for localised carcinoma of the prostate (RADAR).

TROG 03.05 A phase III study of regional RT in early breast cancer (NCIC MA20).

TROG 03.06 A collaborative randomised phase III trial: The timing of intervention with androgen deprivation in prostate cancer patients with a rising prostate specific antigen (TOAD)

TROG 03.07 A randomised phase II trial comparing 2 high-dose palliative chemoradiotherapy regimens in patients with locally advanced non-small cell lung cancer.

TROG 04.01 A paired double blind randomised comparison of Cavilon Durable Barrier Cream to 10% Glycerine (“Sorbolene”) Cream in the prophylactic management of post-mastectomy irradiation skin care

TROG 05.01 Post-operative concurrent chemo-radiotherapy versus post-operative radiotherapy in high risk cutaneous squamous cell carcinoma of the head and neck (POST)

A phase I study to evaluate ZD 1839 (Iressa) and concurrent chemo radiation in patients with locally advanced non-small cell lung cancer. (Critical Study) 


Hypofractionated radiotherapy for the palliation of patients with advanced head and neck cancer who are unsuitable for an attempt at curative treatment
Princess Alexandra Hospital Studies

A randomised phase II study of preoperative chemotherapy versus preoperative chemoradiation for resectable carcinoma of the oesophagus and gastro-oesophageal junction.

A phase II study of weekly oxaliplatin with continuous infusion fluorouracil and concurrent radiation for the treatment of localised oesophageal carcinoma

Financial Support

Grants
$125,820.00 received from the Queensland Cancer Fund as part of the QCOG hospital based data manager scheme

$2,800. NHMRC. A randomised phase III study in advanced oesophageal cancer to compare quality of life and palliation of dysphagia in patients treated with radiotherapy versus chemo-radiotherapy. (Jennifer Harvey)

$4,547. NHMRC. A randomised trial investigating the effect on survival and PSA control of different durations of adjuvant androgen deprivation in association with definitive radiation treatment for localised carcinoma of the prostate (RADAR). (Margot Lehman)

$4,000. Astra Zeneva. A phase I study to evaluate ZD 1839 (Iressa) and concurrent chemoradiation in patients with locally advanced non-small cell lung cancer. (Critical Study). (Bryan Burmeister)

Other Support

$14,000. Multistate Cancer Council. TROG 03.05 A phase III study of regional RT in early breast cancer (NCIC MA20). (Jennifer Harvey)

$1,156. Pharmacyclics. PCYC-0211 A phase II study of weekly oxaliplatin with continuous infusion fluoroouracil and gastro-oesophageal junction. [35x27]4

$106,500. Multistate cancer council. TROG 03.06 A collaborative randomised phase III trial: The timing of intervention with androgen deprivation in prostate cancer patients with a rising PSA (TOAD). (Margot Lehman)

Publications

Journal Articles


Published Abstracts


Lectures and Presentations

Associate Professor Bryan Burmeister


Dr Sandro Porceddu


Dr Jennifer Harvey (invited)


Public Service Relevant to Research

Associate Professor Bryan Burmeister
Chairman, Scientific Committee of Trans-Tasman Radiation Oncology Group
Board Member, Australasian Gastro-intestinal Trials Group
Deputy Chairman, Queensland Co-operative Oncology Group
Member, Medical and Scientific Committee of Queensland Cancer Fund
Radiation Oncology Representative on Melanoma Guidelines Visiting Party
Reviewer, Anti-Cancer council of Victoria, New South Wales Cancer Council and National Health and Medical Research Council for competitive research grants.

Dr Jennifer Harvey
Member, Queensland Cooperative Oncology Group Management Committee.

Dr Margot Lehman
Member, Service Planning and Development Committee of the Faculty of Radiation Oncology
Member, Genito-urinary Interest Group of the Faculty of Radiation Oncology
Member, Breast Cancer Group of Cochrane Collaboration.

Dr Sandro Porceddu
Member, Scientific Committee of the Australian and New Zealand Head and Neck Society
Member, Continuing Professional Development Committee ANZ College of Radiologists (FRO)
Reviewer, Journal of Clinical Oncology, Lancet Oncology, Head and Neck, Australasian Radiology
The Mater Radiation Oncology operates as part of the Southern Zone Radiation Oncology Service, Princess Alexandra Hospital. Currently the service treats 1500 courses per year and the department is equipped with 4 linear accelerators which treat 150-160 patients per day. The referral base is broad and patients attend not only from the Mater campus but also from Princess Alexandra Hospital, Toowoomba and Darling Downs, Gold Coast and Rockhampton. Off site clinics are run in Toowoomba, Ipswich and Charleville. It is the sole provider of radiation oncology services for gynaecology oncology, paediatric oncology and orbital brachytherapy.

A close collaboration has been developed with oncologists on the Mater site and Multidisciplinary clinics are held in breast, gynaecology, paediatrics, skin, lung, gastrointestinal and genitourinary malignancy. There has been a strong emphasis on multidisciplinary management of patients with cancer, clinical research and teaching.

