

2010

AMREP RESEARCH REPORT
The Alfred Medical Research & Education Precinct



The Alfred Medical Research and Education Precinct

The Alfred Medical Research and Education Precinct – AMREP – was established in 2002 as a partnership between Alfred Health, Monash University, Baker IDI Heart and Diabetes Institute and the Burnet Institute. La Trobe University and Deakin University joined the partnership in 2005. AMREP is located on the campus of The Alfred hospital, Melbourne. At AMREP are:



The Alfred



Burnet Institute



Baker IDI Heart and Diabetes Institute



Monash University Central Clinical School



Monash University School of Public Health and Preventive Medicine



Australian Centre for Blood Diseases



Nucleus Network



National Trauma Research Institute



Monash Alfred Psychiatry Research Centre



Australian Centre for Health Innovation



Australasian Cochrane Centre



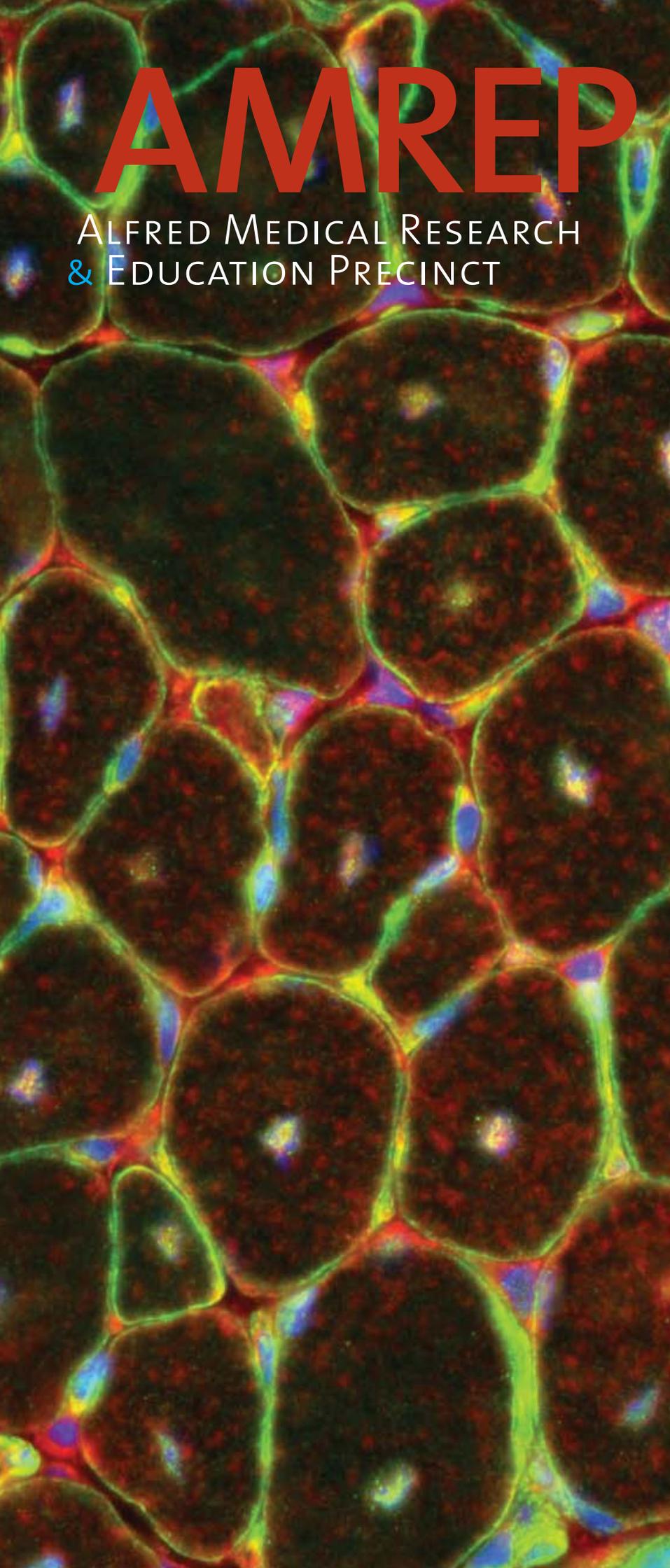
Alfred/Deakin Nursing Research Centre



La Trobe/Alfred Clinical School



Alfred Medical Research and Education Precinct



AMREP

ALFRED MEDICAL RESEARCH
& EDUCATION PRECINCT

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AMREP in 2010/2011

Andrew Way
Chief Executive, Alfred Health
Chair, AMREP Council

Since my last report, the benefits of Academic Health Science Centres have become widely discussed in Australian health and medical research organisations. The development of a virtuous spiral of healthcare delivery, education of clinical professionals and clinical research all enhancing each other to the benefit of patient care and clinical outcomes is starting to influence the way in which groups of organisations relate to each other to have an impact on the health of a population.

AMREP, established in 2002, is Australia's first and longest existing example of such an endeavour, although when created no one at the time would have thought – Academic Health Centre. Although of long standing, high quality and successful in many ways, on a world stage AMREP remains relatively small when considering patient volumes, research funding and outputs. Over the last six months, a larger collaboration has begun to emerge. The collaboration between AMREP and Monash Health Translation Precinct brings together Alfred Health with Southern Health, Monash University, Baker IDI Heart and Diabetes Institute, Burnet Institute, Prince Henry's Institute, Cabrini Health and Epworth with their education and research institutes. This group will be the largest such grouping in Australia and is well equipped to be recognised for its clinical service, research and education activities on a world stage. The partnership will grow to include primary care and other education partners as it develops.

Within the AMREP family, we will continue to make a strong and often leading contribution to the emerging themes of this new organisation, with particular emphasis on

- Heart disease and diabetes
- Infectious diseases and immunity
- Blood diseases and cancer
- Trauma and critical care
- Older people and rehabilitation

The AMREP Council will continue to promote and coordinate activities on our Commercial Road campus, and to that end I am delighted to welcome Professor Stephen Jane as Director of Research for Alfred Health and Head of the Central Clinical School for Monash University.

This year has seen three major grant awards funded from The Alfred Research Trusts, each to a maximum of \$500,000. I am delighted we attracted such high quality applications, and look forward to hearing the results of these awards made to Professor Peter Cameron in Emergency, Professor Paul Fitzgerald in the Monash Alfred Psychiatry Research Centre, Associate Professor Andrew Davies in Intensive Care and their respective research teams.

Research Performance

In 2010, AMREP's external competitive research revenue increased to almost \$95 million from \$90.9 million in 2009. Of this, half came from the National Health and Medical Research Council (NHMRC) and the US National Institutes of Health. The number of publications (refereed journal articles, book chapters and books) rose from 1171 in 2009 to 1463 in 2010. Both research revenue and publication numbers have trebled since AMREP's establishment in 2002.

Competitive Funding Success

AMREP researchers were successful in gaining almost \$44.8 million in new direct NHMRC grant funding commencing in 2011. The major highlight was an unprecedented 57 new Project Grants totalling \$35.3 million, several with budgets well in excess of \$1 million. This level of Project Grant funding placed AMREP fourth highest in Australia for the 2010 funding round. Our early career scientists secured salary awards in a highly competitive environment, with seven new Career Development Fellowships and three Early Career (Postdoctoral) Fellowships, including the highest ranked nationally (awarded to Dr Pamela Davern of Baker IDI).

A further funding highlight announced in March was a \$1.5 million NHMRC Partnership Projects Grant awarded to Professor Sharon Lewin (The Alfred Infectious Diseases Unit and Burnet Institute) to undertake a trial of interactive self-care plans to prevent and manage chronic conditions in people living with HIV. Recently, Professor Lewin was one of a group of seven of the world's best HIV researchers (and the only Australian) to be awarded a \$20 million grant by the US National Institutes of Health to find a cure for HIV.

Australia Day and Queen's Birthday Honours 2011

Several AMREP staff and affiliates were recognised for outstanding contributions to their respective fields in this year's Australia Day and Queen's Birthday Honours. Those honoured were:

- Professor Hatem Salem, Member of the Order of Australia (AM)
- Professor Gregory Snell, Medal of the Order of Australia (OAM)
- Professor Jeffrey Rosenfeld, Member of the Order of Australia (AM)
- Professor Suzanne Crowe, Member of the Order of Australia (AM)
- Professor Andrew Tonkin, Medal of the Order of Australia (OAM)
- Alastair Lucas, Chair of Burnet Institute Board of Directors, Member of the Order of Australia (AM)
- Natasha Stott Despoja, member of Burnet Institute Board of Directors, Member of the Order of Australia (AM)

Health Initiatives

Alfred Health recently achieved membership with the World Health Organization's International Network of Health Promoting Hospitals and Health Services. This status recognises the health service's achievements to date, as well as its commitment to future health efforts.

Associate Professor Andrew Davies
(Intensive Care Unit) received the
2010 AMREP Research Prize.



Kristan Corben has been appointed as Lead for Population Health and Health Promotion to facilitate the integration of a health promotion philosophy throughout the organisation.

The Minister for Mental Health and Ageing, the Hon. Mark Butler, opened Baker IDI's Healthy Lifestyle Research Centre in November 2010. The centre, supported by the Commonwealth Government, will develop health programs that will prevent, manage and treat obesity, diabetes and cardiovascular disease.

Internationally-recognised teams at CSIRO and Baker IDI collaborated to produce *The CSIRO and Baker IDI Diabetes and Lifestyle Plan*, launched in May 2011. The book offers comprehensive plans to support a healthy lifestyle and covers every aspect of diabetes prevention and control. Features include exercise plans to increase physical activity, practical assistance for smart shopping and tips for healthy food choices when eating out, as well as recipes for creating healthy meals.

Promotion of Research at AMREP

The annual Alfred Week Research Poster Display, held each October for many years, showcases research carried out across AMREP. The 2010 display attracted 175 posters and generous prizes were awarded for those posters judged to be the best in their category. Thanks are extended to our prize sponsors, as well as to the many AMREP staff who judged the poster prizes. Details of the winning posters are in the back section of this report.

At the award ceremony, Melbourne Health Executive Director of Research, Professor Ingrid Winship, delivered a stimulating keynote address entitled 'The future of clinical research in Victorian hospitals', and followed by presenting the 2010 AMREP Research Prize to Associate Professor Andrew Davies (Intensive Care Unit, The Alfred). This annual prize is awarded to the AMREP first or senior author whose original research paper was published in the previous year in the journal with the highest impact factor. Dr Davies's article entitled 'Extracorporeal membrane oxygenation for 2009 influenza A (H1N1) acute respiratory distress syndrome' was published in the *Journal of the American Medical Association* (impact factor: 30.718).

AMREP Honours Scholarships

The AMREP Honours Scholarships scheme, implemented three years ago, was devised to attract outstanding Science and Biomedical Science students to undertake their Honours year at AMREP. The scholarship recipients for 2011 were Jodie Abramovitch (Monash Department of Immunology) and Elyse Di Marco (Baker IDI). Photographs of Jodie and Elyse are on page 95 of this report.

Finally, I would like to place on record my thanks to our two very dedicated support teams in the research office and the ethics office, without whom much of what AMREP achieves would not be possible.

The AMREP Council

The AMREP Council has a major governance role in providing the infrastructure and environment in which research at AMREP can flourish.

Members

Andrew Way (Chair)
Alfred Health

Professor Stephen Jane
Alfred Health

Professor Steve Wesselingh
Monash University

Professor Hatem Salem
Monash University

Professor Garry Jennings
Baker IDI Heart and Diabetes Institute

Hilary Bolton
Baker IDI Heart and Diabetes Institute

Professor Brendan Crabb
Burnet Institute

Professor Mark Hogarth
Burnet Institute

Professor Mari Botti
Deakin University

Professor Karen Dodd
La Trobe University

Dr Lee Hamley
Chief Medical Officer, Alfred Health

Associate Professor Sharon Donovan/Janet Weir-Phyland
Chief Nursing Officer, Alfred Health

Professor John McNeil
Chair, The Alfred Human Research Ethics Committee

Dr Andrew Giddy
Chair, AMREP Animal Ethics GAP Committee

Professor Mark Cooper
Chair, AMREP Scientific Advisory Committee

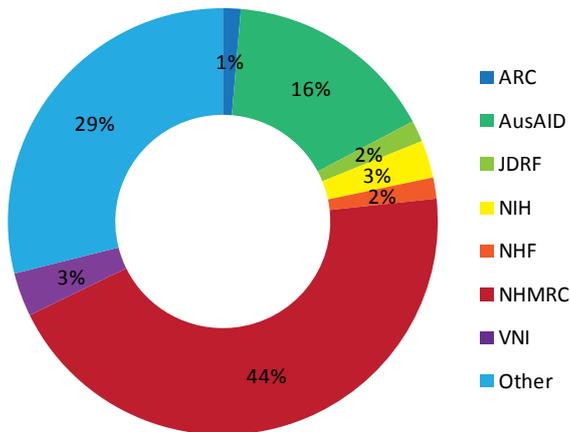
In attendance

Heather Gallichio (Secretary)
General Manager, Alfred & Baker IDI Research Office

Bill O'Shea
Alfred Health Corporate Counsel

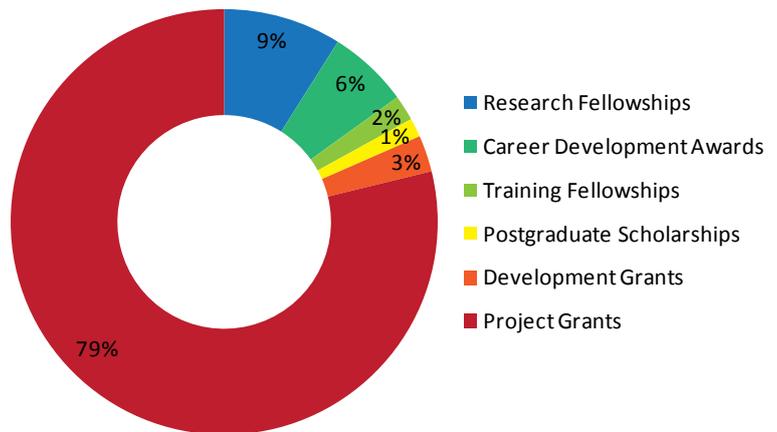
Geoff McDonald
Director, Capital and Infrastructure, Alfred Health

External funding received 2010



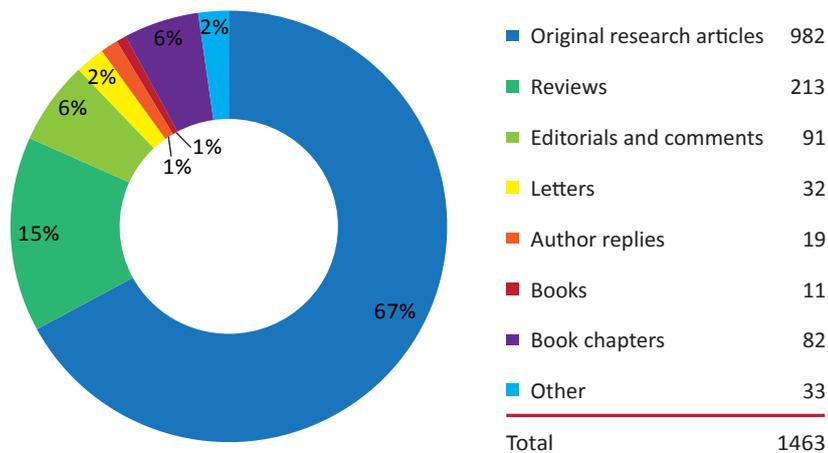
Total \$94,929,601

New NHMRC funding commencing in 2011



Total \$44,777,346

Publications



In 2010, AMREP researchers published original research articles in top-ranking international journals including

New England Journal of Medicine [IF: 53.484]

Nature Genetics [IF: 36.377]

Nature [IF: 36.101]

The Lancet [IF: 33.633]

Cell [IF: 32.401]

Journal of the American Medical Association [IF: 30.011]

The average impact factor of all journal articles published in 2010 was 4.298.

25.1% of all articles were published in journals with a impact factor of ≥ 5 .

Note: 2010 impact factors.

For a complete list of publications by AMREP staff in 2010, see page 107 of this report.

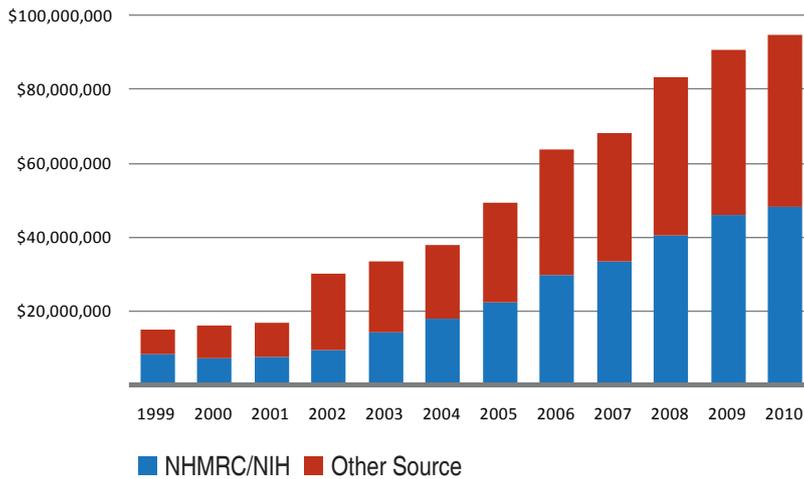
Higher degree completions

34 PhD completions
4 Other doctoral completions
130 Masters completions

In 2010, there were 324 PhD and 50 other doctoral at AMREP.

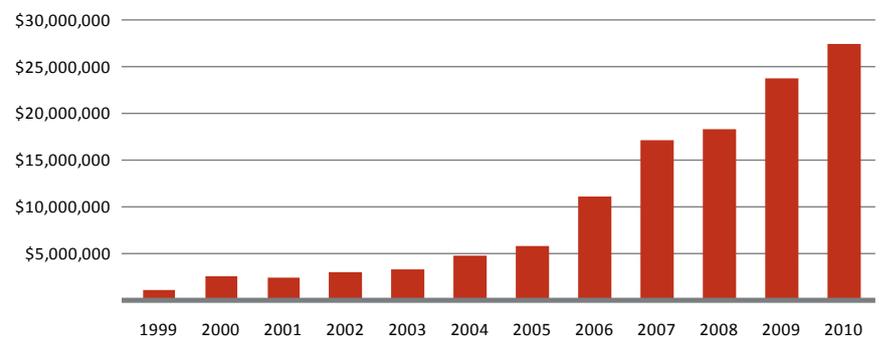
For details of all current doctoral students in 2010, see page 96 of this report.

External research funding received

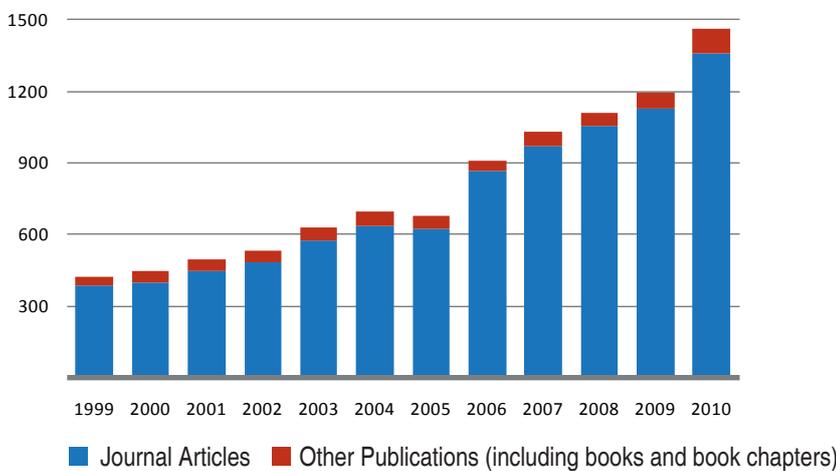


External research funding includes funds received from peer reviewed funding schemes (e.g. NHMRC, National Heart Foundation, NIH), other government grants (e.g. Department of Human Services), industry and university grants. Funds received from commercially sponsored clinical trials/ contract research are not included.

Commercially sponsored clinical trial income

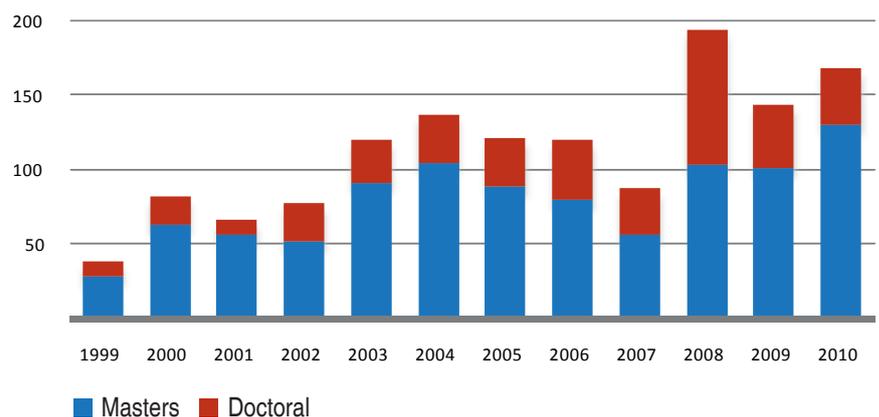


Publications



Abstracts, conference proceedings and 'in press' articles are not included.

Completed and passed higher degrees





Clinical Registries

AMREP has become home to the largest concentration of clinical registries in Australia. At present over 20 major registries are located on site, mainly within the Centre of Research Excellence in Patient Safety (CREPS). CREPS was established as an NHMRC Centre within the Monash University School of Public Health and Preventive Medicine (SPHPM) to provide national leadership and research into the measurement of quality of care.

Registries provide measurement and benchmarking of the outcomes of high significance clinical procedures. They are also used to monitor the safety of new drugs, devices and surgical procedures. New registries currently under development at AMREP include lung cancer, cardiac procedures, major transfusion and breast implants.

Clinical registries collect an identical minimum data set from patients treated at participating hospitals. Outcomes of treatment are also measured in a systematic way using identical definitions. The data is fed back to clinical teams to allow their performance to be measured against other units, nationally and internationally.

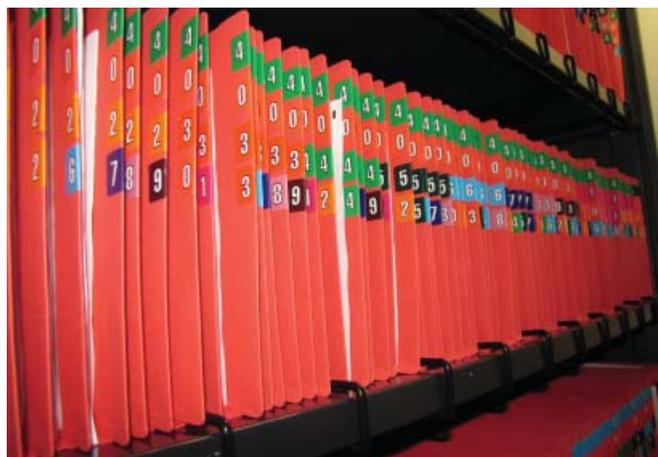
Some registries also collect details of treatment allowing the measurement of compliance with treatment guidelines and exploring variations in care which are still prevalent, even for common conditions such as prostate cancer.

Professor John McNeil, Head of SPHPM, says that one reason for the School's national role in registry development is its data centre. This provides a unique capacity to handle large clinical data sets involving thousands of patients with high security, which is matched by only one or two other units in Australia.

In addition, CREPS has become a leader in registry science, focusing on areas such as risk adjustment, registry governance and funding models. The unit worked closely with the National Commission for Safety and Quality of Healthcare to develop national guidelines for registries which have now been widely adopted throughout Australia.

The School's registry program has provided an excellent example of collaboration between Monash SPHPM and clinical units within The Alfred hospital. Professor McNeil says, "Registries rely on a combination of clinical and research skills. Several senior Alfred clinicians including Jeremy Millar (prostate cancer), Peter Cameron (trauma, burns) and Robert Stirling (lung cancer) work with the School's clinical epidemiologists, biostatisticians and data management staff to provide clinical leadership of each individual registry."

Professor Peter Cameron says, "The registries provide a great example of how specialised skills within the university and the hospital can produce a high profile national program. The registries will also provide the campus with a clinical research resource unique to the campus."



Emily Kelly of the SPHPM Clinical Informatics and Data Management Centre.



Registries managed include:

- Australian Society of Cardiac and Thoracic Surgeons (ASCTS) Database
- Australian Rheumatology Association Database (ARAD)
- Bosentan Patient Registry
- Haemostasis Registry
- Melbourne Interventional Group (MIG) Interventional Cardiology Registry
- REduction of Atherothrombosis for Continued Health (REACH) Registry
- Population-based prostate cancer clinical registry
- Surveillance of Australian workplace Based Respiratory Events (SABRE)
- Victorian Cardiac Arrest Registry
- Victoria Lung Cancer Registry
- Victorian Orthopaedic Trauma Outcomes Registry (VOTOR)
- Victorian State Trauma Outcomes Registry (VSTORM)

For more information, visit www.med.monash.edu.au/epidemiology/research/registries.html





The Healthy Lifestyle Research Centre at Baker IDI

In a bid to combat the epidemic of obesity and diabetes as well as subsequent development of heart and vascular disease, Baker IDI opened the Healthy Lifestyle Research Centre (on level 4 of the Alfred Centre) in May 2010.

The Healthy Lifestyle Research Centre's research program encompasses physical activity and nutrition underpinned by basic and clinical physiology. A principal aim is development of evidence-based, sustainable, interventions to combat obesity and its consequences.

Physical Activity Research

The physical activity program builds on a strong Baker IDI track record in research underpinning national and international exercise guidelines. More recently, time spent sitting has been identified as an independent risk factor for metabolic and vascular disease. The centre has a comprehensive program focused on sedentary behaviour reduction, including understanding mechanisms and development and evaluation of sustainable interventions to reduce sedentary time.

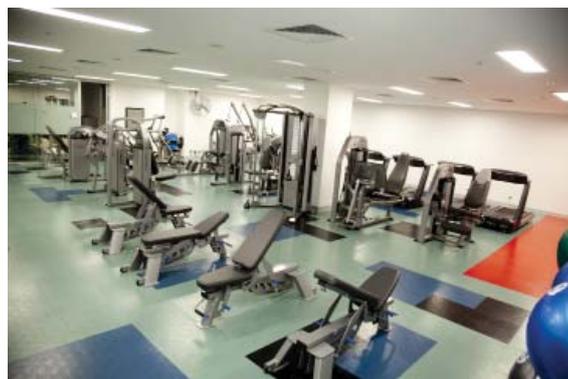
Nutrition Research

Diet and nutrition are important factors in the promotion and maintenance of good health throughout life. Their role as determinants of chronic non-communicable diseases is well established and consequently, they occupy a prominent position in prevention activities.

Lifestyle modification is the cornerstone of treating and preventing diseases of obesity. The nutrition program will examine and endeavour to optimise diets for people with obesity, cardiovascular disease, insulin resistance and Type 2 diabetes.

Access

Enquiries about accessing facilities at the Healthy Lifestyle Research Centre should be directed to Professor Bronwyn Kingwell (bronwyn.kingwell@bakeridi.edu.au).



Both aerobic and resistance exercise intervention research are conducted in the research gymnasium.

Dietary advice and support are central to research focused on sustainable weight loss.



Ian Potter Library

The Ian Potter Library provides a single integrated library and information service to staff and students of AMREP. Acting as the hub of the Alfred Health Library Service, the Ian Potter Library also supports the local library services at Caulfield Hospital and Sandringham Hospital.

The library organises its information resources to support patient care, educational training and research activities of the AMREP institutions. Supporting research is a major focus for the library, and keeping abreast of new research programs and developments is important. With representatives of all the AMREP institutions, the Library Advisory Committee advises on information services and resources required by research scientists and students. Key resources include access to full-text electronic journals, bibliographical databases in biomedicine, technical monographs, specialist reference texts and overseas document requests.

The trend towards replacing library print journal subscriptions with online-only journal subscriptions continued apace in 2010. Library subscriptions from publishers Elsevier, Nature, Springer and Wiley experienced a major change. At the same time, the library was able to generally expand access to the range of titles offered by these important scientific publishers. With online archival access to journal content locked-in, it is possible to consider disposing of back-runs of print journals when extra library shelving space is required. Full-text article downloads from library resources totalled 167,000 in 2010.

The library teamed up with research staff from National Information and Communications Technology Australia (NICTA) based at the University of Melbourne, and RMIT University's Department of Computer Science, to conduct a study titled 'Improving Tools for Searching Medical Literature'. The library asked for volunteers to participate in testing a variety of online search systems, which would gather data on the efficiency of database searching models.

The library provides a busy schedule of training classes for library users. The most popular training classes in 2010 were for EndNote and Medline. The library also provided classes for EMBASE, CINAHL, Cochrane Library and general library orientation. There were 151 training classes conducted, which provided training to 469 people.



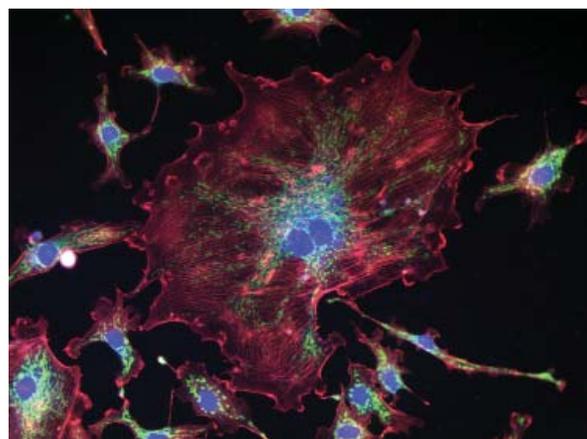
Monash Micro Imaging at AMREP (MMI@AMREP)

Monash Micro Imaging at AMREP manages core imaging resources within Baker IDI Heart and Diabetes Institute, Monash University Central Clinical School and the Burnet Cell Imaging Facility. Stephen Cody coordinates and facilitates microscopy developments, and is responsible for microscopy training and research support.

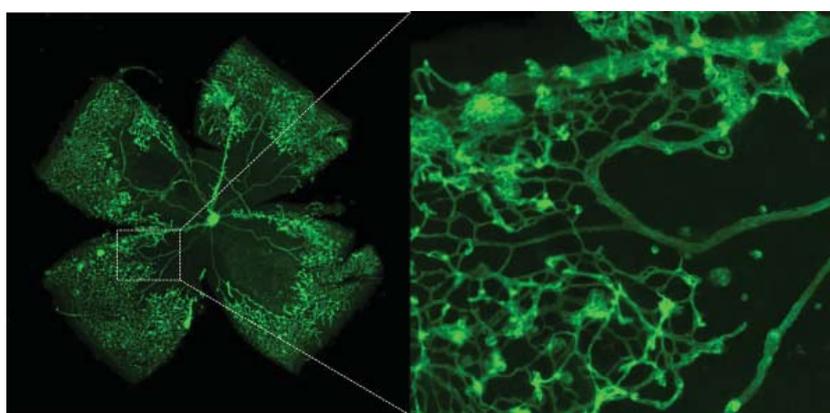
Currently, MMI@AMREP manages three confocal and several conventional fluorescence microscopes within PC2 laboratories. There is also a dedicated deconvolution microscope within a PC3 laboratory forming part of the Burnet Cell Imaging Facility. MMI@AMREP staff are available to help with experimental design, and techniques such as: live and fixed cell imaging, time-lapse, 3D, high resolution of large areas, fluorescence, brightfield, phase, DIC, ion imaging such as Ca²⁺ and pH.

Training on microscopes is conducted on request and is usually coupled with a discussion on the imaging requirements of the research project. This ensures that the training is targeted to the needs of the project, and that the experimental design is appropriate. Training seminars and workshops are also conducted to help broaden the understanding of imaging. MMI@AMREP staff are keen to assist when purchasing a new microscope, ensuring researchers order the right technology to suit their needs and have expertise in negotiating discounted pricing.

Contact Stephen Cody (stephen.cody@monash.edu) for microscopy related issues, including training, research support, instrument demonstrations and promotions, and new technology, or visit www.microimaging.monash.org



Bovine pulmonary artery endothelial cells stained with fluorescent dyes. Mitochondria are labelled in green, F-actin in red and nuclei in blue. Image by Stephen Cody, MMI.



Oxygen-induced retinopathy. High resolution image of a whole mouse retina. The 'tiled' image on the left is 'stitched' together from a mosaic of high resolution images; an example of one tile is on the right. Image by Devy Deliyanti and Genevieve Tan, Department of Immunology, Monash University.

Burnet ImmunoMonitoring Facility

The Burnet ImmunoMonitoring Facility (IMF) is a certified NATA Research and Development (R&D) accredited facility. Under the direction of Associate Professor Rosemary Ffrench, the facility develops optimised and validated immunological assays for clinical trials and pre-clinical research compliant to ISO/AS17025. The development of vaccines and immunotherapies requires the sophisticated assessment of immune responses in both animals and in human clinical trials. Cell-mediated immunity is a key biomarker for most vaccines and immunotherapies and involves the activity of specialised cells including macrophages, dendritic cells, natural killer cells, antigen-specific cytotoxic T-lymphocytes, helper T-lymphocytes and the release of various cytokines in response to antigen stimulation.

The Burnet IMF aims to support both internal and external research in vaccine development by conducting and validating relevant immunological assays to Good Laboratory Practice standards. Increasingly, regulatory authorities request that assays showing markers of vaccine efficacy are robust and standardised. These assays are often difficult to complete and require a high level of operator skill and specialised equipment.



Analysis of the biological samples is performed using the following appropriately validated analytical techniques and processes: isolation and cryopreservation of mononuclear cells, plasma and serum; ELISpot assays; multiplex bead array systems; ELISA; neutralisation activity assays; phagocytic function and oxidative burst activity analysis.

Enquiries about the Burnet IMF should be directed to Associate Professor Rose Ffrench, Facility Director (ffrench@burnet.edu.au) or Kylie Goy, Facility Coordinator (kgoy@burnet.edu.au).



Dr Farhad Shafiei uses the Sequenom MassArray.

Omics (DNA and Blood Profiling)

The DNA and Blood Profiling Facility at Baker IDI has a systems biology theme integrating the genomics, epigenomics, metabolomics and proteomics laboratories with the bioinformatics group.

The facility contains state-of-the-art instruments, including the Illumina Genome Analyzer II (next generation sequencing) and iSCAN System (gene expression microarrays), the Sequenom MassArray for genotyping, as well as a number of specialised mass spectrometers for lipids profiling, peptide mass fingerprinting, biomolecule separation and protein profiling. The team also offers bioinformatics support for the relevant platforms and offers Sanger/capillary DNA sequencing as a regular service.

For more information on the platforms available and the services offered, contact Dr Farhad Shafiei (farhad.shafiei@bakeridi.edu.au), or visit www.bakeridi.edu.au/core_facilities/OMICS/

Mouse Metabolic Phenotyping

Devising new therapies to combat obesity is challenging due to the complex nature of metabolic disease, which involves the interaction between genetics and the environment. Mice provide an essential model for studying metabolic disorders since the whole mouse genome has been sequenced and candidate genes for coronary disease, cardiomyopathy, diabetes, obesity and other disorders of metabolism have been identified. Transgenic technology and gene targeting protocols have allowed researchers to create new mouse lines with specific phenotypes and well-defined DNA structural changes that enable diseases of metabolism to be better understood.



The Mouse Metabolic Phenotyping Facility at Baker IDI Heart and Diabetes Institute was established to provide services to scientists using mice to study obesity, diabetes, cardiovascular disease and other metabolic diseases. Using state-of-the-art tools and methods, the facility provides sophisticated, standardised, high quality metabolic and physiologic phenotyping services for rodent models of obesity, diabetes and related disorders. This service enables scientists to identify and study new mouse models of complex metabolic diseases. By manipulating candidate genes in mice, scientists will gain a better understanding of the genetic origins of obesity and related diseases, and the effects of different environmental factors.

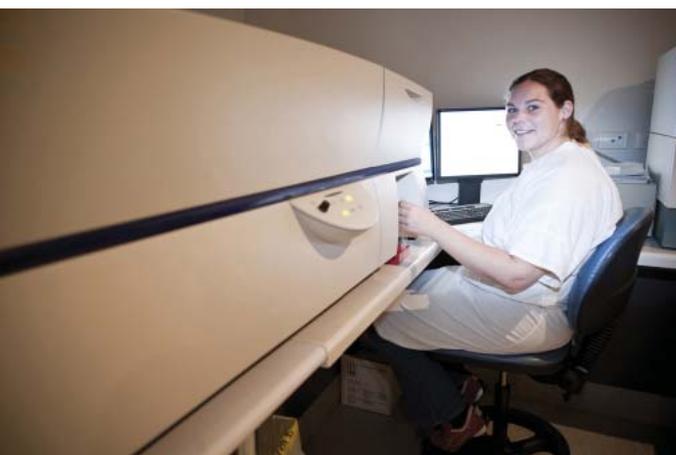
For more information, contact Professor Mark Febbraio (mark.feibraio@bakeridi.edu.au) or Dr Clinton Bruce (clinton.bruce@bakeridi.edu.au).

Flow Cytometry

The AMREP Flow Cytometry Facility is a state-of-the-art, world class cell sorting and cell analysis laboratory, catering for the scientific research community based at AMREP and broader Melbourne. The facility is located in the Monash Department of Immunology, with some instruments located within the Burnet Institute.

The Flow Cytometry Facility offers comprehensive training and education, experimental design and protocol guidance specifically targeting effective data generation and interpretation. Services catering for both animal and human cell sorting in a PC2 environment are offered. The

facility can also handle infectious sample sorting (e.g. HIV, Hepatitis C) in a dedicated PC3 environment, which is unique to Melbourne. The facility offers two FACSAria high throughput sorting platforms and five flow cytometers: an LSR II, a FACSCanto II with a 96-well High Throughput Sampler and three FACSCalibur units.



For more information on the platforms available and the services offered, contact the Manager of the facility, Geza Paukovic (paukovic@burnet.edu.au) or Assistant Manager Michael Thomson (thomson@burnet.edu.au), or visit www.amrepflow.org.au

Dr Alexandra Ziegler utilises the LSR II, one of AMREP's most advanced cell analysers.



HUMAN RESEARCH ETHICS COMMITTEE

Professor John McNeil AM
Chair, The Alfred Ethics Committee

Ethics Committee

Applications

The Ethics Committee received 400 research projects for review in 2010. Of these, 98 were health and social sciences applications, 115 drugs and interventions applications and 187 'low risk' applications, which pose such little risk to participants that they do not need to be reviewed by the full Ethics Committee.

Streamlined Review

Eighteen applications were submitted to the Ethics Committee for review under the new Victorian Government Streamlined Ethical Review Program (SERP). Nineteen SERP projects to be conducted at Alfred Health and reviewed by another certified human research ethics committee (HREC) were authorised for commencement at The Alfred. SERP was developed with the expectation that the time for ethics approval will be reduced and research will commence more quickly than under the previous system where applications were reviewed by the HREC of each study site.

HoMER

The committee also took part in a trust building pilot for the NHMRC's national initiative to streamline the ethical review of multicentre research – HoMER (Harmonisation of Multicentre Ethical Review). The pilot was designed to demonstrate the potential for a single review process, and to encourage confidence in the review of other HRECs. This HREC participated both as a 'reviewing' and an 'accepting' site. HRECs wanting to be part of HoMER will undergo certification to provide a single ethical review for research that may be conducted in different states of Australia.

First-time-in-human Applications

Eight first-time-in-human applications were reviewed and included:

- a new drug to stimulate neutrophil production, which may shorten the duration and reduce the severity of neutropenia after chemotherapy
- a new drug to treat secondary hyperparathyroidism (excessive secretion of parathyroid hormone) in patients who have chronic kidney failure
- an experimental compound being investigated for its potential to regulate airway smooth muscle, which may help in the treatment of patients with asthma
- a new protein developed to treat sensitivity to cat allergens

General Ethical Issues Sub-committee

The General Ethical Issues Sub-Committee (GEI S-C) provides a forum within Alfred Health for the discussion of a wide range of ethical issues: internal matters relating to human research and health care more generally, as well as externally initiated enquiries such as government reviews. The sub-committee met ten times in 2010.

Ethical Issues in Human Research

Research that potentially involves legal risks for participants and researchers

Research that intends, or is likely, to collect information about someone's involvement in illegal activities needs to be designed and conducted with the associated risks in mind. Guidelines were developed in consultation with a range of stakeholders including ethics committee members, researchers from Alfred Health and the Burnet Institute, and Alfred Health legal counsel.

www.alfredresearch.org/ethics/ecguidelines.htm

Accurate information for research participants

A cornerstone of ethical research is informed consent, and participants need clear and accurate information to make an informed decision. The wording in the standard Participant Information and Consent Form templates is periodically reviewed and updated, in step with changing community standards, institutional requirements, laws, etc. In 2010, the sub-committee focused on the clauses describing: (a) compensation for injury sustained through research participation (b) limitations to the confidentiality of participants' information. Both relevant clauses have been revised, trialled and implemented.

Other research-related issues included:

- Research conducted in private practice settings
- Witnessing a person's consent to participate in research – what is required?
- Informing GPs about their patients' participation in research
- Evaluating research projects involving complementary and alternative medicines
- Intellectual property and student researchers

Wider Institutional Ethical Issues

- Educational/promotional activities conducted by pharmaceutical companies which involve the collection of hospital information
- Clinical ethics services and the service at Alfred Health

Public Consultations

Victorian Law Reform Commission's Enquiry into the Guardianship and Administration Act 1986

The Guardianship and Administration Act provides for medical research to be undertaken with adult participants who are unable to give informed consent because of a temporary or long term impairment. However, the Act's research provisions can make certain kinds of research difficult to undertake. The GEI S-C made a submission to the VLRC Enquiry in 2010 and has been closely involved in the subsequent consultation process.

Other public enquiries included:

- NHMRC/AHEC – development of a draft Process Chart to identify quality assurance activities requiring ethical review (submission made)
- Department of Health review of the Mental Health Act 1988 (no submission made)

HREC MEMBERSHIP

Ethics Committee

Professor John McNeil (Chair)
Professor Colin Johnston (Deputy Chair, Drugs and Interventions Group; member with knowledge of relevant research areas)
Roy Olliff (Chair, Health and Social Science Group)
Professor Mari Botti (Deputy Chair, Health and Social Science Group; nursing representative)
Dr Sharon Avery (member with knowledge of professional care and treatment – from February 2011)
Emily Bingle (laywoman – to December 2010)
Elizabeth Burns (laywoman)
Dr Catherine Cherry (member with knowledge of professional care and treatment)
Simon Cohen (lawyer)
Brad Crammond (member with knowledge of relevant research areas – to December 2010)
Dr Peter Douglas (layman; member with experience in analysing ethical decision-making – from January 2011)
Dr Judith Frayne (member with knowledge of professional care and treatment)
Peter Gallagher (layman)
Samantha Gault (laywoman)
A/Professor Richard Gerraty (member with knowledge of relevant research areas)
Reverend Sam Goodes (minister of religion)
Linton Harriss (member with knowledge of relevant research areas)
Reverend Marilyn Hope (minister of religion)
Linda Hornsey (laywoman)
A/Professor David Hunt (member with knowledge of relevant research areas)
A/Professor Peter Hunter (member with knowledge of relevant research areas – from August 2010)
Dr Michael Hurley (member with knowledge of professional care and treatment)
Professor Henry Krum (member with knowledge of relevant research areas)
Jim Mahoney (lawyer)
Maria McKenzie (member with knowledge of relevant research areas)
Stephen Moloney (lawyer)
Fr Ian Morrison (minister of religion)
Linda Murdoch (lawyer – from February 2011)
Shefton Parker (member with knowledge of relevant research areas)
Dr James Shaw (member with knowledge of relevant research areas)
Dr Michael Ward (member with knowledge of professional care and treatment – from November 2010)
Michael Wildenauer (layman)
Dr Fran Wise (Caulfield Hospital representative; member with knowledge of professional care and treatment – to May 2010)
David Zarfaty (layman)
Paul Zawa (lawyer – to December 2010)
Rowan Frew (Secretary)
Dr Angela Henjak (Assistant to Secretary – Drugs and Interventions Group)
Nicole Rosenow (Assistant to Secretary – Drugs and Interventions Group)
Kordula Dunscombe (Secretary – Health and Social Science Group)
Anna Parker (Secretary – Health and Social Science Group)
Tracey Scheller (Ethics Officer – Low Risk applications, Progress Reporting)

General Ethical Issues Sub-committee

Professor John McNeil (Chair)
Professor Paul Komesaroff (Deputy Chair)
Dr Susannah Ahern (Medical Administration representative – to November 2010)
Marta Ago
Dr Tracey Caulfield (to September 2010)
Simon Cohen
Brad Crammond (to December 2010)
Reverend Marilyn Hope
A/Professor Peter Hunter (Caulfield Hospital representative – from April 2010)
Peter Gallagher
Dr Cate Kelly (Medical Administration representative – from February 2011)
Dr Phoebe Mainland
Dr Roderick McRae
Elizabeth Mullaly (Caulfield Hospital representative)
Janine Roney
Professor Alison Street (to February 2011)
Dr Tim Sutton (to July 2010)
Professor John Wilson
Michelle Wright
Kordula Dunscombe (Secretary)
Rowan Frew (Ethics Manager)

Research Review Committee

Professor Colin Johnston (Chair)
Dr Sharon Avery
Dr Catherine Cherry
Dr Andrew Davies
Dr Amanda Davis
Dr Judith Frayne
A/Professor Richard Gerraty
Dr Andrew Haydon
Dr William Kemp
Professor Henry Krum
Anne Mak
Professor John McNeil
Dr James Shaw
Dr Alan Young (to August 2010)
Rowan Frew (Secretary)
Dr Angela Henjak (Assistant to Secretary)
Nicole Rosenow (Assistant to Secretary)

Low Risk Sub-committee

Maria McKenzie (Chair)
The low risk process was changed at the start of 2010 to an out-of-session process involving review by individual Ethics Committee members overseen by the Chair and without meetings or a sub-committee.





ANIMAL ETHICS COMMITTEE

Dr Alana Mitchell
Chair, AMREP Animal Ethics Committee

The AMREP Animal Ethics Committee (AEC) assesses all proposals using animals for scientific purposes from the Baker IDI Heart and Diabetes Institute, Burnet Institute, Monash University Central Clinical School and The Alfred. The AEC decides, on ethical grounds, whether the proposal to use animals is justified, and whether the welfare of the animals will be adequately protected. For animal use to be justified, the AEC must be convinced that the benefits from the use outweigh the potential costs to the animal. As such, the AEC is at the interface between the scientist and the wider community.

The AMREP AEC must also ensure that all animal use for scientific purposes on the precinct complies with the *NHMRC Australian Code of Practice for the Care and Use of Animals for Scientific (The Code)*, which sets out the responsibilities of investigators, institutions and AECs regarding the use of animals.

Applications in 2010

One hundred and twenty-six new experimental proposals were reviewed by the AMREP AEC. Many of the applications received were complex and innovative. The animals used were principally mice and rats, but a small number of rabbits, ducks and dogs were also used.

Applications reviewed by the AMREP AEC in 2010				
Application type	Baker IDI	Monash CCS	Burnet Institute	Alfred Health
New experimental	81	35	8	2
Modifications	60	28	10	2
Tissue	17	6	1	0
Colony	21	12	16	0
Antibody	1	1	0	0

Animal Ethics Committees

To manage the large number of applications, there are two AECs in operation at AMREP. Each review committee meets on a monthly basis, with meetings staggered by two weeks. For consistency and efficiency, modifications and other project specific documentation relating to an approved project are reviewed by the same committee as reviewed the original application. The Chair, Animal Welfare Officer and a member of animal care staff attend all meetings to maintain uniformity across the committees.

The AMREP Animal Ethics Governance and Policy (GAP) Committee was formed in 2010 to provide governance and policy across both review committees and to assist the licence holders in meeting their obligations under *The Code*. In 2010, the GAP Committee focused on improving the quality of submissions to the AEC by introducing a pre-review process conducted by the AEC Chair. This process helped improve consistency and encourage the use of lay language in applications. AEC interviews with investigators were also introduced to explain experimental details where necessary. A review of process timelines by the GAP Committee showed that these initiatives resulted in a 60% improvement to animal ethics application approval times.

Standard Operating Procedures

A Standard Operating Procedure (SOP) is a detailed description of a standardised procedure. Using an SOP can allow researchers to reuse the description of a routine procedure in ethics applications and may save the AEC time in approving well-established procedures. A review and update of the library of Standard Operating Procedures commenced in 2010.

Communication

A GAP Committee Newsletter was established in 2010 to convey critical aspects of AEC activity and policy to researchers. A new Animal Ethics website amrepaec.bakeridi.edu.au was launched to assist investigators with locating animal ethics resources.

Training

Following the Bureau of Animal Welfare's recommendation, the GAP Committee implemented a training program in animal ethics legislation and animal welfare requirements for researchers. All active animal users are required to attend one training session each year. The training consists of a 1-hour refresher program for laboratory heads whose staff use animals and a comprehensive 3-hour training session for active animal users.

AMREP AEC Membership

- Dr Alana Mitchell (Chair)
- Dr Mandy Errington (Veterinarian)
- Dr Kay Juliff (Veterinarian)
- Dr Lucy Uren (Veterinarian)
- Dr Clinton Bruce (Scientist)
- Dr Judy de Haan (Scientist)
- Dr Margaret Hibbs (Scientist)
- Dr Ian Burns (Animal welfare)
- Dr Alan Sherlock (Animal welfare)
- Robyn Sullivan (Animal welfare)
- Noel Ansell (Lay member)
- Jim Gigas (Lay member)
- Ashley Wolff (Lay member)
- Debra Ramsey (Animal Care/Facility Manager)
- David Spiteri (Animal Care)
- Leia Demtschyna (Secretary)

AMREP Animal Ethics Governance and Policy (GAP) Committee Membership

- Dr Andrew Giddy (Chair)
- Patricia Baitz (Lay member)
- Dr Mandy Errington (Veterinarian)
- Heather Gallichio (General Manager, Research Office)
- Professor Stephen Jane (Licence Holder Nominee)
- Professor Fabienne Mackay (Scientist)
- Dr Alana Mitchell (Chair, AMREP AEC)
- Debbie Ramsey (Animal Care/Facility Manager)
- Robyn Sullivan (Animal welfare)
- Leia Demtschyna (Secretary)

**AMREP
RESEARCH
PROGRAMS**





Allergy, Immunology and Respiratory Medicine (AIRmed) has a comprehensive spectrum of expertise covering advanced adult lung diseases, clinical and basic allergy, and non-HIV clinical immunology. Specific disciplines include allergic diseases, severe asthma, primary and acquired immune deficiencies, chronic obstructive pulmonary disease, interstitial lung diseases, sleep apnoea and sleep disordered breathing, cystic fibrosis (CF), bronchiectasis, pulmonary vascular disease and adult and paediatric lung transplantation programs. AIRmed integrates clinical services with extensive human and experimental research programs, linking senior clinician scientists, bench scientists, allied health professionals, primary care physicians and the community.

Clinically driven hypotheses direct the laboratory-based human research and subsequent translation into changes in current best practice for improved health outcomes. The clinical and academic base of AIRmed is located at The Alfred hospital, with experimental and clinical research laboratories located within The Alfred and in the laboratories of Monash University at AMREP.

AIRmed has a very active clinical and biomedical research focus with considerable success in competitive NHMRC, ARC, Cooperative Research Centre and other research grant funding. High international and national profiles of senior personnel are reflected in roles on editorial boards of the highest discipline-specific international journals, committee memberships, numerous peer review publications and speaking invitations.

AIRmed is committed to delivering outstanding best practice clinical care, outcome driven professional education and community outreach, as well as translational research of international acclaim.

Professor John Wilson, Head, Cystic Fibrosis Service, showed Prime Minister Julia Gillard the Tele-health electronic health record for people with cystic fibrosis.



Departmental Highlights

- Greg Snell was awarded a Medal of the Order of Australia in 2011 for service to medicine in the field of respiratory science, to education and to professional organisations.
- Bruce Thompson, Frank Thien, Jo Douglass, Greg King (Woolcock Institute Sydney) and Robyn O'Hehir were awarded an NHMRC Project Grant to research the physiological aetiology of refractory asthma.
- Robyn O'Hehir and Jennifer Rolland (Monash Immunology) were awarded an NHMRC Project Grant to progress their research identifying a human CD4+ T-cell epitope based therapeutic for peanut allergy.
- Michael Abramson, Shyamali Dharmage, Geza Benke and Bruce Thompson were awarded an NHMRC Project Grant for their research 'Third Euro-Australian Respiratory Health Survey'.
- Magdalena Plebanski (Monash Immunology), Robyn O'Hehir, James Friend (Monash Engineering), Jennifer Rolland and Charles Hardy (Monash Immunology) were awarded an NHMRC Project Grant to further their research into the mechanisms of nanoparticle mediated inhibition of asthma.
- Faizel Hartley, Christopher Stuart-Andrews, Brigitte Borg, Belinda Miller and Bruce Thompson were awarded a 2010 Alfred Small Project Grant for their research titled 'Why do some patients with COPD desaturate on exertion, but others do not?'.
- Robyn O'Hehir, Jennifer Rolland and Sara Prickett were awarded a \$100,000 Project Grant for 2011 from the Ilhan Food Allergy Foundation and the Gandel Foundation to progress their research towards a clinical trial for a peanut allergy vaccine.
- Robyn O'Hehir was presented with a Life Governor award from the Board of Asthma Victoria.
- Jo Douglass became President of the Australasian Society for Clinical Immunology and Allergy 2010-2012.
- Robyn O'Hehir was appointed an Honorary Director of the Governing Board of Cabrini Health Ltd.
- Robyn O'Hehir was appointed to the scientific advisory committee of the Food Standards Australia and New Zealand, an independent statutory agency that works with the governments of Australia and New Zealand to set food standards.
- Jeremy Wrobel was awarded a NHMRC Postgraduate Scholarship for research on pulmonary hypertension in COPD.

Tele-health Electronic Health Record

At a visit to The Alfred, Professor John Wilson showcased Tele-health to Prime Minister Julia Gillard, the former Premier John Brumby and Victorian Local Member Tony Lupton. The team have worked on establishing an electronic health record for people with CF. Tele-health enables quick and easy access to the medical history of a person with CF. In conjunction with this electronic record, rural or isolated patients are also able to use a teleconferencing service to receive a specialised CF review with their doctor and the CF team without the burden of travel time.

AIRmed 1: Lung Transplant Service

Head: Professor Greg Snell

The service is one of the largest in the world, performing 3% of all lung transplants worldwide and covering the southern Australian states. It has strong links to clinical programs in severe interstitial lung disease, pulmonary hypertension and severe COPD and includes the Paediatric Lung Transplant Service.

Current Projects

- Mechanisms and predictors of chronic allograft rejection with emphasis on airway remodelling
- Immunological and clinical evaluation of viral (cytomegalovirus) infections
- *Ex vivo* evaluation of humanised transgenic GAL knockout porcine lungs
- Drug trials in pulmonary hypertension
- Investigation of novel bronchoscopic and surgical treatments for emphysema

AIRmed 2 Cystic Fibrosis Service

Head: Professor John Wilson

The Alfred Cystic Fibrosis Service cares for the needs of over 280 patients. The service is actively engaged in clinical and basic research centred on stem cell therapies, host organism interaction, airway remodelling, nutritional needs, airway function and psychosocial issues.