There is active involvement in a broad range of trials predominately under the auspices of the Trans Tasman Radiation Oncology Group. In the past 12 months the Mater Centre has participated in 18 clinical trials. The former part time position in the Clinical Trials team is now full time – funded jointly by the Queensland Cancer Fund and the Private Practise fund. The trial activity on the campus has increased in the past 12 months from 24 new patients in 2004 to 59 in 2005.

A number of new services have also been introduced. Dr Holt has commenced a Rapid Response Palliative Radiation Service which aims to treat patients with severe symptoms within a few days. The department was also successful in receiving Commonwealth Funding to develop an Oncology Telemedicine Program for patients living in rural areas on the Darling Downs.

Current Research Activities

Clinical Trials

TROG 99.03: A randomised trial of involved field radiotherapy versus involved field radiotherapy plus chemotherapy for Stage I – II low grade follicular lymphoma.

TROG 99.05: Tumour volume as an independent prognostic factor in patients with non-small cell lung cancer.

TROG 99.0: A prospective non-randomised study of chemotherapy and radiotherapy for Osteolymphoma

TROG 01.04: A randomised trial of preoperative radiotherapy for stage T3 adenocarcinoma of rectum

TROG 02.01: A randomised clinical trial of surgery versus surgery plus adjuvant radiotherapy for regional control in patients with completely resected macroscopic nodal metastatic melanoma

TROG 02.02: A phase III study of Cisplatin, Tirapazamine and radiation vs. Cisplatin and radiation in locally advanced head and neck cancer

TROG 02.03: A randomised phase III study comparing radical chemo/radiotherapy versus radiotherapy alone in the definitive management of localised muscle invasive TCC of the urinary bladder

Staff

Associate Professor Michael Poulsen, Acting Director
Associate Professor Jonathan Ramsay
Dr Kumar Gogna
Dr Guy Bryant
Dr Judy Cox
Dr Tanya Holt
Dr Andrew Pullar
Dr Tiffany Daly
Simon McQuitty, Director - Radiation Therapy Services
Dr Kym Nitschke, Principal Physicist
Pauline Rose, NUM
Kacy Baumann, Clinical Trials Coordinator
Adrienne See, Clinical Trials Coordinator
Radiation Therapists
Clinical Physicists
Radiation Oncology Nurses
Financial Support

Grants
$39,960 received from the Queensland Cancer Fund as a grant in recognition of clinical trial activity.

$36,600 received from Sanofi-Synthelabo: Phase III randomised trial of concomitant radiation, Cisplatin, and Tirapazamine versus concomitant radiation and Cisplatin in patients with advanced head and neck cancer.

$61,000 NHMRC Project Grant (awarded 2003 for 3 year for randomised phase III trial on bladder cancer).

TROG 03.01: A randomised phase III study in advanced oesophageal cancer to compare quality of life and palliation of dysphagia in patients treated with radiotherapy versus chemo-radiotherapy.

TROG 03.04: A randomised trial investigating the effect on survival and PSA control of different durations of adjuvant androgen deprivation in association with definitive radiation treatment for localised carcinoma of the prostate (RADAR).

TROG 03.05: A phase III study of regional RT in early breast cancer (NCIC MA20).

TROG 03.06: A phase III study of the Timing of Intervention with Androgen Deprivation in prostate cancer patients with a rising PSA (TOAD).

TROG 03.07: A randomised phase II trial comparing 2 high-dose palliative chemoradiotherapy regimens in patients with locally advanced non-small cell lung cancer.

TROG 03.08: A Phase III international randomised trial of Single vs. Multiple Fractions for Re-Irradiation of Painful Bone Metastases

TROG 04.01: A paired double blind randomised comparison of Cavilon Durable Barrier Cream (CDBC) to 10% Glycerine (Sorbolene) cream in the prophylactic management of post-mastectomy irradiation skin care (Cavilon)

Merkel Cell: A phase I study of synchronous weekly carboplatin and radiation in Merkel Cell Carcinoma of the skin – a collaborative study between Brisbane, Melbourne and Newcastle departments.

Palliative H&N: Hypofractionated Radiotherapy for the Palliation of Patients with Advanced Head and neck Cancer who are Unsuitable for an Attempt at Curative Treatment.

Mucositis: Tolerability and Efficacy of Medihoney as treatment for radiation induced mucositis in Head and Neck cancer patients
Publications

Journal Articles


Articles Accepted for Publication

Bova R, Goh R, Poulsen MG, Coman W. Laryngopharyngectomy for squamous cell carcinoma of the head and neck. Accepted for publication in Laryngoscope. 2005

Lectures and Presentations
Associate Professor Michael Poulsen

Role of radiotherapy in Breast Cancer. Breast Cancer Day St Andrews Hospital Toowoomba. 3/9/05


Awards
Alan Glyde was awarded the Robert Bourne Travelling Grant to study IMRT in the United Kingdom.

Public Service Relevant to Research
Associate Professor Michael Poulsen
Treasurer of Trans-Tasman Radiation Oncology Group
Examiner for the Royal Australasian and New Zealand College of Radiologists
Education Officer for the Royal Australasian and New Zealand College of Radiologists
Chairman of the Quality Improvement Committee of Royal Australasian and New Zealand College of Radiologists
Executive member for the Australian and New Zealand Head and Neck Society (2001-2003)
Member of the Queensland Co-operative Oncology Group 2003

Assistant Editor of Australasian Radiology
Chair of QA technical committee for Mater Centre

Associate Professor Jonathan Ramsay
Member of the National Breast Advisory Committee

Member of the Scientific Committee for the Queensland Cancer Fund

Medical Advisor for Peplin Biotech

Dr Kumar Gogna
Member of Council for Royal Australasian and New Zealand College of Radiologists.

Organiser for Combined Urological Group

Chairman for Clinical Trials Group at the Mater.

Trial Chairman for TROG 02.03 “A randomised phase III study comparing radical chemo/ radiotherapy versus radiotherapy alone in the definitive management of localised muscle invasive TCC of the urinary bladder”

Dr G Bryant
Member of the Australian Lymphoma Group

Dr Tanya Holt
Supervisor of registrar training

Examiner in Physics for the Royal Australasian and New Zealand College of Radiologists

Pauline Rose CNC
Committee member of Radiation Oncology Skill Mix and Workforce Advisory Project: Queensland Health.

Collaboration for Cancer Outcomes Research and Evaluation (CCORE) (National Group): Advisory Committee member.

Clinical Trials committee member: Radiation Oncology Services, Mater Centre (also Roxanne Nicholas, RN).

Simon McQuitty
Member of the Radiography work-force steering committee

Dr Kym Nitschke
Member of the Queensland Health Radiation Oncology Skills Mix & Work Analysis Advisory Committee

Member of Queensland Health Working Party on Training, Education and Accreditation Program (TEAP) for Radiation Oncology Physicists

Examiner for ACPSEM Radiation Oncology Medical Physics Accreditation Panel
The Department of Respiratory and Sleep Medicine is the tertiary referral centre for the Queensland Health Southern zone and for Northern New South Wales. All adult respiratory medicine services are provided with the exception of lung and heart lung transplantation and cystic fibrosis services.

The Department has a busy clinical service, an active research program and conducts and participates in undergraduate and postgraduate teaching activities under the direction of the University of Queensland Southern Clinical School and Griffith University.

Current Research Activities

The main areas of research are in the areas of sleep medicine, mainly sleep disordered breathing, airway disease mainly asthma, chronic obstructive pulmonary disease, lung cancer, respiratory physiology and respiratory infection.

- **Lung Cancer**: A phase I trial of radiation dose escalation using accelerated concomitant boost radiotherapy concurrently with weekly carboplatin/paclitaxel in patients with good performance status and Stage IIIA/B non-small cell lung cancer.


- **Lung Cancer**: Prospective Randomised Clinical Phase III Trial of (alternating IV and oral) Vinorelbine plus Cisplatin versus Docetaxel plus Cisplatin in first line chemotherapy of locally advanced or metastatic non-small cell lung cancer patients.

- **Swallow dysfunction in chronic obstructive pulmonary disease**: Prevalence and effects of speech pathology intervention. Collaboration with Speech Pathology.

- **Exubera**: Exubera® (Insulin dry powder pulmonary inhaler) vs. Avandia® as add-on therapy vs. Exubera in patients with Type 2 diabetes.

Staff

- Associate Professor John Armstrong
- Associate Professor Charles Mitchell
- Dr Craig Hukins
- Dr Luke Garske
- Dr Khoa Tran
- Dr Michelle Murphy
- Mr Brenton Eckert
- Ms Judy Ross

Research Assistant

Margaret Dauth

Associate Professor John Armstrong and Team

Snoring analysis: Snoring analysis during diagnostic sleep studies in attempt to develop portable, minimally invasive, auto-analysing diagnostic techniques for sleep disordered breathing. (Collaboration with Department of Engineering, University of Queensland).

Obesity and right heart function: Assessment of changes in sleep disordered breathing and right heart function in subjects managed by the Weight Management Clinic. (Collaboration with Departments of Diabetes & Endocrinology, Cardiology and Hypertension).

Mechanism of sleep disordered breathing in patients with end-stage renal failure on haemodialysis.

Randomised controlled trial of Nasal sesame oil (Nozoil) in the management of nasal symptoms associated with continuous positive airway pressure for obstructive sleep apnoea.

Lung infection: The Australian Community-Acquired Pneumonia Study: Prospective multicentre study to determine aetiology of community acquired pneumonia in Australia, and determine usefulness of pneumonia severity indexes in guiding therapy. (Collaboration with Department of Infectious Diseases, Princess Alexandra Hospital and Austin and Repatriation Medical Centre, Melbourne).

Bleomycin lung toxicity and MUC-1: to determine the usefulness of the immunologic tumour marker MUC-1 in predicting the development of bleomycing lung toxicity and lung function changes (Collaboration with Department of Immunology, Haematology and Oncology).

ADDUCE Study – Safety of GC811007 in Subjects with Type II Diabetes and Heart Failure (in conjunction with Cardiology).