Current Projects

- Airway remodelling and growth factors in CF
- Advanced glycation end-products in renal injury in CF
- Enhanced nutrition and anti-reflux therapy on clinical and physiological outcomes
- Nocturnal hypoxia and consequences for outcomes in CF
- Electronic health records to audit clinical outcomes
- The use of telemedicine to improve access to care
- Improved care models including palliative care

AIRmed 3 General Respiratory and Sleep Medicine Service

Head: Professor Matthew Naughton

The General Respiratory Service cares for patients with general respiratory diseases including pneumonia, chronic obstructive pulmonary disease, acute and chronic respiratory failure, post-ICU recovery, tracheostomy care, interstitial lung diseases and lung cancer. The Sleep Service manages acute and chronic sleep disorders across a wide cross-section of pulmonary, cardiac and neurological conditions.

Current Projects

- Sleep disordered breathing in heart failure and impact of ventilatory support on mortality
- Non-invasive ventilation support (acute and chronic)
- Role of sleep disorders in motor vehicle collisions
- New management algorithms for sleep disordered breathing
- Premature lung disease in marijuana smokers
- Development of smoking cessation courses
- Relationship between sleep and mood disorders
- Relationship between sleep apnoea and Type 2 diabetes
- Acute and chronic effects of oxygen toxicity



AIRmed 4 Allergy, Asthma and Clinical Immunology Service

Head: Associate Professor Jo Douglass

The service cares for patients with asthma, allergic diseases, systemic autoimmune disorders and primary and acquired immune deficiencies. It includes a node of the national Cooperative Research Centre for Asthma and Airways.

Current Projects

- Asthma in the ageing population
- Physiology and treatment of severe asthma
- Development of non-invasive methods for assessing airway inflammation
- Novel strategies for immunomodulation including nanoparticles
- Drug allergy: clinical and laboratory studies
- Immunological and molecular characterisation of peanut allergens
- Clinical and immunological mechanisms of subcutaneous injection and sublingual allergen immunotherapy
- Investigations of immunodeficiency in non-cystic fibrosis bronchiectasis

Physiology Service

Head: Associate Professor Bruce Thompson

The Lung Function Laboratory underpins many of the AIRmed clinical and research programs. It takes a leading role in the evaluation of new diagnostic tests and the evaluation of lung function testing devices.

Current Projects

- Novel non-invasive measures of small airways disease in asthma, BOS and cystic fibrosis
- Using MRI to measure ventilation and perfusion heterogeneity
- Lung function in the ageing lung
- Gas mixing and lung mechanics in patients with severe asthma
- Quality control of lung function testing

Lung Health Promotion Centre

Manager: Adrienne James

This centre provides innovative education programs and resources for health professionals in all aspects of respiratory disease, but particularly asthma and the development of smoking cessation programs.

Postgraduate Students

12 PhD Students
1 MD Student

Publications

61 Journal Articles
1 Book
2 Book Chapters

Anaesthesia and Perioperative Medicine

Director: Professor Paul Myles MBBS, MPH, MD, FANZCA, FFARCSI, FRCA



TheAlfred



MONASH
University

The Department of Anaesthesia and Perioperative Medicine is amongst the largest in Australia, consisting of 29 fulltime and over 50 visiting specialist anaesthetists, as well as 40 registrars in training. The department provides anaesthesia, perioperative care, pain management, resuscitation and referral services for Alfred Health. Academic affiliation with Monash University is strong, with Professor Paul Myles appointed as Chair of the Academic Board of Anaesthesia and Perioperative Medicine.

A dynamic research unit within the department focuses on patient safety, quality of care, improving pain relief and avoiding serious complications after surgery. The research unit is headed by Paul Myles (supported by an NHMRC Practitioner Fellowship) and funded through a number of large NHMRC grants. Dr James Tomlinson and Dr Joel Symons were appointed as senior lecturers and Dr Georgina Thompson is the department's first research fellow.

In 2010, Paul Myles was awarded the Australian and New Zealand College of Anaesthetists' prestigious Robert Orton Medal for distinguished service to anaesthesia. Paul was successful with two new NHMRC Project Grants commencing in 2011: continued funding of \$3.3 million for the ATACAS trial (as CIA) and \$1.1 million for POISE-2 (as CIB).

Current Projects

The unit is currently coordinating four multicentre international trials and participating in a further five trials, including randomised clinical trials, audits and surveys. The larger trials, led by Paul Myles, include:

ENIGMA-II Trial www.enigma2.org.au

One of the biggest research initiatives of the department is to investigate the safety of nitrous oxide in 7,000 patients undergoing major surgery who have risk factors for coronary artery disease. It is expected that avoidance of nitrous oxide will reduce the incidence of cardiac complications or death when compared with otherwise identically managed surgical patients receiving a non-nitrous oxide anaesthesia regimen. This multicentre international trial, funded by a \$2.8 million NHMRC grant, commenced in May 2007.

Inaugural ANZCA Research Fellow Dr Georgina Thompson implemented an enhanced recovery after surgery study across three Victorian hospitals.



Coordination of the trial is by the department together with the ANZCA Trials Group. Collaborating research groups are in Australia, New Zealand, Hong Kong, Canada, USA, India, Saudi Arabia, UK, Malaysia, Switzerland and Singapore.

The ATACAS Trial www.atacas.org.au

The Aspirin and Tranexamic Acid for Coronary Artery Surgery (ATACAS) Trial is a multicentre, randomised, controlled trial established to answer whether aspirin or tranexamic acid, or both, should be used in people having heart bypass surgery. This NHMRC and ANZCA funded trial is jointly coordinated by the ANZCA Trials Group and the department, and aims to enrol 4,600 patients. Collaborators are based in Australia, the UK, India and Canada.

Despite some concern that recent aspirin ingestion increases blood loss after coronary artery surgery, there is some evidence that this may reduce thrombotic complications. In contrast, antifibrinolytic drugs can reduce blood loss in this setting, but there is concern that they may increase thrombotic complications. Published guidelines are limited by a lack of large randomised trials addressing the risks and benefits of each of these commonly used therapies in cardiac surgery.

MASTER Recurrence Trial

This study will test the hypothesis that intraoperative and postoperative epidural analgesia for high-risk (ASA III-IV) patients undergoing major abdominal surgery and complete resection of cancer results in a significant decrease in cancer recurrence and death in the 7 to 12 years after surgery. The study was built on the MASTER trial, which was a large multicentre, randomised trial 1996-2001 that compared epidural regional block with opioid-based analgesia with standard, non-epidural analgesia in 915 high-risk patients having major thoracic or abdominal surgery. A majority of these patients underwent surgery for intra-abdominal cancer. Those patients who underwent cancer surgery were followed up to determine if their cancer has returned, when it returned, and their survival status.

Enhanced Recovery After Surgery (ERAS)

The aim is to evaluate an enhanced recovery after surgery (ERAS) program for abdominal surgical patients in three Victorian hospitals. The project was funded through the Department of Health. The implementation of a comprehensive ERAS program took place over two months and included the education of surgeons, anaesthetists, nurses and allied health professionals.

Data were collected on 154 patients in the pre-implementation cohort and 169 in the ERAS cohort. The conclusion of the project showed that preoperative and surgical practices can be readily modified to incorporate an enhanced recovery program. Training of doctors and nurses in the application of this program improved the quality of care for these patients.

Postgraduate Students

5 Masters Students
2 PhD Students

Publications

23 Journal Articles

Research Activities

HIV neuropathogenesis and HIV reservoirs in the brain *Dr Katherine Thompson*: Research in this department has shown that the brain perivascular macrophage is the main reservoir for HIV and is pivotal in relation to spread of infection from the blood into the brain when the immune system deteriorates. Macrophages therefore represent a focus for targeted treatments to prevent cognitive decline from HIV infection in the brain. It is hypothesised that treatment should begin prior to systemic immunosuppression. This work was presented at the 10th International Symposium on Neurovirology, Milan, Italy, 2010.

Pathogenesis of HIV-associated neurocognitive impairment in the era of effective antiretroviral therapy *Dr Katherine Thompson* in collaboration with Professor Ian Everall and the HIV Neurobehavioral Research Centre, University of California, San Diego. This study is the first to quantify latent viral infection in circulating macrophages and resident brain cells in HIV-positive patients with mild neurocognitive dysfunction, including those using antiretroviral therapy, and will look at associations between latent infection, neuropathology and clinical status.

Progressive multifocal leukoencephalopathy (PML) pathogenesis *Dr Julianne Bayliss*: Establishment of latent reservoirs of JC virus in the brain, blood, and kidney of healthy and immunosuppressed patients is studied using histology and molecular biology techniques. Specific aims are to determine the cellular sites of viral latency during immunocompetence, delineate the role of immunosuppression in viral reactivation and mobilisation from latent reservoirs prior to the development of PML and to investigate the role of viral genotype in establishing latency and the development of PML.

Biomarkers of JC virus reactivation in immunosuppressed patients *Dr Julianne Bayliss*: Collaborating with Dr Catherine Cherry, this study investigates the association between specific genes of JC virus within the plasma of HIV/AIDS patients who later develop PML.

Prostate specific antigen (PSA) levels in cyclists over 50 *Dr Julianne Bayliss*: This study, in collaboration with the Victorian Institute of Sport, investigates the role that long distance road cycling plays on PSA levels in men over the age of 50 through measurement of PSA before and after cycling.

Breast cancer sub-typing and epidemiology *Professor Catriona McLean* in collaboration with the Cancer Council Victoria. This multinational study (with Cambridge University) highlights the relationship of various subtypes of breast cancers with diet, environmental factors and a new prognostic marker in breast cancer.

The role of phosphatases in breast cancer *Professor Catriona McLean* in collaboration with Professor Christina Mitchell.

Characterisation of TCPTP as a tumour suppressor in breast cancer *Professor Catriona McLean* in collaboration with Professor Tony Tiganis.

The Australian Breast Cancer Family Study *Professor Catriona McLean* in collaboration with Professor John Hopper.

Australian Brain Bank Network (ABBN) *Professor Catriona McLean* is Director of the ABBN, overseeing the coordination, neuropathological diagnosis and research activities of the ABBN

and the Victorian arm of the network. Over 1,000 fully pathologically analysed brains are available for research (www.nnf.com).

Neurotrauma brain bank *Dr Tony Frugier (NTRI), Professor Catriona McLean*

Neuroimaging (using novel binders) of neurodegenerative diseases

A study of TDP-43 in motor neurone disease

The role of LRRK2 in Parkinson's disease

A study of FHL1 in muscular dystrophy

A study of filamin C in myopathy

A study of the use of mesenchymal stem cells in an ovine model

Major Achievements

Professor Catriona McLean is CIA of a five-year (\$2M) NHMRC Enabling Grant to facilitate continued brain banking for neurodegenerative diseases. She is also CIA on a continuing (\$800,000) grant into neurotrauma through the Victorian Neurotrauma Initiative (VNI) and is a CI on four NHMRC Project Grants. Professor McLean is one of multiple national and international investigators on a (\$6M) five-year NIH grant that will investigate genetic causes of familial breast cancer. She was invited to present her work in latent virus of the brain at the International Society of Neuropathologists Congress in Salzburg, Austria.

Dr Julianne Bayliss received the Donald H Gilden Lectureship award for excellence in Neuroscience at the 10th International Symposium on Neurovirology, Milan; travel grants from the Ian Potter Foundation, Monash University and the International Society for Neurovirology, and best poster prize at the Brain Awareness Week Symposium, Monash University.

Colleen D'Arcy received a Monash University travel grant.

Colleen D'Arcy (left) and Professor Catriona McLean examine tissue sections using a dual header microscope.



Postgraduate Students
1 PhD Student

Publications
9 Journal Articles
2 Book Chapters

The Australasian Cochrane Centre (ACC) coordinates activities of the Cochrane Collaboration in Australia and the region by providing training and support to authors of Cochrane systematic reviews, working with policy makers, advocating on behalf of the Collaboration regionally and promoting the use and uptake of The Cochrane Library.

The region supported by the ACC encompasses East Asia, South East Asia, New Zealand and the Pacific Islands. The Centre works closely with many Cochrane people in the region and has established branches in Korea, New Zealand, Singapore and Thailand, and supports networks in Malaysia, the Philippines and East Asia.

Training and Support of Review Authors

The Cochrane Collaboration continues to grow worldwide, and Australasian review authors are widely recognised as active and productive contributors to The Cochrane Library. Over 2,700 authors contribute to the Cochrane Collaboration from countries supported by the ACC, of whom 2000 are based in Australia.

In 2010, ACC conducted seven 'Introduction to writing a Cochrane review' courses around Australia and overseas, plus several review completion workshops. ACC's training team also has a leading role in the development and quality improvement of training internationally through the Cochrane Collaboration's Cochrane Training initiative.

Current Research

ACC has a program of research exploring effective ways to inform health care decisions through the uptake of evidence. It has projects investigating the synthesis, interpretation, dissemination and implementation of research evidence for clinical practice and policy.

SEA-URCHIN

SEA-URCHIN (South East Asia – Using Research for Change in Hospital acquired Infection in Neonates) is an NHMRC-funded collaborative project (2011-2015) between Thailand, Malaysia, the Philippines, Indonesia and Australia. The project aims to address whether neonatal infection rates can be improved by increasing the capacity for research synthesis and improving the implementation of effective interventions into practice.

From left: Visiting Fellow Charoonsak Somboonporn (Thailand), Co-Director Steve McDonald, Endeavour Fellow Kun Hyung Kim (Korea) and Systematic Review Trainer Miranda Cumpston.



PLI

The PLI (Policy Liaison Initiative) is an ongoing collaboration between the ACC and the Federal Department of Health and Ageing that aims to encourage and support evidence-based approaches to policy making. The initiative aims to address barriers to using research evidence, particularly Cochrane reviews, through the provision of policy-appropriate summaries of Cochrane reviews and a program of training and support in research use for Department officers.

CIPHER

In partnership with the SAX Institute in Sydney, CIPHER (Centre for Informing Policy in Health with Evidence from Research) is an NHMRC-funded project investigating ways to increase and measure research use in policy decisions.

ALIGN

Chiropractors and physiotherapists provide much of the care for acute low back pain in Australia. The development and publication of the NHMRC clinical practice guidelines for acute low back pain has provided recommendations with the potential to improve the quality of care and safety for people with acute low back pain. ALIGN (Acute Low-back pain Implementing Guidelines iNto practice) investigates the effectiveness of a targeted, theory-based implementation strategy developed to implement clinical practice guidelines in practice.

IRIS

IRIS (Investigating Research Implementation Strategies) investigates the care of people with dementia in general practice, and the effectiveness of a targeted, theory-based implementation strategy to implement evidence-based recommendations into clinical practice. IRIS explores ways of changing practice in line with recommendations and measuring the benefits to health outcomes of people with dementia.

NET

Scientific research continually produces new findings that improve health care. However, research cannot improve health outcomes unless health professionals and health services incorporate the findings into their practice and policies. Successfully changing practice and policy in line with new research relies on strategies that overcome specific barriers. NET (Neurotrauma Evidence Translation), funded by the Victorian Neurotrauma Initiative, develops and tests strategies to increase the uptake of research into policy and practice, facilitating improved outcomes for people after traumatic brain injury.

2010 Highlight

Simon French won the School prize for outstanding PhD thesis – Developing and testing complex interventions for improving the use of evidence in clinical practice: a case study of the management of acute low-back pain in general practice.

Postgraduate Students

3 PhD Students

Publications

16 Journal Articles

1 Book Chapter



The Australian Centre for Blood Diseases (ACBD) is a leading national and international blood diseases centre with recognised research, treatment, and educational programs for blood diseases. ACBD is affiliated with Monash University, Alfred Health, Eastern Health and Southern Health, and is organised into three integrated divisions:

- Clinical and Diagnostic Haematology/Oncology
- Clinical and Basic Research Programs
- Teaching and Education

Thrombosis Research Unit

Head: Professor Shaun Jackson

Blood clotting diseases are Australia's major healthcare problem affecting more than 50% of the adult population and killing one Australian nearly every 10 minutes. Despite intense investigation over the last 40 years into the discovery and development of more effective anti-clotting drugs, the impact of these therapies on mortality rates has remained disappointingly low, with less than 1 in 6 patients taking anti-clotting therapies avoiding a fatal clotting event. This situation is likely to worsen in the future due to the rapidly growing incidence of obesity and diabetes. People with diabetes are typically more resistant to the benefits of anti-clotting therapy; thus there is a pressing need for the identification and development of more effective approaches in the prevention of blood clotting.

Underlying the formation of blood clots are platelets: small, specialised blood cells that stick to areas of injury in blood vessels in order to stop bleeding, in a process known as haemostasis. When triggered within diseased blood vessels, this normally protective process becomes exaggerated and results in an abnormal platelet plug that blocks blood flow through the vessel (arterial thrombosis). Thus, platelets represent a key ingredient in the development of blood clots (thrombosis) that lead to devastating diseases such as heart attacks and strokes.

The unit aims to further our understanding of the basic principles surrounding normal haemostasis, with the ultimate goal to discover a 'magic bullet' that selectively targets pathological thrombosis without compromising haemostasis. The laboratory also investigates the important cross-talk between blood clot formation and inflammation. A major highlight for 2010 was the award of an NHMRC Australia Fellowship to Professor Shaun Jackson.

Current Projects

- Novel insights into platelet function and thrombus formation
 - Novel approaches to regulate blood clot contraction and arterial thrombolysis (S Schoenwaelder)
 - Mitochondrial pathways in procoagulant platelet function and survival (S Schoenwaelder)
 - The prothrombotic implications of diabetes (S Al-Daher)
 - Dynamic interplay between thrombus formation and inflammation (Y Yuan)
- Biochemical and physical factors regulating platelet function
 - A role for Dok2 proteins in regulating haemostasis and thrombosis (S Hughan)
 - Disturbed blood flow and blood clot formation (W Nesbitt)

- Type II PI 3-kinases in haemostasis and thrombosis (J Hamilton)
- The role of thrombin in blood clot formation (Z Kaplan)
- Platelet receptors and their roles in haemostasis and thrombosis
 - The vWf receptor – GPIb/V/IX (S Cranmer)
 - Thrombin and the protease-activated receptors (J Hamilton)

Serpin Biology Unit

Head: Professor Paul Coughlan

The prevention and treatment of blood clots is a delicate act: too much anti-platelet or anti-coagulant therapy can lead to unwanted bleeding, which can have catastrophic consequences (such as haemorrhagic stroke), while fibrinolysis therapy can cause brain damage. The unit examines alternative ways of treating and preventing blood clots, by focusing on the serpin (serine protease inhibitor) superfamily of proteins.

When blood clots form in response to injury, a naturally occurring process of dissolution is also activated. This leads to the clearance of clot from blood vessels during the healing process. Similarly, in diseases such as heart attack, stroke and deep vein thrombosis, clots are usually dissolved over time. In many people this mechanism is inefficient. In the past, activators of clot dissolution have been exploited to treat people with thrombosis. There is a balance in blood between the main clot dissolving factor, plasmin, and its regulator, antiplasmin. The unit studies the ways that these proteins recognise each other and bind together, and has shown that by interfering in this interaction, the clot dissolving process can be accelerated. Ongoing work involves the development of agents which will ultimately be used to treat blood clots and thereby hasten the recovery from thrombotic diseases.



Clinical haematologist Dr Zane Kaplan commenced his PhD under the supervision of Professor Shaun Jackson in the Thrombosis Research Unit.

Fibrinolysis and Gene Regulation

Head: Associate Professor Robert Medcalf

The removal of blood clots from the circulation and the turnover of extracellular matrix proteins are facilitated by specialised enzymes. One of the most important enzymes in this setting is plasmin, which is the end product of the fibrinolytic system. Plasmin performs many functions but it is generally accepted that its primary role is to degrade fibrin, the structural scaffold of a blood clot.

The main interests of the unit are in the molecular and cellular biology of this enzyme system, particularly in gene regulation in various cell types. Efforts are also devoted to understanding the biology and pathophysiology of the plasminogen activator system in the central nervous system, particularly in relation to ischaemic stroke and neurotrauma and modulation of the blood brain barrier.

Current Projects

- Regulation of tissue-type plasminogen activator gene expression *in vitro* (R Medcalf)
- The role of t-PA in the central nervous system (R Medcalf, A Samson, M Sashindranath)
- To understand the means by which t-PA modulates the blood-brain barrier (R Medcalf, B Niego)
- Regulation of the plasminogen activator inhibitor type 2 gene expression (S Stasinopoulos)
- The modulatory effect of the plasminogen activating system on the immune response (R Borg, A Samson, R Medcalf)

Malignant Haematology & Stem Cell Transplantation

Head: Associate Professor Andrew Spencer

A diverse range of translational and clinical research activities exploring improved therapeutic approaches to a variety of blood cancers continued.

Myeloma Research Group

- Epigenetic targeting of haematological malignancies (D Mithraprabhu, A Spencer)
- Small molecule development program (T Khong, A Spencer)
- Cell adhesion mediated drug resistance in multiple myeloma (K Monaghan, A Spencer)
- Tissue array as a predictive tool in multiple myeloma drug response (A Kalf, A Spencer)
- Heat shock proteins as targets for anti-myeloma therapy (E Nichols, A Spencer)
- Impact of CD45 expression on drug resistance and disease progression in multiple myeloma (C Lin, A Spencer)
- Dual kinase inhibitors to target acute myeloid leukemia (AML) (M Guthridge, A Wei)
- The role of inositol phosphatides in regulating PI3K in AML (A Wei, S Rijal, C Mitchell)
- A platform technology for prognostication in AML (A Wei, D Irwin, J McManus)

Stem Cell Transplantation Research Group

- Late Effects Clinic (P Walker, S Avery)
- Immune reconstitution following novel reduced intensity conditioned stem cell transplantation (SCT) (P Walker, A Spencer)
- Longitudinal audit of invasive fungal infections in SCT and acute leukaemia induction (P Walker)

Haematology Clinical Research Unit

Clinical trial activities remained at a high level in 2010, with 34 open trials, with an increasing proportion of Phase 1 and first-time-in-human studies being conducted. Throughout 2010 and into 2011, a suite of multicentre investigator-initiated trials of novel therapeutic approaches to both multiple myeloma and AML were initiated. The Clinical Research Unit acted as the national coordinating site for the ALLG-GIMEMA MM11 myeloma trial.

Eastern Clinical Research Unit

The Eastern Clinical Research Unit (ECRU) is an initiative of the Monash University Department of Medicine and is based at Box Hill Hospital, Maroondah Hospital and The Alfred. ECRU has been involved in clinical trials since 1996 and employs over 50 medical and nursing staff who are involved in the management of over 150 clinical trials in both medical and surgical specialties. ECRU is now the largest multidisciplinary clinical trial unit in Australia. ECRU has particularly distinguished itself in its ability to recruit, collect statistical data and retain trial participants.

ECRU Biotechnology Research Division

ECRU Biotechnology (ECRU Biotech), headed by Dr Anthony Dear, aims to expand the capabilities of ECRU beyond clinical research to a better understanding of the activity of existing pharmaceuticals and the development of new treatments. This in turn promises to deliver better treatment than is currently available. Active contributors to ECRU Biotech include members of several disciplines from the clinical activity at ECRU including endocrinology, neurology and oncology together with significant support from the pharmaceutical industry.

ECRU Biotech also seeks to foster an environment supportive of ongoing academic endeavour, offering biotechnology research projects for Honours and PhD students.

Selected ECRU Biotechnology Collaborative Research Projects

- Assessment of novel small molecule treatments in *in vivo* models of abdominal aortic aneurysm, atherosclerosis and neointimal hyperplasia (R Widdop, Department of Pharmacology, Monash University)
- Effects of liraglutide on vascular endothelial peptide expression in *in vitro* and *in vivo* models of vascular disease (L Knudsen, Novo Nordisk A/S, Denmark)
- *In vivo* characterisation of novel histone deacetylase inhibitors (HDAC) in breast carcinoma (R Anderson, Peter MacCallum Research Institute)
- Effects of novel HDAC inhibitors on HIV latency (S Lewin, Burnet Institute; D Rhodes, AVEXA Pty Ltd, Melbourne)
- Effects of novel HDAC inhibitors and azacytidine in the myelodysplastic syndrome (J McKendrick, Department of Oncology, Box Hill Hospital; G Leone and M Voso, Catholic University, Italy; K Lynch, Celgene Corporation)
- Effects of incretins on severity of acute thromboembolic cerebrovascular accident (C Bladin, Department of Neurology, Box Hill Hospital)

Postgraduate Students

22 PhD Students

Publications

34 Journal Articles

1 Book Chapter

The Australian Centre for Health Innovation (CHI) provides health technology evaluation, innovation and simulation education services that enhance patient safety and quality of care. CHI plays a key role in providing health services with access to innovative technology and education services. Over 7,500 clinicians, managers and technology developers from across Australia used CHI services in 2010.

Key Findings

Reducing Patient Harm from Blood Transfusion – Wrong Blood in Tube (WBIT)

A report prepared for the Victorian Managed Insurance Authority (Jeffcott S, Steele C, Cameron P)

The potential for serious problems in blood labelling exists at each step of the transfusion process. The most common error is known as 'wrong blood in tube' (WBIT), where the patient identification information belongs to one person but the blood belongs to another. The Victorian Managed Insurance Authority (VMIA) sponsored an observational study of existing strategies to combat WBIT across three public hospitals in Victoria. The human factors involved in WBIT incidents were examined through direct observations, interviews and identification of where and how processes might fail. The development of recommendations for reducing patient harm from blood sample collection and a toolkit for hospitals to evaluate their safety systems are the key outcomes from this work.

Radiofrequency Identification (RFID) Scanning of Implants: Improving Logistics and Efficiency

CHI worked with Stryker and Magellan to demonstrate a proof of concept for RFID enabled tracking of orthopaedic implant equipment on consignment to a hospital. The RFID tunnel developed by Magellan can accurately read multiple passive RFID tags in three dimensions within each stock container to enable staff to track stock in seconds rather than hours using the current manual recording systems. As a result, three Victorian hospitals commenced trials of the equipment in 2010.

Clinical Requirements for Videoconferencing and Clinical Communications

A series of evaluation workshops was held for clinicians and their information and communication technology colleagues from across Australia to determine the functional requirements for clinical videoconferencing. This project was commissioned by a group of

national health chief information officers to better inform their decision making about videoconferencing technologies for clinical consultation.

Simulation Education

New courses at CHI included:

- Patient safety for fifth year medical students from Monash University, Malaysia
- Introduction to trauma care: interdisciplinary simulation course

Current Projects

- The use of sensors to protect privacy and security in patient bedrooms
- Collaboration tools for palliative care and degenerative neurological conditions
- Development of further trauma courses with The Alfred Trauma Unit and NTRI
- A comparison of tablet functionality for use in health services
- Advising on information and communications technology developments for digital hospital design
- Models of cloud services for healthcare
- Rapid roaming authenticated desktop access for clinicians

Medical simulations at the Australian Centre for Health Innovation.





Baker IDI Heart and Diabetes Institute is a world renowned medical research facility. Our work extends from the laboratory to hospital research and wide-scale national and international community studies with a focus on diagnosis, prevention and treatment of diabetes and cardiovascular disease.

Our mission is to reduce death and disability from cardiovascular disease, diabetes and related disorders, two complex diseases responsible for the most deaths and the highest costs in the world in terms of treatments and hospitalisation.

Our main laboratory facilities located at AMREP are complemented by a network that includes a research facility in Alice Springs dedicated to Indigenous health, a preventative health laboratory in South Australia with a focus on nutrition and community intervention research, as well as expanding research operations in Singapore.

The institute's work covers five broad themes of research, each of which supports groups of scientists who work in a laboratory setting as well as researchers who work in the community. This integration of basic scientists with epidemiologists, clinicians and public health professionals is central to Baker IDI's strategy to perform research that is directly informed by community needs and to translate discoveries into everyday clinical practice.

Population Studies and Profiling

This group works at understanding the prevalence of disease and disease risk in the population and improving the health of the community. The focus is on prevention and education, as well as development of better profiling tools.

Metabolism and Obesity

The group explores the complex relationship between physical activity, weight regulation and the genetic and environmental underpinnings of metabolism to address the causes and complications of metabolic disorders and obesity.

Diabetic Complications

Diabetes is a chronic, insidious disease that is on the rise in the community. Among its many debilitating complications are heart and vascular disease, kidney and eye disease. This group focuses on understanding which people are most at risk of the complications of diabetes and discovering ways to mitigate the effects of the disease.

Vascular and Hypertension

This group brings together studies on high blood pressure, kidney disease, the neurobiology of the relationship between depression and heart disease, as well as research into the damage to arteries caused by atherosclerosis, and the damage caused by heart attack.

Cardiology and Therapeutics

Heart failure, acute coronary syndromes and better treatment options

for atrial fibrillation are among the research areas for this group. These forms of cardiovascular disease are increasing the health burden of communities. The focus is on taking laboratory findings and translating them into better drugs, surgical and therapeutic devices for people suffering from heart disease.

As well as these research themes, we have a strong presence in health care which includes a multidisciplinary, evidence-based diabetes clinic, diabetes education, and the Healthy Hearts Clinic, providing cardiovascular disease risk assessments to the community.

Baker IDI is also active in training health professionals and collaborating on international projects in heart disease and diabetes.

Celebrating 85 Years

In 2011, we will celebrate 85 years since the Baker Medical Research Institute was established. Our researchers have been responsible for many groundbreaking advances including:

- proving that exercise can lower blood pressure
- proving that mental stress and cigarette smoking both provide powerful, selective and potentially harmful stimulation of the nerves of the heart
- developing techniques to assess stiffness of arteries, enabling the reliable early detection of atherosclerosis and hypertension
- establishing open heart surgery in Australia in collaboration with The Alfred hospital
- developing a method to repair heart valves without surgery
- identifying key factors involved in blood clotting
- defining the differences between Type 1 and Type 2 diabetes

The Baker IDI Research Framework

Baker IDI's research agenda is based on the notion of a disease continuum from birth to death, with the opportunity of preventing the progression of disease at any stage. These themes encompass our activities ranging from cellular and molecular biology, to integrative physiology, population studies, preventative health initiatives and clinical services focused on:

Early life: and the experiences during pregnancy and infancy that may be a determinant of an individual's propensity to develop diabetes, metabolic syndrome and, subsequently, cardiovascular disease in middle age.

Childhood and adolescence: with a view to informing policy and developing novel ways of altering the balance in an individual between energy expenditure, food intake and nutrient density, as well as providing better information on optimal diets and physical activity programs.

Adults with risk factors: including assessment of cardiac and metabolic risk; the causes and treatment of the major cardiovascular risk factors particularly diabetes, hypertension and abnormalities of blood fats; and risk factor clusters such as the metabolic syndrome.

Sub-clinical organ damage: with a focus on the time in life when asymptomatic risk factors cause measurable changes in the body particularly the arteries of the heart, brain, kidneys and eyes.

Acute complications: heart attack, stroke and sudden death; with a focus on understanding the mechanisms underlying the development and rupture of unstable plaques.

Clinical complications: angina, kidney failure, dementia; with a focus on the development of disease management programs, particularly in high risk communities such as the Australian Indigenous community.

Heart failure and terminal disease: including work ranging from fundamental research on maintaining the viability and function of heart cells in the context of advanced disease, the prevention of complications of a failing heart such as arrhythmia, the development of new devices to cure atrial fibrillation, and stem cell research to replace damaged heart muscle or help arteries heal.

Research Highlights

In an extremely productive and successful year, research has continued in a range of areas from cellular and molecular studies to wide-scale community screening and intervention programs, and the translation of research findings into the next stage of therapy development. Findings have been published in high impact journals including *The Lancet*, *New England Journal of Medicine*, *Journal of the American Medical Association*, *Cell Metabolism*, *Molecular Psychiatry*, *Circulation* and *British Medical Journal*.

Early Life

- Recent advancements by the Laboratory for Muscle Research and Therapeutic Development shed new light on the potential use of gene therapy to treat the complications of inactivity and advancing age, as well as a host of conditions that are caused or complicated by the loss of muscle mass and strength.
- Description of the molecular mechanism that explains how blood vessels are damaged by prior episodes of high glucose, a well-described clinical phenomenon, that is for the first time starting to be unravelled using modern molecular biology.

Childhood and Adolescence

- Discovery that a heat shock protein in muscle inhibits inflammation and prevents insulin resistance (pre-diabetes) in the context of obesity and high-fat feeding. Plans are now under way to test these findings in human clinical trials.
- Breaks in sedentary time have beneficial associations with metabolic risk. These findings suggest new public health recommendations regarding breaking up sedentary time that are complementary to those for physical activity. A range of studies are under way to examine the links between sedentary behaviour and metabolic risk in environments such as the workplace.
- Discovery that HDL cholesterol has an important role in glucose and fat metabolism. These findings suggest a potential role for HDL raising therapies beyond vascular disease to address key aspects of the metabolic syndrome. Research is now under way to see if there is a sustained benefit with prolonged HDL elevation.
- Development of a world-first urinary test with the potential to screen for heart disease long before any symptoms emerge.

Adults with Risk Factors

- In *The Lancet*, data from AusDiab (the largest Australian longitudinal population-based study ever conducted) was used to question the basis on which the diagnostic blood sugar levels for diabetes have been set. AusDiab also published the first ever national statistics in any developed country on the incidence of diabetes. AusDiab identified the potential for a novel intervention to improve metabolic health: in addition to reducing total sedentary time, any prolonged sedentary periods should be avoided. Funding was secured to

facilitate the next stage of AusDiab by Associate Professor Jonathan Shaw and his team, which will track 11,000 Australians over 12 years to determine how many people develop diabetes, obesity, kidney and heart disease. A diabetes risk score instrument for assessing the risk of developing diabetes has been developed from AusDiab, and is now being used nationally (and as part of a new Medicare item) to select people for diabetes prevention programs.

- An international conference held in Prato, Italy, attracted good audiences on the topical subject of the link between stress and heart disease. The conference on psychogenic heart disease served to further establish our reputation as leaders in this field.
- The discovery of important interactions between cell compartments in generating potentially harmful reactive oxygen species which damage the kidney in diabetes. These findings have direct clinical implications emphasising the multiple sources of damaging molecules in the diabetic environment that need to be blocked or scavenged in order to reduce blood vessel and kidney injury in diabetes.
- The demonstration that HDL has profound anti-inflammatory effects on monocytes, helping to explain why this 'good cholesterol' helps to avoid atherosclerosis.
- The discovery of a novel treatment for patients with focal atrial tachycardia, which was published in the *Journal of the American College of Cardiology*. The abnormal focus for the arrhythmia was ablated and heart function returned to normal within three months.
- Advancement of our work to develop a drug that can prevent the formation of atherosclerotic plaques by preventing changes in proteoglycans. Patents are in place and research is continuing on the development of this drug.
- A world-first breakthrough in the treatment of high blood pressure was pioneered by Baker IDI researchers, with a study showing a new catheter-based treatment is delivering remarkable improvements in blood pressure levels to clinical trial participants. The procedure involves the insertion of a catheter through the femoral artery and uses radio frequency to 'silence' sympathetic nerves in the renal artery. The results of this study, which were published in *The Lancet*, are expected to revolutionise treatment options for high blood pressure around the world.



Baker IDI Associate Director and Head of Clinical Diabetes and Epidemiology, Associate Professor Jonathan Shaw, with a patient in the institute's purpose-built Specialist Diabetes Clinic.



Head of the Diabetes and Kidney Disease Laboratory, Professor Karin Jandeleit-Dahm with postdoctoral researcher Dr Yugang (William) Tu.

Future Directions

New research initiatives planned for Baker IDI will enhance diabetes and heart disease research and management. Current facilities include:

Metabolomics

Devising new therapies to combat obesity is challenging due to the complex nature of metabolic disease. To develop treatments for metabolic disorders such as obesity, therapies must first be tested in isolated cell systems before progressing to clinical trials. The knowledge gained through research conducted in the planned new facility will allow researchers to devise more effective prevention and treatments. Once the gene functions and defects implicated in particular diseases are identified, researchers can develop ways to screen people for risk factors and design remedies that target the causes and complications of disease.

DNA and Blood Profiling

The establishment of this facility in 2008 represented a major advance in the area of personalised medicine. By more effectively understanding the genetic underpinnings of disease, clinicians will be able to diagnose, treat and care for their patients in a holistic manner. The central idea behind this facility is to integrate existing research disciplines so that health problems are understood and resolved in a way that takes into account individual responses to risk factors.

Clinical Metabolism: The Healthy Lifestyle Research Centre

Diet, exercise and genetics all play important roles in weight regulation. However, it is important to understand the specific underlying causes of obesity, which remain unclear. Opened in May 2010, the Healthy Lifestyle Centre, enables researchers to examine how genetic and environmental factors combine to influence body weight. This unique new facility helps improve understanding about the effects of physical activity and nutrition for the prevention, management and treatment of obesity and its complications, including diabetes and cardiovascular disease. Baker IDI has made several key appointments in the field of health behaviour, including Professor Neville Owen. Professor Owen's research relates to the primary prevention of cancer, diabetes and heart disease, and deals with the environmental, social and personal-level determinants of behavioural risk factors, including television viewing, and desk and screen-bound work.

Specialist Diabetes Clinic

A dedicated clinic combining state-of-the-art facilities opened at AMREP in May 2010. With more than 8,000 patients, it is the largest facility of its kind in Australia. Originally located adjacent to Caulfield Hospital, the new facilities complement the high-quality education and clinical care of this service. The co-location of these clinical services with Baker IDI's research facilities provides greater opportunities to link groundbreaking research with patient care.

Medicinal Chemistry

This facility promotes and enhances existing Baker IDI research projects by providing scientists with the tools they need to further examine the therapeutic potential of particular compounds. Medicinal chemistry is the science of providing small, technically accessible, synthetic molecules. These molecules can be used to induce a change to the human system or better facilitate scientific observations.

Sub-clinical Organ Damage

- We developed a new poly-marker approach for the diagnosis of coronary artery disease using urine samples. Using capillary electrophoresis coupled to mass spectrometry, we defined proteome patterns that are highly specific for coronary artery disease.
- Identification of novel pathways that contribute to myocardial hypertrophy and cardiac fibrosis, key factors in the damaging effects of an enlarged heart in disease, and explaining how heart enlargement in athletes, which occurs through different pathways, is beneficial.
- The description of the role of two relatively recently discovered proteins, ACE2 and RAGE, which could potentially become new drug targets for cardiovascular and metabolic disorders.
- A short course of relaxin treatment in older rats with hypertension was found to lead to marked changes in the large artery structure and a reduction in blood pressure. This suggests a possible therapy in humans is worth exploring.

Clinical Complications

- Clinical trials of a medical device developed at Baker IDI in conjunction with Osprey Medical continued. The device allows people with kidney disease to have coronary angiography without further damaging their kidneys.
- Our staff were key investigators involved in the publication of two landmark studies in the *New England Journal of Medicine* on the best drug treatment for diabetes (ADVANCE) and for people at high risk after stroke, heart attack or other vascular event (ONTARGET, TRANSCEND).
- The Heart of the Heart program was launched in Central Australia in 2009. Dr Alex Brown and his team have screened 200 Indigenous adults as part of this landmark study of cardiovascular disease.
- We have continued to support the Heart of Soweto Study in South Africa with over 8,000 patients now captured via Africa's largest study of heart disease.
- Discovery that inhibition of the hormone, angiotensin II, reduces aortic diameter in patients with Marfan syndrome.
- Development of a novel method for assessing cardiac fibrosis in the human heart using MRI. Further studies are now under way.
- Orthostatic intolerance is a disordered control of blood pressure and causes recurrent fainting and severe fatigue when people stand up. Our molecular research has uncovered a new mechanism that may be responsible for this that will form the basis for new treatments. Former Wiggles, Greg Page, is a sufferer and has supported our research by establishing a fund.

Acute Complications

- Research has uncovered what appears to be the basic cause of heart attack risk in depressive illness. This finding suggests specific treatment to protect patients with depression from heart attack beyond treating their depression alone.

Bioinformatics

An internal, web-accessible workbench called Galaxy was established at Baker IDI to allow scientists to more easily study large data sets, support reproducible, translational genomic and genetic research and allow common analysis among researchers. The work sits at the intersection of biology and computer science, applying computational and mathematical methods to experimental biology. Galaxy was set up by Dr Ross Lazarus (Director of Bioinformatics at the Channing Laboratory, Harvard University) who joined Baker IDI in 2010.



Baker IDI Central Australia: Indigenous Health Research

As part of our mission to address the health inequalities of disease between Indigenous and non-Indigenous Australians, the institute established a dedicated Indigenous health research facility based at Alice Springs. Baker IDI's research program is conducted in close consultation with local communities, working with existing community services and designed to have an immediate effect on vascular health, while improving mortality rates in future generations. In 2010, Baker IDI opened the W&E Rubuntja Research and Medical Education Building, which is jointly tenanted with Flinders University Rural Clinical School.

Dr Alex Brown and Professor Sandra Eades were among the chief investigators in the newly-established Centre of Excellence for Indigenous Primary Care Intervention Research in Chronic Disease. It is one of three specialist centres announced in late 2010 under the auspices of the Australian Primary Healthcare Research Institute to undertake research focused on key health reform challenges.

International Projects

By providing an extension of its Australian research to vulnerable societies around the world, Baker IDI improves the understanding of health and disease around the globe. Part of Baker IDI's mission is to reduce premature ill health and mortality from diabetes and heart disease wherever it occurs. There is a great disparity in health outcomes between Western and developing communities. Poverty is one of the strongest indicators of poor health and it is this inequality that must be addressed. Projects under way include:

Mauritius: The institute's long-standing relationship (over 25 years) with Mauritius passed a major milestone in late 2009 with the signing of a Memorandum of Understanding (MoU) between Baker IDI and the Mauritian government to extend our research into non-communicable diseases, in particular Type 2 diabetes in Mauritius. The objectives of this agreement are to improve the current understanding of the mechanism of Type 2 diabetes through family studies so that effective treatment is possible in the future. The relationship also provides a framework for training and exchange between Mauritian scientists and students with an interest in medical research.

The institute has provided support in the form of survey methods and execution, data analysis and sample preparation. This is an important partnership documenting premature ill health and mortality in a multi-ethnic society that reflects our global population. Projects on gestational diabetes and prevention of Type 2 diabetes are in the

planning phase and the largest surveillance of diabetes complications in any developing nation has just been concluded and published.

Heart of Soweto: This landmark program of research is conducted by Baker IDI in collaboration with the University of the Witwatersrand and the Hatter Cardiovascular Research Institute, South Africa. The team documents emergent heart disease in Africa's largest urban concentration of black people. Comprehensive data from more than 6,000 hospital cases (2006-2008) and 1,300 primary care cases (2009), have resulted in unique reports on emergent heart disease (*The Lancet* and *European Heart Journal*), heart failure (*Circulation*), hypertension (*International Journal of Cardiology*), rheumatic heart disease (*European Heart Journal*) atrial fibrillation (*Heart*) and primary care burden of heart disease (*International Journal of Cardiology*). These data have informed and influenced health care policy in that country. A new phase of research involving the Heart of Africa Study and the multicentre, international Big 5 Primary Prevention Trial aims to extend heart disease surveillance to other Sub-Saharan countries, and examine the impact of a family-based prevention trial in South Africa and Mozambique.

United Arab Emirates

Baker IDI has an MoU with the University of Sharjah. The United Arab Emirates (UAE) is the epicentre of the global epidemic of diabetes and a national study is in the planning phase. The University of Sharjah has been contracted to undertake the study, and Baker IDI will be advising on the survey methods and execution, training of UAE staff, data analysis and sample preparation.

Singapore

Baker IDI has an expanding base in Singapore as a result of key collaborations with organisations such as Duke University, SingHealth and the National University of Singapore (NUS), with the aim of fostering research in cardiovascular disease and metabolic disorders.

NUS has also established the NUS Initiative to Improve Health in Asia as part of its NUS Global Asia Institute. Baker IDI is represented on the International Advisory Board by Professor Paul Zimmet. The first collaborative project to look at the frequency of diabetes and risk determinants in Asian populations is under way between epidemiology groups at NUS, Baker IDI and two leading centres in Beijing.



Postgraduate Students

64 PhD Students
2 Masters Students

Publications

386 Journal Articles
3 Books
15 Book Chapters



The past 12 months have been an exciting time for the institute with a number of strategic initiatives and structural changes implemented, the completion of new laboratory facilities, and a strong performance against key organisational indicators.

Our newly articulated mission statement is 'to achieve better health for poor and vulnerable populations in Australia and internationally through research, education and public health'. This statement best reflects who we are today and where we are headed. While it has a strong focus on the communities we serve, it provides us with the flexibility to address key health issues across our research and public health continuum.

Of great significance was the completion and occupation of the Alfred Centre Stage 2, which was the culmination of more than five years of planning and construction, involving the hard work and extraordinary commitment of many Burnet staff and board members. Our new state-of-the-art laboratory facilities located on Level 7 of the Alfred Centre have significantly enhanced our capacity and we are already seeing the benefits of expanded research and public health programs.

A number of new initiatives were implemented during the year. The institute developed a new ImmunoMonitoring Facility (IMF), the only NATA-accredited facility of its kind in Australia, providing biotech access to support for clinical trials of novel vaccines and immunotherapies.

The Centre for Population Health and its collaborating partners have established a Centre of Research Excellence aimed at reducing the health, social and economic problems of injecting drug use in Australia. This was just one of a number of grant and fellowship successes received from the NHMRC in what was a record year of achievement. Research in human immunodeficiency virus (HIV), malaria, hepatitis C, immunity and vaccines, drug dependency and health of prison populations were just some of the areas supported at the institute this year.

In developing our key health themes, we made a number of strategic appointments to the institute. Professor Louisa Degenhardt has been appointed as Principal in Young People's Health. Dr James Beeson and Dr Freya Fowkes and their team of researchers and epidemiologists joined our Centre for Immunology, significantly increasing the institute's expertise focused on the global health issues associated with malaria. Dr Beeson has since become the head of the Centre for Immunology.

Centre for Virology

The Centre for Virology's mission is to find innovative solutions for the world's most serious viral diseases, focusing on understanding how viruses manipulate their host cells in order to infect them and persist in the body. Research in this area is vital in developing ways to block infection and to prevent viruses replicating and causing disease. The management of chronic viral diseases requires new drugs and diagnostic tools. Research within the centre investigates new drug targets at the molecular level.

HIV-associated Neurological Disorders

The Wright Group is focused upon HIV-associated neurological disorders in diverse international settings. We have undertaken important epidemiological work on NeuroAIDS in both Asia and the Pacific, leading the international SMART Neurology Substudy that examined the neurocognitive performance of HIV-positive patients randomised to receive continuous versus intermittent treatment for HIV infection. We found that cardiovascular risk factors correlated strongly with poor neuropsychological performance. As a result, we recommended that patients be screened and treated for cardiovascular risk factors and disease to offset any potential contributory effects upon their cognition.

Identifying New Therapeutic Targets

The Viral Fusion Laboratory investigates how two major human pathogens, HIV and hepatitis C virus (HCV), attach to and enter cells. Proteins on the surface of viral particles mediate attachment to cellular receptors and then fusion of the virus and cell membranes, which are essential steps leading to viral entry. Understanding these processes at the molecular level enables us to identify ways in which we can block viral attachment and membrane fusion using antiviral agents. It also enables us to design novel vaccines based on the viral surface proteins to elicit an antibody response capable of blocking attachment of viruses to cells. We successfully used this approach to synthetically construct a modified form of the HCV attachment protein and showed that it elicits a neutralising antibody response that can prevent infection with HCV in *in vitro* studies. This modified form of the HCV attachment protein is now a lead vaccine candidate, and further studies will examine its potential for use as an HCV vaccine.

The Life Cycle of HIV

The HIV Molecular Pathogenesis Laboratory, headed by Associate Professor Paul Gorry, aims to understand the very earliest steps in the life cycle of HIV, namely how the virus interacts with cellular receptors

Burnet Institute Ambassador Ms Princess Kasune Zulu, author and AIDS activist, with Associate Professor Johnson Mak



to enter cells. We are demonstrating how alterations in this process accelerate the destruction of CD4+ T-cells in HIV-infected people and how this also renders macrophages susceptible to infection. Moreover, we study how alterations in the way HIV engages cellular receptors facilitates viral escape from new drugs that block virus entry.

Developing the Burnet AX-2 CD4 Test Reader

Associate Professor David Anderson and Professor Suzanne Crowe have continued development of a rapid point-of-care test for measurement of CD4+ T-cells in HIV-infected patients – an essential tool for management of drug therapy. A major focus during 2010 has been the development of the Burnet AX-2 CD4 test reader, together with Melbourne-based Axxin. This simple robust instrument provides enhanced accuracy for samples near the assay cut-off, and allows for improved quality control in assay design and manufacturing.

The Central Nervous System as a Viral Reservoir

The major obstacle to eradicating HIV-1 is the ability of proviral DNA to persist latently in cellular reservoirs. Resting memory T-cells are the best characterised HIV-1 reservoirs, but other cells such as astrocytes in the brain are also latently infected. Unique regulatory mechanisms directing HIV-1 persistence in astrocytes, and the critical nature of these cells for maintaining normal brain function, pose important challenges to strategies that aim to completely eradicate HIV-1 from the body. Led by Dr Melissa Churchill, the HIV Neuropathogenesis Laboratory aims to understand the mechanisms by which HIV-1 infects the brain and persists in the central nervous system.

Growth of Influenza B Viruses for Vaccine Use

Seasonal vaccines against influenza usually consist of the surface antigens of specified epidemic strains of influenza A of the H1N1 and H3N2 subtypes, and influenza B viruses. The growth of seasonal influenza A viruses can be improved by the inclusion of certain genes in the virus. Unfortunately, a similar approach is difficult to achieve with influenza B viruses. Several reports have suggested the use of adaptation to growth at lower temperatures (25°C; cold-adaptation) as a means of enhancing influenza B virus yields. In this project, supported by CSL Ltd, the properties of recent influenza B viruses were compared under different growth conditions to identify reasons for erratic growth in eggs. Several high-yielding, cold-adapted strains continue to be examined by the Tannock Laboratory as potential high-yielding donor strains in the preparation of vaccine reassortants.

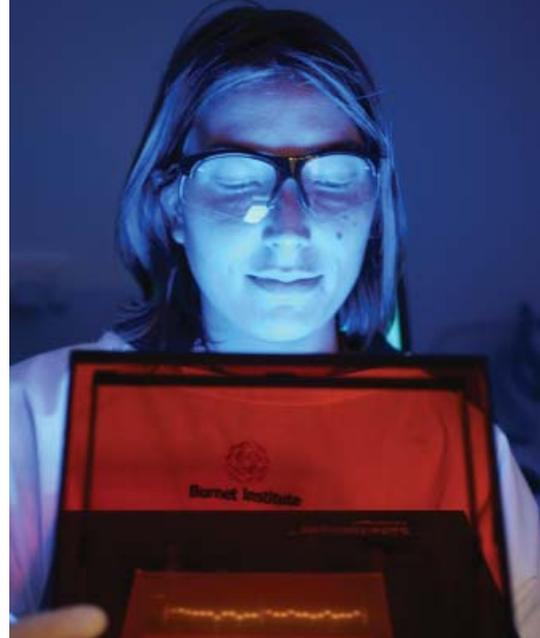
Centre for Immunology

The Centre for Immunology's mission is to develop novel ways to prevent or treat major infectious diseases, cancers, and autoimmune diseases. The centre brings together outstanding research groups and integrates fundamental and applied research programs to understand the way the immune system functions in health and disease. This knowledge is used for the development of novel treatments and vaccines for major human diseases.

HIV-1 Interactions with Macrophages

A cross-cutting collaboration between the laboratories of Dr Paul Ramsland and Associate Professor Paul Gorry has established a computational approach for predicting three-dimensional structures of an HIV-1 surface glycoprotein, gp120, which mediates entry into cells. Dr Jasminka Sterjovski and Michael Roche (PhD student) examined the structural mechanisms for engagement of the host receptors (CD4 and co-receptors CCR5 and CXCR4) by a series of gp120 variants isolated from HIV-1 infected people. The initial experiments examined the capacity of the gp120 variants to mediate CCR5-dependent viral entry into human monocyte-derived macrophages (MDM). This finding

suggested that the gp120 interaction with CCR5 may differ in strength or architecture between different primary HIV-1 isolates. The capacity of gp120 to tolerate mutations at key positions of CCR5 was tested and compared against viral entry into MDM. Critical sites were found to be located in the N-terminal region (first segment of the protein) and the extracellular loop region 2 of the coreceptor. Our ongoing structure–function studies should lead to a detailed structural understanding of viral cellular entry and pathogenesis.



Production of Interferon-λ by DC Subsets

Dendritic cells (DCs) sense pathogen invasion via specific receptors expressed on the surface and inside the cells, known as pattern recognition receptors (PRR). Dr Meredith O'Keefe and her group have further clarified exactly what PRR are expressed by DCs by analysing the proteome (entire suite of proteins) expressed by different subsets of DCs, in collaboration with colleagues in Munich at the Max Planck Institute for Biochemistry and Bavarian Nordic GmbH. They have also shown that a particular type of DC (CD8+ in mice and CD141+ in humans) is a major producer of interferon-lambda (IFN-λ) in response to viral RNA. These DCs are known to be important in inducing potent T-cell responses in viral infections. IFN-λ has been shown to play an important role in protection against mucosal viral infections and may be important for clearance of hepatitis C infection and the cells that make IFN-λ have been ill-defined. We are now investigating how IFN-λ production by these DC subsets may promote or otherwise affect the immune response to infection.

A Role for NFκB1 in Immune Homeostasis

Mice lacking the NFκB1 gene, which is involved in cell signalling within the haematopoietic compartment, develop a lymphoproliferative disease with features that resemble autoimmune disease. Seven months after the transfer of NFκB1-deficient haematopoietic stem cells into normal wild-type host mice, 95 percent of mice developed a multi-organ lymphoid infiltrate resembling the human autoimmune condition systemic lupus erythematosus. Characterisation of these responses revealed a marked increase in specific immune cells (B-cells and CD4+ T-cells) in organs such as the liver, lungs and pancreas. In all cases tested to date, autoantibodies were detected in the sera of mice lacking NFκB1 within the immune system. Collectively, these observations reveal a vital role for NFκB1 in maintaining the normal integrity of the adaptive immune system, as the absence of this regulatory protein may lead to development of a severe autoimmune-like disease.

Designing New Vaccines and Therapies

Professor Geoff Pietersz and colleagues are involved in the design of novel drug and vaccine delivery systems for viral infections and cancer. They have successfully validated a new composition of their cancer vaccine, MFP, in animals and *in vitro* human cell culture. An approach involving the mixing of mannan with whole inactivated influenza vaccine developed by the group has been further optimised using an intramuscular/intranasal prime-boost immunisation strategy

designed to enhance immune responses at mucosal surfaces like the lungs. Membrane translocating peptides were also successfully used to deliver multiple antigenic tumour peptides and confer protection to mice from tumour challenge. Furthermore, they have utilised a small chemical entity that activates an intracellular signaling pathway to increase the immunogenicity of DNA vaccines.

Immune Responses in Hepatitis C Virus Infection

It is still not understood why some people when infected with HCV are able to quickly clear the infection, while others go on to life-long infection and serious complications. Recent studies have shown that IFN- λ may be a critical factor in affecting this outcome and may influence the generation of effective immune responses. In collaboration with institute colleagues, Associate Professor Rose French and her group have studied immune responses and IFN- λ production in the Networks cohort of young injecting drug users. They have shown clear differences in the nature of the immune responses generated in those that resolve HCV infection compared to those with chronic infection, and further studies aim to elucidate the mechanism behind these differences.