Pleureroscopy: Effect of pleuroscopic drainage on exercise and lung physiology in patients with malignant pleural effusion; Effect of pleuroscopic pleurodesis on exercise and cardiorespiratory physiology in patients with malignant pleural effusion. (Collaboration with Prof Marwick and Cardiology); Effect of pleuroscopic pleurodesis on chest wall and diaphragm displacement and function. (Collaboration with Dr Bill Finucaine, Sir Charles Gairdner Hospital, Dr Stephen Morrison, Royal Brisbane Hospital, Dr John Coucher, Radiology);

Pulmonary thromboembolism: CT pulmonary angiogram ordering by the Princess Alexandra Hospital Emergency Department. (Collaboration with Health Services Evaluation Unit).

Chronic cough: Clinical characteristics and diagnostic/management outcomes: collaboration with Professor Ann Chang (Respiratory Medicine, Royal Children's Hospital) and Professor Peter Gibson (Respiratory Medicine, John Hunter Hospital, Newcastle).

Pulmonary hypertension and echocardiographic assessment of the right ventricle: PhD project Nghi Mai under supervision of Professor Tom Marwick (Cardiology) and Luke Garske.


Dr Craig Hukins
Conference Chair, Australasian Sleep Association (ASA)
Member, Conference Organising Committee, Sleep 2007 Congress
Member, Sleep Curriculum Development Committee, Australasian Sleep Association / Thoracic Society of Australia and New Zealand

Dr Luke Garske
Member, Curriculum and Training Program Working Group, National Prescribing Service
Member, Physician Educator Program Planning Group, Royal Australasian College of Physicians.

Associate Professor Charles Mitchell
Chair, Anti-Smoking Committee, Queensland Cancer Fund
Chair, Queensland Health Medication Safety Implementation Group
Member, Clinical Examinations Committee, Australian Medical Council
Member, Queensland Health Drug Advisory Committee
Member, Committee of Management of Australian and New Zealand Association of Medical Education
Member, Curriculum and Training Program Working Group, National Prescribing Service
Member, Physician Educator Program Planning Group, Royal Australasian College of Physicians.

Dr Craig Hukins
Conference Chair, Australasian Sleep Association (ASA)
Member, Conference Organising Committee, Sleep 2007 Congress
Member, Sleep Curriculum Development Committee, Australasian Sleep Association / Thoracic Society of Australia and New Zealand

Dr Luke Garske
Member, Curriculum and Training Program Working Group, National Prescribing Service
Member, Physician Educator Program Planning Group, Royal Australasian College of Physicians.

Ms Skye McLennan
Regional Board Representative, ANZSRS

Ms Judy Ross
Chair, Queensland Respiratory Nursing Interest Group

Public Service Relevant to Research
Associate Professor John Armstrong
Member, Sleep Laboratory Accreditation Panel
Thoracic Society of Australia and New Zealand and Australasian Sleep Association
The Rheumatology Department continues to conduct research into the treatment of early rheumatoid arthritis (first presentation) as well as the vascular effects of chronic inflammatory arthritis. Studies regarding effects of various new-wave treatments continue.

**Current Research Activities**

**Clinical Trials**

**Early Arthritis Clinic**

Prospective multi centre randomised, double blind, active comparator controlled parallel group study comparing the fully human monoclonal anti-TNF\(\alpha\) antibody D2E7 given every second week with Methotrexate given weekly and the combination of D2E7 and Methotrexate administered over 2 years in patients with early rheumatoid arthritis.

Health economic evaluation in conjunction with clinical trial DE013, a prospective multi centre randomised, double blind, active comparator controlled, parallel groups trial comparing the fully human monoclonal anti-TNF\(\alpha\) antibody D2E7 given every second week with Methotrexate given weekly and the combination of D2E7 and Methotrexate administered over 2 years in patients with early rheumatoid arthritis.

A Phase III multi-centre, randomised, double-blind, placebo-controlled study to evaluate the efficacy and safety of BMS-188667 in combination therapy with Methotrexate vs Methotrexate alone in subjects with acute rheumatoid arthritis and inadequate response to Methotrexate.

An open-label multi-centre study to assess the safety and efficacy of the fully human anti-TNF-\(\alpha\) monoclonal antibody adalimumab (D2E7) when added to inadequate standard anti-rheumatic therapy in patients with active rheumatoid arthritis.

A double-blind, parallel, placebo-controlled, randomised study to evaluate the efficacy and safety of three dose levels of oral TMI-005 in subjects with active rheumatoid arthritis on a background of methotrexate.

Phase III Trial: A randomised, double blind, double dummy, parallel group study of the safety and efficacy of MRA monotherapy versus methotrexate (MTX) monotherapy in patients with active rheumatoid arthritis.

A randomised, placebo controlled, parallel group single dose study of SB-681323 in patients with active RA to investigate the CRP dose response relationship.
Financial Support
$3,800 Abbott. D2E7 in rheumatoid arthritis. (P Vecchio)
$9,200. Bristol-Meyers Squibb. BMS 188667 vs Methotrexate in rheumatoid arthritis. (P Vecchio)
$121,000. Wyeth. Oral TMI vs Methotrexate in rheumatoid arthritis. (P Vecchio)

Publications

Journal Articles
2005 marked the 40th anniversary of the foundation of the Social Work Department at the Princess Alexandra Hospital. This significant milestone was recognised through a seminar entitled Past Achievements and Future Challenges. The day long programme brought together a talented mix of academics, researchers, teachers and practitioners each of whom was invited to present a paper which reflected their views about the future of the profession based on their past and present experiences. A number of current staff presented papers.