Dendritic Cell Development

Studies by Professor Vasso Apostolopoulos and her lab have revealed that reactive oxygen species (ROS) may be responsible for the development of DCs, which play key roles in immune responses. ROS have been implicated in various physiological activities; however, their role in DC activation and generation had not been investigated. Induction of ROS correlated with inflammatory DC and functionality.

Infection, Cancer and Autoimmune Diseases: Identifying New Therapies

A newly discovered white blood cell type, Th17, may have major roles in infection, cancer and autoimmune diseases. These cells normally fight infection but also appear to promote destructive inflammation in autoimmune disease or inflammation that assists cancer cell growth. Professor Mark Hogarth and colleagues aim to identify new therapies and understand mechanisms of disease development. They isolate Th17 cells from mice expressing human Fc receptors that develop destructive autoimmunity and from patients with inflammatory autoimmune diseases like rheumatoid arthritis or lupus.

Studies in mice suggest that infection may trigger a series of events leading to the development of Th17 cells that results in arthritis and a lupus-like syndrome. Indeed, changes in white blood cell hormone levels, especially IL 21 and IL 23, are part of this process and precede disease. In patients, and with the CRC for Biomarker Translation, they have analysed 34,000 genes and surface proteins from Th17 cells to find unique molecules associated with disease that can be targeted for novel therapies that eliminate these cells in arthritis, lupus and cancer.

Centre for Population Health

The Centre for Population Health (CPH) improves the health of the community by conducting high-quality, policy relevant and innovative research into major public health problems associated with infectious diseases, drug use and related behaviours. Specific interests include HIV, hepatitis C, sexually transmitted infections (STIs), malaria, tuberculosis, drug and alcohol misuse and justice health – all serious health concerns in Australia and in the Asia and Pacific regions predominantly affecting highly vulnerable populations.

Chlamydia trachomatis

Chlamydia trachomatis is an STI predominantly affecting young heterosexual men and women, with over 74,000 new notifications in



Project officer provides home-based care at Wachet Jivitadana Sangha Hospital in Myanmar.

Australia in 2010. CPH aims to reduce the impact of chlamydia by reducing transmission and increasing the number of young people tested and treated. As part of this work, CPH explores the use of new technologies such as mobile phones and social networking websites for health promotion.

Scaling up Diagnosis and Treatment of Drug-resistant Tuberculosis in Khayelitsha, South Africa

Tuberculosis bacteria, resistant to commonly used antibiotics, are causing increasing morbidity and mortality in resource-poor settings. Although different drugs can be used to treat drug-resistant tuberculosis (DR-TB), treatment continues for almost two years, side effects are common and treatment outcomes remain poor, particularly among HIV-infected individuals. There are also significant problems with access to diagnosis for DR-TB. Working collaboratively with Médecins Sans Frontières in the large township of Khayelitsha, South Africa, Burnet epidemiologist, Dr Helen Cox has helped to integrate DR-TB diagnosis and treatment into the primary care health system through a more patient-centred approach. Key successes include diagnosis and treatment of approximately half of the estimated cases in Khayelitsha, a dramatic improvement on the three percent global figure. The program demonstrates that most patients with DR-TB can be diagnosed and treated at local primary care clinics, thus avoiding expensive hospitalisation.

Health Intervention for Adult Ex-prisoners

The Passports project (Passports to advantage: health and capacity building as a basis for social integration) is led by Dr Stuart Kinner, head of the Centre for Population Health's Justice Health research program. Passports is the world's first randomised clinical trial in its field, and aims to evaluate the impact of an innovative health and psychosocial intervention package for adult prisoners being released to the community in Queensland.

Major research foci are post-release physical and mental health and risk behaviours, access to and use of health services, and the incidence and timing of recidivism. Over 1,300 prisoners were recruited into the cohort, and are being re-interviewed approximately one, three and six months post-release. We anticipate that Passports will lead to significant gains in our knowledge of how to improve the health of Australian ex-prisoners, a large and growing population.

Malaria

Scientists working in the Gilson/Crabb Malaria Laboratory are interested in how malaria parasites attach to and then invade red

blood cells (RBCs) in order to develop new drugs and vaccines that block invasion. They study the parasite surface protein, AMA1, that helps the parasite strongly and irreversibly attach to the RBC surface. They have discovered that the short stubby tail of AMA1 that pokes back inside the parasite needs to be modified by one of the parasite's kinase enzymes before RBC invasion will occur. If the AMA1 tail modification is blocked, then the parasites can attach to but cannot invade the RBC. This is a novel and important finding and was recently published in a high profile parasitology journal. The group believes that the modification of the AMA1 tail is part of a complex chain of signal transduction events that help parasites make decisions about which cell types to invade and when.

Drug Reporting Systems – IDRS/EDRS

Since 2008, Burnet Institute has run the Victorian arms of the Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (EDRS) in partnership with the National Drug and Alcohol Research Centre. This work provides important surveillance information on patterns of drug use and related harms in Victoria using standard methods that have been applied since 1997 (IDRS) and 2003 (EDRS). These methods include a survey of people using particular types of drugs, interviews with key experts and analysis of secondary data sources. The importance of these systems in picking up new trends in drug use is highlighted by the 2010 Victorian EDRS, through which a large increase in the use of the drug mephedrone (street name: miaow miaow) was documented for the first time in Victoria.

Hepatitis C

Our research into HCV continued largely through our ongoing Networks study and the development of models for the integrated management of hepatitis C in the community. Since commencing in 2005, Networks researchers have followed a cohort of people who inject drugs (the major risk group for HCV infection in Australia) with the primary aim being to better understand the transmission of hepatitis C. Important findings include the identification of very high rates of hepatitis C reinfection and associations between the probability of an individual being infected with hepatitis C and the nature of their injecting network.

Centre of Research Excellence in Injecting Drug Use

CPH successfully applied to NHMRC to establish a Centre of Research Excellence in Injecting Drug Use (CREIDU). CREIDU brings together Australia's leading researchers on injecting drug use (IDU), along with partners and key experts from the non-government sector and policy sectors, to generate new evidence on ways to ameliorate the health and social burden of IDU. With a focus on translating research into policy and practice, CREIDU aims to reduce the key harms associated with IDU by identifying ways to reduce blood-borne virus transmission (particularly hepatitis C), prevent overdoses, and improve justice health and psychiatric health.

Informing HIV Prevention

Burnet Institute has conducted HIV surveillance for the Victorian Department of Health since 1986. In 2010, after four years of historically high annual HIV notifications, new diagnoses of HIV in Victoria declined by 15 percent to 228. An increasing proportion of these notifications were newly acquired in the past 12 months. These data suggest that health promotion activities designed to increase HIV testing, particularly among gay men, may be having an impact. This outcome is supported by Burnet's evaluation of HIV prevention initiatives in Victoria. In a report provided to the Victorian Government in 2010, Burnet staff outlined their findings that recent social marketing campaigns were successful in raising gay men's awareness of the

importance of testing and prompted a meaningful proportion to present for HIV testing. Burnet's sentinel surveillance data also showed a significant increase in monthly HIV testing rates among gay men attending high caseload clinics over the campaign period.

Centre for International Health

The Centre for International Health (CIH) leads practical action to improve the health of people in low-income countries. Our expertise spans HIV prevention and care, women's and children's health, sexual and reproductive health, drug use, primary health care, strengthening national health systems, and education about all these fields. We work with local communities, governments, the UN system and international organisations including Australia's development agencies. We have overseas offices in Papua New Guinea (PNG), Indonesia, Lao PDR, Myanmar (Burma), China (including Tibet), Mozambique and Thailand and also work in other countries through Burnet's local partners.

CIH staff members were engaged to help develop: HIV strategic plans in Fiji, Solomon Islands, Federated States of Micronesia, and Marshall Islands; a national plan to prevent and control emerging infectious diseases in Vietnam; and a national health promotion policy in Samoa. We led a review of the Australian-funded Pacific Malaria Initiative and are in the process of designing a second phase of the program. Our staff also designed a new Clinton Foundation program focusing on AIDS in children in PNG. Burnet staff were active in a number of regional and global harm reduction networks and provided technical assistance to the Tanzanian Government to reduce the HIV risks associated with the escalating wave of injecting drug use in Zanzibar. The centre's HIV prevention work included an innovative sexual network modelling study of bisexual men in Vientiane and Hanoi.

As a partner in the AusAID-funded Women's and Children's Health Knowledge Hub, CIH undertook research to: analyse the barriers and enablers to adolescents accessing sexual and reproductive health information and services in Vanuatu; develop competencies for community health workers to provide quality services to adolescents; identify effective community interventions to save the lives of mothers and babies; increase the counselling and communication skills of maternal care providers; and assess health systems interventions for improving access to maternal and child health services in urban areas of the Philippines.

With AusAID, Burnet co-hosted a roundtable on developing a maternal and child health strategy. Burnet also hosted a technical consultation, sponsored by the WHO, on best practices and tools for preventing



Lao women and children benefit from Burnet's maternal and child health projects.

perinatal transmission of hepatitis B. CIH staff members were on the organising committee for the annual UN-DPI NGO conference held in Melbourne in September, and the institute co-sponsored a conference workshop on the unfinished agenda of sexual and reproductive health rights. Burnet hosted 16 participants from India, Mongolia, Sri Lanka, Indonesia, Fiji and Malaysia for a three-week program on healthy ageing, with the aim of establishing a Healthy Ageing Research Hub for Asia and the Pacific. Professor Mike Toole, Head of CIH, was appointed by the Director-General of the WHO to the Independent Monitoring Board of the Global Polio Eradication Initiative.

Myanmar (Burma)

Burnet has successfully completed the first year of co-implementation with three community-based partners to provide antiretroviral therapy to HIV-positive people with clinical AIDS. In collaboration with Myanmar Interfaith Network on AIDS, Burnet co-facilitated workshops to develop a common platform among religious organisations to respond to HIV and AIDS in communities, and from this, four religions reached a consensus on caring for people living with HIV with loving kindness and preventing stigma and discrimination against vulnerable people. To commemorate World AIDS Day, Burnet, in conjunction with Myanmar Anti-Narcotics Association, hosted an event named 'HIV/AIDS Knowledge Quiz with Celebrities and Entertainment'. The event attracted an audience of more than 1,000 people from all walks of life.

China (including Tibet Autonomous Region)

China-Australia Health and HIV/AIDS Facility (CAHHF) is now in its fourth year of implementation. The continued tightening of CAHHF's strategic focus towards funding policy-oriented research relevant to China's current health reform process has ensured the facility remains highly relevant to China's national health priorities. The AusAID-funded Tibet Health Sector Support Program (THSSP) concluded in June 2010 after six years of operation, having successfully contributed to significantly strengthened health systems in the Tibet Autonomous Region of China, in the areas of HIV testing and counselling, STI testing and treatment, development of clinical management protocols, strengthened approaches to health promotion and outreach, and the first prevalence survey in the region covering HIV and other STIs. Burnet successfully negotiated the continuation of the Cooperation Agreement that allows us to continue our important work in Tibet.

Indonesia

In May 2010, Burnet, along with other consortium members, was awarded a five-year USAID project for 'Scaling Up for Most-At-Risk Populations: Organisational Performance (SUM II)' which focuses on improving organisational performance to expand coverage of effective, integrated HIV interventions that lead to substantial and measurable behaviour change among most-at-risk populations, such as sex workers, men who have sex with men (MSM) and people who inject drugs. Two programs concluded in 2010, including 'Capacity Building for Local Responses to HIV Among Injecting Drug Users in Bekasi, West Java'. The evaluation showed that there is a marked increase in awareness of health risks and willingness to adopt harm reduction measures; however, there remains a reluctance to access public health services.

Sri Lanka, Vietnam and Malaysia

Burnet maintains its presence through partnerships in Sri Lanka (improving the health and well-being of elders), Vietnam (harm reduction and a sexual networking study) and Malaysia (harm reduction).

Mozambique

For more than 11 years, Burnet's work in Mozambique has focused on building the capacity of local non-government organisations that provide vital services to very poor communities grappling with

the impact of the HIV epidemic. These services typically include: counselling; home-based care for the sick, and care and support of orphans and other vulnerable children. Burnet has taken an intensive approach to capacity building and worked closely with 30 organisations in Manica Province to maximise the potential for positive change. We established and educated a local team to train and mentor the 30 organisations in a range of topics, according to their needs.

Papua New Guinea

Burnet completed its management of the AusAID-funded Tingim Laip HIV prevention project and entered a new phase including relocation of headquarters to the School of Medicine and Health Sciences, University of PNG. The East New Britain Sexual Health Improvement Project continues to strengthen the capacity of local services and communities to prevent and treat STIs. Positive outcomes associated with this project include reported shifts in religious and cultural beliefs and values relating to sexual health issues; strengthened relationships between health workers and community advocates (Stret Tokers); and individual behaviour change, such as health care-seeking behaviour, condom use and a reduction in the number of sex partners.

Lao People's Democratic Republic

During its 12 years of operations, Burnet's Lao office has developed a niche area of work in peer education with MSM. Further peer education programs also include sex workers and youth, funded by the Australian government, Global Fund and other donors. A major focus of effort in 2010 was a large regional infrastructure initiative funded by the Asian Development Bank. This project has developed provincial and district HIV prevention teams consisting of representatives from different government sectors that are responsible for project implementation. The teams work with youth in villages along a new highway and also with private sector employees. Initial findings show a strong increase in HIV knowledge across all target settings. Funded by an Australian government development research grant, Burnet conducts innovative research that identifies network maps of sexual relationships in Vientiane and demonstrates how even individuals deemed as being in low risk categories are directly linked to high risk categories such as MSM.

Pacific Program

Burnet engaged with a number of Pacific countries through operational research and capacity development in the fields of drugs and alcohol, adolescent sexual and reproductive health, and infectious diseases. The Pacific Drug and Alcohol Research Network maintained its research capacity-building focus, and in February, the Australian National Council on Drugs launched Burnet's report 'Situational Analysis of Drug and Alcohol Issues and Responses in the Pacific 2008-09'.

The Women's and Children's Health Knowledge Hub partnered with Vanuatu-based NGO, Won Smol Bag, to conduct operational research exploring barriers to accessing sexual and reproductive health services. Burnet continued to support HIV programming through partnerships with regional agencies, such as the Secretariat of the Pacific Community, governments, and civil society in five Pacific countries reviewing and developing national strategies to respond to HIV and STIs. Preliminary work to establish research on HIV prevalence in Fiji's prisons was completed.

Postgraduate Students

46 PhD Students
11 Masters Students

Publications

159 Journal Articles
1 Book
2 Book Chapters
6 Commissioned Reports



TheAlfred



Cardiothoracic Surgery

Director: Professor Donald Esmore AO, MBBS, FRACS, FRCS (Edin CT)
Head Cardiac Surgical Research Unit: Professor Franklin Rosenfeldt, MBBS, MD, FRACS, FRCS (Edin), FCSANZ

Donor Heart Preservation

Improved techniques of preservation can enhance the current results of cardiac transplantation and reduce the incidence of primary graft failure once a transplant has been done. Primary graft failure often necessitates the use of mechanical support for the heart to allow the patient to survive and recover. Improved preservation may also allow the use of a new source of donor hearts, namely donation after cardiac death (DCD) hearts. DCD donors are patients who have technically died because of cessation of heart beat followed by brain death. However, with improved techniques it may be possible to restart the heart, revive it and subsequently use it as a transplant. Our new technique of preserving transplant hearts is to perfuse them continuously between donation and transplantation with a novel protective solution. We have shown that perfusion preservation is highly superior to conventional storage in ice.

Integrative Medicine

Improving cardiothoracic surgery patients' pain and anxiety after surgery has been the main focus in 2010. A randomised study comparing massage therapy delivered on the wards to an equivalent period of rest time was conducted. The study also determined feasibility of providing such a service on a busy ward and assessed patient and staff satisfaction with the intervention.

Major Findings

We have shown that preservation of donor hearts by perfusion is superior to the conventional technique of cold storage. This perfusion enables prolonged preservation of normal donor hearts and resuscitation of donation after cardiac death hearts.

We have shown that massage given to patients after cardiac surgery significantly reduced perceived pain, anxiety and muscle tension and induced relaxation and increased patients' hospital experience when compared to an equivalent amount of rest time. In particular, a highly significant 52% reduction in pain was reported after a 20 minute

Dr Lesley Braun and Cathy Reardon (back left and right) coordinate the stress reduction after cardiac surgery by massage study.



Accurately calibrated perfusion is critical for the success of a transplant. From left: Alfred perfusionists Mark Mennen and Robin McEgan, Professor Frank Rosenfeldt (Chief Investigator) and Chris Egan (Research Assistant).

massage delivered to patients on days 3 or 4 after surgery. A significant reduction in pain was also observed when massage was applied on days 5 or 6, thereby confirming the original result. Acceptance of the therapy by nurses and physiotherapists was excellent. Over the study period, an additional 91 referrals were made for the massage service, predominantly by physiotherapy staff, indicating an unmet need for this therapy.

Due to the significant benefits of massage therapy on pain, anxiety, muscle tension and relaxation, and interest from nursing and physiotherapy staff to implement a service, we have been negotiating with Endeavour College to provide massage to patients free-of-charge. We have developed a 2-day induction program for potential massage therapists to provide orientation to cardiac surgery, the cardiothoracic patients needs and medications, working in a hospital environment and OHS issues. Massage therapists will be supervised by an experienced supervisor with experience working at The Alfred hospital. This will directly translate the research findings into practice and shortly benefit patients.

Current Projects

- Donor heart preservation by perfusion – Franklin Rosenfeldt
- Heart donation after cardiocirculatory death – Franklin Rosenfeldt
- Cardiac Wellness Project – Lesley Braun and Franklin Rosenfeldt
- Rib plating for chest trauma – Silvana Marasco
- Stress reduction after cardiac surgery by massage – Lesley Braun
- Evaluation of carbon dioxide insufflation during cardiac surgery – Silvana Marasco

Postgraduate Students

2 PhD Students
2 Masters Students

Publications

20 Journal Articles
1 Book
4 Book Chapters

Research activities in the Department of Cardiovascular Medicine span the continuum from prevention and early disease detection to the management of end-stage cardiac disease. A particular feature in recent years has been the growth in research in the cardiac catheterisation laboratory particularly in relation to the evaluation of devices of which some have originated through work at AMREP. In addition, there has been expansion in research into novel cardiac imaging, particularly cardiac MRI and CT angiography.

Effects of Good Cholesterol

In relation to prevention and risk factor management, work has continued on the effects of HDL (good) cholesterol and the metabolic and inflammatory changes which accompany obesity. Collaborative studies between Professor Anthony Dart and Professor Jaye Chin-Dusting at Baker IDI have examined some of the inflammatory and endothelial changes which accompany severe obesity and their amelioration by treatment. These studies have focused on novel findings with endothelial microparticles and have demonstrated that obese individuals have higher levels of these particles in the blood than do their lean counterparts, indicating the presence of damaged vascular endothelium.

Professor Bronwyn Kingwell and colleagues have demonstrated that reconstituted HDL infusion inhibits fasting-induced fat breakdown and oxidation in patients with Type 2 diabetes, potentially through both AMPK activation in adipose tissue and elevation of plasma insulin.

New Hypertension Treatment

Research into hypertension has concentrated on the management of patients who remain substantially hypertensive despite the use of multiple medications. A major finding in this area has been in relation to percutaneous renal denervation, with a first in man clinical trial led by Professor Henry Krum, Professor Murray Esler and Dr Tony Walton demonstrating this as a promising new approach to an intractable clinical condition. The procedure requires percutaneous placement of a catheter in the renal nerves, with subsequent radiofrequency induced interruption of the renal sympathetic nerves. The recent trial with the ARDIAN innovation device in such patients has been important and has indicated that blood pressure control may be achievable through this procedure.

In addition to clinical evaluation, this research has further examined the basic physiological mechanisms underlying the benefit from this procedure with evidence suggesting that both efferent and afferent renal sympathetic nerves may be contributing to the elevated pressures. This work has featured in publications in *The Lancet* and *New England Journal of Medicine*. Expansion into other fields where exaggerated renal sympathetic function is a likely factor is currently under way. In particular, it will include a major study into the effects of renal denervation as a possible treatment for heart failure, led by Professor David Kaye.

Cardiologist Dr James Hare investigates novel tissue characterisation techniques using cardiac MRI.

Coronary Artery Disease

Work in relation to coronary disease has concentrated on acute coronary syndromes and the management of acute myocardial infarction. Dr Stephen Duffy and Dr William Chan have completed a major trial into the effect of iron chelation on outcomes after primary angioplasty in patients presenting with an ST elevation acute myocardial infarction. The project has utilised cardiac MRI to estimate myocardial infarct size and to measure cardiac remodelling over the subsequent three months.

Using a lipidomic approach, eight plasma lipids have been identified from over 300 candidates which accurately distinguish unstable from stable coronary artery disease presentation in a study in collaboration with Associate Professor Peter Meikle at Baker IDI. In the next phase of these studies it is planned to examine prospectively the ability of this lipid subset to predict which patients with coronary disease are likely to present with myocardial infarction or unstable angina.

In other studies, Dr Karen Lu Fang and Professor Anthony Dart have demonstrated differences in circulating fibrocytes between patients with stable and unstable coronary disease. These may not only then serve as potential biomarkers but may also contribute mechanistically to the explanation of why some atherosclerotic plaques become unstable.

The department continues to be a major contributor to the Melbourne Interventional Group. Research from this group has identified peri-procedural atrial fibrillation as a poor prognostic sign in patients undergoing angioplasty. In addition, current studies are evaluating the outcome of patients treated with an intra-aortic balloon pump during emergency angioplasty. The ability of novel biomarkers to predict peri-procedural myocardial infarction in patients undergoing major vascular procedures has also been undertaken in a collaborative project with the Department of Vascular Surgery.



Antiplatelet Therapy

Research has also continued into evaluation of antiplatelet therapy, in particular its potential interactions with concomitant medications such as proton pump inhibitors. The problem of contrast-induced nephropathy has been studied with preliminary results from a newly developed device to effectively remove contrast from the circulation. Again, this resulted from an original development at AMREP from the work of Professor David Kaye.

Percutaneous Aortic Valve Replacement

In other work originating from the cardiac catheterisation laboratory, Dr Tony Walton and Dr Stephen Duffy have continued to evaluate the benefits of percutaneous aortic valve replacement contributing substantially to local and international research in this area. The catheter laboratory at The Alfred was the first in Victoria to undertake this procedure, which looks a promising alternative to cardiac surgery for aortic valve replacement in the elderly.

Cardiac Imaging

Research into cardiac imaging has continued particularly in cardiac MRI with the more recent initiation of research into coronary CT angiography. A particular finding in relation to cardiac MRI is the demonstration in subjects with heart failure that the likelihood of significant ventricular arrhythmias in patients considered for implantable defibrillators can be predicted from the extent of cardiac fibrosis detected by MRI. Multisequential cardiac MRI was used to detect acute and chronic rejection in heart transplant recipients, and also to predict response to cardiac resynchronisation therapy in heart failure patients. Given both clinical and research application for cardiac MRI, the department is fortunate to have recruited Dr James Hare, a second cardiologist with extensive experience and training in this modality, to complement the work of the head of this service, Dr Andrew Taylor.

Atrial Fibrillation

Associate Professor Peter Kistler continues to lead research in clinical arrhythmia development particularly atrial fibrillation and its relation to the development of heart failure and its management. An intriguing study completed during the year demonstrated that atrial fibrillation is rare in patients who had undergone double as opposed to single lung transplantation, reinforcing the need for complete pulmonary vein isolation when pulmonary vein isolation is used as a therapeutic modality.

Extensive collaboration between Professor Anthony Dart, Dr Silvana Marasco from the Department of Cardiothoracic Surgery and the laboratory of Associate Professor Liz Woodcock at Baker IDI has been evaluating the role of signalling molecules in the inositol pathway to the development of atrial fibrillation. Current studies in this translational research are concentrating on microRNAs – important regulators of gene function.

Cardiovascular Disease and HIV Infection

A particular feature of research in the department is close links with neighbouring AMREP partners, particularly the basic laboratories at Baker IDI and the Burnet Institute. A number of projects have evolved as collaborations with HIV researchers on the campus, reflecting the growing importance of cardiovascular disease to the natural history of HIV infection. The enhanced cardiovascular risk in this particular cohort likely reflects an enhanced inflammatory state. Collaborative studies with Professor Jennifer Hoy and colleagues in the Infectious Diseases Unit have been addressing this.

*Professor David Kaye
and Research Assistant
Ouda Khammy.*



Clinical Trials

The department continues to contribute to a large number of externally originating clinical trials, including both commercial and non-commercial, and is fortunate to have a number of experienced and committed clinical trial nurses. Current trials include the exciting new approach of alternatives to warfarin in patients requiring anticoagulation, novel anti-inflammatory drugs in patients with unstable coronary disease, heart rate lowering medications in patients with stable coronary disease and new lipid lowering drugs. In addition the department contributes data to a number of studies involving new devices.

Major Achievements

In addition to the major findings already presented, researchers in the department have also achieved a number of noteworthy research related outcomes. Professor Dart and colleagues have been awarded a further NHMRC Centre of Research Excellence for five years for Training in Translational Cardiology. This is the third consecutive quinquennium in which investigators from the department have received this or a similar award.

Professor Dart is also an investigator with Associate Professor Dmitri Sviridov from Baker IDI on a new NIH grant in relation to atherosclerosis and HIV. Dr Jonathon Habersberger won the prestigious Ralph Reader Prize at the annual meeting of the Cardiac Society of Australia and New Zealand for his work under the supervision of Professor Karlheinz Peter. Dr Dani Michel's work on the effect of high blood pressure on the adhesion of leukocytes to the vascular endothelium won first prize at the High Blood Pressure Council of Australia annual meeting. Dr James Hare has been the recipient of a CSANZ fellowship. Dr Peter Kistler has been appointed as an Associate Professor by the University of Melbourne. Himawan Fernando (BMedSc student) was awarded an H1 for his year's work under the supervision of Dr James Shaw.

Postgraduate Students

19 PhD Students
1 MD Student

Publications

75 Journal Articles

The Centre for Obesity Research and Education (CORE) is dedicated to understanding and optimally managing the chronic disease of obesity, and measuring the effects of weight loss on health, quality of life and survival. CORE is unique in applying a multidisciplinary approach to the study of obesity, which integrates a major clinical obesity management program with strengths in clinical research, clinical epidemiology, public health, basic sciences and professional and community education. Through this integration, CORE is able to measure the health consequences of obesity, along with the unique capacity to evaluate the health benefits of weight loss.

Research Areas

CORE is, first and foremost, a research centre. Research is central to its mission and its clinical research capability is what sets CORE apart from most other similar research groups.

Basic Research

- Weight regulation – appetite control and energy expenditure
- Mechanisms of obesity related diseases

Clinical Studies

- Randomised controlled trials
- Observational studies
- Optimising therapy
- Measuring outcomes – health, quality of life and survival

Public Health

- Population health
- Prevention of obesity – secondary
- Health impact of weight loss
- Epidemiological modelling
- Cost-effectiveness and health economic studies

Awards

Mr Paul Burton – Royal Australasian College of Surgeons (RACS) Postdoctoral Fellowship

Dr Lisa Doyle – NHMRC Postgraduate Scholarship and RACS Foundation for Surgery Research Scholarship



*Associate Professor
Wendy Brown
became Director of
CORE in late 2010.*

Major Findings

- Adolescent study published in the *Journal of the American Medical Association*, the first randomised controlled trial of bariatric surgery versus conservative therapies in an adolescent population
- Physiology and pathophysiology of the LAP-BAND: a series of studies exploring the role of the oesophago-gastric junction on satiety
- The real incidence of depression and the utility of the Beck Depression Index in obese patients seeking bariatric surgery

Current Projects

- Type 2 diabetes and BMI 25-30 randomised controlled trial (RCT) (Professor Paul O'Brien)
- Physical activity and weight loss in laparoscopic adjustable gastric banding (LAGB) patients RCT (Kristine Egberts)
- Optimised nutrition program for weight loss in LAGB patients RCT (Kristine Egberts)
- Meal frequency, weight loss and dietary satisfaction in LAGB patients RCT (Kristine Egberts)
- Liquid versus solid nutrition study (Kristine Egberts)
- Cohort study of changes in metabolic syndrome with weight loss (Dr Lisa Doyle)
- Indigenous diabetes study (Professor Paul O'Brien)
- Survival study (Dr Anna Peeters)
- Intensive care study (Professor Paul O'Brien)
- Knee pain study (Dr Peter Baquie)
- Impact of treatment of obesity on cancer incidence and survival (Dr Sarah Birks)
- Psychological assessment study (Dr Melissa Hayden)
- Change in BDI factor scores (Dr Melissa Hayden)
- Anti-depressant medication study (Dr Melissa Hayden)
- Predictors of attrition in weight loss interventions (Dr Leah Brennan and Irina Moroshko)
- Nuclear medicine study: gastric emptying (Mr Paul Burton)
- Upper gastrointestinal symptoms study (Mr Paul Burton)
- Video manometry study (Mr Paul Burton)
- Physical activity and weight loss in LAGB patients – systematic review (Kristine Egberts)
- Erosions after LAP-BAND surgery – systematic review (Kristine Egberts)
- Nutrition programs for weight loss in LAGB patients – systematic review (Kristine Egberts)
- Cardiac study (Professor Paul O'Brien)
- Adipose tissue study (Dr John Wentworth)
- Obesity as an auto-immune disease (Dr John Wentworth)
- Cost-effectiveness review: diabetic study (Julie Playfair)
- Cost-effectiveness review: BMI 30-35 (Julie Playfair)
- Cost-effectiveness review: adolescent study (Cheryl Laurie)

Postgraduate Students

3 PhD Students
1 Masters Student

Publications

10 Journal Articles
2 Book Chapters



TheAlfred



Clinical Pharmacology

Head: Professor Henry Krum MBBS, PhD, FRACP, FCSANZ, FESC

The Clinical Pharmacology Unit provides drug-related services to The Alfred, including advice to and membership of the Drug and Therapeutics Advisory Committee and the Human Research Ethics Committee, leadership on the Adverse Drug Reactions Committee and consulting on drug and toxicology related clinical problems.

The Clinical Pharmacology Unit has a very active program of basic and clinical research involving evaluation of new and established drug therapies.

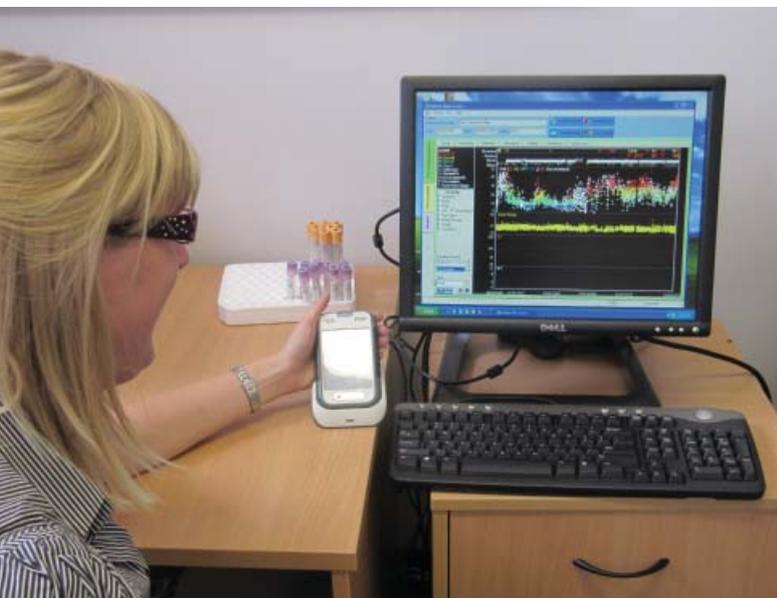
Clinical Research

Clinical research is focused on drugs that may affect the cardiovascular system. Agents under current active research evaluation include COX-2 inhibitors, angiotensin receptor blockers, aldosterone receptor antagonists, clozapine and beta-blockers, as well as various experimental agents. Evaluations include assessment of autonomic and endothelial function as well as microcirculation tone in health and disease.

The unit also serves as a coordinating centre for multicentre clinical trials. Current ongoing trials include:

- ANGLE-HF: This study evaluates the utility of renal biomarkers in predicting worsened renal function and major cardiovascular events in patients with acute decompensated heart failure.
- SCREEN-HF: (SCReening Evaluation of the Evolution of New Heart Failure). The SCREEN-HF study has now recruited all 3,500 elderly (>60 years) subjects with at least one risk factor for heart failure and determined plasma brain natriuretic peptide (BNP) levels. Funding has been secured to longitudinally follow up all subjects for 5 years to assess for new heart failure development, and to randomise the highest BNP quintile to spironolactone versus placebo to lower BNP and reduce heart failure development.

Susie Cartledge analyses a patient's left atrial pressure obtained from their implanted HeartPOD™ device via a handheld patient advisory module.



PhD student Lavinia Tran conducts an iontophoresis study to assess vascular tone.

- Triple R (Reverse Remodelling Resynchronization) Study: Patients with heart failure may be eligible to receive a biventricular pacemaker (cardiac resynchronization therapy) if they have evidence of dyssynchrony either on ECG or imaging. However, the mechanism by which cardiac function is improved is poorly understood and, furthermore, approximately 30% of eligible patients either have no response or deteriorate with this therapy. This randomised controlled trial seeks to determine mechanisms by which patients improve cardiac function and/or whether certain markers of disease predict non-response.
- Renal denervation: Assessment of a novel procedure to denervate renal sympathetic activation in resistant hypertension.
- INTEGRATE: Evaluation of physician inertia in hypertension management and strategies to improve this problem.
- Fibroscan: Evaluation of effect of heart disease on liver fibrosis/stiffness.
- ATMOSPHERE: Evaluation of a direct renin inhibitor in heart failure.

Basic Research

The unit also conducts a number of basic research programs within the Monash Central Clinical School research laboratories. Current programs include:

- Heart-kidney interactions in cardiac disease
- Role of soluble epoxide hydrolase inhibitors in cardiac disease
- Role of Rho kinase in cardiac fibrosis
- Role of novel agents in cardiac fibrosis and inflammation

Postgraduate Students
6 PhD Students

Publications
27 Journal Articles



Two dimensional imaging of vascular abnormalities in the brain (left) versus three dimensional rotational angiography (centre and right). 3DRA is used by interventional radiologists and radiotherapists to plan treatments for cerebral aneurysms and AVMs.

The Alfred Radiology Department is one of the most advanced radiology departments in Australia and is committed to providing safe, efficient and cost effective diagnostic and interventional radiology services. State-of-the-art facilities include the first completely robotic digital radiography room and the lowest radiation dose computerised tomography (CT) scanner in Victoria. The commitment of our staff is underpinned by excellence and leadership in radiological practice, safety, teaching and academic research. Radiological imaging and minimally invasive image-guided interventional procedures are used across all medical disciplines. With support and governance through the Radiology Research Unit, internal, collaborative and commercially sponsored clinical trials are conducted.

Current Projects

Vascular Intervention

- Evaluation of the CRUX Biomedical™ inferior vena cava (IVC) filter system
- CORAL: Cardiovascular Outcomes in Renal Atherosclerotic Lesions
- 3D rotational angiography in stereotactic radiotherapy planning for arteriovenous malformations (AVMs)
- A randomised study to compare the technical difficulty of retrieval of the Bard G2® X and the Cook Celect vena cava filter systems
- Percutaneous balloon angioplasty for the treatment of extracranial vein abnormalities in MS patients: a retrospective study
- PROTECT: PROphylaxis of ThromboEmbolism in Critical care Trial
- Splenic embolisation in blunt abdominal trauma
- Uterine vascular malformations
- Post-operative pain management in patients undergoing uterine artery embolisation for symptomatic leiomyoma
- Follow up of failed retrieval of IVC filters in trauma patients
- Catheter-directed thrombolysis of lower limb thrombosis
- Variant treatment for gastric varices with polidocanol foam using balloon-occluded retrograde transvenous obliteration: a pilot study

Neurovascular Intervention

- Reflection of intracerebral aneurysm identification of multislice computer tomography (64 slice) and digital subtraction angiography
- A Phase 2, multicentre, international, double blind, randomised, placebo-controlled, parallel group, dose finding study for the prevention of cerebral vasospasm after aneurysmal subarachnoid hemorrhage by intravenous administration of clazosentan
- The epidemiology of blunt cerebrovascular injury

Trauma

- Correlation between MRI and operative findings in acute cervical spine injury: a retrospective review
- Occipital condylar fractures – incidence and clinical follow up
- Evaluation of the cervical spine clearance process in a level 1 trauma centre
- The incidence and severity of discoligamentous injuries with isolated facet joint injuries (fracture/dislocation) identified on CT scan of the cervical spine – is routine MRI required?
- TBI II protocol fluid resuscitation of critically ill patients with traumatic brain injury: potential mechanisms behind the detrimental effect of albumin resuscitation
- Focused assessment with sonography for trauma
- Persistent midline cervical tenderness after normal CT in alert, neurologically intact trauma patients

Renal Trauma

- Assessing the usefulness of delayed imaging in routine follow-up for renal trauma
- Predictors of outcome in blunt high-grade renal injuries treated with conservative intent
- Review of management of renal trauma

Tumour Ablation and Embolisation

- Irreversible electroporation (IRE) for the treatment of focal liver, kidney and lung cancer: a pilot study
- A Phase 2 randomised, double-blind, placebo-controlled study of sorafenib or placebo in combination with transarterial chemoembolisation for hepatocellular carcinoma

Cancer and MRI

- A prospective, open label Phase 1B study of single dose intravenous KDF-07002 administered as a tumour imaging agent with MRI in male subjects with head and neck cancer
- A review of MRI for rectal cancer reporting in The Alfred: is synoptic reporting required?
- Comparing clinical sigmoidoscopy and MRI measurements for rectal cancer location – is there a correlation?
- Practicalities of MRI screening for women at genetic high risk for breast cancer

Continued on page 37

Postgraduate Students

3 PhD Students
9 Masters Students

Publications

6 Journal Articles



TheAlfred



Emergency and Trauma

Director, Emergency and Trauma Centre: Dr De Villiers Smit MB, ChB, FACEM
Director, Trauma Services: Associate Professor Mark Fitzgerald ASM, MBBS, FACEM, MRACMA

The Emergency and Trauma Centre has an active research program that covers a broad spectrum of activity and involves collaborations with most inpatient units, the National Trauma Research Institute (NTRI) and the Monash University Department of Epidemiology and Preventive Medicine (DEPM).

Five emergency specialists and one nurse specialist are undertaking doctoral studies and a large number of nurses and doctors are undertaking postgraduate research training. The Emergency and Trauma Centre also takes a leading role nationally in hosting a research training course for emergency trainees. Publications have consistently increased over the last decade.

Major ongoing collaborative research projects with NHMRC research funding include:

- **Australasian Resuscitation in Sepsis Evaluation (ARISE)** – an NHMRC funded randomised controlled trial across more than 40 hospitals involving the emergency and intensive care areas, in collaboration with the Australian and New Zealand Intensive Care Society (ANZICS) research group. The study examines the role of early goal directed therapy in severe sepsis and will take a further two years to complete.
- **POLAR** – an NHMRC funded randomised controlled trial across six hospitals in collaboration with the ANZICS research group to determine the role of hypothermia in protecting patients with traumatic brain injury from further secondary brain injury has commenced enrolment.

Patient receives acupuncture in the Emergency and Trauma Centre as part of the MEDACT Study.



- **MEDACT** – an NHMRC funded randomised controlled trial in collaboration with RMIT University across three hospitals. The study, which aims to determine the role of acupuncture in acute pain syndromes presenting to the Emergency Department, has commenced enrolment and is led by Dr De Villiers Smit.
- **HOLTT** – an NHMRC and Traffic Accident Commission funded study in collaboration with the Hyperbaric Unit examines the role of hyperbaric oxygen in lower limb trauma and continues to enrol patients.
- **RINSE** – a prehospital randomised controlled trial in collaboration with Ambulance Victoria assessing the outcomes of early cooling post cardiac arrest. This study has just commenced and will continue the extensive Melbourne based research that has already changed management in this area.
- **Patient Safety** – in conjunction with the DEPM, there has been an emphasis on improving the methodology for measuring and improving patient safety. This has involved research to improve outcomes in trauma, burns and cardiac arrest. Smaller projects have included investigation of human factors in areas such as wrong blood in tube and patient handover.

The Alfred Emergency and Trauma Centre is a leader in international emergency medicine and has received funding to undertake improvements to emergency and trauma care in Sri Lanka, India, China, Singapore, Hong Kong, Malaysia and other nations. A number of collaborative research projects are being undertaken to evaluate these programs.

Collaboration with Ambulance Victoria has been particularly important for the Emergency and Trauma Centre. As well as being involved in a number of large randomised controlled trials, collaborative research with Ambulance Victoria using the Victorian Ambulance Cardiac Arrest Registry (VACAR) has been integral to investigating the epidemiology, management and outcomes of out of hospital cardiac arrest. Dr Conor Deasy, an emergency specialist from Ireland, has undertaken a PhD studying improvements to out of hospital cardiac arrest management in Victoria. His work has involved evaluating outcomes in patients at the extremes of age – paediatrics and the elderly. Conor has also evaluated the impact of the changes to guidelines for resuscitating cardiac arrest victims.

Postgraduate Students

3 PhD Students
50 Masters Students

Publications

33 Journal Articles
1 Book
1 Book Chapter

Diagnostic and Interventional Radiology continued from page 36

MRI

- A Phase 2, randomised, double-blind, placebo-controlled, study to evaluate the safety and efficacy of daunetide for the treatment of progressive supranuclear palsy MRI component
- Aspirin for the prevention of cognitive decline in the elderly: a neuro-vascular imaging study (ENVIS-ion) from ASPREE

- Evaluation of cerebral AVM before and after radiosurgery utilising brain STAT cerebral perfusion with arterial input function
- Use of posterolateral corner injuries of the knee

Other

- The impact of norfloxacin on portal pressure and endotoxaemia and the role of vasoactive mediators in clinically significant portal hypertension
- Osseointegrated prosthesis for the rehabilitation of amputees



Research Activities

Mechanisms of Diabetic Complications

Professor Leon Bach

Patients with diabetes develop complications including damage to the blood vessels, eyes, nerves and kidneys. Although high glucose levels are necessary for the development of these complications, the precise mechanisms remain incompletely understood. Professor Leon Bach's laboratory is studying the role of proteins that are modified by glucose (advanced glycation end products – AGEs). In particular, his laboratory has identified a novel interaction between AGEs and ERM proteins that are important for maintaining cell shape and function. Current studies are aimed at identifying the role of this interaction in mediating diabetes-induced tissue damage. In 2010, the group studied the relationship between proteases and AGE binding to ERM proteins with a focus on kidney tubule cells. The group also started studying the role of ERM proteins in podocytes, which are cells within the filtering apparatus of the kidney.

Professor Bach has continued a clinical study with Associate Professor Dmitri Sviridov and Associate Professor Merlin Thomas from the Baker IDI Heart and Diabetes Institute to investigate the effects of glucose modification on the anti-atherogenic properties of high density lipoprotein in diabetic patients.

Regulation of Growth Factor Activity

Professor Leon Bach

Insulin-like growth factors (IGFs) are important for normal growth and development, and the IGF system is perturbed in many disease states, including growth disorders, diabetic complications, cancer, and atherosclerosis. A family of six IGF binding proteins (IGFBPs) regulates their actions. For many years, Professor Leon Bach's laboratory has focused on the biological role of IGFBP-6, particularly its role as an IGF-II inhibitor in cancer. These studies may lead to a new class of therapies aimed at modulating the IGF system, which may be relevant for IGF-dependent diseases.

The group has previously shown that IGFBP-6 promotes migration of cancer cells in an IGF-independent manner. Further work in 2010 has studied a number of intracellular signalling molecules involved in this effect and identified a possible cell surface protein that may also be involved.

Clinical Trials in Diabetes and Thyroid Care

Professor Duncan Topliss

ADVANCE-ON is a long term follow-up of participants in the now-concluded ADVANCE trial in Type 2 diabetes. It seeks to provide evidence of a late benefit (legacy effect) of tight glycaemic control versus standard control in macrovascular disease prevention.

The ORIGIN study is testing the effect of early insulin therapy using the new long-acting analogue glargine insulin to prevent macrovascular disease in Type 2 diabetes. It concludes in 2011 and its results are expected to be presented in mid-2012.

The HOPE study (Phase 2), which concludes in 2011, has examined the effects of a novel VEGF/multikinase inhibitor (E7080) on advanced thyroid cancers and suggests benefit. The Alfred will be a trial site for a Phase 3 randomised placebo-controlled trial of this agent commencing later in 2011.

Diabetes in Lung Transplant Recipients

Dr Kathryn Hackman and Professor Leon Bach

A collaboration has been established with Professor Greg Snell, Head of the Lung Transplant Unit, to document the incidence of diabetes in lung transplant recipients and to study the effects of diabetes on transplant outcomes.

Research Achievements

Professor Leon Bach gave an invited Meet the Professor lecture on 'IGFs, diabetes and metabolism' at the 14th International Congress of Endocrinology in Kyoto.

Professor Duncan Topliss gave an invited lecture at the World Congress of Internal Medicine in a seminar entitled Update in Topical Areas of Endocrinology, on 'Challenges for the general physician in thyroid disease' and an invited lecture at the Endocrine Society of Australia Seminar Meeting on 'Thyroid cancer; the challenge of implementing modern guidelines'.

Dr Kathryn Hackman commenced an MD studying the causes and effects of diabetes in lung transplant recipients.



Postgraduate Students

1 PhD Student
1 MD Student

Publications

7 Journal Articles
1 Book Chapter

Epidemiology and Preventive Medicine is the largest department within the School of Public Health and Preventive Medicine at Monash University, with a focus towards disease and disability prevention. As one of our long-term goals of strengthening our 'methodology core' of epidemiology, biostatistics and data-management, we are progressively increasing our capacity to undertake high quality clinical, public health and health services research. The Clinical Informatics and Data-Management Unit and our Biostatistics Unit is capable of handling large health related data sets with high levels of sophistication, which has significantly contributed to our research performance. The research program of the department includes both clinical and public health research which takes place in remote communities, workplaces, ambulances and hospital wards internationally and in Australia.

The department has a strong research funding budget of \$25 million, which includes NHMRC and ARC grant funding exceeding \$10 million. Thirty-five new research grants started last year and the department currently holds 114 research grants, which provides a strong research environment for 2011 and beyond. We were successful in securing seven NHMRC grants in the 2010 Project Grant Round and three NHMRC Career Development Fellowships. Furthermore, several staff members received awards and distinctions for their achievements. Professor Flavia Cicuttini was awarded the Parr Prize for excellence in rheumatology research during the Annual Rheumatology Association meeting. Dr Deborah Zion and Associate Professor Bebe Loff were finalists in the 2010 Eureka Prize. Dr Elizabeth Barr received the Mollie Holman Medal for the best doctoral thesis of the faculty. Judy Gold was first in the faculty Three Minute Thesis competition. Professor Peter Cameron was elected Chair of the International Society of Emergency Physicians.

During 2010, our staff (including adjuncts) authored a record number of publications. Of these, five were published in *The Lancet*, four in the *New England Journal of Medicine* and one in the *Journal of the American Medical Association*.

Research Highlights

Opening of the Michael Kirby Centre for Public Health and Human Rights

The Kirby Centre, named after the eminent jurist and High Court judge, The Hon. Michael Kirby AC CMG, was officially opened in 2010. Mr Kirby is a renowned human rights activist and was recently appointed to the new Global Commission on HIV and the Law. The centre was opened officially by Michel Sidibé, a UN High Commissioner. The centre is headed by Associate Professor Bebe Loff and focuses on human rights and public health, as a collaborative venture between scientists, lawyers, medical practitioners and academics at the school.

Appointment of Chair in Global Health

Professor Ajay Mahal was appointed to the Alan and Elizabeth Finkel Chair in Global Health. Born in India, Ajay holds a Bachelor of Economics degree from University of Delhi and a Masters degree.

He moved into the area of health economics during his PhD studies at Columbia University, New York. As a consultant and adviser, Ajay has worked with the Harvard Institute for International Development in Gaza and West Bank, and the Indian government. He is an expert on issues related to health financing, social determinants of health, and economics of HIV/AIDS. This position was made possible through the philanthropy of Dr Elizabeth Finkel and Dr Alan Finkel, Chancellor of Monash University.

Commencement of the ASPREE Trial

Facilitated by a grant from the Victorian Cancer Agency, the ASPREE Trial commenced in 2010. Regional centres were established at Geelong, Warrnambool, Shepparton, Bendigo, Ballarat and Traralgon. ASPREE Biobank, funded by CSIRO, was of substantial value to the trial. Anne Murray (United States collaborator) and Brenda Kirpach (study coordinator), visited and shared their expertise during the trial, which we greatly value and appreciate.

Clinical Registries

The development and promotion of clinical registries has become an important agenda of the department. Although these registries are primarily used for improving the safety and quality of healthcare, they have significant potential in other forms of health services research and clinical investigations. Accordingly, under the outstanding leadership of Dr Sue Evans, new registries were established for burns, prostate cancer and lung cancer. Associate Professor Chris Reid, Carl Costello and Angela Brennan, together with our Data Centre, have contributed significantly to improving the ability to manage and develop such registries.

The Kirby Centre was officially launched on 29 August 2010 by Michel Sidibé, Executive Director of the Joint United Nations Programme on HIV/AIDS (UNAIDS), centre. Michael Kirby is pictured front left.



Postgraduate Students

89 PhD Students
12 Other Doctoral Students
371 Masters Students

Publications

420 Journal Articles
2 Books
17 Book Chapters



The main focus of research in the Gastroenterology Department in 2010 continued to be in the areas of chronic viral hepatitis, hepatocellular carcinoma and inflammatory bowel disease.

Chronic Viral Hepatitis

A number of novel therapeutic strategies for the treatment of chronic hepatitis C were evaluated, including:

- A study with an all oral interferon-free treatment involving combination therapy with hepatitis C viral polymerase and protease inhibitor demonstrating profound viral suppression without the development of viral resistance (published in *The Lancet*)
- A second all oral interferon-therapy study in hepatitis C genotype 1 patients involving the combination of a non-nucleoside polymerase and protease inhibitor
- A Phase 3 study of Telaprevir in combination with peg interferon alpha-2a plus ribavirin in both treatment naïve and treatment experienced patients (the latter accepted for publication in *New England Journal of Medicine*)
- Transfusion of hepatitis C virus (HCV) lipopeptide-primed autologous dendritic cells in prior non-responders to treatment demonstrating enhanced T cell responsiveness in HCV patients (published in *Journal of Hepatology*)
- A Phase 2 study of novel protease inhibitor TMC435 in combination with peg interferon plus ribavirin in genotype 1 patients

Several key investigator-initiated studies were performed, including:

- Evaluation of the mechanisms behind reduced response rates in subjects with hepatitis C-related cirrhosis to standard therapy (two key papers published in *Hepatology* and *Journal of Hepatology*)
- Investigation of the role of toll like receptors in the development of hepatitis C-related liver inflammation and fibrosis in hepatitis C and HCV-HIV coinfecting patients (published in *Journal of Viral Hepatitis*)
- Assessment of the mechanisms by which GBV virus C protects against the development of progressive severe liver disease in subjects with HCV and HIV coinfection (published in *Journal of Hepatology*)
- The clinical impact of having minimal residual viraemia at week 24 of therapy on treatment response in HCV genotype 1 patients (published in *Antiviral Therapy*)
- Information on the outcomes of tenofovir therapy in patients with chronic hepatitis B who had a suboptimal response to adefovir therapy (published in *Gut*)

Hepatocellular Carcinoma

A range of novel therapeutic strategies were studied in patients with hepatocellular carcinoma across all disease stages including:

- Sorafenib as adjunctive therapy in early stage disease following liver resection or local ablation and in intermediate stage disease following transarterial chemoembolisation
- Evaluation of brivanib; and combination therapy with sorafenib and erlotinib as an alternative to sorafenib in advanced disease
- Evaluation of survival outcomes in patients with early stage disease treated with radiofrequency ablation

Fibroscan Evaluation of Fibrosis

The unit has expanded its clinical and research program evaluating the utility of Fibroscan in several patient groups including:

- Haemophiliacs with hepatitis C and HIV coinfection (published in *Haemophilia*)
- Type 2 diabetics in which Fibroscan was shown to be an excellent screening tool for the detection of steatohepatitis and significant liver fibrosis
- Chronic liver disease showing liver stiffness measurement has good predictive value for the presence of clinically significant portal hypertension
- Heart failure demonstrating those with acute and chronic heart failure have a significantly higher liver stiffness that is not improved by diuresis

Inflammatory Bowel Disease

Novel biological treatment strategies were evaluated during 2010 in patients with Crohn's disease and ulcerative colitis. These included golimumab for ulcerative colitis and the adhesion molecule blocker MLN002 for both acute and maintenance therapy in patients with severe Crohn's disease. A large collaborative study established with St Vincent's Hospital continued to assess the effectiveness of immunomodulator therapy with or without TNF α blockade to reduce recurrence of Crohn's disease following surgical resection.

The development of a large inflammatory bowel disease database was also a key initiative to facilitate investigator-initiated research. Several key studies included examination of the role of azathioprine metabolites as well as methotrexate metabolites in improving patient management in patients with Crohn's disease, as well as investigating the role of capsule endoscopy in patients with quiescent Crohn's disease.

Endoscopy

Two important investigator initiated research projects were performed in 2010 in the area of endoscopy:

- A multicentre study of the outcome of endoscopic mucosal resection of giant polyps in the colon (accepted for publication in *Gastroenterology*)
- A comparative assessment of the efficacy and safety of percutaneous endoscopic gastrostomy tube placement compared to radiologically inserted gastrostomy tubes

Postgraduate Students

1 PhD Student

Publications

14 Journal Articles



TheAlfred

The General Surgery Department remains committed to clinical research, basic science research, databases, clinical registries, clinical trials, and audit and quality assurance processes. Those entering into surgical training are well supported in research projects, and will be invited to present at the DS Rosengarten Prize in December each year and often at the Annual Scientific Congress of the Royal Australasian College of Surgeons.

Breast, Endocrine and General Surgery

Databases in thyroid surgery, parathyroid surgery, adrenal surgery, parotid surgery, soft tissue tumour surgery and a dedicated thyroid cancer database are established and contribute to active clinical research projects.

Current Projects

- Ongoing study of the rate of bifurcation of recurrent laryngeal nerves and the location of the motor fibres of the recurrent laryngeal nerve in the anterior branch (Prof. J Serpell)
- Changes in the diameter of the recurrent laryngeal nerve during thyroid surgery and the relationship of this to voice changes following surgery: a collaborative project between Speech Pathology, ENT and Endocrine Surgery (Prof. J Serpell)
- A model examining differences in tension in the right and left recurrent laryngeal nerves in collaboration with the Faculty of Engineering, Monash University (Prof. J Serpell)
- Surgery in the patient with Hashimoto's thyroiditis (Dr M Seifman, Dr S Grodski, Prof. J Serpell)
- Adrenal tumours, adrenal incidentalomas and pheochromocytomas (Dr D Woon, Dr S Grodski, Prof. J Serpell)
- The diagnosis and management of adrenal trauma and adrenal incidentalomas detected in trauma patients (Dr S Woodruff, Dr M Yeung, Dr S Grodski, Prof. J Serpell)
- Bone metastases arising from minimally invasive follicular thyroid cancer in patients without a demonstrable primary thyroid tumour (Dr J Ban, Dr A Andrabi, Prof. J Serpell)
- The role of core biopsy in the diagnosis of thyroid lymphoma (Dr K Buxey, Prof. J Serpell)
- Epidemiology of thyroid cancer in Melbourne and establishment of a thyroid cancer registry (Prof. J Serpell)

Colorectal and General Surgery

Current Projects

- Multidisciplinary meetings in colorectal cancer: treatment outcomes and conformation to NHMRC guidelines (Dr P Carne)
- Prospective assessment of component training in laparoscopic colorectal resections (Dr S Bell)
- A classification system for causes of faecal incontinence and their relative incidences (Dr S Skinner)
- Development of a standard protocol for management of colonic pseudo-obstruction (Dr M Chin)
- Efficacy of dual therapy for anal fissure (Dr C Farmer)
- Examination of standards required for accreditation of endoanal ultrasound (Dr C Farmer)
- Sphincter preserving surgery for anal fistulas and fissures (Dr S Skinner)
- Utilisation of synoptic reporting for MRI in rectal cancer (Dr P Carne)

Upper GI and General Surgery

The Upper Gastrointestinal Unit has databases in hepatectomy, pancreatic surgery, oesophagectomy, gastrectomy and bariatric surgery. Along with their own research programs, this unit has significant collaborations with investigators at Baker IDI and Monash University School of Public Health and Preventive Medicine.