A second highlight of 2005 was the hosting of the repeat Jenny Morrison Memorial Lecture in the Russell Strong Auditorium to celebrate Social Work Day. Professor Robert Bland a former lecturer at The University of Queensland and employee in mental health at this hospital delivered a lecture entitled Understanding what’s Important about Social Work. Professor Bland now heads the School of Social Work University of Tasmania.

Current Research Activities

Other Research

Ethics approval granted to commence multidisciplinary research project ‘Professional boundaries: staff knowledge, comfort, attitudes and behaviour. Design and evaluation of an education program’ in 2006.
Financial Support
$3,000. Queensland Health. EBP Project – How well do Family conferences in key clinical areas meet the needs of families? (Sue Cumming)

Publications

Journal Articles


Book Chapters
Nicol D and Martin C – ‘The Renal Transplant Patient’ In Book “Supportive Care of the Urology Patient” (editors Richard W Norman and David C Currow), 2005

Lectures and Presentations
Fronek, P - SWSP7082 Program Development and Management for the Human Services, School of Social Work and Human Science, The University of Queensland, Masters Program.


Cumming S, Fitzpatrick E, McKain S, Martin C, Tonge A, A clinical record can be no better than the practice it documents, paper presentation at ARCHI Seminar 'Clinical Decisions, Ethical Challenges' 21-22 April 2005, Cairns Convention Centre.

Kooymans B, Tonge A invited speakers to present on Crisis Intervention and Outcome Directed Practice, 2nd Year Social Work Students, The University of Queensland, May 2005.

Searles S, Innovative patient education-social work leading the way, invited speaker to present a paper at the Social Work Department's 40th Anniversary Seminar, 30 September 2005, Princess Alexandra Hospital.


Cahill S, Martin C, Great Expectations: the guts and bolts of it, invited speaker to present a paper at the Social Work Department's 40th Anniversary Seminar, 30 September 2005, Princess Alexandra Hospital.

Lougher S (social work student) Social Work Role in BIRU, invited to present poster at the Social Work Department's 40th Anniversary Seminar, 30 September 2005, Princess Alexandra Hospital.


Post Graduate Students
Patricia Fronke, Doctor of Philosophy, in progress
Jane Whelan, Master of Social Work, in progress
Angela Tonge, Graduate Certificate in Health Studies (Loss and Grief), completed 2005

Public Service Relevant to Research
Patricia Fronke
Appointment to Queensland Health’s Panel of External Expert Reviewers (PEERS) to assist Queensland Health Human Research Ethics Committees.

Sue Cumming
President Queensland Branch Australian Association of Social Workers

research - key to health
2005 has been a period of research growth. Research activities continued to build on the two established main areas of research interest in acquired brain injury (in particular stroke, brain injury, neurosurgery and Parkinson’s Disease), and in head and neck cancer.

This year has seen continued research partnerships with other clinical units in Princess Alexandra Hospital such as the Respiratory Unit and Radiation Oncology, Speech Pathology Departments in other districts, states and internationally. New areas of clinical interest have included Chronic Obstructive Pulmonary Disease and an increased focus on clinical trials in the Ear Nose and Throat field. It has been pleasing that the research focus has begun to address issues relating to efficacy of different models of service delivery and consumer involvement. There has been a continued increase in the percentage of research projects initiated at Princess Alexandra Hospital, dedicated research assistants, clinician involvement in research as well as in the number of post graduate students supervised. Resulting associated conference presentations and publications have helped to build on an existing national and international profile.

These developments have been led and coordinated by the conjoint research fellow Dr Petrea Cornwell with support from the senior staff of the speech pathology department. Petrea has continued to foster the existing strong links and extensive collaborations with the University of Queensland’s Division of Speech Pathology in the School of Health and Rehabilitation Sciences and the affiliated on-site Motor Speech Research Unit. Concurrently stronger links have been forged between the conjoint research fellows in Occupational Therapy and Physiotherapy, which has resulted in the ongoing development of multidisciplinary research projects. The speech pathology department continues to benefit from the contributions to the research agenda by our advanced clinicians. The Speech Pathology Department staff also play a key role in allied health research planning and coordination for the Division of Clinical Support Services with Dr Jenny Lethlean filling the role of Chair of the Princess Alexandra Hospital Allied Health Research Committee.
Current Research Activities

Clinical Trials
Evaluation of heat and moisture systems (HME) as a treatment option in pulmonary rehabilitation after total laryngectomy or pharyngectomy. K. Hancock, L. Cahill, M. Parkin & W. Coman.

Feasibility and long-term efficacy study of a new non-indwelling voice prosthesis (Provox NID) and its accessories for tracheoesophageal voice restoration in laryngectomized patients. K. Hancock, & B. Houghton.

Other Research

Physiological investigation of laryngeal dysfunction following carotid endarterectomy. B. Murdoch, J. Lethlean, A. Reilly, L. Cahill, T. McGahan, & H. Gibbs.


High level language impairment following subarachnoid haemorrhage and surgical treatment of aneurysms. A. Thomas, B. Murdoch, L. Cahill, A. Nowitzke, J. Matthew, & L. La Pointe.


High level language impairments following primary cerebellar ischaemic lesions. B. Whelan, B. Murdoch, L. Cahill & G. Hall.


Formatting written health information for people with aphasia. T. Rose & L. Worrall (sponsor – W. McCallum).


Language recovery and lexical semantic processing in bilingual aphasia. S. Siyambalapitiya, H. Chenery & D. Copland (sponsor – W. McCallum)

Financial Support
$1,300. Garnett Passe/Rodney Williams Memorial Foundation. QOL, cost effectiveness, survival and functional outcomes following differential management of laryngeal cancer. (Prof W. Coman)

$10,000. CONROD. Rehabilitation of articulatory dysfunction in adults following TBI using 3Dimensional graphic modelling of the vocal tract (B. Murdoch)

$1,700. ATOS Medical. Evaluation of heat and moisture systems as a treatment option in pulmonary rehabilitation after total laryngectomy or pharyngectomy. (K. Hancock)


$1,000. The University of Queensland. Towards an understanding of the motor speech disorders: A parametric acoustic approach to classifying the dysarthrias. (P. Cornwell)

Publications

Journal Articles


Articles Accepted for Publication


Lectures and Presentations


Riddle B. Care of the head and neck cancer patient – The speech pathologist’s role. Princess Alexandra Hospital presents Head and Neck Cancer: A multidisciplinary perspective. Brisbane, November 4 2005. (invited)

McCallum W & Poulton M. Balancing the needs of the individual, the team and the department. 6th National Allied Health Conference, Melbourne, February 23-25 2005.

Cornwell P. The ICF as a tool for the exploration of therapy goals in the rehabilitation setting. Princess Alexandra Hospital Clinical Symposium, Brisbane, August 11-12 2005.


MacBean N, Ward E, Cahill L, Murdoch B.E., Solley M., Hukins C., & Geraghty T. Enhancing communication for the long-term ventilator dependent individual following cervical spinal cord injury. ANZCoS, Gold Coast, 8-10 September 2005.

Public Service Relevant to Research

Petrea Cornwell
Reviewer for the Asia Pacific Journal (The Asia Pacific Journal of Speech, Language and Hearing)
Reviewer for the Speech Pathology Australia Research Grants 2005
Chair of the organising committee for the Rehabilitation module at the 2005 Princess Alexandra Hospital Research Symposium

Aimee Turner
Reviewer for the Speech Pathology Australia Research Grants 2005

Jenny Lethlean
Member of Queensland Health’s Panel of External Expert Reviewers (PEERs).
Reviewer for the Clinical Support Services, PA Hospital Allied Health Research Scholarships
Chair of the Princess Alexandra Hospital Allied Health Research Committee

Wendy McCallum
Referee for Australia Aphasia Association’s applications for funding grants

Post Graduate Students

R Wenke, PhD (commenced)
N. MacBean, PhD (in progress)
A. Thomas, PhD (in progress)
M. Kuruvilla, PhD (in progress)
A. Hill, PhD (in progress)
T. Rose, PhD (in progress)
S. Siyambalapitya, PhD (in progress)
Y. Chen, PhD (in progress)
H. McGhee, Honours (completed)
J. Seah, Honours (completed)
A. Rohde, Master of Speech Pathology Studies (completed)
K. Townley-O’Neill, Master of Speech Pathology Studies (completed)
K Trendall, Master of Speech Pathology Studies (completed)
The Metastasis Research Laboratory continued its program of research into the mechanisms of CD44-mediated metastasis and targets for therapy in 2005. The Princess Alexandra Hospital Tumour Tissue Bank is also administered within this group and has expanded its activities during 2005 in support of oncology researchers on campus.

**Current Research Activities**

Mechanisms of CD44 splice-variant mediated tumour metastasis. This program is currently exploring a range of potential ligands for CD44 splice variants in tumours that trigger signalling through several known pathways in mediation of cellular behaviour that is compatible with metastasis. Of primary interest is the role of v3 and v6 exons and modulation by hyaluronic acid.

CD44v3 and v6 peptides as inhibitors of metastasis. CD44 v3 and v6 domains are important for CD44-mediated tumour metastasis. CD44v6 peptide inhibits cell proliferation of some tumour cells and metastatic tumour growth in animal models. A range of different tumours have been tested in this way during 2005.

Stem Cells in Gastric Cancer.

**Publications**

**Journal Articles**


**Lectures and Presentations**

Professor David Gotley


Minimally invasive oesophagectomy, Royal Australasian College of Surgery, Annual Scientific Congress.
The Therapeutics Research Unit has had an active research year. During the year work continued in the group’s areas of interest, namely drug design, drug delivery, pharmacokinetics, quality use of medicines and natural products. The group was awarded two National Health and Medical Research Council Grants - a renewal of Senior Principal Research Fello for Professor Roberts and also a grant for liver pharmacokinetics. The group achieved the following:

1) funding for the year totalled $1,382,388;
2) twenty one papers were published;
3) invited speakers at ten conferences including two international.