Current Projects

- Traumatic bile duct injuries/leaks (Dr C Pilgrim, Dr V Usatoff, Dr M Smith, Dr P Evans)
- Follow-up of patients following cholecystostomy (Dr B Gong, Dr V Usatoff, Dr M Smith, Dr P Evans)
- Algorithm for management of LAGB patients in the Emergency Department (Dr L Freeman, A/Prof. W Brown, Dr A Korin, A/Prof P Nottle)
- Outcome of patients with liver trauma (Dr P Evans, Dr V Usatoff, Dr P Burton)
- Survival following hepatectomy (Dr V Usatoff, Dr M Smith, Dr P Evans)
- Follow-up of liver resections for metastatic colorectal cancer (Dr V Usatoff, Dr M Smith, Dr P Evans)
- Motility disorders and LAGB surgery (Dr P Burton, A/Prof. W Brown, A/Prof. P Nottle)
- Motility disorders pre and post fundoplication (Dr P Burton, A/Prof. W Brown, Dr A Smith, A/Prof. P Nottle)

Speech pathologists Miriam Voortman (left) and Jessica Hayward use the lingWAVES voice analysis system as part of the post thyroidectomy study.



Postgraduate Students

2 PhD Students
1 Masters Student

Publications

10 Journal Articles

Co-Directors: Professor Brian Oldenburg, Head, International Public Health Unit, School of Public Health and Preventive Medicine, Monash University
Professor Mike Toole, Head, Centre for International Health, Burnet Institute



Burnet Institute
Medical Research. Practical Action.



MONASH
University



Baker IDI
HEART & DIABETES INSTITUTE



The Alfred

Conferences and Forums

World Health Day 2010

On 7 April 2010, the 4th Annual AMREP Conference was held on the topic of Health and the City. Reflecting the WHO's theme for 2010, 'Urbanisation and Health', the conference focused on both the implications of urbanisation for the health of disadvantaged populations and approaches to improving maternal health in low-income countries.

Peers for Progress Forum

The International Public Health Unit (IPHU) hosted a successful forum for Global Peers for Progress (a global diabetes prevention program) in August 2010. Discussion at the forum focused on how to improve the provision of peer support programs for people with diabetes and other chronic conditions in Australia and other countries. More than 50 participants representing over 30 NGOs and other organisations from around Australia attended the half-day forum.

Compass Knowledge Hub

Since 2008, Burnet's Centre for International Health, along with the Menzies School of Health Research and the Centre for International Child Health, has been contracted by AusAID to implement the Women's and Children's Health Knowledge Hub (Compass). In April 2010, Burnet hosted a useful round-table discussion for Bob McMullan, (then Parliamentary Secretary for International Development Assistance), AusAID, and a panel of maternal and child health experts, on how to reduce maternal and newborn mortality particularly focused on the Asia and Pacific countries.

United Nations Department of Public Information/ NGO Conference: Making Health Global

This 2010 conference was held in Melbourne with the major theme being global health and the Millennium Development Goals. This is the third time this conference has been held outside of New York in sixty-three years. Burnet's Centre for International Health was actively involved in the meeting. Monash University was represented by IPHU and Monash medical students from the IGNITE Global Health Group.

Children from Ghana.



Research, Teaching And Capacity Building

Amphetamine Use in South East Asia

The Burnet Centre for International Health, in conjunction with the National Drug Research Institute (Australia), commenced a research project for the Australian National Council on Drugs on amphetamine use in South East Asia.

Asian Collaboration for Excellence in Non-communicable Disease Research Network

The Fogarty International Center at the US National Institutes of Health awarded more than US\$1 million to Professor Brian Oldenburg and others from around the Asia-Pacific region over five years to combat the growing epidemic of chronic diseases in low- and middle-income countries.

Australian Development Research Award

This two-year innovative research study on mapping sexual and social networks of men who have sex with both men and women in Laos and Vietnam, countries with concentrated HIV networks, is undertaken by the Burnet Institute with a \$330,000 ADRA grant.

Addressing Healthy Ageing

The Burnet Centre for International Health was successful in an application for funding under Round 7 of the AusAID-funded Australian Leadership Awards. In July 2010, 14 Fellows from seven countries came to Australia to participate in the *Strengthening Public Health Leadership to Address Healthy Ageing* program.

Kerala Diabetes Prevention Program (K-DPP)

With colleagues from Baker IDI and other international collaborators, the International Public Health Unit at Monash University received NHMRC funding to conduct the K-DPP, a cluster randomised controlled trial of a culturally-tailored and group-based lifestyle intervention program in Kerala, India over the next five years.

Bushbuckridge Water Project

This project concluded in 2010, having investigated the relationship between water, HIV and diarrhoea in South Africa, with funding from the Monash University Office of the Deputy Vice-Chancellor (International). The project involved researchers from Monash University (Australia and South Africa), The Alfred, Burnet Institute and University of the Witwatersrand (South Africa).

Heart of Soweto Study

Baker IDI in collaboration with the University of the Witwatersrand and the Hatter Institute, University of Cape Town, continues to undertake the *Heart of Soweto Study* in South Africa. This continues to be one of the largest most comprehensive studies of heart disease in Africa.

Surveillance and Monitoring Function of the National NCD Program of Vietnam

Baker IDI collaborates with Monash University to conduct this study and relies on three main institutes that include the Vietnam Ministry of Health, Menzies Research Institute and the World Health Organization. The aim of the study is to establish a sustainable system for NCD surveillance in Vietnam.

Research Activities

The Department of Immunology is internationally renowned for its combined expertise in research, teaching and service delivery in immunology and immunopathology. There are extensive research programs in basic and translational immunology, including highly successful collaborations with The Alfred and other AMREP partners.

The department's research activities target diseases including allergy, asthma, autoimmunity, inflammation, diabetes, organ fibrosis, cancer and malaria. The department also focuses on engineering novel treatments such as nanoparticle-based vaccines in cancer and infection, as well as therapeutic proteins and monoclonal antibodies. Researchers are funded by NHMRC, ARC, Cooperative Research Centre and other research grants and have a strong publication output, patent portfolio and biotech activity. In 2010, 13 NHMRC grants were awarded to Department of Immunology researchers.

The department has extended its research activities at the Clayton campus establishing an effective link between basic science and translation/clinical trials at The Alfred. The department also regularly organises scientific retreats to promote scientific integration and spearhead new collaborations within the department.

Current Projects

Allergy, Immunology and Respiratory Medicine Professor Jennifer Rolland and Professor Robyn O'Hehir (AIRmed, The Alfred)

Clinical trials and *in vitro* studies are used to investigate mechanisms of allergen immunotherapy and optimal strategies for down regulation of the adverse T-cell response to allergens in allergic individuals.

Research highlights

- *Peanut allergy peptide immunotherapy development*: Identification of the dominant T cell epitopes of the major peanut allergen Ara h 2. Published in the *Journal of Allergy and Clinical Immunology* (Prickett *et al.* 2010). Continued funding from the Ilhan Food Allergy Foundation and successful NHMRC Project Grant 2011-2013 on 'Human CD4+ T-cell epitope-based therapeutic for peanut allergy'.
- *Grass pollen allergy peptide immunotherapy development*: Incorporation of a panel of grass pollen allergen T cell epitope-based peptides identified by this group into an immunotherapy product entering phase II clinical trial by Circassia Ltd. Mapping of T cell epitopes of the major Bahia grass pollen allergen, Pas n 1, funded by the CRC for Asthma and Airways.
- *Follistatin therapy for cystic fibrosis and other lung inflammatory disorders*: Proof-of-concept studies funded by the CASS Foundation show potential for follistatin to inhibit airway inflammation in cystic fibrosis using a murine model.
- *Nanoparticles inhibit allergic airway inflammation*: Optimal particle size and chemistry determined for nanoparticles that induce lung resistance to airway inflammation. Continued funding by the CRC for Asthma and Airways and an NHMRC Project Grant 2011-2013.

Autoimmune Diseases

Associate Professor Frank Alderuccio

Research centres on processes associated with the autoimmune response and loss of immunological tolerance, with the aim of devising strategies to prevent or reverse autoimmunity. Experimental models of autoimmunity are used to explore the potential of gene therapy strategies aimed at treating these diseases.

- Use of haematopoietic stem cell manipulation to induce immunological tolerance
- Understanding and utilising expression of AIRE for tolerance induction in autoimmunity
- The use of corticosteroids in strategies aimed at promoting disease remission
- Role of regulatory T-cells in experimental models of autoimmunity
- Induction of tissue specific antigen expression using retroviral vectors

Diabetic Retinopathy

Professor Jennifer Wilkinson-Berka

The contribution of vasoactive and growth factor systems to the development of diabetic microvascular complications is studied. Goals are to develop new, safe and effective treatment regimens for patients with diabetic retinopathy, providing a major advance over current invasive therapies such as laser treatment.

- The role of the prorenin receptor in ischemic and diabetic retinopathy
- Aldosterone and angiotensin II: are they conspirators in diabetic retinopathy?
- Pathogenic associations between the microvasculature, glia and neurons in ischemic and diabetic retinopathy
- Do interactions between glyoxalase I and angiotensin contribute to pericyte and endothelial cell death in diabetic retinopathy?

Autoimmune Diabetes

Associate Professor Robyn Slattery

The Autoimmune Diabetes Group is focused on understanding the immunopathogenesis of Type 1 diabetes (T1D). The primary interest of the team is in elucidating the role of β 2M and MHC class I in directing the autoimmune response in diabetes. This is crucial for our understanding of how to regulate the disease in predisposed individuals. Using a sophisticated genetic engineering tool called 'cre/lox', we have been able to track the development of cytotoxic T lymphocytes (CTL) from the time they first become activated to attack the beta cells, until the beta cells are destroyed, insulin production is lost, and diabetes develops. Current projects are focused on:

- The role of β 2M and MHC class I on pancreatic ductal cells in the development of autoreactive CTL
- The role of β 2M and MHC class I on B lymphocytes during the expansion of autoreactive CTL

The Autoimmune Diabetes team identified an important mechanism by which B lymphocytes contribute to the pathogenesis of Type 1 diabetes. Our finding demonstrates a crucial role for the CD19 molecule on B lymphocytes in the expansion of pathogenic CD8 T cells.

Molecular Signalling

Head: Associate Professor Jun-Ping Liu

Studies of the mechanisms regulating the maintenance of telomeres (chromosome ends) in health and disease:

- Cancer inhibition by targeting telomerase using peptide inhibitors
- Cancer inhibition by GAPDH signalling to telomeres
- Cancer inhibition by cytokine signalling to telomeres
- Immune senescence and the roles of telomere maintenance
- Studies of trace metal homeostasis in health and disease
- The roles of ATP13A2 P-type ATPase transporter in lysosomal homeostasis and neurodegenerative diseases

Leucocyte Membrane Protein

Associate Professor Mark Wright

The Leucocyte Membrane Protein Laboratory is fascinated by the role of tetraspanin cell surface proteins in the immune system. Tetraspanins play a vital role in the molecular organisation of the cell surface. Our analyses of tetraspanin deficient mice show a key role for these molecules in all aspects of immunity including pathogen recognition, antibody production, inflammation and cellular immunity. Key tetraspanins studied include CD37, TSSC6, CD82 and CD53.

Research highlights

- *CD37 is important for plasma cell survival:* Collaborative studies have shown that CD37-deficient mice make poor IgG responses to model antigens. This poor humoral immunity is caused by a failure to establish an adequate population of long lived plasma cells. Found evidence that a functional regulation of a4b1 integrin underlies this phenotype.
- *Functional co-operation between tetraspanins CD37 and TSSC6 in adaptive cellular immunity:* Analyses of mice lacking both CD37 and TSSC6 shows that these tetraspanins functionally co-operate to regulate both T cell proliferation and antigen presentation. Published in the *Journal of Immunology* (Garltan *et al.* 2010).
- *A key role for CD37 in cellular immunity and dendritic cell migration:* CD37-deficient mice make poor T cell responses to tumour antigens. This poor cellular immunity is caused by deficient migration of CD37-deficient dendritic cells from the periphery to draining lymph nodes.
- *CD37 is necessary for neutrophil inflammation:* Collaborative studies have shown an important role for CD37 in mediating adhesion between neutrophils and inflamed vascular endothelium.



Leukocyte Signalling

Associate Professor Margaret Hibbs

The Leukocyte Signalling Laboratory studies signalling pathways that play a role in immune system development and function. This group is primarily interested in regulation of the development of immunity and understanding the processes that are perturbed when autoimmunity and inflammatory diseases develop.

Allergy research nurse, Karen Symons, performs a skin prick test.

The group is also interested in understanding the regulation of blood cell development, and believe that it will lead to a greater understanding of the signals that go awry in the development of blood cell cancers. Another major interest is understanding the mechanisms underlying chronic inflammatory lung disease and they aim to identify key pathways or targets for therapeutic intervention.

Vaccines and Infectious Diseases

Professor Magdalena Plebanski

This group is investigating the development of novel vaccines against cancer and infectious diseases as well as immunoregulation (immune evasion and immune suppression).

- Development of malaria and cancer vaccines using a novel nanovaccine technology
- Investigation into the effect of nanoparticles on dendritic cells and other immune cells
- Nanoparticle induction of lung resistance to allergy and inflammation
- Understanding immunosuppression in malaria and cancer by studying changes in dendritic cells and regulatory T-cells (Tregs)
- Study of altered peptide ligand-mediated regulation of T-cell activity and the use of peptide superagonists to enhance malaria vaccine efficacy
- Discovery and validation of new surface markers to distinguish Th1, Th2 and Treg subsets and their use to monitor diverse infectious diseases and cancer

B-cells, BAFF and Autoimmunity

Professor Fabienne Mackay

BAFF is a cytokine from the tumour necrosis factor family that is essential for B-cell development and survival. BAFF production drives autoimmunity and is linked to many autoimmune conditions in humans. The BAFF gene was cloned by Professor Mackay in 1999 and her laboratory was the first to publish a role for BAFF in systemic lupus erythematosus (SLE). In 2009, the BAFF inhibitor belimumab showed efficacy in SLE clinical trials and on 9 March 2011, belimumab was approved by the FDA as a new treatment for lupus, the first new treatment in over 50 years.

- Investigation of the cooperation between BAFF and the innate immune system
- Studies on the role of BAFF in immunoregulation and immune tolerance
- Studies on the role of BAFF in human diseases
- Investigating new forms of autoimmune processes independent of T-cells
- Development of a chemokine receptor inhibitor for the treatment of fibrosis
- Studies of novel microRNAs involved in regulation of BAFF and its receptors in cancer and autoimmunity
- Investigations into the complex interaction between the gut microbiota and immune cell function
- Studies on the role of BAFF in regulating telomeric function and its role in immunosenescence

Postgraduate Students

30 PhD Students
1 Masters Student

Publications

53 Journal Articles

Research Activities

The Alfred Infectious Diseases Unit (IDU) incorporates a large clinical service with active research programs in the fields of HIV, viral hepatitis, infections in the immunosuppressed (such as those with malignancy, in intensive care and post-splenectomy), influenza, drug resistant organisms, antibiotic use and infection prevention and hospital epidemiology.

HIV

Our research in HIV ranges from basic laboratory studies through to clinical research and public health. We have significantly expanded our basic and clinical research programs aimed at understanding where HIV 'hides' in patients on treatment and how HIV can be eliminated in these long-lived cells. This work has recently attracted the award of three NHMRC Project Grants and a fellowship from the American Foundation for AIDS Research (AmFAR) to Dr Suha Saleh and an investigator-initiated Merck sponsored clinical trial on the role of vorinostat in eliminating latent HIV infection (awarded to Dr Lewin, Dr Elliott and Dr Hoy). In recognition of some of this work, Professor Lewin gave the plenary lecture at the opening ceremony of the World AIDS Conference in Vienna in July 2010 on 'Strategies for HIV Cure'. This conference attracts over 25,000 delegates and 2,000 journalists and is the most widely covered health related conference globally.

We also investigate the genetic factors that play a role in recovery of the immune system following treatment of patients with HIV infection. PhD student Reena Rajasuriar has initiated two new international collaborations in Uganda (in collaboration with UCSF) and in Malaysia (in collaboration with the University of Malaya) to further understand a particular genetic mutation that controls cell division.

The Clinical Research Unit is actively involved in multiple international studies to evaluate new treatment strategies and antiretroviral agents. Dr Julian Elliott, head of the Clinical Research Unit, is currently establishing a Melbourne-wide prospective cohort of patients with HIV infection in collaboration with the Burnet Institute, the Victorian Infectious Diseases Reference Laboratory, several high case load GPs and other tertiary hospitals. We hope to better understand complications of anti-HIV treatment in this cohort. Dr Elliott, together with Professor Lewin, was also awarded an NHMRC Partnership Grant for \$1.5 million to perform a randomised clinical trial of a new model of care for patients with HIV infection. The Alfred hospital, Australasian Society for HIV Medicine (ASHM) and the National Association for People Living with HIV are all financial partners in the project providing an additional \$1.5 million over five years.

Our expertise in understanding the clinical impact and pathogenesis of HIV-related complications such as dementia, cardiovascular disease and bone disease was recognised with Dr Edwina Wright giving the plenary lecture at the 2010 national ASHM meeting and her receipt of an NHMRC Postdoctoral Clinical Training Fellowship. Kate Cherry was an invited speaker at the 3rd International Congress on Neuropathic Pain (Athens) and the 13th World Congress on Pain (Montreal) on the topic of 'HIV associated neuropathy'.

Professor Jennifer Hoy, Director of HIV Medicine, chaired the 'HAART at 15' symposium at the 18th Conference on Retroviruses and Opportunistic Infections. Edwina Wright and Jennifer Hoy are co-chairs of two substudies of the START Study, examining the effects of early versus deferred antiretroviral treatment on neurological disease and bone disease in patients with HIV infection. Professor Hoy and Kerrie Watson are members of the Steering Committee of the Australian HIV Observational Cohort study, which collects data from over 2,000 HIV patients and provides information on the trends of treatment, survival and disease progression.

Viral Hepatitis

Research in viral hepatitis combines basic laboratory and clinical work. We are determining how HIV and hepatitis B virus (HBV) may potentially interact in the same liver cell and how the immune system responds to HBV when a person also has HIV. Dr Megan Crane was awarded the highly competitive Mathilde Krim Biomedical Fellowship from AmFAR. We are continuing to collaborate on a multicentre international study investigating the natural history of HIV-HBV infection and have an active program to identify and characterise drug resistance to anti-HBV medication in Australia and Thailand under the supervision of Dr Jennifer Audsley.

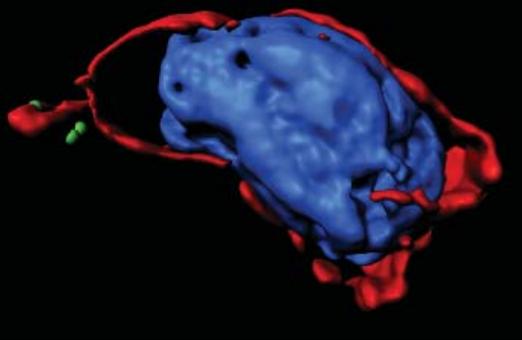
Fungal Infections

Fungal infections are a major cause of death in patients with leukaemia and after transplantation. We completed a randomised controlled trial examining the impact of new diagnostic tests for deep tissue infection with *Aspergillus* on the earlier diagnosis of infection and patient outcomes. We started a project measuring levels of azole antifungal agents in lung tissue of lung transplant recipients to determine activity specifically at the site where infection usually occurs.

The fungus *Cryptococcus* is rarely seen in Australia but is the second commonest cause of death in HIV-infected patients in Africa. Dr Christina Chang is undertaking her PhD under Professor Lewin, Dr Elliott and Professor Martyn French (Royal Perth Hospital). Christina is based at the King Edward Hospital, Durban, and has established one of the largest prospective cohorts of HIV-infected patients with cryptococcal meningitis who are initiating anti-HIV therapy. She was awarded a Pfizer Neurosciences Grant and a grant from ANZ Trustees (with Dr Orla Morrissey) to fully characterise the cryptococci isolated from these patients.

Dr Suha Saleh works in the HIV and Hepatitis Immunopathogenesis Laboratory.





3D fluorescent imaging of the HIV virus (green) entering a resting CD4+ T-cell showing the nucleus (blue) and cytoskeleton (red). Courtesy of Candida da Fonseca Pereira, postdoctoral researcher.

General Infectious Diseases

Dr Anton Peleg was recruited to The Alfred as part of a joint appointment between the Departments of Medicine and Microbiology, Monash University, following a very successful postdoctoral fellowship at Harvard Medical School. As a result, several new research programs have been initiated in general infectious diseases.

Influenza

The Alfred, in conjunction with Australian National University, has led a national hospital-based surveillance system to provide real-time reporting of influenza hospitalisations, clinical data on influenza and pneumonia, and estimates of influenza vaccine effectiveness. Associate Professor Allen Cheng was a chief investigator on a study to monitor for serious complications of influenza vaccination.

Drug Resistant Organisms

PhD student Ching Jou Lim initiated studies to look at rates of bacterial resistance and antibiotic use in long-term care facilities and in patients presenting from the community to The Alfred Emergency Department. Such studies will assist in characterising reservoirs of antibiotic resistance and help guide initial antibiotic prescribing. Dr Peleg has also initiated studies to assess the long-term trends in antibiotic resistance in high-risk units at the Alfred, including the Burns, Respiratory and Haematology Units. Dr Peleg was invited to give a keynote address at the International Acinetobacter Meeting in Rome and a plenary lecture at the International Conference on Antimicrobial Agents and Chemotherapy in Boston. He was also chosen for the Monash Research Accelerator Program.

Dr Cheng led the development of national treatment guidelines for *Clostridium difficile* infection and designed a national period prevalence survey for this infection with colleagues at the University of Western Australia and the University of Queensland. A case control study was performed to examine risk factors for colonisation with vancomycin resistant enterococci, and the use of antiseptic washcloths to prevent transmission with this organism was evaluated.

Improving Antibiotic Use

Guidance, an electronic decision support system to improve antibiotic usage within the hospital, was rolled out over 2010 with considerable input from IDU staff. Multiple research projects related to appropriate use and appropriate dosing of antibiotics in collaboration with the Pharmacy Department are under way. Dr Cheng was an organiser of the Antibiotic Resistance Summit held in Sydney in February 2011 and performs studies on the toxicity of aminoglycoside antibiotics and the pharmacokinetics of vancomycin.

Spleen Registry

The Spleen Registry was involved in a number of studies to define risk in certain patient groups who have had their spleen removed. We have developed and evaluated a new test to measure the immune system after the spleen is removed. We are also evaluating optimal vaccine use in these patients as part of an NHMRC-funded study.

With Dr Mark Polizzotto in the Haematology Unit, we measured the added risk of splenectomy on infection risk in the HIV population. We measured changes in IgM memory B cells in patients with asplenia and in those patients with medical conditions that may result in asplenia.

Major Findings

- Fully characterised a novel *in vitro* model of latent HIV infection which is now being used to screen compounds that may reverse or eliminate latency
- Showed that dendritic cells assist HIV in establishing latent infection
- Showed that genetic markers that predict immune recovery following anti-HIV treatment are significantly different in Caucasians and Africans
- Showed that in HIV-HBV co-infection, there are high levels of gut-derived bacteria in the general circulation and this may contribute to worse liver disease in these patients
- In collaboration with the INSIGHT Network, we showed that the only adverse effect of continuous antiretroviral therapy in HIV infection is greater loss of bone compared to those treated to keep their immune function above the level at which opportunistic infections and malignancies occur
- Showed that interruption of antiretroviral therapy causes changes in lipids and lipoprotein subclasses associated with cardiovascular disease
- Characterised the risk factors for candidaemia-related mortality in cancer patients
- Characterised the current cost of a deep tissue fungal infection in Australia using novel economic modelling

Research Achievements

Researchers in IDU were awarded various NHMRC grants: six Project Grants, a Partnership Grant, two Early Career (Postdoctoral) Fellowships and a Career Development Fellowship. Other major grants included an AmFAR Mathilde Krim Postdoctoral Fellowship (Crane/Lewin), AmFAR Postdoctoral Fellowship (Saleh/Lewin) and a National Institutes of Health RO1 grant (Hoy) on the effect of untreated HIV versus early antiretroviral therapy on bone mineral density.

Awards

- Fiona Wightman (PhD student with Professor Sharon Lewin) received a Young Investigators Award to attend the Conference of Retroviruses and Opportunistic Infections (CROI) in San Francisco
- Dr Michelle Anada Rajah (PhD student with Associate Professor Monica Slavin) received an antifungal award from the Australasian Society for Infectious Diseases (ASID)
- Dr Anton Peleg received the Frank Fenner Award for Excellence in Infectious Diseases from ASID
- Associate Professor Margaret Hellard received the Fenner Award from the Burnet Institute
- Dr Edwina Wright received the Victorian AIDS Council/ Gay Mens' Health Clinic Research Excellence Award

Current Projects

A complete list of current projects is available from <http://www.alfredresearch.org/research/researchrep10.htm>

Postgraduate Students

13 PhD Students
1 Masters Student

Publications

59 Journal Articles
3 Books
28 Book Chapters



TheAlfred



Intensive Care

Director: Professor Carlos Scheinkestel MBBS, FRACP, FCICM
Deputy Director and Head of Research: Professor Jamie Cooper BMBS, MD, FRACP, FCICM

www.alfredicu.org.au

In 2010, the Intensive Care Department expanded its position as a national leader in critical care research and education, with many major journal publications and projects spanning most areas of our diverse speciality. Areas of research included prehospital resuscitation, cardiac support devices, ICU outcomes, nutrition, traumatic brain injury, acute lung injury, renal failure, chest trauma, venous thromboembolism, sepsis and hypothermia.

As a result of an initiative between The Alfred and Monash University, the Intensive Care Department now has four intensivists who are 50% academic: Professor Jamie Cooper, Associate Professor Andrew Davies, Associate Professor Alistair Nichol and Associate Professor David Pilcher. Most of the other intensivists in the group are active in research and all intensivists now hold academic qualifications.

The ICU research team manager is Shirley Vallance (who, as part of the Alfred-Monash initiative, is now funded by The Alfred) and the department has two other research coordinators, Victoria Bennett and Jasmine Board. The group works closely with the Australian and New Zealand Intensive Care Research Centre (ANZIC-RC) team at the Monash Department of Epidemiology and Preventive Medicine, and also with the Australian and New Zealand Intensive Care Society Clinical Trials Group (ANZICS CTG).

Major Highlights

- A three year NHMRC-funded randomised controlled trial led by Associate Professor Steve Bernard in Victoria concluded. It found that pre-hospital rapid sequence intubation in severe head injury patients improved long term neurological function. Published in *Annals of Surgery*, it is likely to have substantial international impact, translating into immediate changes in clinical practice.
- A \$2 million Program Grant was received from the Victorian Neurotrauma Initiative to support two randomised trials in traumatic brain injury (Cooper, Bennett, Nichol).

Current Clinical Research Trials

The Intensive Care Department has up to 20 clinical trials running every year at any one time. Usually only one or two of these are commercial trials. The others are investigator initiated and frequently supported by the NHMRC. Key studies in 2010 included:

DECRA: This unique NHMRC-funded randomised trial of a neurosurgical procedure to reduce brain pressure in severe head injury patients was completed in November 2010 after seven years. Led by The Alfred in collaboration with the Neurosurgery Department, it was published in *New England Journal of Medicine* in 2011.

STATINS: A NHMRC-funded Phase 2 randomised trial testing atorvastatin therapy for severe sepsis patients concluded in 2010.

RIBFIX: A Phase 2 randomised trial with Silvana Marasco and other cardiac surgeons, testing a novel absorbable rib fixation technique for patients with traumatic flail chest neared completion.

PROTECT: A multicentre randomised trial led by the Canadian Critical Care Trials Group and McMaster University testing two methods for thromboprophylaxis in critically ill patients. This study of

3,500 patients will be one of the largest randomised trials ever done in ICU patients, with Australia, particularly The Alfred, being responsible for one quarter of the total recruitment. This study was published in *New England Journal of Medicine* in 2011.

PHARLAP: An Alfred-initiated randomised Phase 2 trial of an improved package of care for mechanical ventilation of patients with acute lung injury was completed in 2010.

ICU Outcomes: David Pilcher, with the ANZICS Centre for Outcome and Resource Evaluation and Michael Bailey from ANZIC-RC, has undertaken projects investigating the epidemiology and outcomes of patients admitted to ICUs in Australia and New Zealand.

Education

The Alfred ICU is a leading centre for education and in 2010 ran:

- Four basic courses (introduction to ICU) for junior medical staff
- Advanced life support course
- Two extracorporeal membrane oxygenation (ECMO) workshops
- 3rd International ECMO Symposium
- Inaugural Nutrition in the Critically Ill Symposium
- 2nd Trauma ICU Symposium
- 4th Advanced Mechanical Ventilation Conference

Awards

- Associate Professor David Tuxen – ANZICS Honour Roll for lifetime contribution to Intensive Care
- Associate Professor Alistair Nichol – Irish Congress of Anaesthesia: best oral presentation
- Dr Lisen Hockings – GA Don Harrison Medal
- Associate Professor Andrew Davies – AMREP Research Prize for the article describing original research published in the journal with the highest impact factor in 2009

Dr Steve Philpot teaches the procedure of bronchoscopy at the inaugural Alfred ICU 'Bronchoscopy for the Critically Ill' course.



Postgraduate Students

10 PhD Students

Publications

46 Journal Articles

1 Book Chapter

In 2010, the Medical Oncology Unit contributed to clinical research projects involving Phase 1, 2 and 3 trials, with both national and international sponsors, as well as collaborative trial groups. The collaboration between the Medical Oncology Unit and Cancer Trials Australia continues, offering us the opportunity to participate in and offer more trials to our patients.

Dr Andrew Haydon is the Australian/New Zealand Study Chair of a large international trial called the SCOT Study. It is a Phase 3, randomised, multicentre study of adjuvant chemotherapy in colorectal cancer, comparing a shorter course of chemotherapy treatment against the standard duration. This study is conducted by the National Cancer Research Network in the UK, and run locally by the Australasian Gastrointestinal Trials Group (AGITG).

Dr Jeremy Shapiro is the AGITG Study Chair of an international study run by the National Cancer Institute of Canada. The study is titled: a Phase 3 randomised study of brivanib alaninate (BMS-582664) in combination with cetuximab (ERBITUX®) versus placebo in combination with cetuximab in patients with K-Ras wild type tumours previously treated with combination chemotherapy for metastatic colorectal carcinoma. Recruitment to this study is now closed and there were 16 Alfred hospital participants enrolled.

In 2010, the Medical Oncology Unit successfully completed a Phase 1 malignant melanoma study, offering a promising new treatment to Alfred patients.

The unit has collaborated with the Monash University Women's Health Program to evaluate a large contemporary cohort of Victorian women with invasive breast cancer, focusing on important psycho-social and quality of life issues which are often poorly addressed in the medical literature. The work resulted in three international publications in 2010.

The unit collaborated with the Palliative Care Units from St Vincent's Hospital and The Alfred together with The Alfred Clinical Ethics Group

Medical Oncology Research Manager Nikki Cross interviews a patient.



in exploring the dynamics and outcomes of second medical opinions in cancer care, and their impact on patients and their doctors. The results were published in an international journal in 2010, and a second paper will be published in 2011.

Current Projects

- SCOT (Short Course Oncology Therapy) Study – a study of adjuvant chemotherapy in colorectal cancer (Dr Andrew Haydon)
- QUASAR 2 – multicentre international study of capecitabine +/- bevacizumab as adjuvant treatment of colorectal cancer (Dr Andrew Haydon)
- PETACC-6 – preoperative chemoradiotherapy and postoperative chemotherapy with capecitabine and oxaliplatin versus capecitabine alone in locally advanced rectal cancer (Dr Sanjeev Gill)
- LAP07 study – a randomised multicentre Phase 3 study in patients with locally advanced adenocarcinoma of the pancreas: gemcitabine with or without chemoradiotherapy and with or without erlotinib AGITG (Dr Andrew Haydon)
- A randomised Phase 3 study of weekly abi-007 plus gemcitabine versus gemcitabine alone in patients with metastatic adenocarcinoma of the pancreas (Dr Sanjeev Gill)
- BETH – Multicentre Phase 3 randomised trial of adjuvant therapy for patients with her2-positive node-positive or high risk node-negative breast cancer comparing chemotherapy plus trastuzumab with chemotherapy plus trastuzumab plus bevacizumab (Professor Max Schwarz)
- A randomised Phase 3, double-blind, placebo-controlled, multicentre study (RAD001) to evaluate the efficacy and safety of everolimus in adult patients with advanced hepatocellular carcinoma after failure of sorafenib treatment (Dr Andrew Haydon)
- NITRO – A Phase 3, randomised trial of adding nitroglycerin to first line chemotherapy for advanced non-small cell lung cancer (Dr Andrew Haydon)
- An open label, multicentre, Phase 3 trial of ABI-007 versus dacarbazine in previously untreated patients with metastatic malignant melanoma (Dr Andrew Haydon)
- A Phase 1, randomised, open-label, multicentre, multiple dose study to investigate the pharmacokinetics and pharmacodynamics of RO5185426 administered as 240 mg tablets to previously treated BRAF V600E positive metastatic melanoma patients (Dr Andrew Haydon)
- SORCE – a Phase 3 randomised double-blind study comparing sorafenib with placebo in patients with resected primary renal cell carcinoma at high or intermediate risk of relapse (Dr Sanjeev Gill)
- A randomised, double-blinded, multicentre Phase 3 study comparing everolimus (RAD001) plus BSC versus placebo plus BSC in patients with advanced gastric cancer after progression on prior systemic chemotherapy (Dr Prasad Cooray)

Publications
6 Journal Articles

The Monash University Department of Medicine is responsible for the provision of teaching and other academic programs at The Alfred for medical undergraduates and postgraduate research students. The department is the focus of many research activities undertaken by university personnel employed in the department and also by hospital clinical departments associated with the Department of Medicine. Many physicians and scientists employed in the hospital's clinical departments have honorary appointments within the Department of Medicine to facilitate the provision of the teaching program, research programs and supervision of postgraduate research students.

Respiratory Immunology Group

There is an active program of research by the clinician scientists of the Department of Allergy, Immunology and Respiratory Medicine, and scientists in the Monash University Departments of Medicine and Immunology. The program includes the investigation of the immunobiology of allergic diseases with development of novel T cell targeted peptide immunotherapy for peanut allergy and novel approaches to management of chronic lung diseases including allergic bronchopulmonary aspergillosis, cystic fibrosis, idiopathic pulmonary fibrosis and lung transplantation. A program of study of lung regeneration using stem cell technology was established in association with Monash Immunology and Stem Cell Laboratories together with investigation of strategies to prevent ischaemic reperfusion injury in lung transplantation. Research investigates the potential for follistatin to prevent airway inflammation and fibrosis in chronic inflammatory lung diseases.

Renal Disease

Clinical research projects are in the area of glomerulonephritis, vasculitis, progression of renal disease, diabetic renal disease, chronic allograft rejection, evaluation of renal disease in patients with end stage heart and lung pathology facing heart or lung replacement, and renal disease following successful heart and lung transplantation. The broad theme of the laboratory research program is the mechanisms of progression of primary renal disease. Both human and experimental models of renal disease are studied, with a particular focus on the role of the fibrogenic growth factors and apoptosis in progression of injury.

Neurosciences

The Van Cleef Roet Centre for Nervous Diseases conducts research programs in stroke, Alzheimer's disease and other dementias, inherited and sporadic ataxias, movement disorders and cognition in cerebellar stroke and hepatitis C. Traumatic brain injury is the focus of research of another neuroscience group within the department, using experimental models of injury. This group works in close collaboration with the National Trauma Research Institute.

Clinical Pharmacology

Pharmacological research is focused on drugs that may affect the cardiovascular system. Basic research programs investigate the role of: urotensin II in cardiac disease; p38 MAP kinase system in heart failure disease progression; Rho kinase in cardiac fibrosis; novel agents in cardiac fibrosis and inflammation. Therapeutics research

also encompasses novel device and procedure-based approaches to treatment of cardiovascular disease.

Infectious Diseases

Research programs are conducted in the fields of HIV, viral hepatitis, neurovirology, infections in the immunosuppressed (such as those with malignancy, in intensive care and post-splenectomy) and infection control and hospital epidemiology.

Women's Health

Research pertains to the main health conditions that affect women at midlife and beyond. Major research projects include a large study of the physical, psychological and social well-being of breast cancer survivors, a community based study of urinary incontinence in women, a study to increase the understanding of joint pain in women being treated for breast cancer, and studies to delineate the role of sex steroids in the preservation of cognitive function in women after menopause.

Endocrinology and Diabetes

Laboratory research is conducted in the areas of diabetic complications and insulin-like growth factor dysregulation in cancer. Clinical research areas include diabetes care and thyroid cancer.

Experimental Anatomical Pathology

This laboratory has a strong focus on pathologic study of human tissue and, through collaborative studies, conducts research into the role of the endothelium in cardiac transplantation, new prognostic markers in breast and prostate cancer, imaging of dementia, pathologic diagnosis of early muscular dystrophy and pulmonary venoocclusive disease and pulmonary hypertension. A particular focus within the laboratory is latent viral infections of the brain.

Centre for Ethics in Medicine and Society

The specific objectives of the centre are: (1) to stimulate a culture of reflection, debate, dialogue and awareness of ethical issues in the medical community and the faculty; (2) to deliver high quality teaching products; (3) to conduct research; and (4) to contribute to the development and enrichment of practice.

PhD student, Tara Bull, supervised by Associate Professor Tom Kotsimbos and Dr Nicole Mifsud, studies Clara cell secretory protein as a biomarker post lung transplantation.



Postgraduate Students

62 PhD Student
2 MD Students
2 Masters Student

Publications

103 Journal Articles
1 Book
7 Book Chapters



Dr Chris Jalilian uses the dermoscope to distinguish melanomas from other aggressive skin cancers.

Research Activities

As a large treatment service for melanoma, primary research interests are in identifying at-risk patients, early detection and therapy. The key focus in recent years has been to explore the importance of aggressive, rapidly growing melanoma. Recent work has shown that these melanomas account for only 13% of melanomas but half of melanoma deaths. Their rapid growth means that there is a relatively brief opportunity to undertake early, curative treatment and yet they are most often misdiagnosed because of their unusual appearances.

An exciting opportunity to explore the genetic and molecular associations of rapidly growing melanoma has arisen through the Melbourne Melanoma Project (MMP), a Victorian Cancer Agency funded collaboration between the Victorian Melanoma Service (VMS), Peter Mac and the Austin. Through MMP, melanomas will be tissue banked for genetic and molecular studies. PhD student, Dr Victoria Mar, gained an NHMRC grant for this work in 2010.

Dr Chris Jalilian has been investigating the dermoscopic appearances of rapidly growing melanoma and other aggressive tumours that have similar appearances. The aim of his work is to use this new and widely available method of examination to aid the early diagnosis of these tumours and to distinguish them from benign imitators. He used this approach to describe for the first time the dermoscopic appearances of Merkel cell carcinoma, an aggressive skin cancer that mimics nodular melanoma. Chris was awarded a Small Project Grant from The Alfred for this work in 2010.

Dr Yan Pan has extended a study of the prognosis associated with the presentation of metastasis of melanoma to the skin and has been able to distinguish three groups of patients with widely differing prognoses in association with their skin metastases. He has also identified and described a newly recognised presentation of melanoma in a study of nine cases of regrowth following excision of a previously benign pigmented lesion.

The use of sequential dermoscopic images taken at short (three month) or long (six month) intervals is a new and exciting method for the early detection of melanoma. Dr Hussain Hilmy has reviewed three years of experience from VMS staff members in the use of sequential dermoscopic imaging to provide a better understanding of the role of this technique. His review shows that it is very useful for detecting melanomas in the highest risk groups.

There are a number of techniques for surveillance of patients who are at risk for the development of melanoma to enhance early detection. The most effective application of these techniques depends on the accurate identification of people who are most at risk. Previous research has provided data on the influence of a number of important risk factors; however, it is very hard for doctors to accurately compute the mathematical impact of multiple risk factors simultaneously to assess the risk for an individual patient.

Dr Victoria Mar has developed a risk model using currently available risk data. In 2010, this was made available as an online instrument that doctors and patients can use to predict risk to develop melanoma in the next 5 years. It is presented on the VMS website. This has enabled more appropriate allocation of individuals to surveillance strategies for the early detection of future melanomas. Presentations to dermatologists and general practitioners in 2010 have led to heavy traffic on the website, demonstrating strong uptake of the model.



Dr Victoria Mar developed the melanoma risk calculator, which was launched on the Victorian Melanoma Service website in 2010.



The screenshot shows the Victorian Melanoma Service website. At the top, there is a navigation menu with links for 'RISK CALCULATOR', 'ABOUT THE CALCULATOR', 'EMILY'S STORY', 'EXPLORE WITH US', 'DISCLAIMER', 'FAQS', and 'CONTACT'. The main content area features a large banner with the text 'VMS VICTORIAN MELANOMA SERVICE' and 'EMILY'S MELANOMA RISK CALCULATOR'. Below the banner, there is a section titled 'First out your risk of melanoma' with a sub-section for 'Health professionals' and a 'General public' section. The 'Health professionals' section includes a link to 'Calculate your melanoma risk for health professionals' and the 'General public' section includes a link to 'Calculate your melanoma risk for the general public'. At the bottom, there is a 'STAFF PROFILE' section with a list of names and titles.

Publications
6 Journal Articles

The Melbourne Sexual Health Centre (MSHC) is a specialised unit for the diagnosis and treatment of sexually transmissible infections (STIs) and is a principal centre for training health professionals in Victoria. The centre conducts epidemiological, public health and clinical research primarily aimed at improving the services offered at MSHC.

Chlamydia trachomatis

Untreated chlamydial infection among pregnant women has been associated with adverse outcomes for both mother and infant. Like most women, pregnant women infected with chlamydia do not report genital symptoms, and are therefore unlikely to be aware of their infection. A cross-sectional study of 100 pregnant women aged 16-25 years attending antenatal services across Melbourne were invited to participate in a face-to-face, semi-structured interview on the acceptability of screening for chlamydia during pregnancy. It was found that 31 of these women were infected with chlamydia. Women had low levels of awareness of chlamydia before the test, retained relatively little knowledge after the test and commonly had misconceptions around chlamydia transmission, testing and sequelae. Chlamydia screening as part of routine antenatal care was considered highly acceptable among young pregnant women who recognised the benefits of screening, and strongly supported its implementation as part of routine antenatal care. The acceptability of screening is important to the uptake of chlamydia screening in future antenatal screening strategies (JE Bilardi, MJ Temple-Smith, SM Garland, CK Fairley, JS Hocking, MY Chen).

HIV Research

Mathematical modelling suggests that increased frequency of HIV testing among men who have sex with men (MSM) will lead to a reduction in HIV incidence. We are therefore in the early stages of a randomised trial examining the HIV testing frequency in MSM offered rapid tests compared to MSM offered normal lab-based tests (SMARTest study). Follow-up is at 18 months. This particular rapid test requires a finger prick blood sample and provides a result in 20 minutes (T Read, MY Chen, A Morrow, CK Fairley).

MSHC has patients in ongoing multicentre HIV studies including SPARTAC (a study of early versus deferred antiretroviral treatment of seroconverters), ALTAIR (a randomised comparison of three initial treatment combinations) and CORAL (a comparison of bovine colostrum, raltegravir or both, to boost CD4 counts in patients with poor immune recovery despite good suppression of viral replication).

Bacterial Vaginosis (BV)

BVAPS (bacterial vaginosis antibiotic and probiotic study) is an NHMRC-funded blinded placebo-controlled randomised controlled trial evaluating combination therapy with oral metronidazole/vaginal clindamycin against oral metronidazole/vaginal placebo and oral metronidazole/vaginal probiotic for the treatment of BV (C Bradshaw, M Pirota, C Fairley, S Garland).

A meta-analysis of the behavioural risk factors associated with BV was published in *Clinical Infectious Diseases*. It showed that BV was

associated with new and multiple sexual partners, lack of condom use and findings that illustrate that BV has the epidemiology of an STI (K Fethers, C Bradshaw, C Fairley).

The Female University Student Study (FUSS) examined the association between sexual practices and BV. It provided support for the hypothesis that BV is an STI by showing that BV is absent in women without a history of sexual activity and is strongly associated with increased numbers of sexual partners. We are conducting a two-year study to determine the behavioural and microbial risk factors associated with incident BV in women with female partners (K Fethers, C Bradshaw, C Fairley).



Human papilloma virus research project



Rapid HIV test use in MSM



Women on women's health

Current research projects at Melbourne Sexual Health Centre.

Human Papilloma Virus (HPV)

The focus of the Hyper Study is the prevalence, incidence and natural history of oral and anogenital HPV among young MSM, which should shed new light on this area and help to inform policy on HPV vaccination of MSM. A study of HPV oral infection in MSM found a prevalence of approximately 15% of all types of HPV. A cohort of 100 HIV-infected MSM having regular screening for anal cancer is being monitored (T Read, H Zou, M Chen, C Fairley).

Use of CASI in Low-risk Populations

The proportion of clinically important diagnoses in a low-risk, asymptomatic population who use a computer-assisted self interview (CASI) to assess risk was examined to determine optimal health service delivery. Medical records were retrospectively analysed for risk characteristics and diagnoses in 1,060 new asymptomatic heterosexual patients who completed CASI. From this low-risk group, 26 diagnoses were made on the day of presentation, including 22 cases of genital warts, three of herpes and one of unintended pregnancy. Additionally, there were 54 cases of chlamydia detected. As chlamydia is effectively diagnosed and managed from self-collected samples, patient review is not always required. This study provides evidence for an express testing service for chlamydia to streamline the screening of low-risk, asymptomatic patients as identified by CASI without the need for a traditional face-to-face consultation (A Yeung, M Bush, R Cummings, C Bradshaw, M Chen, H Williams, I Denham, CK Fairley).

Postgraduate Students

8 PhD Student
8 Masters Student

Publications

33 Journal Articles

The National Trauma Research Institute (NTRI) leads the way in research to better understand traumatic injuries and bridge the gap between research, clinical practice and policy for the benefit of injured patients. It continues to work in close association with The Alfred Trauma Service and gain recognition as a national and international hub and resource of trauma-related knowledge.

After restructuring in 2009, NTRI welcomed Business Manager, Craig Sedgman, and Research Manager, Dr Meng Tuck Mok, in 2010. The new team has helped shape the NTRI's structure and activities, which include pillars of activity in stakeholder dialogue, research leadership, knowledge translation and performance improvement.

NTRI again convened its annual scientific conference in 2010, attended by over 300 national and international delegates. The conference was a joint meeting with the Australasian Trauma Society.

Research Highlights

The Global Evidence Mapping (GEM) initiative has been mapping existing neurotrauma-related research. These maps of existing research for traumatic brain injured (TBI) and spinal cord injured patients are available online and are being maintained. The next phase of GEM seeks to develop a system of evidence delivery that pushes evidence out to users through RSS feeds and Twitter, as compared to passive evidence accessed from a website.

The Health Knowledge Exchange Project is to develop a community of practice around performing and maintaining up-to-date high quality systematic reviews in neurotrauma topics. The software will be piloted with local and international communities of practice. The web-based delivery system will support the next phase of the GEM initiative.

The Neurotrauma Evidence Translation (NET) Program is a five-year research program that commenced in 2009, funded by the Victorian Neurotrauma Initiative, and conducted at the NTRI and the Australasian Cochrane Centre, Monash University. This program aims to address one of the biggest challenges in contemporary health care – the effective and timely translation of evidence from research into clinical practice and policy. The NET Program will develop and test strategies to increase the uptake of research into policy and practice

Delegates of the Asia Pacific Trauma Quality Improvement Network (APTQIN) outside the RACS building in November 2010.



to improve outcomes for people after TBI by knowledge generation and synthesis; defining the problems and understanding practice and policy; designing and evaluating strategies for practice change in mild TBI; and building capacity for knowledge translation in neurotrauma by designing an intervention that will be rolled out in a cluster randomised controlled trial.

In the NTRI laboratory, headed by Associate Professor Cristina Morganti-Kossmann, investigations continue to test whether erythropoietin (EPO) provides neuroprotection for post-traumatic hypoxia, a condition known to exacerbate the severity of brain injury leading to worse neurological outcomes for patients with TBI. Using a well-established rat model of diffuse TBI, results favourably show the neuroprotective function of EPO provided after TBI hypoxia by reducing axonal pathology in the most vulnerable regions of the brain.

The DECRA study is led by The Alfred from the NTRI. It is a unique, partially NHMRC-funded, international, multicentre randomised trial to evaluate the effect of early decompressive craniectomy on neurological function in patients with severe TBI. DECRA aims to assess if decompressive craniectomy improves outcome for patients with severe diffuse TBI and brain swelling. The study completed recruitment in 2010.

First APTQIN Meeting

NTRI convened the first meeting of the Asia-Pacific Trauma Quality Improvement Network (APTQIN) in November 2010. The meeting was funded by AusAid and the Canadian Institutes of Health Research. APTQIN brought together influential leaders of trauma services from across the Asia-Pacific region to promote better understanding of the field of trauma quality improvement (QI). Members agreed to support development of trauma care and quality improvement activities at local and national levels across the Asia-Pacific region, build capacity through dissemination of information, tools and technology to support better trauma systems and seek endorsement from the WHO, professional colleges and relevant peak professional bodies.

WHO Trauma Care Checklist Study

This worldwide QI evaluation is being carried out at 12 hospitals globally, in low to middle income countries. Australia is one of only three high-income countries taking part. NTRI oversees this trial at The Alfred to qualitatively evaluate the impact of the program on safety culture, acceptability and implementation of the checklist. This will help determine the usefulness and effectiveness of a checklist in a busy Level 1 trauma centre like The Alfred.

AusTQIP

NTRI and the National Critical Care and Trauma Response Centre in Darwin are jointly developing and implementing the Australian Trauma Quality Improvement Program (AusTQIP) underpinned by national trauma data. AusTQIP represents a unique opportunity to collaborate on a national basis to share expertise, combine trauma data and work together to improve the quality of trauma care, improve trauma system performance and improve survival and quality of life for injured patients.

Psychiatric Disorders Following TBI

Professor Jennie Ponsford at the Monash-Epworth Rehabilitation Research Centre is conducting a prospective study of pre- and post-injury psychiatric disorders. The study is conducted early after injury and up to five years post-injury to look at the nature, frequency and risk factors of post-injury psychiatric disorders, as well as the relationship between psychiatric disorders and functional outcome. Early results indicate depression is strongly associated with poor functional outcome and is shedding some light on the factors that may help predict who is most at risk and when these disorders are likely to emerge. This will enable clinicians to plan early intervention thereby potentially reducing the emotional burden borne by injury survivors.

P.A.R.T.Y. Intervention Program

Prevent Alcohol and Risk-related Trauma in Youth (P.A.R.T.Y.) is a full day, in-hospital injury awareness and prevention program introducing school children to the real consequences of risk taking behaviour. In 2010, the P.A.R.T.Y. intervention pilot program was introduced at The Alfred, targeting young adult offenders aged 18-25 who have been court ordered to attend, with the aim of reducing re-offending rates.

Current Projects

- Post traumatic hypoxia in the exacerbation of cerebral inflammation elicited by brain injury (Morganti-Kossmann MC, Kossmann T)
- Establishment of a neurotrauma tissue/fluid bank within the National Neural Tissue Resource Centre (McLean C, Morganti-Kossmann MC, Kossmann T, Rosenfeld JV)
- Traumatic injury to the brain and spinal cord: secondary injury, development and evaluation of new treatments (Saunders N, Morganti-Kossmann MC, Tan S-S, Callaway J, Crack P, Howells D, McIntyre P)
- Post traumatic hypoxia increases tryptophan metabolite production and exacerbates secondary brain damage (Yan E)
- To determine the role of tissue type plasminogen activator on models of traumatic brain injury (Medcalf R, Morganti-Kossmann MC, Schmidt HH, Rosenfeld JV)
- Role and mechanisms of NADPH oxidase in ischemic stroke and neurotrauma (Schmidt HH, Morganti-Kossmann MC, *et al.*)
- Correlation of clinical and radiographic findings in acute cervical discoligamentous injury with long term outcomes in road trauma patients (Ackland H, Cameron P, Cooper DJ)
- EPO-TBI: randomised, placebo-controlled trial of erythropoietin in ICU patients with traumatic brain injury (Bellomo R, Cooper DJ, Street A, Nichol A, French C, Presneill J)
- A Phase 2 randomised controlled trial of atorvastatin therapy in intensive care patients with severe sepsis (Kruger P, Venkatesh B, Bellomo R, Kostner K, Cooper DJ, Roberts M)
- Parenteral versus enteral nutrition trial (Doig G, Cooper DJ, Simpson F, Davies A)
- Correlation of clinical and radiographic findings in acute cervical discoligamentous injury with long term outcomes in road trauma patients (Ackland H, Cameron P, Cooper J)
- Decompressive craniectomy in acute traumatic brain injury (Cooper DJ, Dobb G, Bannan P)
- DECRA study (Cooper DJ, Rosenfeld J, Kossmann T, Reilly P, Wolfe R, Murray L)
- RENAL: a multicentre unblinded randomised controlled trial to assess the effect of augmented versus normal continuous renal replacement therapy on 90-day all-cause mortality of intensive care unit patients with severe acute renal failure (Scheinkestel C, Pilcher D, Davies A)
- ENTERIC: a multicentre randomised controlled trial comparing early jejunal feeding (using a frictional nasojejunal tube) and standard feeding in critical illness (Cooper DJ, Pellegrino V, Davies A)
- Phase 2 pilot randomised trial of operative fixation of fractured ribs in patients with flail chest (Marasco S, Cooper DJ)

- NICE TBI: normoglycaemia in intensive care TBI study (Finfer S, Myburgh J, Cooper DJ, Higgins A)
- Fluid resuscitation for patients with TBI – potential mechanisms behind the detrimental effect of albumin resuscitation (Cooper DJ, Myburgh JA)
- Prospective observational study of blood and blood product transfusion practices in Australian intensive care units (Cooper DJ, Bellomo R, Street A, Murray L, Nichol A, Westbrook A, Syres G, French C, Santamaria J, Wood E, Phillips L, Orford N)
- Evaluating the incidence and clinical importance of heparin induced thrombocytopenia in the critically ill (Warkentin TE, Cook DJ, Cooper DJ, *et al.*)
- Trauma in older adults: does age matter? (Kinsella G, Olver J, Kossmann T, Ong B)
- The operation and utilisation of the Victorian State Trauma Registry (Cameron P, Gabbe B, McNeil J)
- VOTOR: Victorian Orthopaedic Trauma Outcomes Registry (Gabbe B, Cameron P)
- ARISE: Australasian resuscitation in sepsis evaluation randomised controlled trial (Bellomo R, Cooper DJ, Cameron P, *et al.*)
- POLAR: prophylactic hypothermia trial to lessen TBI randomised controlled trial (Cooper DJ, Bernard S, Rosenfeld JV, Cameron P, *et al.*)
- Transfusion research improving outcomes (McNeil J, Cameron P, Phillips L)
- Using data to improve quality of healthcare (Cameron P, Sprivilis P, Stoelwinder J, Forbes A, McNeil J, Campbell D)
- Improving outcomes measurement and monitoring in trauma (Gabbe B)
- VSTORM: Victorian State Trauma Outcomes Registry (Cameron P)
- Bi-national Burns Registry (Cameron P, Gabbe B, Cleland H, Edgar D)
- Hyperbaric oxygen in lower limb trauma: a randomised controlled clinical trial (Millar I, Cameron P)
- Massive Transfusion Registry (Cameron P)
- Defining and benchmarking clinically appropriate exceptions to the Emergency Department Four Hour National Access Target (Brand C)
- Australia's blood supply in a major disaster or pandemic: how will we meet clinical demand (Phillips L)
- Telephone-administered early psychological intervention for depression and anxiety following serious injury (O'Donnell ML, Creamer M, Bryant R, Ellen S, Holmes A, Kossmann T, Judson R)
- Longitudinal head injury outcome study (Ponsford J, Olver J)
- Headstrong: multi-family groups for TBI (Couchman G, Ponsford J)
- Motivational interviewing with cognitive-behaviour therapy for anxiety and depression following TBI (Ponsford J, O'Donnell M, Lee N)
- Safer roads to recovery: assessing readiness for driving after TBI (Charlton K, Bedard M, Ponsford J, Marshall S, Stolwyk R, Ross P, Gagnon S)
- Longitudinal head injury outcomes study (Ponsford J, Olver J)
- The Global Evidence Mapping (GEM) initiative in TBI and spinal cord injury (Gruen R)
- NET Program: improving evidence-based care and the outcomes of patients with TBI and spinal cord injury through a program to facilitate knowledge transfer and exchange (Gruen R, Green S)
- Health Knowledge Exchange Project (Gruen R, Elliot J, Cavedon L, Zobel J, Harrison T)
- Australian Satellite of Cochrane Effective Practice and Organisation of Care Group (Gruen R)
- Evidence based action plans in the surgical areas of ENT, Trauma/ Injury, Transplantation and Ophthalmology in the Australian Indigenous population (Gruen R)
- Neurotrauma Knowledge Translation international collaboration (Gruen R)
- TAC/WorkSafe Evidence Service (Gruen R)

Postgraduate Students

19 PhD Students
9 Other Doctoral Students
3 Masters Students

Publications

82 Journal Articles
1 Book
5 Book Chapters

Stroke

The Stroke Unit, under the leadership of Dr Judith Frayne, participates in many national and international multicentre stroke trials, including both industry-sponsored and investigator-driven trials. In 2010, these included studies nearing completion and a new investigator driven study looking at early mobilisation after stroke.

Alzheimer's Disease and Other Dementias

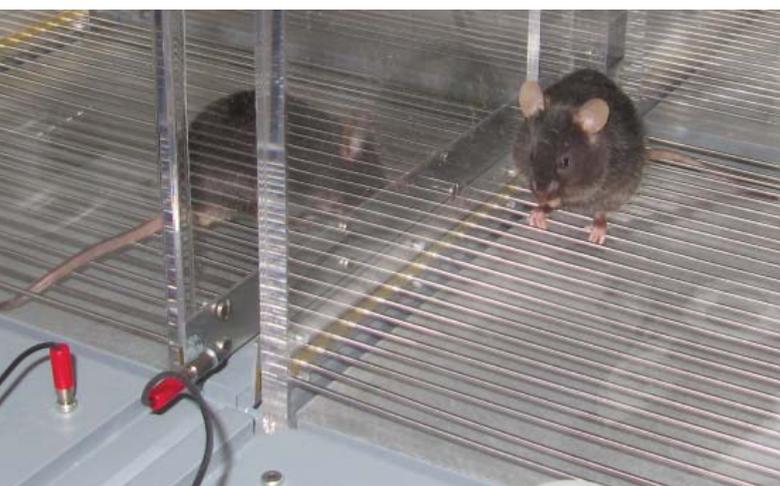
Alzheimer's disease has been called 'the approaching epidemic'. Optimally, treatment for Alzheimer's should be started as early in the disease as possible, when the only problem is of mild memory loss. In conjunction with Associate Professor Glynda Kinsella (La Trobe University), supported by an NHMRC grant, patients continue to be studied to ascertain whether teaching memory strategies at an early stage may improve everyday memory function. Judy Allen-Graham's postdoctoral studies continue on the functions of APP, the nerve cell protein that is broken down to form the toxic amyloid protein of Alzheimer's disease.

Professor Storey is on the international steering committee and the cognitive endpoint committee of the NIH-funded \$50 million, 19,000 participant ASPREE trial of aspirin in the healthy elderly, for which dementia is a primary endpoint. He is also a CI on an Australian National University-led NHMRC-funded substudy, ENVISion, assessing the effects of aspirin on brain MRI, cognition and retinal vasculature, running over five years.

Inherited and Sporadic Ataxias and Other Neurogenetic Disorders

Spinocerebellar ataxias (SCAs) affect those parts of the brain concerned with coordination. Many cases have a genetic cause. Our clinical work in the inherited ataxias involves finding and describing new varieties of ataxic illness. In late 2009, we published our third previously undescribed inherited ataxia, SCA 30, and in 2010, we completed our studies (in conjunction with colleagues in Sydney and Wellington) into a newly recognised sporadic ataxia, CANVAS. The lead author is Dr David Szmulewicz, who was one of our advanced trainees in 2009.

Research into motor deficits in a mouse model of spinocerebellar ataxia.



In conjunction with Professor David Amor at the Murdoch Institute, we are pursuing genetic localisation of oculopharyngeodistal myopathy in a large pedigree studied by us and Dr Michael Fahey (Monash Medical Centre), as well as two apparently previously undescribed distal myopathies – one dominant and one recessive.

Gluten sensitivity (which underlies coeliac disease) has been proposed as a common cause of sporadic (non-genetic) ataxias by producing antibodies that damage the cerebellum, although this is contentious. Dr Louise Kelly and Volga Tarlac obtained antibodies to gluten (gliadin) in HLA-transgenic mice (a gift from University of Melbourne), and in 2010, showed that these high titre antibodies do not affect cerebellar function or structure. This work is to be presented at the American Academy of Neurology meeting in 2011.

The group continued to collaborate with Monash University (Gippsland) to produce portable apparatus with which to conduct various novel tests of upper limb coordination. Lyn Lindsay has started as a part-time PhD student on this project in 2010.

Movement Disorders

The research team, coordinated by Associate Professor David Williams, now includes Perdita Cheshire, a PhD student who is working on brain tissue archived at the Australian Brain Bank Network to investigate the possible causes of medication-related abnormal excessive movements in advanced Parkinson's disease. Associate Professor Williams also co-supervises a University of Melbourne PhD student who is performing longitudinal neuropsychological studies on patients with movement disorders.

Together with the scientists in The Alfred Movement Analysis Laboratory, the team tests diagnostic and electrophysiological measures of tremor: dystonic tremor, orthostatic tremor and essential tremor.

Associate Professor Williams was invited to talk at international meetings including the Asian Oceania Section Movement Disorders Society Bi-Annual Meeting, Parkinson's Disease and Movement Disorders Annual Congress and Neuroscience Japan Annual Meeting.

Cognition in Cerebellar Stroke and Hepatitis C

Chris O'Halloran, a La Trobe Neuropsychology student whose Masters is co-supervised by Professor Storey, has completed his studies on localisation of cognition and affective function in the cerebellum, and has submitted. Neuropsychologist Dr Rubina Alpitsis studies the effects of hepatitis C infection on cognition, in conjunction with the Gastroenterology Unit, funded by an Alfred Research Trusts Small Project Grant.

Postgraduate Students

2 PhD Students
1 Other Doctoral Student

Publications

13 Journal Articles



TheAlfred



Head: Professor Jeffrey Rosenfeld MBBS, MD, MS, FRACS, FRCS(Edin), FACS, FRCS(Glasg)Hon, FCNST(Hon), FACTM, MRACMA, RAAMC

In 2010, the Department of Neurosurgery entered an exciting new phase in its research program, with the commencement of the Monash Vision Direct to Brain Bionic Eye project. Professor Rosenfeld is a principal investigator with a team of experts in engineering physiology, ophthalmology and medical imaging, who, in partnership with industry, aim to restore some useful vision to selected blind individuals. The project is developing a cortical implant, in contrast to a retinal implant.

The Monash Vision Direct to Brain Bionic Eye system combines digital and biomedical technology with consumer-friendly glasses. A digital camera embedded in the glasses will capture images. As the head turns, the glasses turn as well. An eye movement sensor inside the glasses will detect more subtle changes in where the user looks. The digital processor will modify the images captured by the camera to present the image that is being looking at to the brain. Cutting edge digital processors will be embedded in the glasses along with a wireless transmitter. The transmitter will send signals to a chip inserted on the brain at the back of the head under the skull. The chip will then directly stimulate the visual cortex of the brain with electrical signals, which the brain will learn to interpret as sight.

The Neurosurgery Unit continued its participation in multidisciplinary and pure neurosurgical research in the last year. The study of blunt cervical and vertebral artery injury was published. This study has assisted neurosurgery, neurology and emergency physicians to more adequately screen trauma patients for these potentially devastating injuries. The POLAR study of hypothermia for severe traumatic brain injury is under way and we continue to work closely with the intensive care unit on this important project. The trial of decompressive craniectomy for diffuse traumatic brain injury has drawn to a close after seven years. The results were published in the *New England Journal of Medicine* in April 2011.

Phil Lewis continues his research on transcranial doppler and cerebral autoregulation. Dr Tony Goldschlager completed his PhD and published a number of papers in high ranking journals as a result of his research on mesenchymal stem cell applications in the spine.

Awards, Prizes and Major Grants

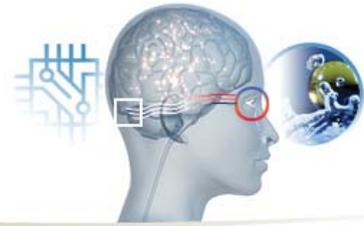
- The Monash Bionic Eye Project commenced in 2010. There are 30 researchers involved in this four-year project funded by an \$8 million grant from the Australian Research Council
- Professor Rosenfeld was appointed to the Neurotrauma Committee of the World Federation of Neurosurgical Societies
- Professor Rosenfeld was the recipient of the John Thomson Medal and Oration, Royal Australian Army Medical Corps and Queensland Medical School, Herston, Brisbane

Current Projects

- ARC Research in Bionic Vision Science and Technology Initiative: 'Direct stimulation of the visual cortex: a flexible strategy for restoring high-acuity pattern vision' (Rosenfeld JV, *et al.*)
- DECRA: a multicentre randomised trial of early decompressive craniectomy in patients with severe traumatic brain injury (Cooper DJ, Rosenfeld JV, *et al.*)

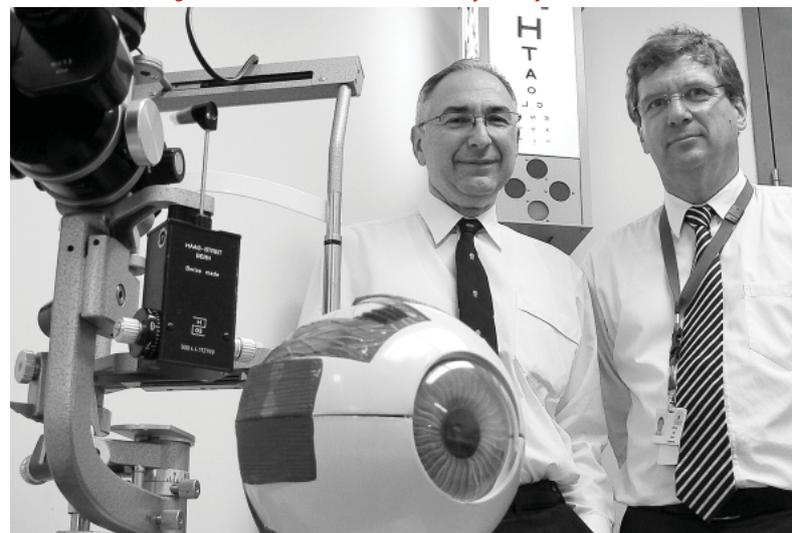
MONASH VISION

Direct to brain bionic eye



- POLAR: Prophylactic hypothermia trial to Lessen traumatic Brain injury randomised controlled trial (Cooper DJ, Rosenfeld JV)
- The correlation of clinical and radiographic findings with long-term outcomes in road trauma patients with acute cervical discoligamentous injury (Ackland H, Rosenfeld JV and Malham G)
- Establishment of a neurotrauma tissue/fluid bank within the National Neural Tissue Resource Centre (McLean C, Rosenfeld JV)
- Identification of risk factors for the development of postoperative bleeding after cranial neurosurgery (Hwang P)
- Intentional forgetting in frontal lobe tumour patients (Anderson J, Rosenfeld JV)
- The determination of the expression of calcitonin receptor (CTR) and the characterisation of CTR-positive cell types in human brain tumours. (Wookey P, Hwang P and Rosenfeld JV)
- Cerebral autoregulation monitoring in paediatric traumatic brain injury (Lewis P, Butt W, Rosenfeld JV)
- The development of a neurosurgical audit system (Lewis P)
- Melatonin in critical ill patients: a study to examine the levels of melatonin in severe head injuries (Morganti-Kossmann C, Rosenfeld JV, Seifman M)
- Establishment of a spinal injuries registry (Tee JW, Chan P, Rosenfeld JV, Liew S, Gruen R)

Director of Neurosurgery, Professor Jeffrey Rosenfeld (left), and Head of Ophthalmology, Associate Professor Anthony Hall, are Alfred investigators on the Monash Bionic Eye Project.



Postgraduate Students

2 PhD Students

Publications

15 Journal Articles
4 Book Chapters

The Department of Nuclear Medicine was established in 1968 and is primarily committed to providing patient services that involve the use of unsealed sources of medical isotopes either for therapy or diagnosis. It is especially active in training medical specialists in the field and nuclear medicine technologists who are an integral part of the provision of these services to patients.

The department is involved in research activities that support its principal areas of clinical involvement and, with the presence of a dedicated positron emission tomography (PET)/computed tomography (CT) scanner, is increasingly focused on improving the assessment and management of cancer patients treated at William Buckland Radiotherapy Centre and other Alfred Health centres. The department has had a strong research track record under the leadership of Associate Professor Michael Kelly who retired as director after nearly 30 years of service to The Alfred. The department's long history of actively participating in a series of multidisciplinary research projects with many other Alfred departments and the Baker IDI Heart and Diabetes Institute continues.

Several recently completed studies are now either published in peer reviewed journals or are in various stages of the publication process. These include a publication by Dr Thomas Barber, Nuclear Medicine Fellow, demonstrating PET/CT impacts on the treatment strategy in approximately in 45% of patients with pancreatic cancer. Dr Kenneth Yap has worked closely with colleagues from the Centre of Obesity Research and Education, Monash University, and has contributed as a co-author on two publications evaluating the effects of laparoscopic gastric banding on gastric emptying, supra- and infra-band transit and sensation of satiety using novel nuclear medicine techniques.

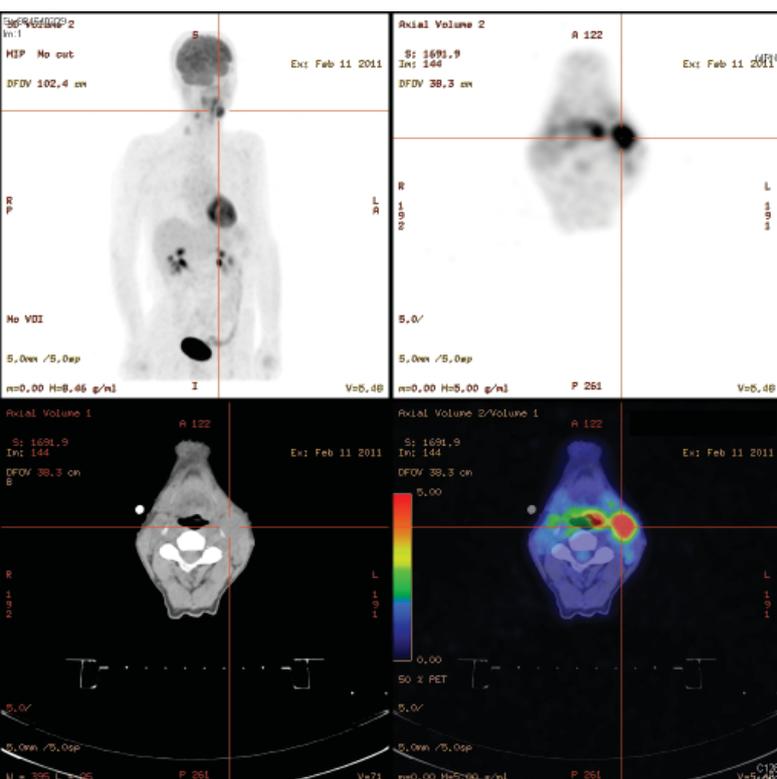


PET scan in patient with active inflammatory bowel disease.

Current Projects

- A pilot study of non invasive assessment of acute graft versus host disease of the gastrointestinal tract and treatment response following allogeneic haemopoietic stem cell transplantation using ¹⁸F-FDG PET (Dr Martin Cherk with Departments of Haematology and Gastroenterology)
- A pilot study to assess activation of cervical and upper thoracic brown adipose tissue in humans via beta adrenergic stimulation using ¹⁸F-FDG PET (Dr Martin Cherk with Baker IDI)
- Predicting chemotherapy induced hepatic injury on clinical, genetic and imaging parameters following treatment of colorectal carcinoma (Dr Martin Cherk with Gastrointestinal Surgery Unit)
- Frequency of undetectable serum thyroglobulin and thyroglobulin Ab in spite of whole body I-131 positive scans in thyroid cancer patients (Dr Martin Cherk and Professor Duncan Topliss, Endocrinology Unit)
- A pilot study of the use of magnetic seizure therapy for treatment resistant depression (Dr Kenneth Yap and Professor Paul Fitzgerald, Department of Psychiatry)
- Precision of LVEF measurements obtained during gated SPECT Sestamibi myocardial perfusion imaging (Dr Martin Cherk and Associate Professor Victor Kalff)
- Comparison of prone versus supine left ventricular ejection fraction from gated myocardial perfusion studies and gated cardiac blood pool scans (Dr Kenneth Yap and Associate Professor Victor Kalff)

PET/CT head and neck cancer demonstrating local spread.



Publications
3 Journal Articles



A healthy volunteer is monitored during a Phase 1 study.

Phase 1 clinical trials, where a new drug therapy is tested in a healthy volunteer or in patients with specific medical conditions, are integral in the development of new therapies. Nucleus Network relies on community involvement in this process, and is grateful for the time and effort volunteered by participants, without whom new medicines would not reach the people who need them most. The information collected from clinical trials monitors and protects the participants' health and also provides crucial information about the therapy under trial.

Nucleus Network is a not-for-profit clinical research and education company wholly owned by Baker IDI Heart and Diabetes Institute. The organisation is one of Australia's leading early phase clinical research facilities. The not-for-profit status provides the establishment of unique collaborations with hospital-based principal investigators, medical schools and access to dedicated research facilities and capabilities across AMREP.

The Centre for Clinical Studies AMREP, together with the Centre for Clinical Studies at the Austin Hospital, Heidelberg, are purpose-built facilities for the conduct of clinical trials and are core to the business of Nucleus Network. In addition to conducting early phase clinical trials, Nucleus Network provides education and training in Good Clinical Practice and clinical trial consulting services.

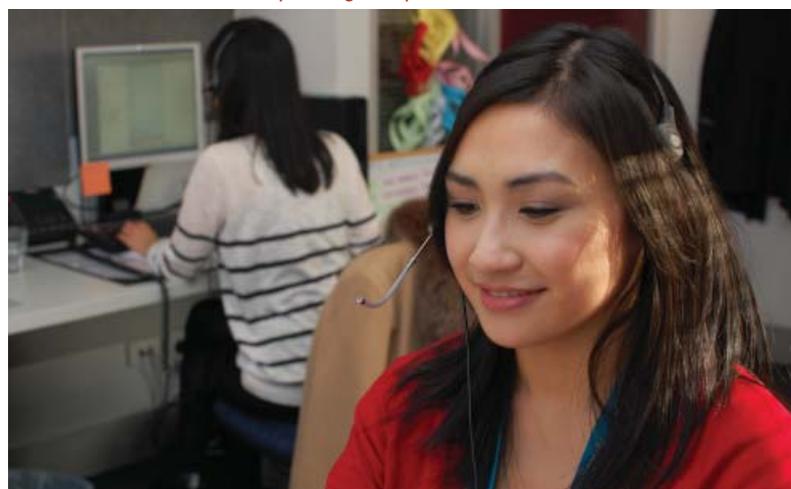
Nucleus Network Education is committed to developing high standards for education and training for clinical research and for building clinical research support frameworks. In 2010, Nucleus Network Education collaborated with the Victorian Managed Insurance Authority (VMIA), insurer of all public hospitals in Victoria, to develop a training program to implement the VMIA Research Governance Toolkit. The toolkit will help clinical research organisations ensure that their research is underpinned by best practice research governance and help them fulfil some of the requirements under the Australian Code for the Responsible Conduct of Research. In 2011, educational seminars will be delivered across Victorian public hospitals free-of-charge to participating clinical research professionals. These seminars will be presented by leading experts in the clinical research industry in partnership with local research office representatives.

Nucleus Network again participated in the Governor of Victoria export awards, having won the Emerging Exporter and Award for Innovation Excellence in 2008 and being a commendee in the Medium Services category in 2009. Nucleus Network was a finalist in the Large Services category in 2010. These awards reflect on the valuable work that we continue to do and the level of trust that we have established with our international clients. Around 85% of our income is from providing services to international companies – this means that we have created around 80 new jobs in Victoria over the last few years and we are proud that we are forming part of the economic success of Victoria.

2010 Highlights

- Over \$2 million of services, donations, education subsidies, contract work and scholarships paid to AMREP members
- Over \$13.5 million of direct export revenue generated for the Australian biopharmaceutical industry plus unquantifiable flow-on benefits for the industry and other economic sectors
- Three direct student placements, plus support provided to external researchers (including PhDs)
- More than 35 clinical trials conducted
- Clients include international big pharma companies from Australia, USA, Japan, China, New Zealand and the United Kingdom

Recruitment staff member speaking to a potential volunteer.



Healthy volunteers use the entertainment facilities.



The Alfred/Deakin Nursing Research Centre

The research activities of the Alfred/Deakin Nursing Research Centre have focused on the evaluation of quality and safety of nursing care delivery and the development and implementation of interventions to improve patient outcomes. The active doctoral research program has continued under the direction of the centre staff. PhD projects in progress are investigating symptom management in the oncology context, patient participation and preferences for participation in recovery after cardiac surgery, the quality of care of frail elderly in acute care to reduce functional decline and the trajectory of pulmonary dysfunction following cardiac surgery. Rochelle Wynne successfully completed her PhD titled 'Antecedents to postoperative pulmonary dysfunction in adults having cardiac surgery' in 2010.

Current Projects

- Evaluating quality of care in an oncology setting: symptom management and practices (Emma Cohen)
- Evaluating the quality of 24 hour acute care delivery: describing functional outcomes of older people using a model of best practice (Lenore Beddoes)
- Defining patient participation in treatment in acute care context (Lauren McTier)
- Predictors of hospital admission of patients with chronic obstructive pulmonary disease in the emergency department (Dr Julie Considine)
- Video analysis of interprofessional communication and decision making to manage sedation therapy in intensive care (Associate Professor Judy Currey)
- Living with an artificial heart: experiences of patients and carers (Associate Professor Judy Currey)
- Managing patients with a ventricular assist device: an exploration of international models for community-based care (Associate Professor Judy Currey)
- Enhancing medication safety in hospitals: development of a core dataset and an exploration of factors influencing nurses' decisions (Associate Professor Judy Currey)

Vicki White was awarded the Kathleen AB Smith Memorial Prize in Nursing for her publication on mechanical ventilation weaning.



- The effect of improving quality of heart failure programs on patient outcomes (Elizabeth Oldland)
- Mapping the trajectory of post-operative recovery for octogenarians following transcatheter aortic valve implantation (Roxanne Johnston)
- Increasing critical care nurses' diagnostic accuracy of atrial electrograms by using an innovative education program (Julie Preston)
- Correlation between ET_{CO}₂ and PaCO₂ in spontaneously breathing emergency department patients (Elaine Killeen)
- Presentation to emergency departments due to chemotherapy-induced complications: opportunities for improving service delivery (Associate Professor Trish Livingston)

La Trobe/Alfred Clinical School

A collaborative research project was undertaken between La Trobe/Alfred Clinical School of Nursing and the Department of Endocrinology and Diabetes led by Geraldine Lee and Sue Wyatt. The aim was to evaluate whether improvements would be seen in patients with diabetes who were undergoing cardiac surgery if they participated in a pre-operative education and intervention program compared to patients in the usual care group.

The intervention group was assessed by a diabetes nurse consultant, dietitian, and endocrinologist during a pre-operative visit. Specific diabetes questionnaires were administered, education delivered, and protocol-driven changes to the medical regimen instituted, including insulin commencement if appropriate. Length of stay, incidence of post-operative complications, and the number of post-operative inpatient review endocrinology visits required were assessed.

A total of twenty-four patients with a pre-operative HbA_{1c} greater than 6.5% were studied (17 males and 7 females). The majority of participants were having bypass surgery and in the intervention group, HbA_{1c} fell significantly by 1.9% (to 8.2%) compared to 7.0% in the usual care group. Improvements in patients' self-care and efficacy were seen in the intervention group. In terms of complications related to cardiac surgery, there was a trend for usual care patients to require more post-operative endocrinologist visits and to have more acute diabetes-related complications. Although only a pilot study, it suggests a potential benefit of acute optimisation of diabetes treatment before elective cardiac surgery. Following these results, a larger study evaluating this intervention in elective surgery and medical patients at The Alfred will be undertaken.

The Masters of Nurse Practitioner course was re-accredited until 2015. This is the first Victorian Masters program to be re-accredited and the internship model, developed by Geraldine Lee, has become an integral part of all Masters programs throughout Australia.

Postgraduate Students

6 PhD Students
16 Masters Students

Publications

7 Journal Articles

2010 was a productive year for the Nutrition Department, expanding its research focus to include intensive care clinical nutrition along with the established nutritional research areas of human immunodeficiency virus (HIV) and cardiovascular health.

Julia Price continued her research in HIV and the risk of lowered bone mineral density as a result of a high risk of vitamin D deficiency. In conjunction with Dr Ian Woolley from the Infectious Diseases Unit, she investigates the prevalence of metabolic syndrome, lipodystrophy and cardiovascular disease risk in an ambulant ageing HIV-infected male cohort. This study of 517 HIV patients found that a significant proportion of patients were vitamin D deficient (75%). Predictors included gender, country of birth, HIV duration, season, anti-retroviral agent exposure and alkaline phosphatase.

Emma Ridley continued her role as the Australasian Society of Parenteral and Enteral Nutrition (AuSPEN) and the Australian and New Zealand Intensive Care Research Centre (ANZIC-RC) Nutrition Research Fellow (School of Public Health and Preventive Medicine, Monash University).

Award

Ibolya Nyulasi was appointed a European Society for Clinical Nutrition and Metabolism (ESPEN) Faculty member, in recognition of her significant contribution within ESPEN for developing and improving the field of clinical nutrition and metabolism.

New Research Position

Dr Audrey Tierney was appointed as one of the inaugural ICU research fellows for 6-12 months to investigate the use of metabolic cart measurements of resting metabolic rate versus current practice in estimating energy requirements of ICU patients.

Current Projects

- Are individuals with HIV and darker skin pigmentation at risk of lowered bone mineral density, and further HIV disease progression due to high risk of vitamin D deficiency? (Julia Price)
- Prevalence of metabolic syndrome, lipodystrophy and cardiovascular disease risk in an ambulant ageing HIV-infected male cohort (Julia Price, Emma Ridley)
- Can a modified fat diet with low glycaemic load improve insulin sensitivity and inflammatory mediators in overweight people with cardiac failure? (Suzannah Jackson, Rachel Stoney)
- A randomised controlled study of a pre-operative intervention in patients with diabetes undergoing cardiac surgery (Rachel Stoney and Sue Wyatt, Department of Endocrinology and Diabetes)
- POLAR BEAR: the Prophylactic hypOthermia trial to Lessen trAumatic bRain injury Basal Energy Assessment Research (Emma Ridley, Ibolya Nyulasi)

Research Achievements

Julia Price – oral presentation ‘Traditional and HIV – related factors of vitamin D insufficiency in Melbourne, Australia’ presented at the European Society for Parenteral and Enteral Nutrition meeting in Nice, France, and the Australian Society of HIV Medicine Meeting in Sydney.

Emma Ridley – recipient of the \$20,000 Alfred Trusts Allied Health Grant in 2010 for POLAR BEAR – the Prophylactic hypOthermia trial to Lessen trAumatic bRain injury Basal Energy Assessment Research.

Kathryn Collins – poster presentation at the European Society for Parenteral and Enteral Nutrition meeting entitled ‘Complication rates of percutaneous endoscopic gastrostomy (PEG) versus radiologically inserted gastrostomy (RIG) insertion at an Australian tertiary referral hospital’.

Ibolya Nyulasi – invited speaker at the combined Gastroenterological Society of Australia and AuSPEN 2010 conference on the topics of malnutrition and quality services in PEG care.



Associate Professor Ibolya Nyulasi was appointed a European Society for Clinical Nutrition and Metabolism Faculty member.

Postgraduate Students

1 PhD Student
3 Masters Students

Publications

6 Journal Articles

The Occupational Therapy Service aims to enhance people's quality of life by enabling them to participate in their chosen life roles and personal occupations, including self care, leisure, study and/or work.

Research output for 2010 has included two publications in peer-reviewed journals, as well as 12 free papers and 8 posters at national and international conferences. Key projects undertaken or completed in 2010 have reflected the breadth of speciality areas that occupational therapists work across. These have included:

- Evaluation of targeted occupational therapy services for elderly trauma patients
- Patient adherence to treatment in acute hand injuries
- Assessment of high level cognition based communication disorders in traumatic brain injury
- Conservative management of wrist pain caused by ulnar abutment
- School-based intervention to develop young children's social competency
- Adult accomplishment in cystic fibrosis

In March, Annabelle Bond, along with colleagues from Speech Pathology, presented at the International Brain Injury Association's Eighth World Congress on Brain Injury in Washington, USA. In May, three Occupational Therapy staff from The Alfred (Rebekah Clutterbuck, Michelle Farquahar and Lisa O'Brien) and two from Alfred Psychiatry (Lorrae Mynard and Gabby Pitt) presented their work at the World Federation of Occupational Therapists (WFOT) Congress in Santiago, Chile. Lisa O'Brien also presented two papers at the International Federation of Societies for Hand Therapy (IFSHT) Congress in Florida, USA in June.

Lisa O'Brien submitted her PhD thesis (by publication). Her studies have included a multicentre randomised controlled trial comparing the effectiveness of different splints for mallet finger injury, a systematic

Lisa O'Brien completed a randomised controlled trial comparing three different splints in 2010. It was published in Archives of Physical Medicine and Rehabilitation in early 2011.



review, a qualitative study of patients' experience of distraction splinting for intra articular finger fractures, and a two-centre cohort study comparing long-term outcomes with patients from Southern Health who received treatment other than distraction for the same injury.

Alison Hardman completed a Master of Public Health, travelling to Bangladesh to collect data for her thesis 'Factors affecting utilisation of rehabilitation services by people with an upper limb injury in Bangladesh'.

The 'Adult accomplishment in individuals with cystic fibrosis' study, a joint project between Occupational Therapy and the Department of Allergy, Immunology and Respiratory Medicine, has continued.

Current Projects

Group-based fatigue management education for improving chemotherapy and radiotherapy patients' performance and satisfaction with daily living activities (Anna Loughnan and Lisa O'Brien, supported by Southern Melbourne Integrated Cancer Service Supportive Care Research Grant, 2010-2011)

Alfred Child and Adolescent Mental Health Service schoolyard participation project: implementation and evaluation of a targeted school-based intervention program to develop young children's social competency (Allison Cox)

Conservative management of wrist pain caused by ulnocarpal abutment (Alison Hardman and Lisa O'Brien)

Efficacy and patient experience of distraction splinting for complex intra-articular finger fractures (Lisa O'Brien and Dr Andy Simm, The Alfred; Dr Ian Loh and Kim Griffiths, Southern Health)

Women's experiences of acute admission to an acute psychiatric ward (Jennifer Grigg and Tracy Fortune, La Trobe University; Scott Presnell)

Adult accomplishment in cystic fibrosis (Dr Rob Stirling, Fiona Hore-Lacy, Jenny-Maree Marshall and Scott Presnell)

Effectiveness of brief smoking cessation intervention with hospital patients: pilot study (Judy Shepherd, Sandringham Hospital)

Viability of occupational therapy involvement for pre-elective sternotomy patients (Carly McKeough)

Postgraduate Students

1 PhD Student
1 Other Doctoral Student
9 Masters Students

Publications

2 Journal Articles

In 2009, the Department of Orthopaedic Surgery started recruiting subjects into four international multicentre randomised controlled orthopaedic studies. During 2010, the department began to emerge as an international player in clinical orthopaedic research in collaboration with the number one group at McMaster University in Canada.

Key achievements in 2010 included:

- Associate Professor Liew was invited onto the Executive Committee of the International Hip Fracture Research Collaborative and the steering committees of two international randomised controlled trials. She featured in the Australian Orthopaedic Association Annual Scientific meeting with five invited presentations, eight scientific papers and five poster presentations
- Dr Adam Dowrick, Research Fellow, was awarded an NHMRC Overseas Early Career Fellowship enabling him to work with the McMaster group for the next two years

International Multicentre Trials

FLOW (Fluid Lavage of Open Wounds): this trial examines the effect of irrigation pressure and an additive to saline irrigant in the initial management of open fracture wounds on the reoperation rate within one year. The total number of patients required is 2,300 and as of January 2011, there have been over 652 patients recruited across 25 sites, with The Alfred being the lead recruiter and just having passed a milestone of recruiting its 100th patient. Associate Professor Liew is on the writing committee and the group has two publications in press. The first paper reports on the results of the pilot study and suggests a trend toward better outcomes with low pressure and soap irrigation. The second paper describes the methodology of the definitive trial now running. We were awarded a Monash Near Miss Grant to continue this study.

FAITH (Fixation using Alternative Implants for the Treatment of Hip fractures): this trial compares the reoperation rate within two years for the fixation of undisplaced neck of femur fractures using three screws versus a sliding hip screw. The total number of patients required is 1,500. As of February 2011, there have been 535 patients recruited across 60 sites, with The Alfred being one of best recruiters (19 patients) outside of the Netherlands.

HEALTH (Hip fracture Evaluation using the ALternatives of Total hip arthroplasty versus Hemiarthroplasty): this trial compares the reoperation rate within two years for the treatment of displaced neck of femur fractures using a total hip arthroplasty (replacement) versus a hemiarthroplasty (partial hip replacement). The total number of patients required is 2,000. It is still in the pilot phase, with The Alfred (one of 30 hospitals) having already attained its 15 patient target.

PRAISE (PRevalence of Abuse and Intimate partner Abuse Surgical Evaluation): this trial examines the prevalence of domestic violence in female patients who attend an orthopaedic outpatient clinic. This observational study requires a total of 2,700 female patients. The initial pilot study of 282 females found 89 (32%) had been subject to emotional, physical, or sexual abuse by their partners. A methodology paper has been published.

VOTOR (Victorian Orthopaedic Trauma Outcomes Registry): this registry of major orthopaedic trauma patients was established at The Alfred in 2003 and now collects data from four Victorian hospitals, and so captures information on the majority of these patients across the state. It provides collaborative research opportunities for consultants and junior staff and resulted in a number of presentations at national trauma and orthopaedic conferences in 2010.

Departmental Studies

Since the amalgamation of trauma and elective orthopaedics into one department in 2008, a working database of all patients treated has resulted in quarterly audits that provide a stimulus for questioning current clinical practices.



Undisplaced femoral neck fractures are randomised to either a sliding hip screw and plate (left) or three cancellous screws (below) in the FAITH study.



Publications
2 Journal Articles



Clinical Biochemistry Unit

Head: Associate Professor Hans Schneider

- The cardiac marker testing with B-type natriuretic peptide (BNP) study showed that the use of BNP in the setting of emergency departments is of marginal value in that it may reduce hospital length of stay in healthcare environments with long hospital stay. At The Alfred, it does not seem to help patient management.
- In collaboration with the General Medical Unit, a study commenced to measure high sensitivity troponin T levels in patients without acute coronary syndrome that are admitted for other reasons. Troponin T levels appear to be more frequently elevated in patients with general medical problems, which may be important for long term prognosis and also may further identify high risk populations.
- The feasibility study of using urinary NGAL (neutrophil gelatinase-associated lipocalin) as an acute kidney injury marker in the ICU ended, with the outcome that patients who would develop acute renal failure with early NGAL elevation could not be easily identified.
- A study to identify urine and serum markers of acute kidney injury in heart failure in order to predict risk of future hospitalisation and cardiac events continued.
- Dr Nilika Wijeratne measured heart type fatty acid binding protein in serum and CSF of patients with traumatic brain injury and in controls, and is preparing to publish the outcomes.
- Nicole Jenkins determined bone turnover markers in a cohort of Australians from Geelong. Data analysis led to a routine method of vitamin D measurement being stopped. A new liquid chromatography tandem mass spectrometry method, considered the gold standard for vitamin D measurement, is being worked up.
- Associate Professor Schneider joined the AusDiab team to provide pathology expertise for interpretation and measurement issues.

Haematology

Acting Head: Dr Susan Whitehead

During 2010, the focus of the Haematology Unit turned to the transfusion service, in particular, patient identification. An audit performed by the transfusion nurses showed poor compliance with the hospital procedure for patient identification when administering red blood cells (RBC). A proof of concept study using electronic hand-held devices was initiated to explore the hypothesis of improved compliance and, hence, patient safety.

Blood Bank

- Support of a pilot feasibility trial of allocation of freshest available RBCs versus standard care in critically ill patients undertaken by the ANZIC group is now complete, and demonstrated a significant degree of separation between the two groups
- In conjunction with the Transfusion Outcomes Research Collaborative, a study of the early coagulopathy in trauma is currently accruing patients

General Haematology

- The flow cytometry department continues to be involved mainly in Phase 1 drug studies from Nucleus Network
- In collaboration with the Clinical Haematology Unit, a Phase 2 study of lenalidamide and prednisolone as post-autologous stem cell

transplant maintenance therapy for patients with multiple myeloma incorporating residual disease monitoring using flow cytometry is progressing

- Support of a cross-institutional study of the utility of repeating blood films in the diagnosis of imported malaria. Data suggest that, in selected patients, the diagnosis can be made using a single set of thick and thin blood films together with rapid ICT
- Collaboration continues with the Australian Centre for Blood Diseases in assessing the role of platelet glycoprotein 6 in haematological diseases
- An audit of intrinsic coagulation factor assays on patients who present to the Emergency Department with an unexpected prolonged aPTT showed that current practice is appropriate
- The study showing that rapid change in mean red cell volume can be used to identify wrong blood in tube samples in the laboratory was completed and the findings presented at the annual meeting of the Haematology Society of Australia and New Zealand

Microbiology

Head: Associate Professor Denis Spelman

Microbiology has an ongoing significant role in a hospital-wide diagnostic and consultative service, and a surveillance role in the monitoring and detection of antimicrobial resistance. Projects include:

- In collaboration with the Cardiothoracic Surgical Unit, studies of the causative organisms and impact of infections in patients with ventricular assist devices have been undertaken
- In collaboration with Infectious Diseases and Immunology, an NHMRC-funded multisite study to optimise immunisation protocols in hyposplenic and asplenic patients commenced
- Studies of patients with endocarditis and participation in the International Collaboration on Endocarditis
- Annual surveys of consecutive isolates with antibiotic resistance patterns and contributions to the Australian Group on Antimicrobial Resistance including hospital and community acquired organisms such as *Staphylococcus aureus* and *Enterococcus faecalis*
- Australian and New Zealand collaboration on the outcome of staphylococcal sepsis (ANZCOSS)
- Study of antibiotics resistance in the Asia-Pacific region (SENTRY): this is a study on antibiotic resistance to evaluate the frequency and antimicrobial susceptibility of bacterial isolates collected from specific clinical infections in different geographical regions
- Determination of risk factors for vancomycin resistant enterococci (VRE) and vancomycin susceptible enterococci
- Study of the usefulness of multilocus sequence typing in the determination of the epidemiology of VRE
- In collaboration with the Victorian College of Pharmacy and the Austin Hospital, a multisite analysis of cost of VRE infection
- Collection, identification and typing of methicillin-resistant *S. aureus* isolates over a 6 month period

Publications

12 Journal Articles
3 Book Chapters
1 Book

The Department of Patient and Family Services Social Work Service continued to develop academic links with the University of Melbourne and has completed a consultancy program during 2010 with Associate Professor Lou Harms, University of Melbourne.

Trauma Team

The Trauma Team, in conjunction with Dr Lou Harms, completed the research project, 'Family adaptation following trauma: the impact of ICU hospital admissions', which explored family members' perceptions of psychosocial trauma and adaptation as a result of an ICU admission. Findings indicated a high level of trauma symptoms relative to the mean scores in other studies of trauma. Similarly, the use of the PTGI showed that participants were also reporting some positive changes, occurring mostly in relation to personal resources.

Chronic Illness Team

Sue De Bono, Senior Social Worker, Bone Marrow Transplantation, in collaboration with Lynda Katona (Psychology) and Stuart Lee (Monash Alfred Psychiatry Research Centre), published a study on routine screening for psychological distress on an Australian inpatient haematology and oncology ward and the impact on use of psychosocial services in the *Medical Journal of Australia*. Up to 60% of cancer patients experience long-term distress, with 20-35% experiencing anxiety or depression. Many distressed inpatients are not identified or referred for psychosocial support until in crisis. The aim of this project was to trial a new system of screening inpatients to better identify distressed patients, to examine the causes of their distress, and to improve psychosocial referral. The research found that there is a high prevalence of unidentified distress in patients on the oncology ward, who would not normally be referred for psychosocial support.

A collaborative study was conducted on the psychological impact of haematopoietic stem cell transplantation on relative donors. For this research, we interviewed 19 sibling donors of recipients who underwent peripheral blood stem cell or bone marrow transplants from 2007 onwards. The findings revealed that there was a positive impact on the relationship between the donor and their sibling. However, donors experience a high level of distress associated with the success of the donation, which is linked with the length of the recovery for the recipient and whether the recipient survived the transplant.

Maureen McInerney, Senior Social Worker, Malignant Haematology and Medical Oncology, conducted a research project entitled 'Telling children about their parent's cancer: improving family focused practice in oncology and haematology in an acute adult hospital'. This project used current literature to assess whether it would help inform social work practice with children when a parent has been diagnosed with cancer. The communication style that a family adopts influences how they wish information is to be given to their children, and this needs to be taken into account when working with families.

Infectious Diseases Team

The Infectious diseases Social Work Team, in collaboration with the HIV Mental Health Service, developed and commenced running a

six week support group program for young people aged between 18 and 25 who are living with HIV. The group was set up to provide these young people with a safe and confidential space where they could discuss and share their experiences of living with HIV, working towards a goal of improving participants' sense of social connection with other young people living with HIV.

Evaluation of the program will include consumer feedback and satisfaction outcomes, a presentation of critical reflections by the group facilitators and an assessment as to whether participants felt that had achieved an improved sense of social connection with other young people living with HIV.

General Medicine Team

The General Medicine team, in conjunction with Dr Lou Harms, investigates admissions to the General Medical Unit following a suicide attempt. This research will look at ways in which we can improve psychosocial support during a hospital admission.

Pastoral Care

Reverend Marilyn Hope continued with the project 'The spiritual dimension of the experience of illness', performing interviews of patients and a few staff members from pastoral care.

Staff Achievements

Bridget Wall, John Ashfield, Maureen McInerney, Lou Kerven and Leah du Plooy presented papers at the 6th International Social Work in Health and Mental Health Conference, Dublin, in July 2010.

From left: Stephanie Inglis, Associate Professor Lou Harms and Kellie Muir discuss research within the Social Work Trauma Team.



Publications

1 Journal Article



The Centre for Medication Use and Safety (CMUS) has established itself as one of the key research units within the Faculty of Pharmacy and Pharmaceutical Sciences of Monash University. CMUS has two nodes: the one based within the Pharmacy Department of The Alfred focuses on acute health and medication use. The research activities of The Alfred node of CMUS fall under the broad banner of evaluating the quality use of medicines, and may be classified under the themes of medication safety, therapeutics, practice research and outcomes research.

Key Research Projects

- The ARC-funded COMPLIANS (COst-effectiveness analyses of improved adherence to Management PLans among AUstralianS) project is a collaboration between Pharmacy, Monash University Department of Epidemiology and Preventive Medicine, The Alfred Respiratory Unit and Roche Pharmaceuticals. The final data analysis is being completed and will enable us to investigate the economic impact of improved adherence to treatment plans in chronic disease.
- A research collaboration with Aged Care Services, Caulfield Hospital, investigated the success of a pilot SAM (self-administration of medications) program in hospitalised subacute aged care patients. Supported by a Collier Charitable Fund research grant, the program assessed patients' ability to self-administer their medications when they are discharged home. Forty-three patients of average age 82.1 years were recruited over six months. Twenty-four patients passed the program; others were offered supports to ensure safe medication administration. The SAM program was found to be feasible in the subacute setting and staff resource requirements were quantified. The program was effective in detecting and addressing of barriers to medication adherence in elderly patients.
- A project funded through a Society of Hospital Pharmacists of Australia research grant has enabled one of our staff pharmacists, Ruth Chieng, to provide new services to the multidisciplinary allogeneic stem cell transplant (SCT) outpatient clinic. The aim of the project is to determine if the addition of a pharmacist to the clinic will improve the ability of patients to manage their medications and reduce the incidence of medication related problems after SCT. This project is nearing completion. Preliminary study results show that the pharmacist provides a beneficial service to the SCT clinic.

Josephine McGuinness (left) advises Hospital-in-the-Home Nurse Unit Manager, Katrina Neave, of a patient's warfarin dose.



- A collaboration between The Alfred, Monash Centre for Medication Use and Safety and the National Prescribing Service completed an evaluation of the alert systems contained within the electronic prescribing modules of the Victorian Department of Human Services (DHS) HealthSmart system. This evaluation, funded by DHS, assessed a range of allergy, drug interaction and therapeutic duplication alerts. The study identified a broad representation of drug combinations encountered in hospital practice and evaluated the alerts generated from the Cerner/Multum system. A number of limitations were identified, with key recommendations developed for consideration and action by DHS.
- Pharmacy, together with the Department of Endocrinology and Diabetes, and Diabetes Education, have conducted a series of reviews to assess the monitoring and management of patients at risk of developing steroid-induced diabetes while receiving glucocorticoid agents (prednisolone, dexamethasone hydrocortisone, methylprednisolone). A monitoring and management guideline was developed and approved by the Alfred Health Drug and Therapeutics Committee as part of this work. A significant proportion of patients remain unmonitored or under-monitored; however, there has been an increase in appropriate referral to the Department of Endocrinology and Diabetes, and Diabetes Education as a result of this work.

Other Current Projects

A list of other current projects is available from <http://www.alfredresearch.org/research/researchrep10.htm>

Pharmacist-led Anticoagulant Dosing Service in Hospital-in-the-Home Program

The aim of this study was to evaluate the safety and effectiveness of a pharmacist-led anticoagulant dosing service in a Hospital-in-the-Home (HITH) setting. The study was prompted by a number of warfarin-related incidents in HITH. Data prior to pharmacists' involvement were collected retrospectively.

An anticoagulant dosing competency program was established using local and international resources, together with nursing and medical input. During the initial stages of the service, pharmacists worked in pairs and contacted a treating doctor to confirm dose recommendations. Of the fifty-four patients who were dosed to two consecutive therapeutic INRs in the pre-intervention arm, it took on average 9.9 days to achieve the first therapeutic INR and 12.1 days to achieve two consecutive therapeutic INRs. In the post-intervention arm, the mean time to first therapeutic INR was 7.7 days and to have two consecutive therapeutic INRs was 8.8 days.

These data suggest that a pharmacist-led warfarin dosing service is safe and effective. Subsequent phases of the program will progress to trained competent pharmacists providing the dosing service independently.

Postgraduate Students

1 PhD Student
4 Masters Students

Publications

28 Journal Articles
1 Book
4 Book Chapters

The Alfred Physiotherapy Department's research focus is on physical activity and rehabilitation in hospitalised patients and people with chronic illness. Active research programs investigate physiotherapy interventions for respiratory disorders, early mobilisation following surgery, physical activity in chronic disease, and physiotherapy in intensive care.

Carol Hodgson completed her PhD in 2010, investigating the effects of recruitment manoeuvres for ventilated patients with acute lung injury and acute respiratory distress syndrome. Her PhD studies, conducted with the Intensive Care research team, included a randomised controlled trial examining the effectiveness of a novel protective ventilation strategy in these critically ill patients. This study, funded by the Intensive Care Foundation, Australian and New Zealand College of Anaesthetists, Alfred Research Trusts and NHMRC, showed promising effects on oxygenation and lung inflammatory markers over a seven day period compared with the control group.

A randomised controlled trial of early mobilisation following ankle surgery, led by physiotherapist Lara Kimmel, was completed in 2010. This study showed that early ambulation on the first postoperative day resulted in a decreased length of stay, without an increased rate of readmission or wound complications, compared to a control group who rested in bed until the second postoperative day. The results of this study indicate that early ambulation following internal fixation of ankle fracture is safe, with benefits for both patients and the health service, and is now standard practice at The Alfred.

Caroline Nicolson recently concluded a randomised controlled trial comparing the inhalation of hypertonic saline to isotonic saline in patients with bronchiectasis. Improvements in lung function and quality of life were evident in both groups over 12 months of follow-up. This trial suggests that saline inhalation may be a promising treatment for people with bronchiectasis, a condition for which there are few existing treatments that improve long-term wellbeing.

The department has a growing interest in translation of research into practice. Alfred physiotherapists have participated in updating the online Pulmonary Rehabilitation Toolkit (Anne Holland and Annemarie Lee), evaluation of the uptake of 'Physiotherapy for Cystic Fibrosis in Australia: a Consensus Statement' (Brenda Button and Anne Holland), a study investigating the use of evidence in physiotherapy practice for treatment of patients following cardiac surgery (Kate Hayes and Anne Holland) and development of a tool to measure evidence-based practice in allied health professionals (Anne Holland and Tshepo Rasekaba).

Current Projects

- Randomised controlled trial of exercise training for bronchiectasis (A Lee)
- Shorter versus longer rehabilitation following lung transplantation – a randomised controlled trial (L Fuller)
- Telerehabilitation for chronic obstructive pulmonary disease (COPD) (A Holland)
- Randomised controlled trial of home-based versus hospital-based pulmonary rehabilitation for COPD (A Holland)

- A pilot study of exercise training for pulmonary arterial hypertension (P Munro)
- Randomised controlled trial of exercise training for people with a left ventricular assist device (K Hayes)
- Advance care planning and pulmonary rehabilitation: participation and patient perspectives (A Holland)
- Variations in care for people with COPD across health care networks (A Holland)
- Prevalence and impact of incontinence in adult men with COPD (A Burge)
- Prevalence and impact of incontinence in adult men with cystic fibrosis (CF) (B Button)
- How do allied health professionals keep up to date with current evidence? (A Holland)
- Physiotherapy for CF in Australia: uptake and acceptance of the consensus statement (A Holland, B Button)
- Positive expiratory pressure therapy during acute exacerbations of COPD – a randomised controlled trial (C Osadnik)
- Splinting for axillary burns – a randomised controlled trial (A Kolmus)
- Predicting discharge to rehabilitation following ankle fracture (L Kimmel)
- Quality of life in H1N1 survivors (C Hodgson)
- Quality of life in ARDS survivors following ECMO (T Everard)
- Predictors of outcome following chest trauma (M Dixon)
- Physical activity in people living with HIV/AIDS (S Fillipas)
- Self-reported exercise and activity levels in a population of people with Parkinson's disease (K Richardson)
- Physical activity following hip and knee arthroplasty (P Harding)
- Physical activity in adults with CF: a longitudinal study (N Cox)

Cochrane Reviews

- Early mobilisation for elbow fracture in adults (P Harding)
- Airway clearance techniques for COPD (C Osadnik)
- Airway clearance techniques for bronchiectasis (A Lee)
- Breathing exercises for COPD (A Holland)
- Interventions to improve physical activity in people with CF (N Cox)

*Dr Carol Hodgson,
ANZIC-RC Senior
Research Fellow and
ICU physiotherapist,
investigates improved
outcomes for critically
ill patients.*



Postgraduate Students

6 PhD Students
1 Other Doctoral Student
3 Masters Students

Publications

10 Journal Articles

The Monash Alfred Psychiatry Research Centre (MAPrc) is a unique clinical translation research centre, which develops new treatments, new services and new understanding of mental disorders. MAPrc has over 100 staff and postgraduate students.

Over many years, MAPrc has worked on the clinical translation of neuroscience into innovative treatments for people with severe mental illness. Examples of new and effective approaches to therapy for people with longstanding and severe illness include estrogen as a treatment for schizophrenia and transcranial magnetic stimulation (TMS) for depression.

MAPrc conducts 13 research programs, with over 90 projects. The research programs span diverse areas, from cutting-edge neuroimaging techniques that are recognised around the world for the breakthrough insights they provide into brain structure and function in health and illness, to innovative uses of adjunctive treatments to boost the effectiveness of conventional medications for major mental illnesses, to grassroots initiatives looking at ways of increasing the efficiency of community mental health service delivery or addressing the mental health aspects of problem gambling. This reflects MAPrc's focus on bench to bedside research, where results translate directly into everyday benefits for people with mental illnesses, carers and healthcare professionals.

For a full list of MAPrc research projects and outcomes, go to www.maprc.org.au

Women's Mental Health Program Professor Jayashri Kulkarni

With ten projects, the women's mental health program involves the development of novel treatments with estrogen, progesterone and selective estrogens for women with schizophrenia, perimenopausal depression and bipolar affective disorder. The National Register for

PhD student Jodie Feil administers a combined transcranial magnetic stimulation and EEG technique to a healthy volunteer to measure brain activity associated with craving and alcohol dependence.



Antipsychotic Medications in Pregnancy (NRAMP) is an important large project in this area. The program provides advice for state government committees, obstetric hospitals nationally and other related health care facilities about the most appropriate antipsychotic medication to use in pregnancy.

2010 saw the launch of the MAPrc Women's Mental Health Clinic, which is a second opinion specialist clinic providing expert psychiatric consultation for women by Professor Kulkarni, Dr Dielle Felman, advanced psychiatry registrars and a senior endocrinology registrar.