In addition Professor Roberts served as Chair of a World Health Organisation Committee, was an international conference vice chair and presented a three day course to Therapeutic Goods Administration (Canberra) amongst other activities.

In February 2005 the unit purchased a liquid chromatography tandem mass spectrometer system which will allow a significant acceleration in the rate of purification and characterisation of novel drugs. In addition, the unit is extending its collaborative projects with other groups by using this instrument for research into cancer, cardiovascular disease, hypertension, diabetes and endocrinology, and drug monitoring of intensive care patients with burns and/or sepsis.

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Current Research Activities

Targeted drug delivery by topical application.

Effect of liver pathophysiology on hepatic pharmacokinetics.

New Drugs to prevent heart attacks and stroke: syntheses, identification, characterisation, physiochemical properties determinations and pharmacological activities evaluation.

Dialysis-assisted Fibre-Optic Spectroscopy for monitoring drug concentration in situ

Pharmacokinetics and liver vascularity.

Pharmacokinetics in the pancreas.

Pharmacokinetics in burns and sepsis.
Clinical Trials
Management of burn injury: fluid dynamics and antibiotic pharmacokinetics

Other Research
Effectiveness and Cost Effectiveness of Dose Administration Aids Project
Evaluation of the Quality Care Pharmacy Program

Patents
Anissimov YG, Zvyagin AV, Verhaege A, Roberts MS, "Dialysis-assisted optical fibre spectroscopy probe", PCT application No. 2004903655; filed 5th July 2004.

Financial Support
Current NHMRC Grants
$112,500. NHMRC (#351519) Management of burn injury: fluid dynamics and antibiotic pharmacokinetics. (with S Cross, B Vengatesh and J Lipman)
$145,000. (2003-2005) NHMRC (#252871) Effect of liver pathophysiology on hepatic pharmacokinetics (with D Crawford)

Other Grants
$343,567 (2 years from 28-11-05) Pfizer Global Research & Development. Evaluation of Topical Delivery of Therapeutic Compounds by Ultrasound and Dermal Abrasion. (with S Cross and J Grice)
$263,236. (2005) The University of Queensland Major Equipment and Infrastructure Grant. Estimation of drugs, peptides and metabolites using HPLC-Mass-spectrometry –microdialysis. (Convener and CIA with members of my TRU group, Centre for Immunology & Cancer Research, Princess Alexandra Hospital & University of Queensland)

Princess Alexandra Hospital Intensive Care Unit & Royal Brisbane and Women's Hospital Burns, Trauma and Critical Care Research Centre, Royal Brisbane and Women's Hospital, University of Queensland, Royal Brisbane and Women's Hospital Perinatal Research Centre, Department of Diabetes and Endocrinology, Princess Alexander Hospital

$55,000. Princess Alexandra Hospital Research Foundation. Development of an Experimental Intensive Care Facility (with B Venkatesh & P Kruger)

$30,000. University of Queensland Research Development Scheme. Dialysis-assisted Fibre-Optic Spectroscopy (DAFOS) for monitoring drug concentration in situ (with A Zvyagin & Dr Y Anissimov)

$900,000. University of Queensland. Major Equipment and Infrastructure Grant Replacement of caging infrastructure and ancillary support equipment in the Biological Research Facility (BRF), Princess Alexandra Hospital. (with I Frazer, R Thomas, T Gonda, M Brown, N Saunders, N MacMillan (Centre for Immunology and Cancer Research), Dr P Masci (TRU) (most from DVC (Research) and Faculty of Health Sciences)

$89,500. Uniseed Thrombostat (with Dr D Hung)

$40,000. Australian and New Zealand College of Anaesthetists (ANZCA). Optimal antibiotic dosing in burns fluid dynamics and drug tissue pharmacokinetics. (with Assoc Prof B Venkatesh, Prof J Lipman, Dr S Cross)

$104,785. Pfizer Global R&D. Improved Targeting of Drugs For Hair Loss MS Roberts, SE Cross, YG Anissimov 2004-5 US

Centres for Health Research Annual Review 2005
Publications

Journal Articles


Articles Accepted for Publication


Book Chapters


Lectures and Presentations

Professor Michael Roberts
International Programme on Chemical Safety (IPCS/WHO) to meeting in Germany, June 2005, to prepare an Environmental Health Criteria document titled Dermal absorption and chemical risk assessment. (Invited)

Absorption of Drugs Through the skin. Connetics (US, Pao Alto) Lecture Series June 2005 (Invited)

Therapeutics – Making a difference. Princess Alexandra Hospital, Translational Research Symposium – tomorrow’s therapies today Aug 30, 2005 (invited)

How to Succeed in Research. University of Queensland School Of Medicine Research Committee 2005 Seminar Series; Seminar I, Friday 27th May 2005 Princess Alexandra Hospital Auditorium (Invited)

Fate of Permeating Substances: Aesthetic, Australian Society of Cosmetic Chemists Conference, March 2005, Brisbane, Australia (Invited)