Brain Stimulation and Neuroscience Program Professor Paul Fitzgerald

With 24 projects, this research program involves the use of TMS, MST, transcranial direct current stimulation and deep brain stimulation as methods of developing biomarkers for mental illnesses and using these for innovative treatments for depression, schizophrenia and bipolar affective disorder. 2010 saw the translation of brain stimulation technology in the continuation of magnetic seizure therapy as a new treatment for depression in Alfred Psychiatry.

Neural Diagnostics Program Dr Brian Lithgow

In 2010, Dr Lithgow and Professor Kulkarni won the Grand Final of the ABC television program, The New Inventors, for the development of the EVestG™ ear probe diagnostic tool, dubbed 'the ECG of the mind'. Following this significant win, Commercialisation Australia have awarded a grant to develop the probe to distinguish between the difficult diagnoses of bipolar disorder and unipolar depression.

Cognitive Neuropsychology Program Associate Professor Susan Rossell

With 11 projects, this research program involves the development and use of highly specific cognitive testing in conjunction with neuroimaging to understand the role of cognitive impairment in schizophrenia and depression. This team has developed novel psychological treatments for persistent auditory hallucinations.

2010 saw the successful development of the Voices Clinic, which is a clinical translation of cognitive techniques to treat intractable auditory hallucinations. The Voices Clinic is unique in Australia and is a direct translation from cognitive neuroscience research conducted by Associate Professor Susan Rossell and Dr Neil Thomas. There is a clear need for this type of service, given the limited availability of psychological treatments for patients with severe mental illness. The Voices Clinic is a tertiary service that provides evidence-based psychological treatment to patients, in addition to their regular treatment from public mental health services or private psychiatrists.

Psychopharmacology Program Dr Siva Ilancheran

With nine projects, this program involves the development and conduct of clinical trials of new medications in schizophrenia, depression, bipolar disorder and anxiety disorder. 2010 saw several new medications for schizophrenia and depression being successfully



The launch of the Women's Mental Health Clinic (from left): Jayashri Kulkarni, Tony Lupton, Andrew Way and Mary Wooldridge.

trialed. New medications with fewer side effects are desperately needed for people suffering from mental illnesses and these trials assist in making new treatments possible

Healthy Lifestyles and Outcomes Program Sacha Filia

Healthy lifestyle and outcomes projects address the significant cardiovascular risks for many patients with schizophrenia. Packages of treatment for smoking cessation and weight loss for people with schizophrenia have been developed. 2010 saw significant breakthroughs in assisting people with schizophrenia to stop smoking cigarettes, thereby improving their overall general physical wellbeing.

Service Related Research Program Dr Stuart Lee

With eight projects and support for a range of quality improvement projects delivered by clinical staff, this stream is focused on improving the quality of treatment delivered by psychiatric services. Projects in 2010 included Artbeat (a combined music and art therapy intervention in acute psychiatry); training and intervention delivered by a state wide problem gambling mental health partnership; and evaluating the impact of a state wide psychiatric intensive care service. A highlight was the securing of funding to establish a choir for people with aphasia.

Highlights

Dean's Award for Excellence in Research

Dr Kate Hoy was awarded the Monash University Faculty of Medicine, Nursing and Health Sciences Dean's Award for Excellence in Research (Early Career) 2010 for achieving the highest levels of sustained excellence in research over the last five years. Having graduated only three years ago, she has generated considerable research output (30 peer-reviewed articles, h-index of 8, \$734,000 in research funding). As Team Co-ordinator of the Brain Stimulation and Neurosciences Team, Dr Hoy plays a central role in the development and assessment of novel brain stimulation therapies for patients with treatment resistant mental illness.

Launch of the Women's Mental Health Clinic

The Women's Mental Health Clinic was officially opened on Thursday 28 October by Victoria's Cabinet Secretary and Member for Prahran, Tony Lupton MP. Shadow Minister for Mental Health, Mary Wooldridge, was a guest speaker at the launch.

Professor Kulkarni said, "This clinic is unique in that consultations and treatments will be informed and shaped by the specific biological, hormonal and gender factors that are often implicated in the symptoms and conditions which women experience."

Professor Kulkarni called for greater community awareness of gender-specific aspects to many mental health disorders, including perimenopausal depression, menstrual cycle related mood disturbances, and psychosis in bipolar affective disorder affecting women.

MAPrc in the Media

MAPrc had considerable media attention in 2010. A highlight was being awarded first place honours on ABC's The New Inventors for EVestG™, a new diagnostic tool for detecting mental illnesses and other neurological conditions, developed at MAPrc. The innovative device was invented by Monash University engineer Brian Lithgow in collaboration with Professor Kulkarni. Called 'EvestG'™ (short for electrovestibulography) by commercial partner Neural Diagnostics Pty Ltd, the tool measures patterns of electrical activity in the brain's vestibular (or balance) system against distinct response patterns found in disorders such as depression and schizophrenia. Ongoing research has found distinct response patterns that distinguish different diseases from each other and from regular electrovestibular activity.



Professor Jayashri Kulkarni and Professor Brian Lithgow receive the 2010 Invention of the Year Award on ABC's The New Inventors.

Fundraising Initiatives

The annual de Castella Fun Run continues to be a significant fundraising event for MAPrc. The 2010 event was held on Sunday 29 August, and attracted more than 700 entrants. Marathon champion Robert de Castella presented race winners with their awards. For more details, see www.decastellarun.com.au

The 2010 Art for Mental Health Research Exhibition and Auction was held on Thursday 12 November at the Blue Door Gallery in South Melbourne. This event was highly successful and raised nearly \$10,000 to support mental health research.

The 2010 Art for Mental Health Research Exhibition and Auction.



Postgraduate Students

29 PhD Students
11 Other Doctoral Students
3 Masters Students

Publications

45 Journal Articles

The Psychology Department provides clinical psychology and clinical neuropsychology services to patients of The Alfred.

Alfred Psychology is actively involved in providing research and evaluation as well as education and consultation to staff and community organisations. The department is strongly committed to the teaching and training of postgraduate students (provisional psychologists), and offers clinical placements to clinical psychology and clinical neuropsychology masters and doctoral students.

As part of Alfred Psychiatry, clinical psychology assessment and treatment services are provided to children, adolescents and adults. Within the acute hospital, clinical psychologists are involved in the assessment and treatment of patients who present with psychological problems such as depression, anxiety and adjustment issues. Clinical psychologists are attached to the Cystic Fibrosis, Oncology and HIV Services and the Hospital Admission Risk Program.

Current Projects

In conjunction with Monash Alfred Psychiatry Research Centre, senior clinical psychologist Dr Neil Thomas is involved in a number of research projects on psychological models and therapies for schizophrenia-related disorders. These include a randomised controlled trial of acceptance and commitment therapy (ACT) for medication-resistant psychotic symptoms, an emergent therapy that has attracted substantial clinical interest. This trial will be the world's first trial of this therapy in chronic psychosis, and one of the most rigorously conducted trials of ACT internationally to date. Other projects include thinking processes involved in delusions, perceptual processing in auditory hallucinations, psychosis following traumatic brain injury, therapeutic processes and mechanisms of change in psychological therapies for psychosis, and peer-facilitated interventions for people with psychosis.



Kathleen Troup, Senior Clinical Psychologist.

Monash University Psychology Honours student, Brindha Pillay, investigated the psychosocial impact of haematopoietic stem cell transplantation on relative donors. The aim of the study was to explore the psychosocial impact of stem cell donation before, during and after donation, and to gain insight into donors' experience of the preparation for, and procedures associated, with donation. Participants included 13 men and nine women, with a mean age of 53.1 years, who donated stem cells or bone marrow to a relative between 2007 and 2010 at The Alfred. The results revealed that a broad range of positive and negative emotions are experienced at different time points during the donation process, with the psychosocial impact of donation influenced by factors such as the pragmatic aspects of the donation process, family dynamics, perceived adequacy of preparation and emotional support, and uncertainty related to health outcomes for the recipient and donor. The implications of the results will be used to improve the provision of psychosocial services for donors. This was a joint project between the Psychology Department, Patient and Family Services, Monash Alfred Psychiatry Research Centre and Cabrini Monash Psycho-oncology Research Unit.

Senior Clinical Psychologist, Kathleen Troup, led a project involving the implementation and evaluation of dialectical behaviour therapy (DBT) in an Australian community mental health setting for people with Borderline Personality Disorder. Data were collected for 20 clients over seven years at pre-treatment, mid-treatment and post-treatment. Clients were assessed using a range of self-report measures. Utilisation of Inpatient, Emergency Department, and Crisis Assessment and Treatment Team services for two years before and after treatment was also obtained. Significant improvements were found from pre- to mid-treatment, and from pre- to post-treatment in trait anxiety, affective control, quality of life and coping. Significant improvement in depression was found after two rounds of DBT skills training modules. Additionally, utilisation of crisis services decreased significantly after two rounds of skills modules.

Neuropsychologist Dr Rubina Alptsis studies cognitive outcomes in hepatitis C patients, investigating of the effects of the virus on cerebral function, specifically cognition and P300. She also participates in an NHMRC-funded study into the cognitive outcomes of deep brain stimulation surgery for older patients with Parkinson's disease.

Dr Maxine Braithwaite, Senior Clinical Psychologist, works on improving adherence to treatment in cystic fibrosis patients. A randomised control trial with the intervention of direct pharmacy dispensing, and motivational interviewing is in progress.

Dr Michelle Earle, Senior Clinical Psychologist, investigates sexual compulsivity, sexual sensation seeking and global mental health in men who have sex with men presenting to the Psychology Clinic within the Victorian HIV Service.

Postgraduate Students

2 Doctor of Psychology Students
3 Masters Students

Publications

2 Journal Articles

William Buckland Radiation Oncology (WBRO) has continued research efforts in radiation oncology medical physics, clinical trials, image-guided radiation treatment/stereotactic techniques, and in specific tumours such as those of the CNS, breast, prostate, head and neck. WBRO has an outstanding dataset containing patient, disease, treatment and outcome details of all patients treated over the 18-year history of the centre, which acts as a resource for reviews of outcomes for specific subsets of patients. This scientific effort has led to consistent and ongoing modifications in the way in which we treat our patients, applying radiation research to the radiation 'bedside'.

Highlights

- WBRO staff were chief investigators in a number of collaborative research projects awarded almost a million dollars in NHMRC and Victorian Cancer Agency grants in 2010
- Ryan Smith received a conference grant from RMIT University to attend the 11th Workshop on Electronic Portal Imaging in Belgium
- Joanne Brooker submitted her PhD thesis on quality of life outcomes among acoustic neuroma patients
- WBRO fulfilled the requirements to become a European Organisation for Research and Treatment of Cancer (EORTC) accredited radiation oncology department
- WBRO was accepted to participate in the Trans Tasman Radiation Oncology Group (TROG) Assessment of New Radiation Oncology Technology and Treatments (ANROTAT) project
- Development of the Surveillance Therapy Against Radical Treatment (START) trial in Australia

Current Projects

- Scatter measurements with intensity modulated radiotherapy treatments (J Ruben)
- Factors to be used with IAEA TRS398 for low kilovoltage x-rays (T Ackerly)
- Synchrotron microbeam radiation therapy (J Crosbie)
- Glioblastoma multiforme patient treatments and outcomes June 2005-June 2006 (A Shorthouse)
- Primary chemotherapy with temozolomide versus radiotherapy in patients with low grade gliomas after stratification for genetic 1p loss: a Phase 3 study (J Ruben)
- Whole brain radiotherapy following local treatment of intracranial metastases of melanoma – a randomised Phase 3 trial (J Ruben)
- Neurocognitive function in AVM patients (M Dally)
- Stereotactic radiosurgery for treatment of Cushing's disease (L Wein, M Dally)
- A long-term outcome for glomus jugulare tumours treated with radiotherapy at one institution (R Limb, M Dally)
- PRIME Phase 2 – Scottish Breast Cancer Trials Group: post-operative radiotherapy in minimum-risk elderly (K Taylor)
- Phase 3 study of radiation doses and fractionation schedules in non-low risk ductal carcinoma *in situ* of the breast (K Taylor)
- Breast bolus: can 2mm bolus for the whole course replace the use of 5mm bolus for two regimes? (K Taylor)
- POST – post-operative concurrent chemo-radiotherapy versus post-operative radiotherapy in high-risk cutaneous squamous cell carcinoma of the head and neck (S Davis)

- RadioHum – radiotherapy with humidification in head and neck cancer (S Davis)
- Oropharyngeal SCC treated with radiotherapy: a 16-year experience at WBRO (N Haghghi, S Davis)
- TOAD – a collaborative randomised Phase 3 trial: the timing of intervention with androgen deprivation in prostate cancer patients with a rising prostate specific antigen (J Millar)
- Improving treatment with permanent ¹²⁵Iodine seed implants for prostate cancer using dosimetry with either fused CT/MR images or fused CT/US images (R Smith)
- Development of a population-based prostate cancer clinical registry (J Millar)
- RAVES – a Phase 3 multicentre randomised trial comparing adjuvant radiotherapy with early salvage radiotherapy in patients with positive margins or extraprostatic disease following radical prostatectomy (B Matheson)
- Outcomes after 'top up' in men implanted with radioactive iodine seeds for the treatment of prostate cancer (S Miller)
- The protective role of physical activity against psychological distress in men undergoing androgen deprivation therapy for prostate cancer (K Chipperfield, R Smith, T Oh, J Millar)
- A Phase 3 international randomised trial of single versus multiple fractions for re-irradiation of painful bone metastases (B Matheson)
- PETACC-6 – preoperative chemoradiotherapy and postoperative chemotherapy with capecitabine and oxaliplatin versus capecitabine alone in locally advanced rectal cancer (J Shapiro, I Porter)
- Registry of Clinical Cancer Trials in Southern Melbourne enlarged to form the Victorian Cancer Trials Link (J Millar with DEPM)
- Quality of life in stage 1 seminomatous germ cell tumour patients treated with either adjuvant carboplatin chemotherapy, adjuvant radiotherapy, or high intensity chemotherapy (J Lewin, J Millar)
- Review of Alfred rectal cancer patients treated with radiation (A Tafreshi, L Kirsbaum, J Millar)
- Initial evaluation of the AlignRT surface imaging system (K Fox)

Research physicist Wen Chuan-Dong aligns the MapCHECK phantom to check the delivery of WBRO's new breathing motion compensated radiotherapy treatment.



Postgraduate Students

1 PhD Student
3 Masters Students

Publications

8 Journal Articles

The ageing population and the burden of chronic disease are firmly entrenched as challenges for the Australian healthcare system. Caulfield Hospital provides health care services across Rehabilitation, Aged Care, Residential Care and Aged Psychiatry in both inpatient and community and ambulatory settings, and is therefore well placed to meet these challenges.

During 2010, Caulfield Hospital continued to foster and develop a growing research culture. It is intended that this will contribute significantly to the implementation of effective translational research and interdisciplinary and person centred models of care, with links to defined clinical outcomes in areas of greatest need.

One of the key achievements in 2010 was the development of the 2011-2013 Caulfield Hospital Research Strategy, building on the achievements of the 2007-2011 Caulfield Hospital Research Strategy. Research Program Areas were identified which reflected the range and diversity of Caulfield Hospital services across medicine, nursing and allied health, and outlines the priorities and drivers of research fundamental in delivering the aims outlined in Alfred Health's strategic plans. The following Research Program Areas will become the focus for research activity over the next three years:

- Innovative models of care
- Management of chronic disease
- Mental health and cognition
- Health promotion
- Improving physical and functional outcomes
- Pain management and treatment

The evolution of a nationally recognised research culture at Caulfield Hospital continues with the following notable achievements in 2010:

- Caulfield Hospital Grants Program awarded \$50,000 in internal grant funding to Caulfield staff facilitating four new small projects and one major new research project
- Seven externally funded research projects attracting \$790,311 and two clinical trials funded for \$182,383 during 2010

Dr Ettie Ben-Shabat (left) and Dr Mithu Palit investigate the effects of botulinum toxin A injections for treatment of lower limb dystonia.



- A regular, committed and ongoing Caulfield Hospital Research Interest Group with monthly meetings held and monthly research newsletters distributed to all Caulfield staff
- Greater focus on research as a part of Caulfield Week and the implementation of the Caulfield Week Mini Poster Presentation session
- Development of a Research Coordinator role to assist in the implementation of the Caulfield Hospital Research Strategy: Nicole Austin commenced in this position in January 2010 and has provided extensive support to research activities across the hospital and its programs

Aged Care Services

One of the key priorities for Aged Care Services was the development of discrete projects that allowed advanced trainee geriatric medicine registrars to complete their research projects, while still ensuring the overall goals of the clinical program were met. During 2010, the areas of aged psychiatry, trauma in the elderly, osteoporosis, falls/nutrition/sarcopenia, and community geriatrics were identified. Research projects were undertaken within these areas to ensure the continued development of an effective skill and knowledge base in 2011. Of note was the award to Dr Chris Moran by the Australian Society for Geriatric Medicine (Victorian Committee) for the most outstanding advanced trainee presentation on 'Outcomes of cervical spine immobilisation post fracture in older people'.

Rehabilitation Services The Spinal Rehabilitation Unit

The Spinal Rehabilitation Unit offers a specialised statewide interdisciplinary clinical service for individuals with non-traumatic spinal conditions, including multiple sclerosis, transverse myelitis, spinal cord ischaemia, cancer related spinal impairment, spinal infections and spina bifida. Research activity is strong, with the following projects completed for publication in 2010:

- Costs and adverse events associated with hospitalisation of patients with spinal cord injury (SCI) in Victoria (New PW, Jackson T)
- A multidisciplinary consultation team to address the unmet needs of hospitalised SCI patients (New PW)
- The importance of early diagnosis of herpes zoster myelitis (Ong LWO, Churchyard AC, New PW)

Ongoing research in the Spinal Rehabilitation Unit includes:

- Comparison of traumatic and non-traumatic SCI
- Quality of life in adults with SCI
- Survival after rehabilitation for SCI due to tumour
- Comparison of the management of the patient in specialised and non-specialised rehabilitation units
- Management of the SCI patient during admission and discharge
- Rehabilitation outcomes of SCI due to tumour
- Bladder and urodynamics outcomes in a retrospective case series of patients with non-traumatic SCI
- Functional outcomes of the SCI patient with acute spinal cord ischemia
- Improving outcomes of the SCI patient in the acute setting

Aged Psychiatry

An investigator initiated study investigating the neuropsychological characteristics of patients referred with senile squalor (Macfarlane S, Kotsios C, Mastwyk M) is under way. Participation in clinical trials into Alzheimer's disease included:

- Effect of passive immunisation on the progression of Alzheimer's disease: solanezumab (LY2062430) versus placebo (Macfarlane S)
- Exploratory study of S38093 versus placebo in patients with mild to moderate Alzheimer's disease (Macfarlane S)

Clinical Innovations and Interdisciplinary Projects

The Clinical Innovation and Interdisciplinary Projects team supports quality improvement projects across the hospital and its programs, and is also responsible for the management of the research strategy implementation and the Advance Care Planning program. In addition to the valuable work of the Research Coordinator in developing and driving the research strategy for Caulfield Hospital, a number of research projects have been generated.



Findings from the under nutrition pilot study are translated into a Lunch Club initiative at the Glen Eira Nursing Home. Residents are encouraged to eat in a social setting, free from interruption.

The results from the pilot study 'Reducing functional decline due to under nutrition in older patients' (Marshall K, Hunter P, Gill L, Gordon A) were incorporated into the Victorian Department of Health's Best Care for Older People Everywhere toolkit. This exciting initiative was launched in 2010 and designed to assist health services by identifying tools and resources to assist them in the provision of improved care for the older person while in hospital and following discharge. Furthermore, the findings from this pilot study are being expanded to include residential care at Caulfield Hospital. Findings were presented at the Best Care for Older People Conference in September 2010.

Other current projects include:

- Does offering an advance care planning service to people recently diagnosed with dementia or mild cognitive impairment by the Cognitive, Dementia and Memory Service clinic lead to completion of advance care planning documentation? (Nicholes M, Lewis M, Rand E, Mullaly L, Macfarlane S, Hunter P)
- Advance care planning and pulmonary rehabilitation: a pilot project (Holland A, Miller B, Lee A, Nicholes M, Burge A, Purcell S)

Community and Ambulatory Services

Community and Ambulatory Services provide community based therapeutic interventions that may improve function and/or prevent the deterioration of existing conditions.

The Cardiac Rehabilitation Unit (CRU)

The CRU provides a comprehensive multidisciplinary approach to rehabilitate patients who have experienced a cardiac event, heart failure or require risk factor modification. Research projects include:

- Phase 3 Cardiac Rehabilitation – a collaborative pilot project between CRU and Caulfield Community Health Service (Wise F, Sheppard R, Patrick J, Corben K)
- Determination of the minimal clinically important difference for the 6 minute walk test in heart failure (Wise F, Holland A, Sheppard R)

Caulfield Pain Management and Research Centre

The centre provides specialist assessment and treatment for adults with chronic non-malignant pain and cancer survivors with chronic pain, and conducts research on outcomes of pain treatments, psychosocial aspects of chronic pain, pain and ageing and novel therapies for pain. Current projects:

- Investigating a novel therapeutic intervention for chronic pain following neurotrauma (Miller SM, Ngo TT, Gibson SJ)
- Investigating caloric vestibular stimulation as a novel therapeutic intervention for chronic pain, mania and depression (Ngo TT, Gibson SJ, Fitzgerald PF, Miller SM)
- MRI and transcranial magnetic stimulation (TMS) compatible electroencephalography system and an MRI-compatible TMS system (Georgiou-Karistianis N, Fitzgerald P, Stout J, Cornish K, Maller J, Rossell S, Miller S, Enticott P, Rinehart N, Bourne J, Hourigan K, Rajan R, Hohwy J, Dubaj V, Zhang J)
- Effect of electroacupuncture on opioid consumption by patients with chronic musculoskeletal pain: a randomised controlled study (Xue C, Zheng Z, Gibson SJ, Helme RD)
- The effect of combined therapies of electroacupuncture and cognitive behavioural therapy on chronic tension-type headache: a randomised controlled clinical trial (Greenwood K, Xue C, Zheng Z, Gibson SJ)
- Optimising pain management in frail older people (McLachlan A, Naganathan V, Le Couteur D, Hilmer S, Gibson SJ)

Nursing

The development of nursing research is a key focus in the overall evolution of a research culture at Caulfield Hospital. In 2010, a Nursing Services Research Committee was established to assist in facilitating and supporting the development of research projects.

Allied Health

Allied Health offers an intensive and diverse range of services to Caulfield Hospital's rehabilitation and aged care clients in a multidisciplinary team environment.

Research projects within the Spasticity Management Clinic:

- Botulinum toxin A injections for treatment of lower limb dystonia
- Inter-rater and intra-rater reliability of the Tardieu Scale for assessment of the leg muscles
- Comparisons of the gait patterns of people with lower leg dystonia and spasticity
- Botulinum toxin injection for management of muscle overactivity – a longitudinal study of outcomes
- Sensitivity of functional outcome measures to change following Botulinum toxin injection of the lower limb

Publications

20 Journal Articles
5 Book Chapters



The Department of Rheumatology researches the prevention and treatment of arthritis, particularly osteoarthritis (OA). We have undertaken a number of clinical trials in OA that cover a wide spectrum of therapeutic strategies from orthotics to vitamin D to stem cell transplantation. By using MRI-based assessment of the knee and hip joints, we have been able to examine the role of lifestyle factors such as physical activity and obesity prior to the development of clinical disease. This offers a novel approach to determining what is good or bad for joints. For example, we showed that contrary to widespread belief, physical activity is good for knee joints, the exception being situations where joint injury co-exists.

The effect of obesity on joints is proving interesting. Our results suggest that the effect of obesity is not simply due to loading on the joints, but that obesity affects joints by both loading and metabolic factors. This has raised the interesting concept of obesity related meta-inflammation (metabolic triggered inflammation) potentially playing an important role in the progression of OA.

In 2010, Professor Flavia Cicuttini was awarded the triennial Parr Prize for Research by the Australian Rheumatology Association (ARA), PhD student Dr Andrew Teichtahl was awarded the New Investigator Prize at the ARA national meeting, and research fellow Dr Donna Urquhart and PhD student Trish Berry won the prestigious Spine Young Investigator Award for 2010.

Key research findings:

- Sharon Brennan, PhD student, showed that avoiding weight gain in women during early to middle age is likely to have a significant impact on the risk of knee OA in a publication in *Arthritis Research Therapy*.
- As part of her PhD, Trish Berry showed in a publication in *Arthritis and Rheumatism* that higher bone remodelling is associated with reduced cartilage loss. This suggests that targeting bone may provide a new approach to treatment and prevention of knee OA.

- In publications in *Arthritis Research and Therapy* and *Rheumatology* respectively, PhD student Stephanie Tanamas showed that both bone cysts and bone marrow lesions predict the risk of joint replacement in people with knee OA, providing evidence for the importance of bone pathology in disease progression.
- Postdoctoral research fellow Dr Miranda Davies-Tuck published in *Arthritis Research Therapy* the finding that bone marrow lesions are structural changes in the knee that have a fluctuating course which includes resolution. This is associated with improvements in the knee cartilage and thus reduced risk of development of OA. Thus these lesions are potential targets in the prevention of knee OA. This observation was followed with the intriguing finding that higher levels of total serum cholesterol and triglycerides are associated with bone marrow lesions, suggesting a link between vascular disease and OA.
- Studies on the importance of dynamic knee loading on development of bone marrow lesions in OA were published in *Annals of the Rheumatic Diseases*. This was followed by further work showing that dynamic knee loading is also related to cartilage and bone changes in knee OA.
- Trish Berry and Anita Wluka, in a publication in *Rheumatology*, showed that the effect of obesity is not just due to loading of the joint, but that fat mass and muscle mass have different effects on the knee structure. In a further publication in *Arthritis and Rheumatism*, they showed that serum adipokines may provide a non-mechanical link between obesity and joint integrity, by mediating bone and cartilage protein turnover, and subsequent cartilage volume loss.
- Research fellow Dr Changhai Ding examined the associations between non-steroidal anti-inflammatory drugs (NSAIDs) and changes in knee cartilage volume. Comparing users of cyclooxygenase-2 inhibitors with users of conventional NSAIDs, the latter had higher knee cartilage volume loss, supporting the notion of a differential effect on knee structure. This was published in the *American Journal of Medicine* and has significant implications for the management of patients with knee pain.
- Dr Yuanyuan Wang, in a publication in *Rheumatology*, demonstrated the importance of a healthy meniscus in maintaining a healthy joint. She found that meniscal extrusion was associated with subchondral bone marrow lesions, bone cysts and expansion of subchondral bone in OA knees.
- Dr Donna Urquhart and Trish Berry showed that increased fat mass is associated with high levels of low back pain intensity and disability. The work was published in *Spine* and provides a new approach to our understanding of the effect of obesity on back pain and disability.

Postdoctoral fellow, Dr Fahad Hanna, and visiting research fellow from Sri Lanka, Dr Pushpika Wijethilake, examine the knee magnetic resonance image of a study participant.



Postgraduate Students
7 PhD Students

Publications
35 Journal Articles

A pilot study investigating the relationship between the level of compliance with a swallowing exercise program and swallowing outcomes for patients with head and neck cancer undergoing (chemo)radiotherapy:

The Speech Pathology Department received a grant of \$29,249 from the Southern Melbourne Integrated Cancer Service (SMICS) to fund this study. The principal researcher is Amanda Dwyer who works with head and neck cancer patients at the William Buckland Centre.

The study aims to improve care for head and neck patients with swallowing problems. These problems are frequently experienced following radiotherapy to the head and neck area and result in a reduction in the quality of life. Previous research has reported that exercises to stretch and strengthen muscles during and following (chemo)radiotherapy can improve swallowing function. This study examines the efficacy of an exercise program on swallowing ability and quality of life.

A range of patient information including treatment modality, the site and stage of cancer, gender, psychosocial history, geographical location and social support will be collected. The patients will be given a swallowing exercise program two weeks prior to commencing their (chemo)radiotherapy and instructed to complete the exercise program daily until three months post completion of their treatment. Swallowing function will be assessed using videofluoroscopy prior to commencing the exercise program and at three and six months post (chemo)radiotherapy. Measures of patients' oral intake, weight, tongue strength, range of jaw movement, extent of oral health side effects and quality of life will also be taken. To establish if there is a relationship between compliance with the exercise program and swallowing outcomes, the patients will be also requested to record the number of times exercises are completed.

This study follows on from an audit of radiotherapy patients focusing on the timing and severity of swallowing problems that was also funded by SMICS. Leonie Baker presented the results of the audit to the Speech Pathology Australia Conference 2010.

Changes in the diameter of the recurrent laryngeal nerve during thyroid surgery and the relationship of this to voice changes following surgery: a collaborative project between Speech Pathology, ENT and Endocrine Surgery:

The Speech Pathology Department participates in this collaborative study with Professor Jonathan Serpell from the Department of General Surgery. Speech pathologists Miriam Voortman and Jessica Hayward are involved in collecting data using the lingWAVES voice analysis system. This evaluates the vocal function of patients before thyroid surgery, one day post surgery and at three months post surgery.

Other Achievements

Gulsen Ellul presented the results of a project that benchmarked the management of orofacial contractures in burns units across Australia and New Zealand at the Speech Pathology Australia 2010 conference and at the Australian and New Zealand Burns Association 2010 conference. She received the award for best allied health presentation at the Australian and New Zealand Burns Association conference, and plans to use the results to develop a study examining the efficacy of specific interventions.

Tanya Blyth presented the results of a study, 'The effective assessment of high level cognition based communication disorders in traumatic brain injury', to the Speech Pathology Australia 2010 conference and the International Brain Injury Association 2010 conference in Washington, USA. This was a collaborative study with the Occupational Therapy Department and was funded by the RACV Sir Edmund Herring Memorial Scholarship.

Speech Pathologist Amanda Dwyer studies a videofluoroscopy recording in research involving swallowing exercises for radiotherapy patients with head and neck cancer.



Publications
1 Journal Article

Head: Professor Jeffrey Rosenfeld MBBS, MD, MS, FRACS, FRCS(Edin), FACS, FRCS(Glasg)Hon, FCNST(Hon), FACTM, MRACMA, RAAMC

www.med.monash.edu.au/surgery/alfred/

The Monash Department of Surgery at The Alfred is a department of the Monash University Central Clinical School and is affiliated with the Department of Surgery at Cabrini Health, headed by Associate Professor Paul McMurrick. Associate Professor McMurrick has an academic interest in colonic cancer research and medical education, and has developed a Monash-wide colorectal surgery database with Monash colorectal surgeons.

The Monash Vision Direct to Brain Bionic Eye project began in 2010. Professor Rosenfeld is a principal investigator with a team of experts in engineering, physiology, ophthalmology and medical imaging who, in partnership with industry, aim to restore some useful vision to selected blind individuals. The Monash Vision Direct to Brain Bionic Eye project is developing a cortical implant in contrast to a retinal implant. This approach may have a wider range of applications than the retinal device.

Professor Jonathan Serpell, Head of General Surgery at The Alfred, has developed a Monash-wide endocrine surgery database and continues to promote and conduct a wide range of surgical research activities at The Alfred. Professor Russell Gruen is Director of the National Trauma Research Institute (NTRI), Professor of Surgery and Public Health at Monash University, and a general and trauma surgeon at The Alfred. Under his direction, NTRI leads improvements in the care of severely injured people locally, nationally and internationally through stakeholder dialogue, research leadership, knowledge translation and performance improvement activities.

The Department of Surgery has many dedicated adjunct staff members who contribute to its research programs and are actively engaged in the teaching of Monash University medical students. The Department of Surgery encourages medical students at Monash University who are interested in surgical careers and promotes the Bachelor of Medical Science program.

The DS Rosengarten Surgical Trainee Research Prize for 2010 was awarded to Master of Surgery student, Dr Krish Chaudhuri.

Associate Professor Cristina Morganti-Kossmann heads the Basic Research group at the National Trauma Research Institute.



A patient in the Burns Unit with Dr Heather Cleland (centre), Director, Victorian Adult Burns Service and Yvonne Singer, Victorian State Burns Education Program Coordinator.

Current Projects Burns Laboratory

- Cellular therapies for burn wound management/skin tissue engineering
- Burn wound clinical management protocols
- Mortality and long term outcomes after severe burn injury
- Australian and New Zealand Burns Quality Registry (with DEPM)

Cardiothoracic Surgical Research

For a list of current projects, see page 31.

General Surgery Research – Breast, Endocrine, Colorectal and Upper Gastrointestinal

For a list of current projects, see page 41.

Neurosurgical Research

For a list of current projects, see page 55.

Orthopaedic Research

For a list of current projects, see page 61.

Trauma Research

For a list of current projects, see pages 52-53.

Postgraduate Students

6 PhD Students
2 Masters Students

Publications

38 Journal Articles
2 Book Chapters

The Women's Health Program undertakes research and provides education about common health issues that affect women throughout adult life and the impact of menopause and role of sex hormones (estrogen and testosterone) on health and wellbeing. The research program includes studies addressing the effects of menopause; prevention of diabetes, dementia, breast cancer and urinary incontinence (UI); and improving wellbeing, sexual function and optimising quality of life after breast cancer.

Major Research Findings

- Developed and published a new tool (PROSPECT) for GPs to identify women aged 70 and above who are most likely to need treatment to prevent fracture if radiological imaging is undertaken. This will enable more targeted screening in the community.
- From a longitudinal study, we reported that UI has a dynamic time-course with relatively high incidence and resolution rates, but with an overall trend of increasing prevalence with age. There were few women with UI receiving treatment with proven efficacy, suggesting significant barriers.
- We reported on the relationship between hormone therapy use at the time of diagnosis of breast cancer and tumor characteristics. Importantly, our data shows that Australian women who were taking HRT at the time their breast cancer was diagnosed did not have more advanced disease.
- We investigated the use of complementary and alternative therapy (CAM) amongst women with breast cancer and found the frequency of use of CAMs in common usage for menopausal symptoms by women with breast cancer was lower than anticipated, increased with time from diagnosis and is associated with more severe menopausal symptoms.

Research Achievements

- NHMRC Project Grant: Selective estrogen receptor modulators (SERMs) – a potential new treatment for child bearing age women with schizophrenia (J Kulkarni, S Davis): \$205,016
- NHMRC Project Grant: Transdermal testosterone therapy: a potential treatment for selective serotonin reuptake inhibitor (SSRI)-associated sexual dysfunction in women (S Davis, R Bell, J Kulkarni): \$235,295
- Victorian Cancer Agency Fellowship (R Bell)

Screening Tool for Osteoporosis

Although bone density by dual-energy X-ray absorptiometry (DEXA) is the standard measure for the diagnosis of osteoporosis, as a screening tool it has significant cost and is not universally available. PROSPECT (Prospective Screening for Osteoporosis; Australian Primary Care Evaluation of Clinical Tests) was a national study undertaken to develop an effective pre-screening tool to be used in primary care to facilitate targeted assessment of women aged 70 years and over for prevention of osteoporotic fractures. This study was undertaken in conjunction with the Monash University School of Primary Health Care and Servier Laboratories. The resultant decision support tool for osteoporosis screening will be introduced to GPs across Australia throughout 2011 and can be accessed via the Women's Health website. The tool assists health care practitioners

in evaluating which of their female patients aged 70 and over need a bone density test and a plain X-ray. The tool uses three clinical risk factors: body mass index, rib-pelvis distance and use of estrogen.

Current Projects

- Waistline study: metformin for the management of insulin resistance in overweight women at midlife (S Davis, R Bell, F Jane)
- ATLAS: Adjuvant Tamoxifen Longer Against Shorter (S Davis)
- Assessment of knee joint articular cartilage volume change in women with breast cancer treated with anastrozole or letrozole and comparison with untreated controls (S Davis, R Bell)
- The effect of transdermal testosterone gel 300mcg daily on cognitive performance in older postmenopausal women: a randomised placebo controlled trial (S Davis, R Bell, F Jane)
- BUPA Health Foundation Health and Wellbeing after Breast Cancer Study (S Davis, R Bell)
- The effect of transdermal testosterone patch (Intrinsa®) on cognitive performance in older postmenopausal women: a randomised placebo controlled trial (S Davis, S Davison)
- Effects of metformin on the LKB1/AMPK pathway in breast tissue, a randomised clinical trial (S Davis, E Simpson, K Brown, R Bell)
- A randomised double-blind placebo-controlled trial to assess the effects of 17 beta-oestradiol 1mg + drospirenone 2mg administration on cognitive function in early postmenopausal women (S Davis, F Jane, R Bell)
- Multicentre, double-blind, randomised study to investigate the impact of a sequential oral contraceptive containing estradiol valerate and dienogest (SH T00658ID) compared to a monophasic contraceptive containing ethinylestradiol and levonorgestrel (Microgynon) over 6 treatment cycles on alleviating complaints of reduced libido in women with acquired female sexual dysfunction associated with oral contraceptive use (S Davis, F Jane)
- Transdermal testosterone therapy: a potential treatment for SSRI-associated sexual dysfunction in women (S Davis, R Bell)

Professor Susan Davis (left) and Associate Professor Robin Bell, Director and Deputy Director of the Women's Health Program, Monash University.



Postgraduate Students

3 PhD Students

Publications

13 Journal Articles

1 Book Chapter

INTERNAL GRANTS, AWARDS AND PRIZES

Maithili Sashindranath receives the Senior Medical Staff Prize for Basic Science/Laboratory-based Research from Professor Duncan Topliss.



Alfred Research Trusts Strategic Grants

Professor Leon Bach

*Department of Endocrinology and Diabetes
(Medical Research Trust)*

Professor Peter Cameron

*Emergency Medicine
(Medical Research Trust)*

Professor Jamie Cooper

*Intensive Care Unit
(Marian & Edwin Harold Flack Trust)*

Professor Anthony Dart

*Department of Cardiology
(Marian & Edwin Harold Flack Trust)*

Professor Michael Dooley

*Department of Pharmacy
(Sol Green Trust)*

Professor Don Esmore

*Cardiothoracic Surgery Department
(Sol Green Trust)*

Associate Professor Mark Fitzgerald

*Trauma Services
(Medical Research Trust)*

Professor Paul Fitzgerald

*Monash Alfred Psychiatry Research Centre
(Edward Wilson Trust)*

Professor Russell Gruen

*National Trauma Research Institute
(Sir William Phillip Trust)*

Professor Jayashri Kulkarni

*Monash Alfred Psychiatry Research Centre
(Edward Wilson Trust)*

Professor Sharon Lewin

*Infectious Diseases Unit
(Medical Research Trust)*

Professor Fabienne Mackay

*Department of Immunology, Monash University
(Marian & Edwin Harold Flack Trust)*

Professor Catriona McLean

*Anatomical Pathology
(Paula Josephine Jung Trust)*

Professor John McNeil

Department of Epidemiology and Preventive Medicine, Monash University (Sir William Phillip Trust)

Associate Professor Jeremy Millar

*William Buckland Radiation Oncology
(Peter Grant Hay Trust)*

Professor Paul Myles

*Anaesthesia and Perioperative Medicine
(Sol Green Trust)*

Professor Robyn O'Hehir

*Allergy, Immunology and Respiratory Medicine
(Marian & Edwin Harold Flack Trust)*

Professor Jeffrey Rosenfeld

*Department of Surgery, Monash University
(Paula Josephine Jung Trust)*

Professor Hatem Salem

*Australian Centre for Blood Diseases
(Peter Grant Hay Trust)*

Associate Professor Max Schwarz

*Medical Oncology Unit
(Peter Grant Hay Trust)*

Professor Jonathan Serpell

*General Surgery
(Paula Josephine Jung Trust)*

Associate Professor Andrew Spencer

*Clinical Haematology and Bone Marrow Transplant Unit
(Patricia Leonora Anderson Trust)*

Professor Elsdon Storey

*Department of Neurosciences
(Richard Carus Choice Trust)*

Professor Ken Thomson

*Department of Radiology
(Peter Grant Hay Trust)*

Professor Napier Thomson

*Department of Medicine, Monash University
(Sir William Phillip Trust)*

Nursing Research Grant

To support the research programs of the Alfred/Deakin Nursing Research Centre and the La Trobe/Alfred Clinical School of Nursing (Donald Raymond Stuart Research Trust)

Allied Health Research Grant

Emma Ridley, *Nutrition Department: 'POLAR BEAR - the Prophylactic hypOthermia trial to Lessen trAumatic bRain injury Basal Energy Assessment Research'*
(Marian & Edwin Harold Flack Trust)

Alfred Research Trusts Small Project Grants

Dr Harriet Beevor

Department of Anaesthesia and Perioperative Medicine

'Pain processing in patients after severe burns versus a population of unaffected volunteers: a comparison'

Mahesh Dharmakumara

Department of Allergy, Immunology and Respiratory Medicine

'Changes in exhaled nitric oxide levels during direct and indirect bronchial provocation tests in asthma'

Dr Krishanu Chaudhuri

Department of Cardiothoracic Surgery

'A randomised controlled trial investigating carbon dioxide insufflation of the pericardial field as a neuroprotective strategy in open chamber cardiac surgery'

Dr George Grigoriadis

Haematology Unit

'Defining the role of NFκB1 transcription factor in T cell neoplasms'

Faizel Hartley

Department of Allergy, Immunology and Respiratory Medicine

'Why do some patients with Chronic Obstructive Pulmonary Disease (COPD) desaturate on exertion, but others do not?'

Dr Chris Jalilian

Melanoma Service

'In vivo microscopic characterisation of red nodules'

Dr Cameron Jeremiah

Infectious Diseases Unit

'The incidence, epidemiology, antibiotic susceptibility and typing of community onset and hospital-acquired methicillin resistant *Staphylococcus aureus* (MRSA) at The Alfred hospital'

Dr Jeremy Lewin

Medical Oncology Unit

'To assess health related quality of life in stage 1 seminomatous germ cell tumour patients treated with either adjuvant carboplatin chemotherapy, adjuvant radiotherapy, or high intensity chemotherapy (PEB regimen)'

Caulfield Hospital Research Grants

Major Grant – Ben-Shabat E, Palit M, Olver J, De Graaff S, Mooney A, Winter A, Holland A

'Botulinum toxin A injections for treatment of lower limb dystonia'

Aldous S, Holland A, Winter A, Fini N, Wild D, Palit M

'Botulinum toxin injection for management of muscle overactivity – a longitudinal study of outcomes'

Mullally L

'Caregiver characteristics and reporting of apathy in memory clinic clients'

Street P, Thompson J

'Indwelling urethral catheter management post hip fracture'

Thomas F, Gibson S

'Does self efficacy predict long term functional outcomes among patients with persistent pain after attendance at a multidisciplinary pain management group'

AMREP Research Prize

For article describing original research published in the journal with the highest impact factor in 2009:

Dr Andrew Davies *Intensive Care Unit*

Australia and New Zealand Extracorporeal Membrane Oxygenation (ANZ ECMO) Influenza Investigators, Davies A, Jones D, Bailey M, Beca J, Bellomo R, Blackwell N, Forrest P, Gattas D, Granger E, Herkes R, Jackson A, McGuinness S, Nair P, Pellegrino V, Pettilä V, Plunkett B, Pye R, Torzillo P, Webb S, Wilson M, Ziegenfuss M. Extracorporeal membrane oxygenation for 2009 influenza A (H1N1) acute respiratory distress syndrome. *Journal of the American Medical Association*. 2009;302(17):1888-95. [Impact factor: 30.718]

GlaxoSmithKline Prize for Advanced Trainee Physicians

Dr Claire Gordon *Infectious Diseases Unit*

'2009 pandemic influenza A (H1N1) infection and immunoglobulin subclass 62 deficiency'

DS Rosengarten Surgical Trainee Research Prize

Dr Krishanu Chaudhuri *Department of Cardiothoracic Surgery*

'Carbon dioxide insufflation of the pericardial field: a randomised controlled trial investigating neurocognitive outcomes'

Kathleen AB Smith Memorial Award in Nursing

The purpose of this award is to support and acknowledge a high standard of nursing publication that has potential for significant impact on patient care.

Vicki White *Nursing, The Alfred*

White V, Currey J, Botti M. Multidisciplinary team developed and implemented protocols to assist mechanical ventilation weaning: a systematic review of literature. *Worldviews on Evidence-Based Nursing*. 2011 Mar;8(1):51-9.

Alfred Week Research Poster Prizes

Monash Alfred Psychiatry Research Centre Prize

Sacha Filia *Monash Alfred Psychiatry Research Centre*

THE HEALTHY LIFESTYLES PROJECT: REDUCING CARDIOVASCULAR DISEASE (CVD) RISK IN PEOPLE EXPERIENCING SEVERE MENTAL ILLNESS BY TARGETING SMOKING, DIET AND EXERCISE

Filia SL, Baker A, Richmond R, Kay-Lambkin F, Castle D, Williams J, Carrington M, Clark V, Filia KM, Mu L, Hunt D, Fitzpatrick C, Hunt L, de Castella RA, Kulkarni J

Henrietta Law Memorial Prize for Allied Health Research

Karly Wheeler *Department of Orthotics and Prosthetics*

DETERMINING OPTIMAL HALO PIN MANAGEMENT PRACTICES TO DECREASE PIN COMPLICATIONS

Wheeler KN, Burchall GB, Byrne MJ, Paul E, Malham GM

Noel and Imelda Foster Prize for Cardiovascular Research

Leah Iles *Department of Cardiology*

MYOCARDIAL FIBROSIS PREDICTS APPROPRIATE DEVICE THERAPY IN PATIENTS WITH IMPLANTABLE CARDIOVERTER DEFIBRILLATORS FOR PRIMARY PREVENTION OF SUDDEN CARDIAC DEATH

Iles L, Pfluger H, Lefkovits L, Butler M, Kistler PM, Kaye DM, Taylor AJ

Lucy Battistel Prize for Allied Health Research

Caroline Nicolson *Physiotherapy Services*

THE LONG TERM EFFECT OF INHALED HYPERTONIC SALINE (6%) IN NON-CYSTIC FIBROSIS BRONCHIECTASIS

Nicolson C, Stirling R, Borg B, Gourlay R, Button B, Wilson J, Holland A

Michael J Hall Memorial Prize for Research in the Field of Respiratory Disease/Physiology

Jennifer Hislop *Department of Allergy, Immunology and Respiratory Medicine*

AUDIT OF A WARD-BASED ACUTE NON-INVASIVE VENTILATION SERVICE IN A TERTIARY HOSPITAL

Hislop J, Parker K, Toghil J, Borg B, Naughton M, Young A

Professor Daniel Czarny Prize for Allergy and Asthma Research

William Figgitt *Department of Immunology, Monash University*

TACI IS CRITICAL FOR AUTOANTIBODY PRODUCTION IN T CELL-INDEPENDENT BAFF-DRIVEN AUTOIMMUNITY

Figgitt W, Bijker M, Stokes R, Mackay F

Tony Charlton Prize for Cardiac Surgical Research

Jonathan Choong *Department of Cardiothoracic Surgery*

CONTINUOUS CRYSTALLOID MICROPERFUSION PROVIDES PRESERVATION SUPERIOR TO COLD STORAGE DURING PROLONGED DONOR HEART PRESERVATION

Rosenfeldt FL, Lim YW, Choong J, Ou R

The Janet A Secatore Nursing Research Award (sponsored by Nurses First Credit Union)

Emma Cohen *Alfred/Deakin Nursing Research Centre*

PATIENT PARTICIPATION IN SYMPTOM MANAGEMENT IN ACUTE ONCOLOGY: PATIENT/CLINICIAN INTERACTIONS

Cohen E, Botti M, Duke M

The Nursing Research and Access Committee Award (sponsored by Nurses First Credit Union)

Sue Wyatt *Department of Endocrinology and Diabetes*

A PILOT STUDY OF ACUTE PRE-OPERATIVE INTERVENTION IN PATIENTS WITH DIABETES UNDERGOING CARDIAC SURGERY

Wyatt S, Topliss DJ, Stoney RM, Lee G

Baker IDI Heart and Diabetes Institute Prize for Cardiovascular Research

Nicholas Lam *Baker IDI Heart and Diabetes Institute*

NERVE GROWTH FACTOR PROMOTES CARDIAC REGENERATION IN A CARDIOTOXIC MODEL OF HEART FAILURE IN ZEBRAFISH

Lam NT, Marshall T, Khammy O, Currie PD, Rosenthal N, Kaye DM

Baker IDI Heart and Diabetes Institute Prize for Diabetes Research

Felicia Yap *Baker IDI Heart and Diabetes Institute*

ACE ADVANCED GLYCATION END PRODUCTS ARE DIRECT MODULATORS OF PANCREATIC ISLET INSULIN SECRETORY FUNCTION

Yap FYT, Coughlan MT, Tong DCK, Andrikopoulos S, Gasser A, Thallas-Bonke V, Webster D, Miyazaki JI, Kay TW, Kaye DM, Furlanos S, Harrison LC, Groop PH, Knip M, Forbes JM

Burnet Prize for Infectious Diseases Research and International Health (First Prize)

Mark Stoové *Burnet Institute*

INCIDENCE AND TRANSMISSION RISKS FOR HIV, SYPHILIS AND CHLAMYDIA IN MEN WHO HAVE SEX WITH MEN: FINDINGS FROM A PRIMARY CARE SENTINEL SURVEILLANCE NETWORK IN VICTORIA, AUSTRALIA

Stoové M, El-Hayek C, Goller J, Guy R, Wilkinson A, Gold J, Bergeri I, Gouillou M, Spellman T, Hellard M

Burnet Prize for Infectious Diseases Research and International Health (Second Prize)

Alyssa Barry *Burnet Institute*

PROFILING PATTERNS OF ANTIBODY ACQUISITION TO DIVERSE *PLASMODIUM FALCIPARUM* ERYTHROCYTE MEMBRANE PROTEIN 1 (PFEMP1) VARIANTS USING PROTEIN MICROARRAYS

Barry AE, Trieu A, Fowkes FJI, Pablo J, Kalantari-Delaghi M, Hirst S, Jasinskas, A, Tavul L, Day KP, Felgner P, Doolan DL

Burnet Prize for Infectious Diseases Research and International Health (Third Prize)

Devy Santoso *Burnet Institute*

MEMORY B CELL, T CELL IFN- γ AND IL-2 RESPONSES TO PANDEMIC H1N1 INFLUENZA IN A LONGITUDINAL COHORT STUDY

Santoso D, Goy K, Hearps A, Edouard V, Elliott J, Crowe S, Barr I, French R

Whole Time Medical Specialists Private Practice Scheme Prizes for Clinical Research

Amanda Thrift *Baker IDI Heart and Diabetes Institute*

GENDER SPECIFIC EFFECTS OF CASTE AND SALT ON HYPERTENSION IN POVERTY: A POPULATION-BASED STUDY

Thrift AG, Evans RG, Kalyanram K, Kartik K, Fitzgerald SM, Srikanth V

Yuanyuan Wang *Department of Epidemiology and Preventive Medicine, Monash University*

PATELLOFEMORAL AND TIBIOFEMORAL CHANGES IN ARTICULAR CARTILAGE AND SUBCHONDRAL BONE FOLLOWING ARTHROSCOPIC PARTIAL MEDIAL MENISCECTOMY

Wang Y, Dempsey AR, Lloyd DG, Mills P, Wrigley T, Bennell KL, Metcalf B, Hanna H, Cicuttini FM

Senior Medical Staff Prize for Clinical Research

Lester Bisibisera *Burnet Institute*

IMPROVING IMMUNISATION AND NEWBORN SURVIVAL AT THE AID POST LEVEL IN PAPUA NEW GUINEA

Bisibisera L, Winjong H, Bauze A, Morgan C

Senior Medical Staff Prize for Basic Science/Laboratory-based Research

Maithili Sashindranath *Australian Centre for Blood Diseases, Monash University*

INCREASED PERMEABILITY OF THE BLOOD-BRAIN BARRIER AND MORE SEVERE MOTOR IMPAIRMENT FOLLOWING TRAUMATIC BRAIN INJURY IN MICE OVER-EXPRESSING TISSUE TYPE PLASMINOGEN ACTIVATOR (TPA)

Sashindranath M, Sales E, Karadimos D, Beckham S, Gall A, Metcalf R

MAJOR GRANTS



Listed are the major national competitive, peer-reviewed research grants held by AMREP staff in 2010; inclusion is based on the Australian Competitive Grants Register (ACGR). Major international grants are also listed.

Australian Grants Cooperative Research Centres (CRC) Program

CRC for Asthma and Airways. O'Hehir RE, Thompson P, Mackay C, Berend N, Foster P, Gibson P, Jenkins C, Weinstein P. 2005-2012. CRC Program funding: \$26,440,000. Total funding: \$54,000,000.

CRC for Biomarker Translation. Hogarth PM, Hoogenraad N, Hart D, Zola H, Morris H, Venter D, Warner N, Polverino T. 2007-2014. CRC Program funding: \$30,590,000. Total funding: \$90,000,000.

National Health and Medical Research Council Program Grants

Adams J, Bouillet P, Colman P, Cory S, Gerondakis S, Huang D, Lindeman G, Strasser A, Vaux D, Visvader J. Roles of impaired apoptosis and differentiation in tumorigenesis and therapy. 2007-2011: \$21,228,860. Administering institution: Walter and Eliza Hall Institute.

Cooper D, Beard M, Dore G, Emery S, French M, Kelleher A, Kent S, Lloyd A, Purcell D. HIV and HCV vaccines and immunopathogenesis. 2009-2013: \$17,734,213. Administering institution: University of New South Wales.

Cowman A, Brown G, Crabb B, Handman E, McConville M, McFadden G, Scholfield L, Speed T. Host parasite interactions: disease, pathogenesis and control. 2006-2010: \$13,660,837. Administering institution: Walter and Eliza Hall Institute.

Jennings G, Dart A, Esler M, Kaye D, Kingwell B, Chin-Dusting J. A program of research addressing the transition from health to advanced cardiovascular disease. 2008-2012: \$12,281,756. Administering institution: Baker IDI.

Kaldor J, Garland SM, Fairley CK, Law MG, Grulich AE. Sexually transmitted infections: causes, consequences and interventions. 2010-2014: \$9,100,000. Administering institution: University of New South Wales.

Krum H, Kelly D, Reid C. Prevention and treatment of chronic heart and kidney disease via epidemiological, pharmacological device and cell-based approaches. 2010-2014: \$5,390,000. Administering institution: Monash University.

Mackay C, Sprent J, Goodnow C, Basten T, de St Fazekas B, Mackay F, Tangye S, Vinuesa C, Brink R. Molecular and cellular studies of the adaptive immune response in health and disease. 2007-2011: \$15,544,453. Administering institution: Garvan Institute of Medical Research.

Marwick T, Stewart S. Integration of risk evaluation in cardiovascular disease management programs. 2009-2010: \$4,568,853. Administering institution: University of Queensland.

Capacity Building Grants

Eades S. Making a difference: building research capacity for health interventions to improve Aboriginal health. 2010-2011: \$2,317,125. Administering institution: Baker IDI.

Sim M, Abramson M, Fritschi L, LaMontagne A. Linking research policy and health services to build a better evidence base for workplace public health. 2009-2013: \$1,625,115. Administering institution: Monash University.

Centre of Clinical Research Excellence

Oldenburg B, Hoy W, Shannon C, Tonkin A, Lea T, Ring I, Elston J, Wenitong M, Hayman N. Centre for Clinical Research Excellence in Circulatory and Associated Conditions in Urban Indigenous Peoples. 2006-2010: \$2,000,000. Administering institution: Monash University.