Dr Sheree Cross
Physical Delivery Techniques for Topically Administered Therapies Aesthetic Therapies Conference, June 2005, Gold Coast Australia (Invited)

Treatment of Follicular Conditions Skin Science and Advances in Aesthetic Therapies Symposium, Australian Society of Cosmetic Chemists Conference, March 2005, Brisbane, Australia (Invited)

Dr Yuri Anissimov
Multiphoton Microscopy, Deception and Modelling. Australian Society of Cosmetic Chemists Conference, March 2005, Brisbane, Australia (Invited)

Dr Julie Stokes
Helping patients take their medicines. Australian Association of Consultant Pharmacy Forum at the Pharmacy Australia Congress, October, 2005, Melbourne, Australia. (Invited)


Dr Michael Whitehouse
Efficacy and Safety of Dermal Oils: Particularly in the Context of Experimental Arthritis Australian Society of Cosmetic Chemists Conference, March 2005, Brisbane, Australia (invited)


Mr Kent Fanning

Post Graduate Students

Kanchana Ranasinghe, PhD, commenced 2005

Gihan Gunawardene, PhD, commenced 2005

Kent Fanning, PhD, in progress

Ken Newton, PhD (in progress)

Robert Penissi, Masters (completed 2005)

Young Mo, PhD, completed 2005

Brett MacFarlane, PhD, in progress

Peter Kruger, PhD (in progress)

Nadeeka Dissanayaka, PhD (in progress)

John Chapman, PhD, in progress

Geoff Lewis, PhD, commenced 2005

Gerhard Siebert, PhD, completed 2005

Awards

Dr Sheree Cross
Jack Jacobs Award for most innovative

Australian research paper presented at the Annual Conference of the Australian Society of Cosmetic Chemists

Public Service Relevant to Research

Professor Michael Roberts
Presentations to Lions Medical Research Foundation on Sunday mornings in February (Miss Personality) and in July (Board of Governors) every year since 1989 as a speaker on our research achievements demonstration of our research by a tour of our laboratories and comments by my staff

Elected Co-Vice Chair of Gordon Research Conference on “Barrier Function of Mammalian Skin” (USA) for 2005, Mt Holyoke College, Massachusetts 7-12 August, 2005

Current member of Australian Drug Evaluation Committee (Pharm)


Member, Scientific Advisory Board, Perspectives in Percutaneous Penetration since 1993.

Currently, Chair, WHO Committee International Program on Chemical Safety - Environmental Health Criteria for Dermal Absorption

Conducted a 3 day course for the Australian Government Therapeutics Drug Administration branch (TGA) in November 2005

Guest member Scientific Committee for Consumer Products in Brussels July 2005 in developing guidelines for dermal absorption

Leader of Task Force Australian Rural Industries Research Development Corporation advising on scientific issues related to registration of tea tee oil in Europe.

Organised Symposium on Skin science and advances in aesthetic therapies in “Dermal Downunder” held Brisbane Convention and Exhibition Centre, 16 March 2005.

Elected Member, Pharmaceutical Subcommittee (PSC) of the Australian Drug Evaluation Committee (ADEC) from 2004 -2009.

Journal Editorial

Professor Michael Roberts
Associate Editor. Skin Pharmacology and Applied Physiology

Editorial Board. Journal of Pharmacokinetics and Pharmacodynamics

Editorial Board. Current Drug Delivery

Editorial Board. Clinical Pharmacokinetics

Editorial Board. Pharmaceutical Research
The Department of Vascular Surgery has been accepted as a participant in the International Carotid Stenting versus Surgery trial, Dr Tim McGahan will be supervising activity locally in this trial.

The Nurse Unit Manager Sister Theresa O’Keefe won the prize for the best presentation in the Nursing Section of the Annual Scientific Meeting of the Australian New Zealand Society of Vascular Surgery.

One of our Senior Vascular Fellows Dr Walid Mohabbat’s papers on stenting of the superficial femoral artery has been accepted for presentation at the 2006 scientific meeting of the Australian New Zealand Society for Vascular Surgery.

Dr John Quinn as Executive Director of Surgical Affairs of the Royal Australasian College of Surgeons continues his interest in Workforce Assessment and the rearrangement of the Surgical Training Programs.

Dr Peter Woodruff has furthered his interests in Safety and Quality issues through his position as a Member of the Board of the ACHS. He spent a considerable portion of 2005 as one of the ministerial investigators involved in the review of clinical services in the Bundaberg Base Hospital and he was one of the four authors of the confidential review report and a significant contributor to the subsequent Morris and Davies Enquiries.

### Current Research Activities

#### Clinical Trials
- ICSS – International Carotid Stenting versus Surgery
- STRATIFY – Study of Risk Assessment to Reduce Cardiac Events in Patient following Major Surgery. - Professor Tom Marwick
- ASPIRE – Aspirin to Prevent Recurrent venous Thromboembolism

#### Publications

##### Journal Articles
- Dr Peter Woodruff, ASERNIPS – “Unicompartmental knee Arthroplasty for the treatment of unicompartmental osteoarthritis: a systemic review”

##### Published Abstracts
- Sister Theresa O’Keefe, Risk Factor Modification: Is
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