Centres of Research Excellence

Dart A, Jennings G, Kaye D, Peter K, Kingwell B, Chin-Dusting J. Centre of Excellence for Clinical Research Training in Translational Cardiology. 2010-2015: \$2,500,000. Administering institution: Baker IDI

Hellard M, Dietze P, Ritter A, Lubman D, Kinner S, Dore G, Maher L, Williams G, Moore D, Power R. Reducing the health, social and economic burden of injecting drug use in Australia. 2010-2015: \$2,485,060. Administering institution: Burnet Institute.

H1N1 Influenza Research Grant

Kelly P, Kotsimpos T, Becker N, Reynolds A, Cheng A. Establishing a rapid alert system for severe respiratory illness in adults: the FluCAN Surveillance system. 2009-2010: \$268,991. Administering institution: Australian National University.

Health Services Research Grants

Cameron P, Sprivulis P, Stoelwinder J, Forbes A, McNeil J, Campbell J. Using data to improve quality of health care. 2007-2011: \$2,629,000. Administering institution: Monash University.

Cass A, Brown A, Patel A, Eades S, Hayman N, Isbel N, Jan S, Ring I, Stewart G, Tonkin A, Weeramanthri T. Improving health outcomes for Aboriginal Australians with chronic disease through strategies to reduce systems barriers to necessary care. 2006-2011: \$2,800,000. Administering institution: University of Sydney.

McNeil J, Peeters A, Oldenburg B, Hollingsworth B, Nelson M, de Courten M. Better targeting of preventative services using epidemiological modelling. 2007-2011: \$1,823,750. Administering institution: Monash University.

Scott A, Joyce C. Understanding the dynamics of the medical workforce to improve population health and equity of access: the Australian Longitudinal Survey of Doctors. 2007-2011: \$2,133,430. Administering institution: University of Melbourne.

Stewart S, Scuffham P, Marwick T, Horowitz J, Krum H, Davidson P, MacDonald P. Which heart failure intervention is most cost-effective and consumer friendly in reducing hospital care: the WHICH Study. 2007-2011: \$878,702. Administering institution: Baker IDI.

Medical Bioinformatics, Genomics and Proteomics Strategic Grant

Shortman K, Heath WR, Villandangos J, Lahoud M, Simpson R, Wright M, Amigorena S. Genomic and proteomic profiling of dendritic cell heterogeneity. 2006-2010: \$1,971,250. Administering institution: Walter and Eliza Hall Institute.

Palliative Care Research Grant

Davidson P, Macdonald P, Curnow D, Newton P, Leung D, Tofler G, Krum H. Oxygen to relieve dyspnoea in non-hypoxaemic patients with end-stage heart failure. 2008-2010: \$300,000. Administering institution: University of Western Sydney.

Preventive Healthcare and Strengthening Australia's Social and Economic Fabric Research Grants

Kinner S, Alati R, Williams G, Lennox N, Boyle F, Jamrozik K, Vlack S, Haswell-Ekins M, Taylor D. Passports to advantage: health and capacity building as a basis for social integration. 2007-2011: \$1,564,095. Administering institution: Burnet Institute.

Loff B, Lawrence M, Peeters A, Ackland M, Swinburn B. A comprehensive regulatory strategy for obesity prevention in Australia. 2007-2011: \$761,184. Administering institution: Monash University.

Development Grants

Kaye D, Krippner G. Novel soluble guanylate cyclase activators for pulmonary artery hypertension. 2010-2011: \$470,100. Administering institution: Baker IDI.

Mitchell A, Nesbitt WS, Jackson SP. Microfluidic device for the quantitative assessment of blood platelet aggregation behaviour. 2010-2011: \$267,750. Administering institution: RMIT University.

Grgacic E. A novel vaccine platform for trimeric envelope proteins: HIV-1 envelope. 2010: \$139,250. Administering institution: Burnet Institute.

Enabling Grants

Bellomo R, Cooper DJ, Myburgh J, Finfer S. National Centre for Intensive Care Research. 2010-2015: \$2,500,000. Administering institution: Monash University.

Buchbinder R, March L, Lassere M, Reid C. Australian Rheumatology Association Database. 2006-2010: \$1,250,000. Administering institution: Monash University.

McLean C. National Network of Brain Banks. 2010-2014: \$2,536,000. Administering institution: Mental Health Research Institute.

Simes J, Ghersi D, Stockler M, Keech T, Green S, Henderson-Smart D, Krum H, Jennings G. Australian Clinical Trials Registry. 2005-2010: \$1,500,000. Administering institution: University of Sydney.

Project Grants

Abramson M, Benke GP, Croft RJ, Sim MR. Do mobile phones affect cognitive development in children? 2009-2011: \$531,000. Administering institution: Monash University.

Alderuccio F, Scott H, Hubert F-X. The role of Aire in immunological tolerance and immunity. 2008-2010: \$416,625. Administering institution: Monash University.

Allen T, Cooper M. The role of urotensin II in diabetes-associated atherosclerosis. 2010-2012: \$391,125. Administering institution: Baker IDI.

Anderson J, Hope T, Tachedjian G. Mechanisms underlying APOBEC3G restriction of HIV-1. 2008-2010: \$536,654. Administering institution: Burnet Institute.

Andrews RK, Arthur JF. Redox regulation of platelet adhesion receptors. 2010-2012: \$571,500. Administering institution: Monash University.

Andrews RK, Cranmer SL, Ramshaw H, Salem H. The role of platelet receptor glycoprotein Ib-V-IX in thrombosis. 2009-2011: \$576,750. Administering institution: Monash University.

Andrews RK, Speare R, Carapetis, J, McCarthy J, Cheng A, Kearns T, Mulholland E, Holt D, Markey P. Impact of an ivermectin mass drug administration program against endemic scabies and strongyloidiasis. 2010-2012: \$1,257,125. Administering institution: Menzies School of Health Research.

Andrews RK, Ward CM. Factor XII-dependent thrombosis and platelet glycoprotein Ib. 2010-2012: \$324,750. Administering institution: Monash University.

Bach L, McRobert A. The role of ezrin-radixin-moesin proteins, novel binding proteins for advanced glycation endproducts, in kidney cells. 2008-2010: \$483,075. Administering institution: Monash University.

Bach LA, Rice GE, Fu P. How do proteins regulate cell behaviour? 2009-2011: \$528,750. Administering institution: Monash University.

Baglietto L, Kelsall H, McLean C, Giles G. Risk and prognostic factors for breast cancer of different immunohistochemical subtypes. 2008-2010: \$286,000. Administering institution: Cancer Council Victoria.

Baker AL, Richmond RL, Castle D, Kulkarni J, Williams JM, Kay-Lambkin FJ. Improving the lifestyle of people with psychotic illnesses. 2009-2012: \$773,000. Administering institution: University of Newcastle.

Bellomo R, Cameron P, Cooper DJ, Peake S, Webb S, Delaney A, Holdgate A. The Australasian resuscitation in sepsis evaluation – randomised controlled trial. 2008-2011: \$1,718,130. Administering institution: Monash University.

Bellomo R, Cooper DJ, Street A, Nichol A, French CJ, Presneill JJ. Erythropoietin in traumatic brain injury (EPO-TBI). 2009-2013: \$1,886,655. Administering institution: Monash University.

Bennell K, Buchbinder R, Wrigley T, Harris A, Pua Y. Is physiotherapy beneficial for people with osteoarthritis? 2010-2012: \$607,488. Administering institution: University of Melbourne.

- Berger P, Hamilton G, Naughton M. Duty ratio: a simple method for quantifying loop gain during breathing instability. 2010-2012: \$331,841. Administering institution: Monash University.
- Bobik A. Roles of interleukins, chemokines and circulating cells in cardiac fibrosis. 2008-2010: \$416,625. Administering institution: Baker IDI.
- Bobik A, Agrotis A. Atherosclerosis: molecular mechanisms of suppression by CD4+CD25+ regulatory T-cells. 2008-2010: \$513,750. Administering institution: Baker IDI.
- Bobik A, Curtis D. Understanding the pharmacology of G-CSF for treating myocardial infarction. 2008-2010: \$412,215. Administering institution: Baker IDI.
- Bobik A, Peter K, Agrotis A. HMGB1, a cytokine linking inflammation, lipid accumulation, and platelet activation in atherosclerosis. 2008-2010: \$498,750. Administering institution: Baker IDI.
- Brooks A, Kotsimbos T. The role of HLA-E in innate and adaptive immunity. 2008-2010: \$518,250. Administering institution: University of Melbourne.
- Browning C. Health, wellbeing, disability and service pathways in older (80+) Australians. 2008-2010: \$358,850. Administering institution: Monash University.
- Bruce C. Sphingosine kinase as a target therapeutic for obesity induced insulin resistance. 2009-2011: \$432,750. Administering institution: Baker IDI.
- Bryant A, Bennell K, Lloyd D, Cicuttini F, Wrigley T. Young people with old knees: knee ligament reconstruction and early joint changes. 2010-2013: \$747,800. Administering institution: University of Melbourne.
- Budge M, Storey E, Tonkin A, Wong T, Reid C, Ames D. Aspirin for the prevention of cognitive decline in the Elderly: a Neuro-Vascular Imaging Study (ENVIS-ion) from ASPREE. 2008-2012: \$1,316,242. Administering institution: Australian National University.
- Buttery JP, Barnes CD, Monagle P, Spelman D, Lindeman R. Optimal immunisation schedules for children and adults with poor or non-functioning spleens. 2009-2011: \$455,188. Administering institution: Murdoch Childrens Research Institute.
- Campbell DJ, Prior DL, Liew D, Wolfe RC. Targeting those at risk of chronic heart failure. 2009-2013: \$1,420,375. Administering institution: St Vincent's Institute of Medical Research.
- Chapman I, Visvanathan R, Naganathan V, Hunter P, Karnon J, Horowitz M, Lange K, Cameron I. Testosterone and a nutritional supplement treatment for undernourished older people. 2010-2012: \$1,018,438. Administering institution: University of Adelaide.
- Chin-Dusting J, Dusting G. Targeting arginase in peripheral arterial occlusive disease. 2009-2011: \$234,250. Administering institution: Baker IDI.
- Churchill M, Wesselingh S, Turville S, Gorry P. Molecular studies of the astrocyte reservoir of HIV-1 in the central nervous system. 2010-2012: \$571,500. Administering institution: Burnet Institute.
- Cohen MM, Smit DV, Taylor D, Cameron P, Xue CC. Multiple emergency department acupuncture trials (MEDACT). 2009-2011: \$416,301. Administering institution: RMIT University.
- Cooper DJ, Bernard S, Rosenfeld J, Cameron P. POLAR - Prophylactic hypothermia trial to lessen traumatic brain injury: a randomised controlled trial. 2009-2013: \$1,998,578. Administering institution: Monash University.
- Cooper M, Chai Z, Cao Z. Pathogenic role of CDA1 via its profibrotic action in diabetic nephropathy. 2008-2010: \$464,250. Administering institution: Baker IDI.
- Cooper M, El-Osta A, Jandeleit-Dahm K. Role of chromatin remodelling in diabetic renal and vascular complications: *in vivo* studies. 2009-2011: \$456,000. Administering institution: Baker IDI.
- Cooper M, Kantharidis P, Twigg S. Growth factors and their effect on microRNAs and transcription factors in tubulointerstitial fibrosis in diabetes. 2009-2011: \$471,000. Administering institution: Baker IDI.
- Coughlan M. Restricting dietary advanced glycation end product intake as a potential therapeutic tool in diabetic nephropathy. 2010-2012: \$466,125. Administering institution: Baker IDI.
- Crabb B, Gilson P, Leykauf K. Signalling during red blood cell invasion by *Plasmodium falciparum*. 2010-2012: \$344,750. Administering institution: Burnet Institute.
- Currie B, Cheng A, Giffard P, Mayo M, Spratt B. Diversity and virulence determinants among 100 clinical and environmental isolates of *Burkholderia pseudomallei*. 2010-2012: \$499,500. Administering institution: Menzies School of Health Research.
- Danta M, Matthews GV, Hellard M, Sasadeusz J, Prestage GP. Defining sexual transmission of hepatitis C among gay men. 2009-2011: \$380,050. Administering institution: University of New South Wales.
- de Courten B, Forbes J, Walker K, de Courten M. Will a reduction in dietary AGEs improve insulin sensitivity and secretion in overweight individuals? 2010-2011: \$234,700. Administering institution: Baker IDI.
- de Haan J, Cooper M. Antioxidant glutathione peroxidase (GPx) mimetics and atherosclerosis: a role for targeted antioxidant therapy. 2009-2011: \$344,250. Administering institution: Baker IDI.
- Denton K, Head G, Widdop R. Interaction between estrogen and the renin-angiotensin system in the regulation of arterial pressure. 2008-2010: \$612,750. Administering institution: Monash University.
- Dharmage S, Walters E, Abramson AJ, Thomas P, Erbas B, Matheson M. What increases the reactivity of airways in middle-age? 2009-2011: \$585,313. Administering institution: University of Melbourne.
- Dietze P, Aitken C, Jolley D, Hickman M, Kerr T, Stoové M. The natural history of injecting drug use among IDU in Melbourne. 2009-2013: \$739,698. Administering institution: Monash University.
- Ding C, Jones G, Cicuttini F, Winzenberg TM, Wluka AE, Quinn S. Does vitamin D supplementation prevent progression of knee osteoarthritis? A randomised controlled trial. 2010-2012: \$980,188. Administering institution: University of Tasmania.

- Drummer HE, Pountourios P. Role of the hepatitis C virus glycoprotein E2 variable regions in viral entry and antibody mediated neutralization. 2009-2011: \$521,250. Administering institution: Burnet Institute.
- Drummer H, Pountourios P, Coulibaly F. Structure and function of the HCV glycoproteins. 2010-2012: \$577,500. Administering institution: Burnet Institute.
- Dunstan D, Shaw J, Salmon J, Zimmet P, Cerin E. Understanding the acute and cumulative metabolic effects of prolonged sitting in adults. 2009-2011: \$400,050. Administering institution: Baker IDI.
- Eades S, Sanson-Fisher R, Paul C, Zimmet P, Carey M, Wenitong M. A cluster randomised trial to test a systems based collaborative for Type 2 diabetes among Indigenous Australians. 2010-2014: \$1,311,000. Administering institution: Baker IDI.
- El-Osta A, Du X-J. Understanding the opposing roles of SWI/SNF in the control of gene programs for pathological cardiac hypertrophy. 2009-2011: \$457,689. Administering institution: Baker IDI.
- Emery S, Hoy JA, Pett SL, Roth NL, Wright E. Strategic Timing of AntiRetroviral Treatment (START). 2009-2010: \$405,400. Administering institution: University of New South Wales.
- Enticott PG. Examining the brain basis of social cognitive impairment in autism spectrum disorders. 2009-2011: \$144,500. Administering institution: Monash University.
- Erbas B, Abramson M, Tang MLK, Allen KJ, Newbigin EJ, Dharmage SC. Outdoor aeroallergen exposure and asthma exacerbations. 2009-2011: \$454,550. Administering institution: La Trobe University.
- Evans R, Bertram J, Schlaich M, Gardiner B, Smith D, Phillips J. Hypoxia is the common pathway to renal failure. 2010-2012: \$478,125. Administering institution: Monash University.
- Fairlie D, Young P, Tachedjian G. Investigating a novel generic approach to anti-infective agents. 2008-2010: \$611,250. Administering institution: University of Queensland.
- Farhall J, Castle D, Copolov D, Hayes S, Sawyer F, Thomas N. Acceptance and commitment therapy for medication-resistant psychosis: a randomised controlled trial. 2008-2010: \$527,000. Administering institution: La Trobe University.
- Febbraio M, Hevener A. Activation of HSP70: a therapeutic target to treat obesity-induced insulin resistance. 2008-2010: \$449,250. Administering institution: Baker IDI.
- Febbraio M, Lancaster G. Can blocking fatty acid transport in myeloid cells prevent insulin resistance? 2009-2011: \$491,250. Administering institution: Baker IDI.
- Febbraio M, Lancaster G, Sadler A, Williams B. A novel lipid sensitive kinase and its role in obesity-induced inflammation and insulin resistance. 2010-2012: \$540,075. Administering institution: Baker IDI.
- Febbraio M, Rose-John S, Matthews V. Novel gp130 receptor ligands to treat metabolic disease. 2009-2011: \$680,250. Administering institution: Baker IDI.
- Fitzgerald PB. rTMS treatment in bipolar depression. 2009-2011: \$385,800. Administering institution: Monash University.
- Fletcher EL, Wilkinson-Berka JL, Allen AM. Glial cells and retinal disease. 2009-2011: \$299,250. Administering institution: University of Melbourne.
- Forbes A, Ramsay CR, Forbes CS. Interrupted time series studies: design and analysis resolution. 2009-2011: \$297,425. Administering institution: Monash University.
- Forbes J, Thorburn D, Muench G, de Haan J. Cytosolic oxidative disturbances as a source of mitochondrial dysfunction in diabetic nephropathy. 2009-2011: \$486,000. Administering institution: Baker IDI.
- Fritschi L, Heyworth JS, Saunders C, McCaul K, Glass DC, Erren TC. Does shift work cause breast cancer? 2009-2011: \$776,975. Administering institution: University of Western Australia.
- Gao XM. Macrophage migration inhibitory factor (MIF): pathological and therapeutic significance in post-infarct inflammation. 2008-2010: \$525,500. Administering institution: Baker IDI.
- Gardiner EE, Andrews RK. Regulation of platelet surface proteins. 2009-2011: \$531,500. Administering institution: Monash University.
- Gardiner EE, Andrews RK. Platelet receptor regulation in autoimmune disease. 2010-2012: \$489,500. Administering institution: Monash University.
- Gerondakis S. The transcription factors c-Rel and RelA serve distinct roles in the development and function of CD4 Regulatory T cells. 2009-2011: \$484,200. Administering institution: Burnet Institute.
- Gicquel C, El-Osta A, Le Bouc Y. Mechanisms of abnormal expression of the IGF2 gene in disorders affecting foetal growth. 2008-2010: \$537,750. Administering institution: Baker IDI.
- Giles G, Severi G, Bolton D, Millar J, Sim M, Benke G. A case control study of risk factors for aggressive prostate cancer. 2010-2014: \$1,508,475. Administering institution: Cancer Council Victoria.
- Gilson P, de Koning-Ward T, Boddey J. Identification of the *Plasmodium falciparum* translocon that exports parasite proteins into their erythrocytic hosts. 2008-2010: \$362,250. Administering institution: Burnet Institute.
- Gorry PR, Churchill MJ. Env-determinants of HIV-1 subtype C contributing to pathogenicity. 2009-2011: \$410,350. Administering institution: Burnet Institute.
- Gowans EJ, Loveland BE. Multiple vector vaccine for hepatitis C virus. 2009-2011: \$463,000. Administering institution: Burnet Institute.
- Gowans EJ, Roberts SK, Loveland BE. A new HCV cell therapy. 2009-2011: \$530,849. Administering institution: Burnet Institute.
- Greenwood K, Xue C, Zheng Z, Martin P, Helme R, Gibson SJ. Combined electroacupuncture and cognitive behavioural therapy for tension-type headache: a randomised controlled trial. 2009-2011: \$292,025. Administering institution: RMIT University.
- Gregorevic P. Defining mechanisms of follistatin-mediated muscle adaptation, for treatment of frailty and muscle-related diseases. 2009-2011: \$536,250. Administering institution: Baker IDI.

- Gregorevic P, Larsson L, Haviv I. Dissecting microRNA dysregulation as a mechanism underlying muscle wasting. 2010-2012: \$496,125. Administering institution: Baker IDI.
- Gugasyan R, Berzins S. NF κ B1 is a novel regulator of CD8+ T cell development and memory cell generation. 2010-2012: \$422,400. Administering institution: Burnet Institute.
- Hamilton J, Salem H. Defining the roles of platelet protease-activated receptors in thrombosis. 2008-2010: \$324,075. Administering institution: Monash University.
- Hannan R, Woodcock E, Thomas W. Regulation of cardiac hypertrophy at level of ribosome biogenesis. 2008-2010: \$609,000. Administering institution: University of Melbourne.
- Head G, Armitage J, Davern P, Eikelis N. A neurogenic basis of obesity hypertension: role of adipokines and ghrelin in regulating sympathetic vasomotor activity. 2009-2011: \$344,250. Administering institution: Baker IDI.
- Head G, Davern P, Morris B. Neurogenic hypertension in the spontaneously hypertensive mouse: role of the hypothalamic-brainstem sympathetic axis. 2009-2011: \$458,000. Administering institution: Baker IDI.
- Head G, Lawrence A, Davern P. Role of the hypothalamus, oxidative stress and angiotensin in chronic stress. 2008-2010: \$513,750. Administering institution: Baker IDI.
- Hocking J, Bradshaw C, Tabrizi S, Fairley C, Pirota M, Donovan B. A longitudinal study of bacterial vaginosis and *Mycoplasma genitalium* in young Australian women. 2008-2010: \$117,415. Administering institution: University of Melbourne.
- Hogarth PM, Mottram P, Powell M. The role of Fc RIIa in antibody dependent tissue destruction in autoimmunity. 2008-2010: \$534,798. Administering institution: Burnet Institute.
- Hogarth PM, Wines B, Powell M. Structure and function of receptors for IgG (Fc γ R). 2008-2010: \$767,423. Administering institution: Burnet Institute.
- Hooper S, Lewis R, Thompson B, Hourigan K. Phase contrast X-ray imaging of the lung at birth. 2008-2010: \$498,593. Administering institution: Monash University.
- Hopwood J, Meikle PJ, Fuller M, Brooks DA, Dean CJ. Newborn screening for genetic disease. 2009-2011: \$865,500. Administering institution: University of Adelaide.
- Hughan S, Nesbitt W. Investigation of Dok2 and Dok1 adapter proteins in the negative regulation of integrin α IIb β 3 platelet signalling. 2008-2010: \$437,615. Administering institution: Monash University.
- Iredell J, Webb S, Stanley K, Brown S, Nichol A, Bailey M. Bacteraemic load and survival in septic shock. 2010-2013: \$647,738. Administering institution: University of Sydney.
- Jackson D, Wright M, Ashman L. Tetraspanins serve as molecular facilitators to regulate platelet thrombus formation. 2010-2012: \$568,500. Administering institution: Burnet Institute.
- Jackson SP. Investigate novel functional roles for PI 3-kinases in platelets. 2008-2010: \$515,500. Administering institution: Monash University.
- Jackson SP. Investigation of the role for GPV1 in platelet function and thrombosis. 2008-2010: \$531,705. Administering institution: Monash University.
- Jackson SP, Nesbitt WS. Examination of the mechanical effects of blood flow on clot formation. 2009-2011: \$488,750. Administering institution: Monash University.
- Jackson SP, Schoenwaelder S. Investigation of a new approach to regulate fibrin clot retraction and arterial thrombolysis. 2010-2012: \$465,560. Administering institution: Monash University.
- Jamieson L, Skilton M. Associations between periodontal disease and cardiovascular surrogate endpoints in an adult Indigenous population. 2010-2012: \$1,298,760. Administering institution: University of Adelaide.
- Jandeleit-Dahm K, Thomas M, Bierhaus A. Targeting the AGE/RAGE axis in diabetes associated atherosclerosis. 2010-2012: \$523,500. Administering institution: Baker IDI.
- Jaworowski A, Crowe SM. ITAM signalling proteins in chronic viral disease. 2009-2011: \$438,000. Administering institution: Burnet Institute.
- Karagiannis T. DNA binding ligands for Auger therapy and receptor imaging. 2009-2011: \$566,550. Administering institution: Baker IDI.
- Kaye D, Venardos K. Mitochondrial L-arginine transport and its role in the pathogenesis of heart failure. 2009-2011: \$504,875. Administering institution: Baker IDI.
- Kent SJ, Stambas J. Comparative effectiveness of vaccine-induced SIV-specific CD8 T cells. 2010-2012: \$588,750. Administering institution: University of Melbourne.
- Kett M, Thomas M, Moritz K. Salt and cardiovascular disease: does acute salt-sensitivity convey greater cardiovascular risk? 2008-2010: \$573,630. Administering institution: Monash University.
- Kile B, Jackson S, Roberts A. The molecular regulation of platelet life span. 2008-2010: \$531,440. Administering institution: Walter and Eliza Hall Institute.
- Kilpatrick TJ, Binder MD, McLean CA. Analysing how key molecules protect the nervous system in multiple sclerosis. 2009-2011: \$486,500. Administering institution: University of Melbourne.
- Kingwell B, de Courten B. Novel metabolic actions of HDL with therapeutic potential for Type 2 diabetes. 2010-2012: \$540,900. Administering institution: Baker IDI.
- Kotsimbos T, Mifsud N, Tait B. Cross-reactive anti-viral T cells mediate allograft rejection in lung transplantation. 2009-2011: \$364,650. Administering institution: The Alfred.
- Kulkarni J, Davis SR. Brain estrogens – a potential treatment for symptoms of schizophrenia? 2009-2011: \$673,750. Administering institution: Monash University.

- Lambert E, Head G, Schlaich M, Straznicky N. Role of sympathetic nervous system in the development of early organ damage in obesity: an emerging target for therapy. 2010-2012: \$523,625. Administering institution: Baker IDI.
- Law R, Coughlin P. The regulation of fibrinolysis by alpha2-antiplasmin. 2009-2011: \$257,250. Administering institution: Monash University.
- Leach AJ, Chang AB, Cheng AC, McDonald M, Torzillo P, Brown N. Is long term weekly azithromycin use for bronchiectasis in Indigenous children associated with antibiotic use? 2009-2011: \$384,875. Administering institution: Menzies School of Health Research.
- Lewin SR, Cameron PU, Jaworowski A. Modulation of HIV-1 latency in primary CD4 T cells by chemokines and dendritic cells. 2008-2010: \$372,330. Administering institution: Monash University.
- Li H, Liu JP. Molecular targeting to telomerase and cancer cell immortality by a novel inhibitor. 2008-2010: \$428,085. Administering institution: Monash University.
- Little P. KIT as a target for the modification of vascular proteoglycans and prevention of atherosclerosis. 2008-2010: \$329,125. Administering institution: Baker IDI.
- Loff B, Zion DR, Glass DC, Fritschi L, Kelsall HL, Brown NJ. Clarifying Australians' understanding of privacy – what affects participation in epidemiological research? 2009-2011: \$425,850. Administering institution: Monash University.
- Lynch G, Gregorevic P, Harrison CA. Enhancing growth signalling pathways to improve muscle growth and development in muscular dystrophy. 2009-2011: \$506,250. Administering institution: University of Melbourne.
- Mak J, Davenport M, Marquet R. Macrophages drives the diversity of HIV. 2010-2012: \$631,188. Administering institution: Burnet Institute.
- Mak J, Hijnen M. Biochemical and structural analysis of virus-host interactions during HIV-1 assembly. 2009-2011: \$324,250. Administering institution: Burnet Institute.
- Mak J, Jaworowski A, de Fonseca Pereira C. Does HIV function as a lipid-raft during infection? 2008-2010: \$603,442. Administering institution: Burnet Institute.
- Mathias J, Bigler E, Bowden S, Rosenfeld J, Taylor D, Vink V, Rose S. Diagnostic and prognostic evaluation of diffusion tensor imaging and cognitive function after traumatic brain injury. 2008-2010: \$856,485. Administering institution: University of Adelaide.
- McAllen R, Farrell M, Lambert G. Functional mapping of autonomic control circuits in the human brain. 2008-2010: \$280,000. Administering institution: University of Melbourne.
- McLachlan A, Naganathan V, Le Couteur D, Hilmer S, Gibson SJ. Optimising pain management in frail older people. 2009-2011: \$393,750. Administering institution: University of Sydney.
- McMullen J, Lin RCY. Targeting PI3K regulated microRNAs to treat heart failure. 2010-2012: \$514,125. Administering institution: Baker IDI.
- McMullen J, Woodcock E. Targeting critical nodes on the IGF1-PI3K pathway to improve function of the failing heart. 2009-2011: \$493,000. Administering institution: Baker IDI.
- Medcalf R. To determine the role and mechanism of action of tissue-type plasminogen activator in the central nervous system. 2008-2010: \$493,770. Administering institution: Monash University.
- Medcalf R. To understand the role of the plasminogen activating and matrix metalloproteinase systems in traumatic brain injury. 2010-2012: \$481,500. Administering institution: Monash University.
- Medcalf R, Bottomley S, Samson A. To investigate how the aggregation of proteins during neuronal injury promotes neurotoxic plasmin formation. 2010-2012: \$565,500. Administering institution: Monash University.
- Medcalf R, Lawrence D. To determine the means by which plasminogen activators modulate integrity of the blood brain barrier. 2010-2012: \$504,500. Administering institution: Monash University.
- Medcalf R, Nagamine Y, Stasinopoulos S. Post-transcriptional regulation of plasminogen activator inhibitor 2 gene expression. 2008-2010: \$498,390. Administering institution: Monash University.
- Millar I, Williamson O, Cameron P, Myles P. Hyperbaric oxygen in lower limb trauma: a randomised controlled clinical trial. 2008-2012: \$684,375. Administering institution: Monash University.
- Mitchell C, McLean C. Role of the inositol polyphosphate 4-phosphatase type 2 in human breast cancer. 2010-2012: \$589,500. Administering institution: Monash University.
- Molenaar P, Du X-J. Molecular attributes and physiological significance of beta1L-adrenoreceptors. 2008-2010: \$724,188. Administering institution: University of Queensland.
- Molero-Navajas JC, Konstantopoulos N, Jowett JB, Segal DH. Stratification of insulin resistance. 2009-2011: \$329,250. Administering institution: Deakin University.
- Moore D, Dietze P, Bammer G, Perez P. Understanding the barriers to improved access, engagement and retention of methamphetamine users in health services. 2008-2010: \$783,756. Administering institution: Curtin University of Technology.
- Myles P, Leslie K, Silbert B, Peyton P, Paech M. Nitrous oxide anaesthesia and cardiac morbidity in major surgery. 2007-2011: \$2,782,500. Administering institution: Monash University.
- Nelson M, Reid C, Ryan P, Tonkin A, Wing L. Absolute risk prediction of subsequent cardiovascular events in a large cohort of elderly Australians with hypertension. 2008-2010: \$192,000. Administering institution: University of Tasmania.
- O'Brien PE, DeWitt DE. The control of Type 2 diabetes through weight loss in indigenous Australians: the feasibility and acceptability of LAGB. 2009-2011: \$577,500. Administering institution: Monash University.
- Oldenburg B, Courtney M, Friedman R, Wootton R, Ash S. Using conversational computer technology to improve diabetes management: a randomised controlled trial. 2007-2010: \$604,464. Administering institution: Monash University.

- Perkovic V, Hillis G, Thomas M, Lowe G. Utility of novel biomarkers in the prediction of major complications of Type II Diabetes Mellitus. 2010-2012: \$494,563. Administering institution: University of Sydney.
- Peter K. CD40L/Mac-1 as therapeutic target in inflammatory diseases in particular atherosclerosis. 2010-2012: \$539,500. Administering institution: Baker IDI.
- Peter K. Platelet-activating and proinflammatory effects of proteins secreted by *Staphylococcus aureus*. 2009-2011: \$496,000. Administering institution: Baker IDI.
- Peter K, Bobik A. Monomeric C-reactive protein as pathogenic factor and therapeutic target in atherothrombotic disease. 2008-2010: \$647,625. Administering institution: Baker IDI.
- Peter K, Hagemeyer C. Single-chain antibodies for directed stem cell homing and targeting of effector cells in vascular disease. 2008-2010: \$572,750. Administering institution: Baker IDI.
- Pietersz G, Apostolopoulos V. Polynucleotide vaccine based on targeted delivery to antigen presenting cells. 2008-2010: \$536,654. Administering institution: Burnet Institute.
- Pitman L, Paul CL, Gibberd R, Shaw JE. RCT of continuing medical education and feedback to altering diabetes population outcomes. 2009-2013: \$900,825. Administering institution: Monash University.
- Plebanski M, O'Hehir R, Hardy C, Rolland J. Inhibition of allergic airway inflammation by nanoparticles. 2008-2010: \$529,020. Administering institution: Monash University.
- Ponsford J, O'Donnell M, Lee N. Motivational interviewing with cognitive behavioural therapy for anxiety and depression following traumatic brain injury. 2010-2012: \$442,825. Administering institution: Monash University.
- Poumbourios P, Drummer H, Gorry P. Delineation of receptor-activated conformational signalling pathways in HIV-1 envelope glycoproteins. 2008-2010: \$829,192. Administering institution: Burnet Institute.
- Poumbourios P, Drummer HE, Wilce M. Structural and functional role of HIV-1 gp41 terminal interactions in the membrane fusion mechanism. 2009-2011: \$508,500. Administering institution: Burnet Institute.
- Power D. The role of fatty acid metabolism in renin secretion. 2010-2012: \$561,500. Administering institution: Burnet Institute.
- Power D. Waste control in kidney disease. 2009-2011: \$438,000. Administering institution: Burnet Institute.
- Ramsland PA, Wines BD. Bacterial evasion of IgA immunity. 2009-2011: \$462,750. Administering institution: Burnet Institute.
- Reeder J, Barry A. Population genomics of *Plasmodium falciparum* surface antigen genes. 2008-2010: \$383,072. Administering institution: Burnet Institute.
- Rice G, Lappas M, Permezel M. Molecular mechanisms regulating spontaneous onset of human labour. 2009-2010: \$426,600. Administering institution: Baker IDI.
- Rice G, Tong S, Georgiou H. First trimester aetiology of obstetric diseases. \$461,625: 2008-2010. Administering institution: University of Melbourne.
- Ritchie R, Horowitz JD. Novel cGMP-based therapies prevent left ventricular remodelling. 2008-2010: \$512,025. Administering institution: Baker IDI.
- Ritchie R, McMullen J, Jandeleit-Dahm K. Targeting ROS-induced damage rescues the diabetic heart. 2009-2011: \$469,000. Administering institution: Baker IDI.
- Rogerson S, Jaworowski A, Kain K. Phagocytic clearance and immune activation in malaria. 2010-2012: \$544,500. Administering institution: University of Melbourne.
- Salmon JL, Hume C, Hesketh K, Dunstan D, Daly R, Cerin E. An intervention to reduce sedentary behaviour, promote physical activity and improve children's health. 2009-2013: \$815,025. Administering institution: Deakin University.
- Sambrook P, Little D, March L, Buchbinder R. A randomised controlled trial to evaluate the effectiveness of zoledronate therapy in osteonecrosis of the hip. 2010-2014: \$511,425. Administering institution: University of Sydney.
- Schlauch M, Lambert E, Lambert G. Noradrenaline transporter dysfunction in neural circulatory disorders: clinical, molecular and therapeutic implications. 2008-2010: \$490,500. Administering institution: Baker IDI.
- Schlauch M, Lambert G. Sympathetic nervous system inhibition for the treatment of diabetic nephropathy. 2010-2012: \$439,125. Administering institution: Baker IDI.
- Schmidt H, Morganti-Kossmann C, Winkler K, Armitage M. Role and mechanism of NADPH oxidase in ischemic stroke and neurotrauma. 2010-2012: \$560,250. Administering institution: Monash University.
- Schoenwaelder SM, Salem HH. Investigation of new approaches to dissolve blood clots. 2009-2011: \$479,375. Administering institution: Monash University.
- Scott AM, Ramsland PA, Ravetch JV. Using the immune system to treat cancers. 2009-2011: \$543,500. Administering institution: La Trobe University.
- Slattery R, Miller J. The role of MHC class I expression on pancreatic ductal lineage cells in the pathogenesis of Type 1 diabetes. 2010-2012: \$467,200. Administering institution: Monash University.
- Smyth IM, Sviridov D, Kile BT. How the ABCA12 protein transporter controls lipid levels and affects the biology of the skin and cardiovascular system. 2009-2011: \$496,250. Administering institution: Monash University.
- Srikanth V, Blizzard L, Thrift A, Phan T, Muench G, Robinson S. A population-based cohort study of brain ageing – rates of brain structural change, functional effects, and mechanisms. 2008-2012: \$1,256,600. Administering institution: Monash University.
- Stewart AG, Medcalf RL, Banwell MG, Hughes RA. New treatments for cancer. 2009-2011: \$355,750. Administering institution: University of Melbourne.

Stewart S, Jennings G, Bergin P, de Courten B, Lee G, Carrington M, Wong C. A randomised controlled trial of a Nurse-led Intervention for Less Chronic Heart Failure: the NIL-CHF Study. 2008-2012: \$1,101,990. Administering institution: Baker IDI.

Straznicki N, Masuo K, Eikelis N, Lambert G. Neurogenic mechanisms of cardiovascular risk in the metabolic syndrome: benefits of lifestyle interventions. 2008-2010: \$315,000. Administering institution: Baker IDI.

Sviridov D, Bukrinsky M. Atherosclerosis and HIV. 2009-2011: \$349,500. Administering institution: Baker IDI.

Sviridov D, Thomas M, Bach L. Impact of advanced glycation on anti-atherogenic properties of high density lipoprotein. 2009-2011: \$357,750. Administering institution: Baker IDI.

Tachedjian G, Harrigan R, Sluis-Cremer N, Sonza S. Silent mutations in the HIV-1 reverse transcriptase selected during antiretroviral therapy. 2010-2012: \$535,500. Administering institution: Burnet Institute.

Tang MLK, Samuel CS, Royce SG, Giraud AS, Wilson JW, Schulz H. Lung function genes in asthma. 2009-2011: \$559,500. Administering institution: Murdoch Childrens Research Institute.

Taylor DA, Knott JK, Castle D, Kong D. Droperidol and olanzapine as adjuncts to midazolam for the acutely agitated patient: a randomised clinical trial. 2010-2011: \$186,247. Administering institution: University of Melbourne.

Tesch G, Nikolic-Paterson D, Febbraio M. Therapeutic targetting of MIF in Type 2 diabetes. 2008-2010: \$498,750. Administering institution: Prince Henry's Institute for Medical Research.

Thien F, Thompson B, Robinson P, Harris B, Cowin G. Ventilation heterogeneity and airway remodelling in asthma. 2010-2012: \$504,750. Administering institution: Monash University.

Thomas M, Tikellis C, Cooper M, Brown R. The role of angiotensin converting enzyme 2 in diabetic complications. 2009-2011: \$435,375. Administering institution: Baker IDI.

Thompson B, Kotsimbos T, Snell G. Why does peripheral airway dysfunction lead to bronchiolitis obliterans syndrome in lung transplantation? 2008-2011: \$248,250. Administering institution: The Alfred.

Thrift A, Cadilhac D, Nelson M, Srikanth V, Bladin C, Gerraty R. Shared Team Approach between Nurses and Doctors For Improved Risk factor Management (STAND FIRM). 2010-2012: \$1,688,750. Administering institution: Baker IDI.

Tonkin A, Thompson P, West M, Blankenberg S, Kirby A, Hague W. The LIPID Study: 16 year outcomes and predictors of risk and their interactions in CHD patients. 2008-2010: \$746,465. Administering institution: Monash University.

Turrell G, Oldenburg B, Giler-Corti W, Burton N, Giskes K, Haynes M, Brown W. A longitudinal multilevel study of change in physical activity in mid-age and factors associated with change. 2008-2011: \$705,000. Administering institution: Queensland University of Technology.

Villemagne V, Rowe C, McLean C, Mulligan R, Fodero-Tavoletti M.

Abeta amyloid imaging in neurodegenerative disorders with a novel 18F radiotracer. 2008-2010: \$1,142,250. Administering institution: University of Melbourne.

Weickert TW, Weickert CS, Schofield PR, Kulkarni J, Carr VJ. Cognitive enhancement in schizophrenia via selective oestrogen receptor modulator. 2009-2011: \$381,150. Administering institution: University of New South Wales.

Wilkinson-Berka J, Fletcher E, Allen T, Nguyen G. Receptor-mediated actions of prorenin in diabetic retinopathy. 2008-2010: \$704,250. Administering institution: Monash University.

Wilkinson-Berka JL, Miller AG. Aldosterone and diabetic retinopathy. 2009-2011: \$491,250. Administering institution: Monash University.

Williams D, Silburn P, Rowe C, Cook M, Kinsella G, Bittar R. Finding the optimum target and predictors of outcome in deep brain stimulation of older patients with Parkinson's disease. 2010-2012: \$496,150. Administering institution: Monash University.

Wolfe R, Forbes A. Missing data and risk prediction. 2009-2011: \$435,125. Administering institution: Monash University.

Wong TY, Shaw JE, Cheung ND, Kawasaki R, McGeechan K, Lee ML. Novel retinal architectural vascular signs and risk of cardiovascular disease: the AusDiab Study. 2010-2012: \$727,375. Administering institution: Centre for Eye Research Australia.

Woodcock E. Cardiac-specific therapy targeting hypertrophy and apoptosis. 2009-2011: \$526,500. Administering institution: Baker IDI.

Woodcock E, Iismaa S. A novel cardiac inotropic mechanism that provides functional benefit. 2009-2011: \$397,750. Administering institution: Baker IDI.

Wright MD, Hickey MJ. How tetraspanin proteins control the movement of white blood cells. 2009-2011: \$402,750. Administering institution: Monash University.

Xue CC, Thien F, Story DF. A clinical trial on acupuncture for hay fever. 2009-2011: \$169,725. Administering institution: RMIT University.

Xue C, Zheng Z, Gibson SJ, Helme RD. Electroacupuncture on opioid consumption by patients with chronic musculoskeletal pain: a randomised controlled trial. 2009-2011: \$353,650. Administering institution: RMIT University.

Australia Fellowships

Cooper M. 2009-2013. Administering institution: Baker IDI.

Jackson S. 2010-2014. Administering institution: Monash University.

Research Fellowships

Allen T. 2008-2012. Administering institution: Baker IDI.

Anderson D. 2007-2011. Administering institution: Burnet Institute.

Andrews R. 2004-2010. Administering institution: Monash University.

Bobik A. 2006-2011. Administering institution: Baker IDI.

Chin-Dusting J. 2006-2011. Administering institution: Baker IDI.

Crowe S. 2008-2012. Administering institution: Burnet Institute.

Dart A. 2010-2014. Administering institution: Baker IDI.

Davis S. 2008-2012. Administering institution: Monash University.

Dixon J. 2010-2014. Administering institution: Baker IDI.

Du X-J. 2005-2010. Administering institution: Baker IDI.

El-Osta A. 2009-2013. Administering institution: Baker IDI.
 Esler M. 2010-2014. Administering institution: Baker IDI.
 Febbraio MA. 2007-2011. Administering institution: Baker IDI.
 Gerondakis S. 2006-2010. Administering institution: Burnet Institute.
 Gowans E. 2009-2013. Administering institution: Burnet Institute.
 Head G. 2006-2010. Administering institution: Baker IDI.
 Hellard M. 2009-2013. Administering institution: Burnet Institute.
 Hibbs M. 2010-2014. Administering institution: Monash University.
 Hogarth M. 2007-2011. Administering institution: Burnet Institute.
 Jackson D. 2009-2013. Administering institution: Burnet Institute.
 Jandeleit-Dahm K. 2009-2013. Administering institution: Baker IDI.
 Kaye D. 2008-2012. Administering institution: Baker IDI.
 Kent S. 2008-2012. Administering institution: University of Melbourne.
 Kingwell B. 2009-2013. Administering institution: Baker IDI.
 Lambert G. 2007-2011. Administering institution: Baker IDI.
 Little P. 2006-2010. Administering institution: Baker IDI.
 Mackay F. 2007-2011. Administering institution: Monash University.
 McMullen J. 2010-2014. Administering institution: Baker IDI. Honorary.
 Medcalf RL. 2008-2012. Administering institution: Monash University.
 Meikle P. 2008-2012. Administering institution: Baker IDI.
 Peter K. 2010-2014. Administering institution: Baker IDI. Honorary.
 Plebanski M. 2008-2012. Administering institution: Monash University.
 Reeder J. 2009-2013. Administering institution: Burnet Institute.
 Reid C. 2008-2012. Administering institution: Monash University.
 Ritchie R. 2008-2012. Administering institution: Baker IDI.
 Schlaich M. 2010-2014. Administering institution: Baker IDI.
 Shaw J. 2010-2014. Administering institution: Baker IDI.
 Stewart S. 2008-2012. Administering institution: Baker IDI.
 Sviridov D. 2010-2014. Administering institution: Baker IDI.
 Tachedijan G. 2009-2013. Administering institution: Burnet Institute.
 Thomas M. 2010-2014. Administering institution: Baker IDI.
 Thrift A. 2007-2011. Administering institution: Baker IDI.
 Wilkinson-Berka J. 2006-2010. Administering institution: Monash University.
 Woodcock E. 2010-2014. Administering institution: Baker IDI.

Practitioner Fellowships

Buchbinder R. 2010-2014. Administering institution: Monash University.
 Cameron P. 2009-2013. Administering institution: Monash University.
 Cooper DJ. 2007-2011. Administering institution: Monash University.
 Fitzgerald P. 2010-2014. Administering institution: Monash University.
 Lewin SR. 2008-2012. Administering institution: The Alfred.
 Myles P. 2007-2011. Administering institution: Monash University.

Industry Fellowship

Ffrench R. 2007-2010. Administering institution: Burnet Institute.

Career Development Awards

Benke G. 2007-2011. Administering institution: Monash University.
 Bruce C. 2010-2013. Administering institution: Baker IDI.
 Cherry C. 2009-2012. Administering institution: Burnet Institute.
 de Courten B. 2006-2011. Administering institution: Baker IDI.
 Dietze P. 2006-2010. Administering institution: Monash University.
 Drummer H. 2007-2011. Administering institution: Burnet Institute.
 Forbes J. 2010-2013. Administering institution: Baker IDI.
 Gabbe B. 2007-2011. Administering institution: Monash University.
 Gicquel C. 2008-2011. Administering institution: Baker IDI.
 Gorry P. 2009-2012. Administering institution: Burnet Institute.
 Gruen R. 2008-2011. Administering institution: Monash University.
 Hagemeyer C. 2008-2011. Administering institution: Baker IDI.
 Hughan S. 2009-2012. Administering institution: Monash University.
 Jowett J. 2010-2013. Administering institution: Baker IDI.
 Lambert EA. 2006-2010. Administering institution: Baker IDI.
 Ramsland PA. 2006-2010. Administering institution: Burnet Institute.
 Wluka A. 2009-2012. Administering institution: Monash University.

Training (Postdoctoral) Fellowships

Abbott A. 2008-2011. Administering institution: Baker IDI.
 Ahimastos A. 2007-2011. Administering institution: Monash University.
 Audsley J. 2009-2013. Administering institution: Monash University.
 Bradshaw C. 2007-2010. Administering institution: Monash University.
 Carrington M. 2008-2011. Administering institution: Baker IDI.
 Chang J. 2008-2013. Administering institution: Monash University.
 Cheng A. 2006-2010. Administering institution: Monash University.
 Cox H. 2007-2010. Administering institution: Burnet Institute.
 Davison S. 2007-2010. Administering institution: Monash University.
 Drew B. 2009-2012. Administering institution: Baker IDI.
 Driscoll A. 2009-2012. Administering institution: Monash University.
 Enticott P. 2009-2012. Administering institution: Monash University.
 Evans SM. 2008-2011. Administering institution: Monash University.
 Fletcher A. 2009-2012. Administering institution: Monash University.
 Fredericks B. 2007-2010. Administering institution: Monash University.
 Giles M. 2009-2012. Administering institution: The Alfred.
 Gray L. 2010-2013. Administering institution: Monash University.
 Gurvich C. 2009-2012. Administering institution: Monash University.
 Fu Y. 2010-2011. Administering institution: Baker IDI.
 Hanna F. 2007-2011. Administering institution: Baker IDI.
 Hoy K. 2009-2012. Administering institution: Monash University.
 Inglis S. 2008-2010. Administering institution: Baker IDI.
 Joyce C. 2006-2010. Administering institution: Monash University.
 Kammoun H. 2010-2011. Administering institution: Baker IDI.
 Keegel T. 2009-2012. Administering institution: Monash University.
 Kinner S. 2006-2010. Administering institution: Burnet Institute.
 Lim M. 2009-2012. Administering institution: Burnet Institute.
 Lynch B. 2010-2013. Administering institution: Baker IDI.
 McNamara B. 2010-2013. Administering institution: Baker IDI.
 McKenzie D. 2009-2012. Administering institution: Monash University.
 Medley TL. 2005-2010. Administering institution: Baker IDI.
 Mifsud N. 2007-2010. Administering institution: Monash University.
 Ngo T. 2008-2010. Administering institution: Monash University.
 O'Connor D. 2010-2013. Administering institution: Monash University.
 Peleg AY. 2010-2013. Administering institution: Monash University.
 Skilton M. 2007-2010. Administering institution: Baker IDI.
 Smith MZ. 2008-2013. Administering institution: Monash University.
 Stratov I. 2007-2010. Administering institution: Burnet Institute.
 Thompson K. 2007-2011. Administering institution: The Alfred.
 Tonna S. 2009-2010. Administering institution: Baker IDI.
 Wang Y. 2007-2010. Administering institution: Monash University.
 Watson A. 2008-2012. Administering institution: Baker IDI.
 White A. 2008-2010. Administering institution: Baker IDI.
 Wong C. 2008-2011. Administering institution: Baker IDI.
 Zatta A. 2010-2013. Administering institution: Monash University.

Other Australian Grants

ANZ Trustees – Mason and Williams Memorial Foundation Research Grants

Davis S, Bell R. Does transdermal testosterone therapy significantly improve cognitive performance in postmenopausal women? A randomised placebo controlled trial over 26 weeks. 2009-2010: \$70,000. Administering institution: Monash University.

Arthritis Australia – Fellowships

Urquhart DM. Social determinants of joint replacement in Australia: implications for potential health inequality. 2010. Administering institution: Monash University.

AusAID – Australian Leadership Award Fellowship

Holmes W. 2010. Administering institution: Burnet institute.

AusAID – Bilateral Program Grants

Morgan C. China-Australia health facility. 2007-2012: \$38,744,289. Administering institution: Burnet Institute.

Morgan C. Tibet health sector support project. 2004-2010: \$1,331,750. Administering institution: Burnet Institute.

Toole M. Tingim Laip project, Papua New Guinea. 2007-2010: \$10,000,000. Administering institution: Burnet Institute.

AusAID – Development Research Awards

Power R. Investigating the role of drug and alcohol use in the spread of HIV and other STIs in the Pacific. 2007-2010: \$151,277. Administering institution: Burnet Institute.

Toole M. Modelling sexual and social networks of urban men who have sex with men and women in Vietnam and the Lao PDR. 2008-2010: \$515,589. Administering institution: Burnet Institute.

AusAID – NGO Cooperation Program Innovations Fund

Whitney R. Health across African Borders: improving the health of women and children along the Mozambique-Zimbabwe border. 2010-2011: \$150,000. Administering institution: Burnet Institute.

AusAID – NGO Project Grants

Drenkhan G, Asproloupos D. Cyclone Nargis relief – local resource centre for community based responses, Myanmar (Burma). 2008-2010: \$1,613,652. Administering institution: Burnet Institute.

Holmes W. Women's and Children's Health Knowledge Hub. 2008-2011: \$5,059,161. Administering institution: Burnet Institute.

Power R. Asia Regional HIV/AIDS Project; Indonesian HIV/AIDS Prevention and Care Project; Indonesian-Australian Specialised Training Program; Xinjiang HIV/AIDS Prevention and Care Project; HAARP. 2007-2015: \$3,451,850. Administering institution: Burnet Institute.

Whitney R. Australian partnerships with African communities. 2005-2010: \$3,217,891. Administering institution: Burnet Institute.

Whitney R, Otto B, Toole M, Morgan D, Kwarteng T, Vaughan C, Holmes W. Community based HIV programs for youth and vulnerable populations. 2001-2010: \$2,424,597. Administering institution: Burnet Institute.

Australia and New Zealand Burns Association – Project Grant

Cameron P, Gabbe B, Cleland H, Edgar D. National burns registry upgrade. 2008-2010: \$132,050. Administering institution: Monash University.

Australian and New Zealand College of Anaesthetists – Research Grant

Myles P, Leslie K, Chan M. ENIGMA-II trial long-term follow-up study. 2010-2012: \$180,000. Administering institution: The Alfred.

Australian and New Zealand College of Anaesthetists – Douglas Joseph Professorship

Myles P. Perioperative epidural analgesia for major abdominal surgery and incidence of late cancer recurrence. 2010. Administering institution: The Alfred.

Australian Centre for HIV and Hepatitis Virology – Project Grant

Elliott J, Cameron P, Peter K, Lewin S, Hoy J. Investigation of biological mechanisms linking abacavir use and cardiovascular disease using mRNA profiling. 2010-2011: \$135,000. Administering institution: Monash University.

Australian Diabetes Society – Early Career Fellowship

Coughlan M. Targeting mitochondrial permeability transition in diabetic nephropathy. 2010. Administering institution: Baker IDI.

Australian Government National Water Commission – Research Fellowship

O'Toole J. Water recycling: identifying data gaps and refining estimates of pathogen health risks. 2010-2011. Administering institution: Monash University.

Australian Research Council – Discovery Grants

Forde GM, Plebanski M. Biodegradable immuno-therapeutic nanoparticles. 2009-2011: \$420,000. Administering institution: Monash University.

Jackson SP, Nestbitt WS, Fouras A. Development of model systems to investigate blood hydrodynamic parameters affecting blood cell function: an interdisciplinary approach. 2009-2011: \$300,000. Administering institution: Monash University.

Komesaroff PA, Castle D, Blood WR, Thomas SL, Hyde J. Being 'fat' in today's world: a socio-cultural investigation of overweight and obesity. 2008-2010: \$411,189. Administering institution: Monash University.

Meeusen EN, O'Hehir R. Molecular determinants of an allergic response. 2009-2011: \$370,000. Administering institution: Monash University.

Pattison PE, Robins GL, McBryde E, Hellard M. The structure and dynamics of social contact for human disease transmission models. 2009-2012: \$550,000. Administering institution: University of Melbourne.

Australian Research Council – Future Fellowships

Dietze P. 2010-2014. Administering institution: Burnet Institute.
Dunstan D. 2010-2014. Administering institution: Baker IDI.
Gavin AL. 2009-2013. Administering institution: Burnet Institute.
Mak J. 2010-2014. Administering institution: Burnet Institute.
McMullen J. 2009-2013. Administering institution: Baker IDI.
Peter K. 2009-2013. Administering institution: Baker IDI.

Australian Research Council – Linkage Grants

Liew D, Dooley MJ, Wilson J. COst-effectiveness analyses of improved adherence to Management PLans among AustralIANS (COMPLIANS). 2008-2010: \$306,977. Administering institution: Monash University.

Lin V, Oldenburg BF, Hall WD, McDermott RA, Eagar K, Fleming M, Legge DG, O'Neill DL, Filby DR, Wilson A, Thompson I. Developing new methods for building health policy capacity in Australia. 2007-2010: \$209,816. Administering institution: La Trobe University.

Oldenburg BF, Lin V, Joyce C, Eagar K, Dugdale P, Segal L, Mutch AJ, Hartz Karp JF, Gericke CA, Tennant MJ, O'Donoghue R, Panter D. Citizen engagement: listening to citizen's view about Australia's health system and prevention. 2009-2011: \$250,000. Administering institution: Monash University.

Peeters A, de Courten M, Bilsborough SA. Global corporate challenge evaluation - evaluation of a low-cost, low-impact physical-activity workplace intervention. 2009-2011: \$113,000. Administering institution: Monash University

Australia Stem Cell Centre – Program Grant

Elliott D, Kaye D, Pouton C, Elefanta A. Stem cell derived cardiomyocytes: tools for investigating cardiac disease. 2010-2011: \$820,000. Administering institution: Monash University.

beyondblue Victorian Centre of Excellence in Depression and Related Disorders – Research Grant

O'Donnell M, Creamer M, Bryant R, Ellen S, Holmes A, Kossman T, Judson R. Telephone-administered early psychological intervention for depression and anxiety following serious injury. 2009-2011: \$300,000. Administering institution: Australian Centre for Posttraumatic Mental Health.

BUPA Health Foundation (formerly MBF Foundation) – Project Grants

Davis S, Bell R. Health and wellbeing after breast cancer study. 2008-2010: \$510,000. Monash University.

Davis SR, Bell RJ. Metformin for the management of insulin resistance in overweight women at midlife. 2010-2011: \$158,611. Administering institution: Monash University

Cancer Australia – Priority-driven Collaborative Cancer Research Scheme Grant

Millar J, Davis I, Bolton D, Giles G, Costello T, McNeil J, Evans S. Pilot of a population-based prostate cancer clinical registry. 2010-2013: \$592,875. Administering institution: Monash University.

Cancer Council Victoria – Grants-in-Aid

Liu JP. Investigating the control mechanisms of telomere maintenance in cancer: a new interaction between telomerase and GAPDH. 2009-2011: \$300,000. Administering institution: Monash University.

Pietersz G. Vaccine for breast cancer. 2008-2010: \$277,038. Administering institution: Burnet Institute.

Wright MD. The role of tetraspanin in cellular immunity. 2009-2011: \$294,800. Administering institution: Monash University.

Cardiac Society of Australia and New Zealand – World Congress of Cardiology/CSANZ Research Investigatorship

Kistler PM. Comparison of catheter ablation with medical therapy for atrial fibrillation in heart failure. 2007-2010. Administering institution: Baker IDI.

CASS Foundation – Science and Medicine Grants

Febbraio M. Modified IC7 for the prevention and treatment of obesity. 2010: \$48,000. Administering institution: Baker IDI.

O'Hehir R, Rolland J, Mackay F, Hardy C. Follistatin therapy for cystic fibrosis and other lung inflammatory disorders. 2010: \$52,500. Administering institution: Monash University.

O'Keefe M. Dendritic cell populations of human bone marrow. 2010: \$25,000. Administering institution: Burnet Institute.

Williams DR. Establishing the role of serotonergic neurons in dyskinesias in Parkinson's disease. 2010: \$40,000. Administering institution: Monash University.

CSIRO – Flagship Cluster

McNeil J, Burgess A, Masters C, Nelson M. ASPREE Healthy Ageing Biobank. 2010-2012: \$2,442,000. Administering institution: Monash University

Department of Health and Ageing (Federal Government)

Brand C. Defining and benchmarking clinically appropriate exceptions to the Emergency Department Four Hour National Access Target. 2010: \$56,471. Administering institution: Monash University.

Dietze P. Illicit Drug Reporting System (IDRS). 2010: \$64,844. Administering institution: University of New South Wales.

Gruen R. Australian Satellite of Cochrane Effective Practice and Organisation of Care (EPOC) Group. 2009-2012: \$180,000. Administering institution: Monash University.

Hellard M. Ecstasy and Related Drug Reporting System (EDRS). 2010: \$63,678. Administering institution: University of New South Wales.

Hellard M, Donovan B, Guy R, Kaldor J, Sullivan E, Dimech W. Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS). 2007-2010: \$1,283,843. Administering institution: Burnet Institute.

Kulkarni J, Lee S, de Castella A, Fitzgerald P. Collaborative care models for adults with severe and persistent mental illness. 2010: \$82,193. Administering institution: The Alfred.

Sim M, Blackman J, Kelsall H. Sequelae of psychiatric conditions and multisymptom illness. 2009-2011: \$1,223,463. Administering institution: Monash University.

Department of Human Services (Victorian Government)

Dooley MJ, Nation RL. An evaluation of medication-related decision support provided in the Multum prescribing software system. 2010: \$54,500. Administering institution: Monash University.

Hellard M, Guy R. Renewal of HIV surveillance in Victoria. 2006-2010: \$964,918. Administering institution: Burnet Institute.

Myles P. Enhanced Recovery After Surgery (ERAS). 2010: \$158,000. Administering institution: The Alfred.

Stoové M, Hellard M, Pedrana A, Gold J, Nguyen P, Ata N. FaceSpace: using social networking to promote safer sex to higher risk groups. 2009-2010: \$161,700. Administering institution: Burnet Institute.

Department of Innovation, Industry, Science and Research (Victorian Government) – International Science Linkages Competitive Grant

Hagemeyer C, Peter K. Novel antibody-targeted nanoparticles for magnetic resonance imaging of atherosclerosis. 2009-2011: \$392,673. Administering institution: Baker IDI.

Diabetes Australia Research Trust – Type 1 Millennium Award

El-Osta A, Haviv I, Tothill R, Balcerzyk A, Okabe J, Brasacchio D, Kowalczyk A, Cooper M, Zimmet P, Shaw J, Brownlee M. Mapping of human hyperglycemia induced memory in Type 1 diabetes. 2009-2010: \$150,000. Administering institution: Baker IDI.

Diabetes Australia Research Trust – Type 2 Millennium Award

Febbraio M, James D, Haviv I, Gregorevic P, LeBrasseur N, Kemp B. Identification of novel myokines as potential therapeutic targets for Type 2 diabetes. 2009-2010: \$150,000. Administering institution: Baker IDI.

Dairy Innovation Australia – Research Services Grant

Meikle P, Shaw J, Jowett J, Nestel P. Obesity and obesity-related diseases. 2008-2011: \$1,200,000. Administering institution: Baker IDI.

Ilhan Food Allergy Foundation – Research Grant

O'Hehir R, Rolland J. Induction of regulatory T cell responses to inhibit 'anaphylactic'-type immune responses to nut allergens. 2007-2010: \$400,000. Administering institution: The Alfred.

Juvenile Diabetes Research Foundation (Australia) – Research Grant

Slattery R. The role of the human insulin promoter in regulating beta cell autoimmunity. 2007-2010: \$495,000. Administering institution: Monash University.

Kidney Health Australia – Bootle Grant

Thomas M. Novel diabetes research – to explore a link between insulin and the complications it causes. 2006-2010: \$1,000,000. Administering institution: Baker IDI.

L.E.W. Carty Charitable Fund – Research Grant

David S, Bell R. Health and wellbeing after breast cancer study. 2008-2010: \$100,000. Administering institution: Monash University.

National Heart Foundation of Australia – Career Development Fellowship

Hamilton J. 2008-2012. Administering institution: Monash University.

National Heart Foundation of Australia – Grants-in-Aid

Du XJ, Zhang Y. Chronic b-AR stimulation activates NADPH oxidase/p-38 MAPK signal pathway in heart failure. 2010-2011: \$129,000. Administering institution: Baker IDI.

El-Osta A, Thomas M, Tikellis C. Understanding glucose induced gene regulatory events associated with hyperglycemic memory in endothelial cells. 2010-2011: \$129,000. Administering institution: Baker IDI.

Hagemeyer C. Novel single-chain antibody targeted virus particles for genetic transfer of fusion proteins to inhibit atherosclerosis. 2010-2011: \$129,000. Administering institution: Baker IDI.

Jandeleit-Dahm K, Allen T. The AT2 receptor in diabetes related vascular disease: pharmacological interventions and genetic knockout studies. 2009-2010: \$115,470. Administering institution: Baker IDI.

Jandeleit-Dahm K, Schmidt H, de Haan J, Winkler K. Nox isoforms in diabetic micro-and macrovascular complications. 2010-2011: \$129,000. Administering institution: Baker IDI.
Little P, Osman N. PDGF receptor tyrosine kinase activity in the regulation of proteoglycan synthesis in vascular smooth muscle. 2010-2011: \$126,250. Administering institution: Baker IDI.

Jowett J, Abraham L, Sviridov. Investigation of the mechanism of action of *Vanin-1*: a new gene related to HDL cholesterol and inflammation. 2009-2010: \$118,585. Administering institution: Baker IDI.

Mackay F. Rare CXCR7 mutations and cardiac development. 2009-2010: \$164,218. Administering institution: Monash University.

McMullen, Du X-J. Sex dimorphism in cardiac pathophysiology: interaction of PI3K with estrogen receptors. 2009-2010: \$129,000. Administering institution: Baker IDI.

Owen A, Reid C, McLennan P, Krum H. Is the Omega-3 index a useful marker for risk of heart disease in older Australians? 2009-2010: \$130,800. Administering institute: Monash University.

Woodcock E, Marasco S, McMullen J, Kistler P. Atrial fibrillation, substrates, triggers and targets. 2009-2010: \$123,300. Administering institution: Baker IDI.

National Heart Foundation of Australia – Overseas Research Fellowship

Calkin A. The role of the nuclear receptor NR4A receptors in inflammation, lipid metabolism and atherosclerosis. 2009-2012. Administering institution: Baker IDI.

National Heart Foundation of Australia – Postdoctoral Fellowships

Brown A. Outlining the burden and correlates of heart failure and vascular risk in Aboriginal people in central Australia: the Heart of the Heart Study. 2009-2011. Administering institution: Baker IDI.

Irvine J. Novel NO siblings inhibit myocardial remodelling in diabetes. 2010-2011. Administering institution: Baker IDI.

Ta H. Novel contrast nanoparticles for early diagnosis of vascular disease using magnetic resonance imaging, computed tomography and synchrotron-based imaging. 2010-2011. Administering institution: Baker IDI.

Venardos K. Mitochondrial L-arginine transport and its role in the pathogenesis of heart failure. 2010-2011. Administering institution: Baker IDI.

Pfizer – Cardiovascular Lipid Research Grants

lyngkaran P, Krum H, Cameron P. Utility of NGAL and renal biomarker panel in predicting renal impairment, further decompensation and rehospitalization in acutely decompensated and chronic heart failure patients: biomarker panel substudy. 2010: \$48,864. Administering institution: Monash University.

Pfizer – Senior Research Fellowship

Gregorevic P. Using gene transfer technology to study and treat muscle-related disease. 2008-2012. Administering institution: Baker IDI.

Royal Australasian College of Physicians – Collaborative Research Initiative Grant

Ierino F, Isbel N, Krum H. A randomised controlled trial of the beta-blocker carvedilol versus placebo to reduce cardiovascular morbidity and mortality in patients receiving dialysis. 2008-2010: \$704,400. Administering institution: University of Melbourne.

Sylvia and Charles Viertel Charitable Foundation – Clinical Research Fellowship

Urquhart DM. Optimising therapeutic and prevention strategies for low back pain. 2010. Administering institution: Monash University.

Transport Accident Commission – Grants

Cameron P, Gabbe B, McNeil J. The operation and utilisation of the Victorian State Trauma Registry. 2009-2011: \$2,315,384. Administering institution: Monash University.

Cooper DJ, Rosenfeld J. Continuation of DECRA project. 2007-2011: \$566,373. Administering institution: The Alfred.

Edwards E, Graves S, Williamson O, Richardson M, Cicuttini F, Cameron P. Victorian Orthopaedic Trauma Outcomes Registry (VOTOR) Phase II. 2006-2010: \$846,688. Administering institution: Monash University.

Millar I, Cameron P, Williamson O. Does hyperbaric oxygen therapy reduce complications and improve outcomes after open tibial fractures with severe soft tissue injury? An international multi-centre randomised controlled trial. 2006-2010: \$273,000. Administering institution: Monash University.

VicHealth – Fellowships

Dunstan D. 2006-2010. Administering institution: Baker IDI.
Loff B. 2006-2010. Administering institution: Monash University.

Victorian Cancer Agency – Translational Cancer Research Grant

McNeil J, Reid C, Burton R, Woods R. Building translational clinical research capacity in regional Victoria through ASPREE and the Healthy Ageing Biobank. 2010-2012: \$1,921,000. Administering institution: Monash University.

Victorian Cancer Agency – Research Grant

Spencer A. Epigenetics and cancer therapy. 2010-2012: \$512,280. Administering institution: The Alfred.

Victorian Neurotrauma Initiative – Neurotrauma Fellowships

Bye N. 2009-2011. Administering institution: The Alfred.
Maller J. 2008-2011. Administering institution: Monash University.
Miller S. 2008-2011. Administering institution: Monash University.
Morganti-Kossmann C. 2008-2011. Administering institution: The Alfred.
Nichol A. 2009-2011. Administering institution: Monash University.
Yan E. 2009-2011. Administering institution: The Alfred.

Victorian Neurotrauma Initiative – Program Grants

Cooper DJ, Cameron P, Bernard S, Rosenfeld J, Nichol A. Early interventions to improve outcomes after traumatic brain injury. 2009-2012: \$2,100,000. Administering institution: Monash University.

Gruen R, Green S. Improving evidence-based care and the outcomes of patients with traumatic brain injury through a program to facilitate knowledge transfer and exchange. 2009-2010: \$4,399,539. Administering institution: Monash University.

Victorian Neurotrauma Initiative – Project Grants

Cooper DJ, Bellomo R, Bernard S. Multi-centre randomised controlled trials of early acute interventions (hypothermia, and erythropoietin) to improve outcomes after traumatic brain injury. 2010-2014: \$2,100,000. Administering institution: Monash University
Cooper DJ, Rosenfeld J, Murry L. Multi-centre prospective randomised trial of early decompressive craniectomy in patients with severe traumatic brain injury (DECRA). 2008-2011: \$90,000. Administering institution: The Alfred.

Couchman G, Ponsford J. Headstart: Multi-family groups for traumatic injury. A clinical research program for the study of the impact of multi-family group intervention on the social and psychological functioning of people with traumatic brain injury and their care givers. 2007-2010: \$345,618. Administering institution: Monash University.

Finfer S, Myburgh J, Cooper DJ, Higgins A. Normoglycaemia in intensive care traumatic brain injury (NICE TBI) study. 2008-2011: \$98,797. Administering institution: The Alfred.

Fitzgerald PB. Transcranial Magnetic Stimulation (TMS) treatment in depression after traumatic brain injury (TBI). 2008-2010: \$502,950. Administering institution: Monash University.

Gruen R. Global evidence mapping initiative in traumatic brain injury and spinal cord injury. 2008-2010: \$943,825. Administering institution: Monash University.

Gruen R, Bragge P, Bayley M. Neurotrauma knowledge translation - an international collaboration. 2010: \$25,000. Administering institution: Monash University.

McLean C, Morganti-Kossmann C, Rosenfeld J. Establishment of a neurotrauma tissue/fluid bank within the National Neural Tissue Resource Centre (NNTRC). 2007-2010: \$811,148. Administering institution: The Alfred.

Medcalf R, Morganti-Kossmann C, Schmidt H. To determine the role of tissue type plasminogen activator models of traumatic brain injury. 2007-2010: \$578,064. Administering institution: Monash University.

Olver J, Ponsford J. Longitudinal head injury outcomes study. 2007-2010: \$940,574. Administering institution: Monash University.

Water Quality Research Australia and Smart Water Fund (Victoria Water Trust) – Research Grant

Sinclair M, Leder K, O'Toole J, Hamilton A, Halliwell D. Greywater use in the backyard: what are the health risks? 2010-2011: \$181,396. Administering institution: Monash University.

International Grants

Bill and Melinda Gates Foundation – Grand Challenges in Global Health

Gilson P. A novel virulence-associated malaria drug target. 2009-2010: US\$107,475. Administering institution: Burnet Institute.

Ford Foundation – Asset Building and Community Development Grant

Morgan A. Promoting men's involvement in ante natal care services, Indonesia. 2008-2010: US\$104,363. Administering institution: Burnet Institute.

Juvenile Diabetes Research Foundation International – Career Development Award

Tikellis C. ACE2 in the vascular complications of Type 1 diabetes. 2010-2014. Administering institution: Baker IDI.

Juvenile Diabetes Research Foundation International – Multi-project Grants

Cooper M. NOX isoforms in diabetic nephropathy. 2010-2013: US\$135,465. Administering institution: Baker IDI.

Jandeleit-Dahm K. NOX isoforms in diabetes-associated atherosclerosis. 2010-2013: US\$271,200. Administering institution: Baker IDI.

Juvenile Diabetes Research Foundation International – Project Grants

Cooper M. Set 7: a novel target for diabetic vascular complications. 2008-2013: US\$1,250,000. Administering institution: Baker IDI.

Cooper M. Targeting CDA1 to treat diabetic renal fibrosis. 2009-2011: US\$500,000. Administering institution: Baker IDI.

El-Osta A. Role of epigenetic persistence in diabetic vascular complications. 2008-2010: US\$453,750. Administering institution: Baker IDI.

El-Osta A. Suppression and reversal of diabetic complications mediated by hyperglycemia using epigenetic inhibitors. 2009-2010: US\$550,000. Administering institution: Baker IDI.

Forbes J. RAGE as a link between environmental and genetic susceptibility to Type 1 diabetes. 2010: US\$110,000. Administering institution: Baker IDI.

Forbes J. Synergistic methods for mitochondrial rescue in diabetic nephropathy. 2010-2011: US\$500,000. Administering institution: Baker IDI.

Leukaemia and Lymphoma Society (USA) – Specialized Center of Research

Adams JM, Cory S, Colman P, Strasser A, Vaux DL, Bouillet P, Gerondakis S, Huang DSC. Apoptosis in hematopoiesis, leukemogenesis and therapy. 2007-2010: US\$800,000. Administering institution: Walter and Eliza Hall Institute.

Levi Strauss Foundation – Strategic Grant

Fischer A. Capacity building for local responses to HIV/AIDS amongst injecting drug users in Indonesia. 2005-2010: US\$169,351. Administering institution: Burnet Institute.

Muscular Dystrophy Association – Research Grant

Gregorevic P. Gene transfer based follistatin expression for treatment of muscular dystrophy. 2008-2010: US\$330,000. Administering institution: Baker IDI.

National Alliance for Research on Schizophrenia and Depression, USA – Young Investigator Award

Enticott P. 2008-2010. Administering institution: Monash University.

National Institutes of Health (USA)

Bukrinsky M, Sviridov D. Mechanisms of virus-induced impairment in reverse cholesterol transport. 2009-2014: US\$340,970. Administering institution: George Washington University.

Cooper M, Allen T, Burrell L, Forbes J, Groop P-H, Jandeleit-Dahm K, Jerums G, Parving H-H. AGEs and cardiovascular disease in Type 1 diabetes. 2006-2010: US\$1,338,000. Administering institution: Baker IDI.

Grimm R, McNeil J. Aspirin in Reducing Events in the Elderly (ASPREE). 2010-2015: US\$23,372,347. Administering institution: Monash University.

Mak J. Elucidating the interplay of protease substrate recognition and drug resistance. 2010-2011: \$191,268. Administering institution: Burnet Institute.

McCarthy T, Wesselingh S. VivaGel microbicide development consortium. 2005-2010: \$26,000,000. Administering institution: Starpharma.

Meikle P, Blangero J, Zimmet P, Shaw Jo, Haviv I, Kowalczyk A, Jowett J. Metabolomic studies into the pathogenesis and risk assessment of Type 2 diabetes. 2010-2013: US\$929,809. Administering institution: Baker IDI.

Tachedjian G. Development of dendrimer and combination microbicides. 2008-2011: US\$218,393. Administering institution: Burnet Institute.

Wright E. International Network for Strategic Initiatives in Global HIV Trials (INSIGHT). 2010: US\$23,938. Administering institution: Monash University.

Wright E. START Neurology Substudy. 2010: US\$10,600. Administering institution: Monash University.

NIH Fogarty International Centre – Millennium Promise Award

Oldenburg B, Fisher E, Kadir K, Thankappan K. Building the Asian non-communicable disease research network for regional research capacity. 2010-2015: US\$1,178,773. Administering institution: Monash University.

Society for Progressive Supranuclear Palsy – Research Grant

Williams DR. Mapping progressive neurodegeneration in PSP using transcranial magnetic stimulation and CSF-TAU. 2008-2010: US\$60,000. Administering institution: Monash University.

Stanley Medical Research Institute (USA)

Kulkarni J, Rossell SL, Lee S, de Castella A, Fitzgerald P. Double blind, placebo controlled, randomized investigation of ondansetron in chronic residual schizophrenia. 2010-2013: US\$899,029. Administering institution: Monash University.

United Nations Development Program – Fund for HIV/AIDS in Myanmar Grant

Fischer A. Reducing burden of CD morbidity/mortality in Myanmar. 2007-2010: \$2,993,460. Administering institution: Burnet Institute.

NHMRC Grants Commencing in 2011 Program Grant

Owen N, Bauman A, Wendy B. Sitting less and moving more: Population health research to understand and influence sedentary behaviour. 2011-2014: \$3,773,000. Administering institution: Baker IDI.

Stewart S, Thompson D, Abhayaratna W. Integration of risk evaluation in cardiovascular disease management programs. 2011-2013: \$2,898,607. Administering institution: Baker IDI.

Project Grants

Abramson M, Dharmage S, Benke G, Thompson B. Third Euro-Australian Respiratory Health Survey. \$343,028. Administering institution: Monash University.

Alderuccio F. Immune tolerance in experimental autoimmune encephalomyelitis following transplant of bone marrow cells genetically encoding autoantigen. \$327,524. Administering institution: Monash University.

Barker A, Brand C, Haines T, Hill K, Brauer S, Jolley D, Botti M. Falls prevention in the acute hospital setting: a multi-centre cluster randomised controlled trial of efficacy, cost effectiveness and sustainability of the 6-PACK program. \$1,179,850. Administering institution: Monash University.

Barry A, Reeder J, Tavul L. Var gene diversity and naturally acquired immunity to malaria. \$329,530. Administering institution: Burnet Institute.

Bernard S, Cameron P, Jacobs I, Smith K, Finn J. The RINSE Trial: the Rapid Infusion of Cold Normal Saline by paramedics during CPR. \$677,888. Administering institution: Monash University.

Brown A, Carrington M, Eades S, Thompson D, Zeitz C. The Central Australian Heart Protection Study: a randomised trial of nurse-led, family based secondary prevention of acute coronary syndromes. \$1,830,401. Administering institution: Baker IDI.

Bruce C, Febbraio M. The CDP ethanolamine pathway: a new player in obesity induced insulin resistance. \$566,706. Administering institution: Baker IDI.

Cooper M, Chai Z, Cao Z. Novel strategy to reduce renal fibrosis. \$558,390. Administering institution: Baker IDI.

Davis S, Bell R, Kulkanri J. Transdermal testosterone therapy: a potential treatment for selective serotonin reuptake inhibitor-associated sexual dysfunction in women. \$235,296. Administering institution: Monash University.

Du XJ. Beta-adrenergic activation: a double-edged sword on cardiac angiogenesis. \$352,524. Administering institution: Baker IDI.

Du XJ, Hewitson T, Samuel C. Relaxin therapy reverses large artery remodelling and stiffening in aged and hypertensive models. \$429,615. Administering institution: Baker IDI.

Dunstan D, Healy G, Owen N, Eakin E, LaMontagne A, Moodie M. Reducing prolonged workplace sitting time in office workers: a cluster-randomised controlled trial. \$506,996. Administering institution: Baker IDI.

Eades S, McNamara B, Stanley F, Pearson G, Langridge A. Intergenerational determinants of fetal growth in Aboriginal Western Australians. \$381,605. Administering institution: Baker IDI.

Esler M, Vaddadi G, Lambert E. Reducing the burden of orthostatic intolerance – delineating mechanisms and improving therapy. \$397,524. Administering institution: Baker IDI.

Febbraio M, Bruce C, McGee S. Activation of HSP72 in skeletal muscle as a therapeutic target for obesity. \$633,390. Administering institution: Baker IDI.

Febbraio M. An essential role for skeletal muscle FoxO1 in protecting against obesity-induced insulin resistance. \$573,390. Administering institution: Baker IDI.

Fitzgerald P, Barton D, Hoy K. A randomised controlled trial of magnetic seizure therapy in major depressive disorder. \$359,208. Administering institution: Monash University.

Forbes A, Gurrin L, Hodge A. Mediterranean diet and mortality: analysis of longitudinal dietary patterns using newly developed statistical methods. \$330,058. Administering institution: Monash University.

Gavin A. The role of NOD proteins in T cell development and function. \$337,524. Administering institution: Burnet Institute.

Gorry P, Churchill M, Lewin S. Elucidating the flexibility of co-receptor engagement by HIV-1 important for macrophage tropism and escape from entry inhibitors. \$613,194. Administering institution: Burnet Institute.

Gregorevic P, Harvey K. Investigating Hippo signalling as a novel cause of muscle disease, and as a target for new interventions to combat frailty. \$444,615. Administering institution: Baker IDI.

Head G, Allen A, Davern P. Importance of the brain renin-angiotensin system for regulating blood pressure and cardiovascular autonomic function. \$588,390. Administering institution: Baker IDI.

Hibbs M, Tarlinton D. Defining the cellular and molecular mechanisms underlying autoimmunity using a model of SLE. \$603,390. Administering institution: Monash University.

Hibbs M, Anderson G. Defining subpopulations of pathogenic macrophages underlying lung diseases. \$618,390. Administering institution: Monash University.

Hogarth P, Wines B, Powell M, Baker R. Structure and function of receptors for IgG (FcγR). \$655,074. Administering institution: Burnet Institute.

Jackson S, Hamilton J. Investigating the role of type II PI 3-kinases in platelet function. \$429,615. Administering institution: Monash University.

Jackson S, Nesbitt W. Investigating biomechanical platelet activation mechanisms. \$496,706. Administering institution: Monash University.

Jandeleit-Dahm K, Schmidt H, de Haan J, Wingler K. NOX isoforms in diabetes associated vascular injury: implications for therapeutic strategies. \$426,273. Administering institution: Baker IDI.

- Kinner S, Preen D, Lennox N, Butler T, Power R, Ober C, Ware R. Improving the health of Indigenous and non-Indigenous ex-prisoners: a multi-jurisdictional, mixed-methods study. \$1,386,769. Administering institution: Burnet Institute.
- Kulkarni J, Davis S, Gurvich C. Selective estrogen receptor modulators (SERMs) – a potential new treatment for women of child-bearing age with psychotic symptoms of schizophrenia. \$205,016. Administering institution: Monash University.
- Lee-Young R. Understanding the metabolic consequences of impaired AMPK α 2 and nNOS μ in skeletal muscle: implications for the metabolic syndrome. \$556,706. Administering institution: Baker IDI.
- Lewin S, Cameron P, Jaworowski A, Cunningham A. The role of chemokines in establishing HIV latency. \$359,208. Administering institution: Monash University.
- Lewin S, Churchill M, Wesselingh S. Histone deacetylase inhibitors and HIV latency. \$593,416. Administering institution: Monash University.
- Liu J-P. Studies of novel manganese transporter in lysosomes and its implications in Niemann-Pick type-C disease. \$506,706. Administering institution: Monash University.
- Mackay F, Hertzog P. The role of BAFF, its receptor TACI and toll-like receptors in autoimmunity and tolerance. \$470,022. Administering institution: Monash University.
- Magliano D, Shaw J, Huxley R, Balkau B, Davis W. The Australian and New Zealand Diabetes and Cancer Collaboration. \$398,591. Administering institution: Baker IDI.
- McMullen J. PI3K-regulated heat shock proteins and microRNAs as new treatment strategies for atrial fibrillation. \$534,615. Administering institution: Baker IDI.
- McMullen J. Manipulating cardiac-selective PI3K targets to reverse heart failure progression. \$514,615. Administering institution: Baker IDI.
- Myles P, Silbert B, Cooper DJ, McNeil J. Completion of the ATACAS trial. \$3,328,614. Administering institution: Monash University.
- O’Hehir R, Rolland J. Human CD4+ T cell epitope-based therapeutic for peanut allergy. \$389,208. Administering institution: Monash University.
- O’Keeffe M, Radford K, Banerjee A. Production of interferon lambda by dendritic cell subsets and role in adjuvant effects of poly I:C. \$383,028. Administering institution: Burnet Institute.
- Oldenburg B, Thankappan K, Tapp R, Zimmet P, Jolley D, Hollingsworth B, Fisher E. Kerala Diabetes Prevention Program (K-DPP): a cluster RCT of its effectiveness and cost-effectiveness. \$1,046,991. Administering institution: Monash University.
- Peter K, Bobik A. Preventing myocardial infarction: A mouse model of atherosclerotic plaque instability/rupture as unique tool for establishing novel pharmacological strategies and targeted molecular imaging. \$566,706. Administering institution: Baker IDI.
- Plebanski M, O’Hehir R, Hardy C, Friend J, Rolland J. Mechanisms of nanoparticle-mediated inhibition of asthma. \$615,903. Administering institution: Monash University.
- Poumbourios P, Drummer H, Yuriev E. Elucidating the activation mechanism of the HIV-1 envelope glycoproteins, gp120-gp41. \$615,074. Administering institution: Burnet Institute.
- Reeder J, Barry A, Mueller I, Siba P. Population genomics of *Plasmodium vivax* in Papua New Guinea. \$576,706. Administering institution: Burnet Institute.
- Schlaich M, May C. Catheter based renal denervation to improve outcomes in congestive heart failure. \$598,533. Administering institution: Baker IDI.
- Shaw J, Zimmet P, Anstey K, Kavanagh A, Atkins R, Chadban S, Dunstan D, Balkau B. AusDiab 3: emerging risk factors for and long-term incidence of cardio-metabolic diseases. \$2,537,113. Administering institution: Baker IDI.
- Sviridov D, Remaley A, Shaw J, Turner S. Novel apolipoprotein A-I mimetic peptides: a research tool and a therapeutic agent to study and treat atherosclerosis. \$389,208. Administering institution: Baker IDI.
- Tachedjian G, Gorry P, Ramsland P, Aguilar M-I. Elucidating the mechanism of action of denrimer nanoparticles against HIV. \$540,048. Administering institution: Burnet Institute.
- Thompson B, Thien F, Douglass J, King G, O’Hehir R. Physiological aetiology of refractory asthma. \$344,208. Administering institution: The Alfred.
- Wilkinson-Berka J, Peti-Peterdi J, Miller A. Evaluating the link between the GPR91 receptor and renin in the pathogenesis of diabetic retinopathy. \$470,022. Administering institution: Monash University.
- Wilkinson-Berka J, Campbell D, Slattery R, Miler A. Prorenin and the prorenin receptor in diabetic retinopathy: involvement of the Wnt pathway and inflammation. \$560,022. Administering institution: Monash University.
- Woodcock E, Kistler P. Phospholipase C β 1b, a target to limit atrial dilatation. \$526,299. Administering institution: Baker IDI.
- Woodcock E, Grubb D. SHANK3 as a target to reduce hypertrophy and heart failure. \$530,048. Administering institution: Baker IDI.

Development Grants

- Gorry P. Development of a biochemical HIV-1 tropism assay. \$159,604. Administering institution: Burnet Institute.
- Head G, Kaye D, Byrne M. Development of oral natriuretic peptides for congestive heart failure. \$496,410. Administering institution: Baker IDI.
- Peter K, Hagemeyer C, Krippner G, Adams T. Development of platelet-targeted nanoparticles for magnetic resonance imaging towards the detection of thrombi/emboli and vulnerable atherosclerotic plaques. \$586,996. Administering institution: Baker IDI.

Research Fellowships

Andrews R. SRF-A. 2011-2015. Administering institution: Monash University.

Dietze P. SRF-A. 2011-2015. Administering institution: Burnet Institute.

Forbes J. SRF-A. 2011-2015. Administering institution: Baker IDI.

Gerondakis S. PRF. 2011-2015. Administering institution: Burnet Institute.

Head G. PRF. 2011-2015. Administering institution: Baker IDI.

Owen N. SPRF. 2011-2015. Administering institution: Baker IDI.

Wilkinson-Berka J. SRF-B. 2011-2015. Administering institution: Monash University.

Career Development Awards

Cheng A. Level 1. 2011-2014. Administering institution: Monash University.

Eades S. Level 1. 2011-2014. Administering institution: Baker IDI.

Kinner S. Level 1. 2011-2014. Administering institution: Burnet Institute.

Leder K. Level 1. 2011-2014. Administering institution: Monash University.

O'Keeffe M. Level 2. 2011-2014. Administering institution: Burnet Institute.

Urquhart D. Level 1. 2011-2014. Administering institution: Monash University.

Training Fellowships

Bilardi J. Australian Public Health. 2011-2014. Administering institution: Monash University.

Davern P. Australian Biomedical. 2011-2014. Administering institution: Baker IDI.

Dowrick A. Overseas Clinical. 2011-2014. Administering institution: The Alfred.

Ng T. Australian Biomedical. 2011-2014. Administering institution: Baker IDI.

Wright E. Australian Clinical. 2011-2014. Administering institution: Burnet Institute.

AMREP HONOURS SCHOLARSHIPS 2011



Jodie Abramovitch
Allergy Laboratory,
Department of
Immunology,
Monash University.
Supervisors:
Professor Jennifer
Rolland and
Professor Robyn
O'Hehir.



Elyse Di Marco

Diabetes and Kidney Disease Laboratory, Baker IDI Heart and Diabetes Institute and
Diabetes Laboratory, Department of Immunology, Monash University. Supervisors:
Professor Karin Jandeleit-Dahm and Associate Professor Robyn Slattery.

POSTGRADUATE STUDENTS



PhD

Abdullah A. Decentralised health planning and resources allocation (case study in Indonesia). Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*

Abrahamson S. Risk factors and evolutionary theories of autism. Monash University. Anticipated completion: 2014. *Monash Alfred Psychiatry Research Centre.*

Ackland H. Assessment of the correlation of clinical and radiographic findings in acute cervical discoligamentous injury with long term outcomes in road trauma patients. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash / Intensive Care Unit, Alfred / National Trauma Research Institute, Alfred.*

Ademi Z. Efficacy and benefits of treatment in the Second National Australian Blood Pressure Study (ANBP2). Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*

Al-daher S. Investigation of the platelet prothrombotic status in diabetes. Monash University. Anticipated completion: 2012. *Australian Centre for Blood Diseases, Monash.*

Al-Hammad Y. Investigating the function of HCV variable regions in the infectivity of HCV tissue culture viruses. Monash University. *Burnet.*

Al-Tamimi M. Platelet receptor shedding – platelet specific collagen receptor glycoprotein VI. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash / Australian Centre for Blood Diseases, Monash.*

Alexander B. Transient processing in visual perception: the role of lateral intraparietal cortex. La Trobe University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*

Allen-Graham J. Inhibition of APP and APLP2 to investigate protein function possible therapies for AD. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Department of Neurology, Alfred.*

Alwis D. Prolonged synaptic dysfunction following diffuse traumatic brain injury. Monash University. Anticipated completion: 2012. *National Trauma Research Institute, Alfred.*

Anders K. Individual and household risk factors for dengue and acute viral respiratory infections in Vietnamese infants. Monash University. Anticipated completion: 2017. *Department of Epidemiology and Preventive Medicine, Monash.*

Andrew N. Epidemiology and outcomes of serious sport and leisure injuries. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute, Alfred.*

Anilovitch J. Cardiovascular responses to acute and chronic stress modulation by the renin-angiotensin-aldosterone system. Monash University. Anticipated completion: 2012. *Baker IDI.*

Ardipradja K. Activation-specific single-chain antibody constructs for positron emission tomography. University of Melbourne. Anticipated completion: 2013. *Baker IDI.*

Ariyaratne TV. Comparison of long-term outcomes and cost effectiveness of coronary artery bypass graft surgery (CABG) and percutaneous coronary interventions (PCI). Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash.*

Au A. Investigation into the effects of platelet-released factors (PRFs) on the brain. Monash University. Anticipated completion: 2013. *Australian Centre for Blood Diseases, Monash.*

Bailey N. Neural changes related to depression and traumatic brain injury. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*

Ball J. Optimising management of patients with atrial fibrillation. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash / Baker IDI.*

Barit D. Role of NADPH oxidase in diabetic nephropathy: interventional and gene knock out studies. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*

Barzel B. The role of neuromodulatory factors in the hypothalamus in the development of obesity related hypertension. Monash University. Anticipated completion: 2013. *Baker IDI.*

Batty R. An examination of the risk factors, phenomenology and aetiology of psychosis following traumatic brain injury with a focus on psychological treatment related factors. Monash University / RMIT University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*

Bayles R. Examination of the noradrenaline transporter in major depressive disorder: delineating mechanisms of cardiac risk. Deakin University. Anticipated completion: 2011. *Department of Cardiovascular Medicine, Alfred / Baker IDI.*

Beauchamp A. Socioeconomic status as a determinant of cardiovascular disease in the Melbourne Collaborative Cohort study. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*

Beddoes L. Evaluating the quality of 24 hour acute care delivery: describing functional outcomes of older people using a model of best practice. Deakin University. Anticipated completion: 2011. *Nursing, Alfred.*

Bellamy-McIntyre A. Receptor activated conformation of the gp120-gp41 glycoprotein complex of HIV-1. Monash University. *Burnet.*

Bellomo R. The effect of intensity of continuous renal replacement therapy in critically ill patients. Monash University. Anticipated completion: 2018. *Department of Epidemiology and Preventive Medicine, Monash.*

- Bennett C.** The impact of environmental exposures to particulate air pollution on respiratory health. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Bennie J.** Describing and understanding physical activity in desk-based work settings. Deakin University. Completed: 2010. *Baker IDI.*
- Berry DJ.** Cell modelling with applications to cell-wall interactions. Monash University. Completed: 2010. *Australian Centre for Blood Diseases, Monash.*
- Berry P.** The role of lifestyle factors on hip cartilage volume and rate of cartilage loss in a normal community-based population a longitudinal study. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred.*
- Bertovic D.** Cardiovascular hemodynamics in health and disease. Monash University. Anticipated completion: 2011. *Department of Cardiovascular Medicine, Alfred / Baker IDI / Department of Medicine, Monash.*
- Bilardi J.** Screening and control of chlamydia. University of Melbourne. Completed: 2010. *Melbourne Sexual Health Centre, Alfred.*
- Bingham G.** Identifying susceptible critically ill patients who desaturate following hyperbaric treatment: their characteristics and outcomes. La Trobe University. Anticipated completion: 2011. *Nursing, Alfred / Hyperbaric Service, Alfred.*
- Bohensky M.** Using routine hospital data to measure and improve the quality of patient care. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Bonato L.** Outcomes after tibial plafond fractures: does the treatment approach matter? Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*
- Bond M.** Why diet and exercise alone won't solve the obesity epidemic. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash.*
- Borg R.** Investigation into the interaction between tissue-type plasminogen activator and injured cells. Monash University. Anticipated completion: 2012. *Australian Centre for Blood Diseases, Monash.*
- Botlero R.** Investigating women's health issues: urinary incontinence and lower back pain. Monash University. Anticipated completion: 2011. *Women's Health Program, Monash / Department of Rheumatology, Alfred / Department of Medicine, Monash.*
- Brady Z.** Radiation doses from paediatric computed tomography. RMIT University. Anticipated completion: 2011. *Department of Radiology, Alfred.*
- Brennan S.** Developing a research framework to improve our ability to understand and measure the effect of continuous quality improvement (CQI) in primary care. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash / Australasian Cochrane Centre, Monash.*
- Brennan SL.** How does bone metabolism affect knee cartilage in healthy women? Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred.*
- Brown A.** Kurunpa: exploring the link between depression, stress and coronary heart disease in Indigenous men in Central Australia. University of Queensland. Completed: 2010. *Baker IDI.*
- Bruce E.** Comprehensive models of HIV/STI prevention among sex workers and their clients in Papua New Guinea. University of Melbourne. Completed: 2010. *Melbourne Sexual Health Centre, Alfred.*
- Buchanan B.** Neurobiology of body dysmorphic disorder. Monash University. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre.*
- Bull T.** Clara cell secretory protein as a biomarker of inadequate repair in lung transplantation. Monash University. Anticipated completion: 2013. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Medicine, Monash.*
- Bullen H.** The characterisation of a novel family of invasion associated membrane proteins in apicomplexan parasites with particular focus on those found in *Plasmodium falciparum* and *Toxoplasma gondii*. University of Melbourne. *Burnet.*
- Burch ML.** A novel link between G protein coupled and serine/threonine kinase receptors regulating proteoglycan synthesis in vascular smooth muscle: relationship to lipid binding and atherosclerosis. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*
- Burton P.** Physiological studies of the oesophago-gastric junction relating to satiety. Monash University. Completed: 2010. *Centre for Obesity Research and Education, Monash / Department of Surgery, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- Butler M.** Novel imaging modalities for detection of organ fibrosis. Monash University. Anticipated completion: 2013. *Department of Cardiovascular Medicine, Alfred / Department of Medicine, Monash / Baker IDI.*
- Campbell J.** Intergenerational transmission of alcohol expectancies. University of Queensland. Completed: 2010. *Burnet.*
- Chae J.** 3T MR *in vivo* spectroscopy of adnexal tumour. University of Sydney. Anticipated completion: 2013. *Department of Radiology, Alfred.*
- Chamberlain C.** Assessing the efficacy of screening for gestational diabetes amongst Aboriginal women. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash.*
- Chan C.** Mechanisms of NK cell mediated tumour immunosurveillance. Monash University. Anticipated completion: 2013. *Department of Immunology, Monash.*
- Chan J-X.** Characterisation of a novel neural specific ATPase in cholesterol transport. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash.*
- Chan W.** Iron and oxidative stress in coronary artery disease. Monash University. Anticipated completion: 2012. *Department of Cardiovascular Medicine, Alfred / Department of Medicine, Monash / Baker IDI.*
- Chang C.** Immunopathogenesis and diagnosis of tuberculosis and tuberculosis-associated immune restoration disease in people with HIV. Monash University. Anticipated completion: 2013. *Department of Medicine, Monash / Infectious Diseases Unit, Alfred / Burnet.*
- Chang L.** Gene activity patterns associated with the development of pathological cardiac hypertrophy are mediated by specific epigenetic changes. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*
- Charnaud S.** The mechanism of protein export in the blood stage of *Plasmodium falciparum*. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Burnet.*
- Chellapah J.** Surveillance and modification cardiovascular risk factors in children and young adults. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*

- Chen L.** Development and validation of appropriate methods for the prediction of risk of future cardiovascular events in the contemporary Australian population. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Chen LF.** Methicillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infection: epidemiology, patient outcomes, risk factors, infection control methodology and prevention in community-based hospitals. Monash University. Anticipated completion: 2015. *Department of Medicine, Monash.*
- Chen YCB.** Targeting stem cell to the sites of endothelial damage and atherosclerotic lesions. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*
- Cheshire P.** Establishing the role of serotonergic neurons in dyskinesias in Parkinson's disease. Monash University. Anticipated completion: 2014. *Department of Neurology, Alfred / Department of Medicine, Monash.*
- Chew C.** Antiretroviral toxic neuropathy in HIV patients: genetic and other risk factors. University of Western Australia. Anticipated completion: 2012. *Infectious Diseases Unit, Alfred / Burnet.*
- Chin G.** Transitions of care – Obstetric Clinical Handover. The study, observation and improvements in Obstetric Clinical Handover to improve the efficacy and patient safety in this practice. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute, Alfred.*
- Chowdhury E.** Epidemiological modelling of chronic disease - particularly cardiovascular disease and its economic implications. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash.*
- Christopher M.** Dyslipidaemia resulting from obesity or other high-risk states is a major contributor and predictor of the onset and progression of diabetes. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Baker IDI.*
- Chung J-Y.** Mechanisms of tolerance following ectopic autoantigen expression. Monash University. Anticipated completion: 2014. *Department of Immunology, Monash.*
- Clissold B.** Analysis of ambulance factors in identification of stroke and accessibility to hospitals with acute stroke therapies. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute, Alfred.*
- Cohen E.** Evaluating quality of care in an oncology setting: symptom management and practices. Deakin University. Anticipated completion: 2011. *Nursing, Alfred.*
- Corcoran S.** Autonomic mechanisms of recurrent syncope. Monash University. Anticipated completion: 2015. *Department of Cardiovascular Medicine, Alfred / Baker IDI.*
- Cowley D.** Molecular studies of the astrocyte reservoir of HIV-1 in the central nervous system. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Burnet.*
- Cox N.** Physical activity in adults with cystic fibrosis: participation and effects of intervention. La Trobe University. Anticipated completion: 2013. *Physiotherapy Department, Alfred.*
- Crammond B.** Factors relevant to the success of a rights-based health program. Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash.*
- Cui L.** HIV mediated impairment of reverse cholesterol transport. University of Melbourne. Anticipated completion: 2014. *Baker IDI.*
- Dahm J.** The contribution of head injury to psychological outcome following trauma – a comparison of TBI and orthopaedic outcomes. Monash University. Anticipated completion: 2013. *National Trauma Research Institute, Alfred.*
- D'Arcy C.** The role of FHL proteins in the pathology of muscular dystrophies: identification of novel therapeutic targets. Monash University. Anticipated completion: 2012. *Department of Anatomical Pathology, Alfred.*
- David C.** Development of a rotavirus vaccine. University of Melbourne. *Department of Immunology, Monash.*
- Davies-Tuck M.** The effect of obesity and weight loss on osteoarthritis of the knee. Monash University. Completed: 2010. *Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred.*
- Davis J.** Evaluation of clinical indicators for safety and quality in colorectal cancer surgery. Monash University. Anticipated completion: 2018. *Department of Epidemiology and Preventive Medicine, Monash.*
- Dean J.** Thiol disulfide exchange in HCV glycoproteins E1 and E2. Monash University. *Burnet.*
- Deasy C.** Cardiac arrest – addressing the gaps in our scientific knowledge. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Infectious Diseases Unit, Alfred / Burnet / National Trauma Research Institute, Alfred.*
- Deliyanti D.** An evaluation of aldosterone's pathogenic role in the ischemic and diabetic retina. Monash University. Anticipated completion: 2014. *Department of Immunology, Monash.*
- Demaria D.** Understanding the cellular and molecular basis of the poor adaptive immunity and T cell responsiveness in tetraspanin-deficient mice with a focus on the tetraspanin CD37. Monash University. Anticipated completion: 2014. *Department of Immunology, Monash.*
- Desmond C.** Interaction of hepatitis B virus and the adaptive immune system. Monash University. Anticipated completion: 2014. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash / Burnet.*
- Diehl P.** New diagnostic and therapeutic strategies in thrombosis, atherothrombosis and inflammation – selecting of new designed ankyrin repeat protein (DARPs) from a phage library. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Baker IDI.*
- Diug B.** How do social risk factors affect warfarin therapy? What are the social responsibilities and strategies in place to deal with these risk factors? Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*
- Dong X.** GBV-B infection of marmosets as a model for HCV infection. Monash University. Completed: 2010. *Burnet.*
- Doyle L.** The impact of weight loss on the metabolic syndrome. Monash University. Anticipated completion: 2013. *Centre for Obesity Research and Education / Department of Surgery, Monash.*
- D'Souza W.** Designing novel apolipoprotein A-1 mimetic peptides as therapeutic agents for the treatment of atherosclerosis. Monash University. Anticipated completion: 2011. *Baker IDI.*
- Dwyer J.** The role(s) of molecular signalling in the regulation of telomerase. Monash University. Completed: 2010. *Department of Immunology, Monash.*
- Egberts KJ.** The role of lifestyle factors in surgically induced weight loss. Monash University. Anticipated completion: 2011. *Centre for Obesity Research and Education, Monash / Department of Surgery, Alfred.*

- Elsik M.** Effect of biventricular pacing on fibrosis markers in heart failure. Monash University. Completed: 2010. *Clinical Pharmacology Unit, Alfred / Department of Cardiovascular Medicine, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- Evans V.** Dendritic cells and their role in HIV-1 pathogenesis. Monash University. Anticipated completion: 2011. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash / Burnet.*
- Feil J.** Substance dependence: the inability to inhibit compulsive patterns of drug use. Monash University. Anticipated completion: 2014. *Monash Alfred Psychiatry Research Centre.*
- Fethers K.** The epidemiology of bacterial vaginosis in Australian women. University of Melbourne. Anticipated completion: 2011. *Melbourne Sexual Health Centre, Alfred.*
- Filia S.** Monitoring and improving the outcomes and quality of life of people with psychosis – a biopsychosocial approach. Monash University. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre.*
- Fillipas S.** Physical activity in people living with HIV/AIDS. Monash University. Anticipated completion: 2011. *Physiotherapy Department, Alfred / Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred / Burnet.*
- Fitzgibbon B.** Synaesthesia for pain in phantom limb patients. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Flynn J.** Stimulation and maintenance of T cell responses in acute HCV infection. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash / Burnet.*
- Fooladi E.** The effect of transdermal testosterone on sexual function among SSRI(s) drugs users. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Department of Epidemiology and Preventive Medicine, Monash / Women's Health Program, Monash.*
- Freak-Poli R.** Global corporate challenge evaluation: the evaluation of a low-cost, low-impact physical-activity workplace intervention. Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash.*
- Garrett A.** EVestG: responses in depressed patients. Monash University. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre.*
- Garrett C.** Virtual visits: investigating the acceptability of webcam consultations for young adults' sexual health. University of Melbourne. Anticipated completion: 2012. *Melbourne Sexual Health Centre, Alfred.*
- Garvey L.** Learning styles and engagement of undergraduate medical students in problem based learning. Monash University. Anticipated completion: 2014. *Monash Alfred Psychiatry Research Centre.*
- Gibbie T.** Psychological predictors of the effectiveness of motivational interviewing as an intervention for sexual high risk taking behaviours in men who have sex with men. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Goeman D.** Improving the quality and content of General Practice consultations for people with asthma. Monash University. Anticipated completion: 2012. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Medicine, Monash.*
- Gold J.** The medium and the message: an investigation of how youth access, interpret and implement sexual health information. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash / Burnet.*
- Goodwin P.** Inflammatory markers in depression. Swinburne University of Technology. Anticipated completion: 2013. *Monash Alfred Psychiatry Research Centre.*
- Gorzin A.** The role of the NS2 protein in the hepatitis C virus life cycle. Monash University. *Burnet.*
- Gosling C.** Incidence, risk factors and outcomes of injuries in triathletes. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute, Alfred.*
- Gouklani H.** Functional interactions of the structural and non-structural proteins of HCV. Monash University. *Burnet.*
- Govindaraj C.** Investigation of CD25hi TNFR2hi T cells and their role in ovarian cancer. Monash University. Anticipated completion: 2014. *Department of Immunology, Monash.*
- Green A.** Investigating the effects of adjunct glycine therapy on cognitive function in schizophrenia. Monash University. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre.*
- Groot C.** Examining auditory processing and affective prosody in schizophrenia patients and their relatives: a behavioural and neuroimaging study. University of Melbourne. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Gust A.** Surveillance of in-hospital central line associated bacterial infection: using data linkage to assess the utility of routinely collected hospital data. Monash University. Anticipated completion: 2017. *Department of Epidemiology and Preventive Medicine, Monash.*
- Habersberger J.** Proinflammatory effects of monomeric C reactive protein in vascular endothelium. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Department of Cardiovascular Medicine, Alfred / Baker IDI.*
- Haghgooe S.** EVestG: a diagnostic measure for schizophrenia. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Hall P.** A neuroeconomics investigation into reward and punishment sensitivity and its relation to depression. Monash University. Anticipated completion: 2013. *Monash Alfred Psychiatry Research Centre.*
- Hamlett A.** Immunotherapy using tumour-associated antigens for leukaemia. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash.*
- Harcourt B.** Interactions between receptors for advanced glycation end products and estrogen substrates in Type 2 diabetes and its complications. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash / Baker IDI.*
- Hawkes D.** Rearrangement of the virion plasma membrane in HIV-1. Monash University. *Burnet.*
- Hellewell S.** Pathophysiology and therapeutic strategies for the treatment of traumatic brain injury. Monash University. Anticipated completion: 2013. *Department of Medicine, Monash / National Trauma Research Institute, Alfred.*
- Herbert D.** The social and ethical dimensions of genetic testing a longitudinal of the haemophilia community. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash.*
- Higgins A.** An economic evaluation of resuscitation in sepsis. Monash University. Anticipated completion: 2013. *Intensive Care Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- Hills D.** What makes GPs and specialists entering rural practice stay? Impact of personal characteristics, community connectedness and sense of place. Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash.*
- Ho MSH.** The bone and bone marrow interface and its relationship to haematopoiesis. Monash University. Anticipated completion: 2014. *Australian Centre for Blood Diseases, Monash.*

- Hodge A.** Efficacy and mechanism of action of the antifibrotic agent FT52 in cell cultures and animal models. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash / Department of Gastroenterology, Alfred.*
- Hodgson C.** Recruitment manoeuvres in adult ventilated patients. Monash University. Completed: 2010. *Physiotherapy Department, Alfred / Intensive Care Unit, Alfred.*
- Hoe V.** The CUPID study: risk factors for musculoskeletal and somatic symptoms and associated disability in workers. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Hosseini E.** The role of genetic variants of HLA-E in NK cell function and stem cell transplant outcome. Monash University. Completed: 2010. *Department of Immunology, Monash.*
- Huynh K.** The causal role of ROS induced damage in the development of LV dysfunction in the diabetic heart *in vivo*. Monash University. Anticipated completion: 2013. *Department of Medicine, Monash / Baker IDI.*
- Iles L.** Myocardial fibrosis and heart failure. Monash University. Anticipated completion: 2012. *Department of Cardiovascular Medicine, Alfred / Department of Medicine, Monash / Baker IDI.*
- Inyang I.** Assessment of exposure to radiofrequency energy in an epidemiological cohort. Monash University. Completed: 2010. *Department of Epidemiology and Preventive Medicine, Monash.*
- Iser D.** Interactions between HIV and hepatitis B virus. University of Melbourne. Anticipated completion: 2011. *Infectious Diseases Unit, Alfred / Burnet.*
- Ivey M.** Gender – a case for change in the management of chronic obstructive pulmonary disease (COPD) in Australia. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash.*
- Ivory S.** Epidemiological risk prediction tools; methods and applications. Monash University. Anticipated completion: 2017. *Department of Epidemiology and Preventive Medicine, Monash.*
- Jackobson A.** The effect of transcranial direct current stimulation on dreaming. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Jackson K.** Hypertension in genetic high blood pressure mice is due to overactivity of specific hypothalamic pathways regulating sympathetic nervous system. Monash University. Anticipated completion: 2012. *Baker IDI.*
- Jeavons T.** Fungal exposure and asthma. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Jenkinson R.** Weekend on the town: patterns and correlates of psychostimulant use among young socialites. Monash University. Completed: 2010. *Burnet.*
- Jennings P.** Analgesia in the Victorian pre-hospital setting. Monash University. Anticipated completion: 2015. *Department of Epidemiology and Preventive Medicine, Monash / Intensive Care Unit, Alfred / National Trauma Research Institute, Alfred.*
- Joglekar A.** Mechanisms of tolerance following genetic manipulation and transfer of bone marrow stem cells. Monash University. Anticipated completion: 2013. *Department of Immunology, Monash.*
- Johnson P.** Pain assessment using non-verbal behaviour rating scales. La Trobe University. Completed: 2010. *Caulfield Hospital.*
- Jones D.** The Medical Emergency Team: patient characteristics and resource utilisation. Monash University. Anticipated completion: 2018. *Department of Epidemiology and Preventive Medicine, Monash.*
- Kaplan R.** Somatoperception in body dysmorphic disorder. Monash University. Anticipated completion: 2013. *Monash Alfred Psychiatry Research Centre.*
- Kaplan Z.** Determining the role of GPIb binding to thrombin specifically pertaining to its effect on fibrin generation and impact on leukocyte – platelet interactions. Monash University. Anticipated completion: 2011. *Australian Centre for Blood Diseases, Monash.*
- Karki S.** Providing tools and evidence to support hospital-based infection prevention interventions. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash.*
- Katik I.** Regulation of telomerase activity and telomere remodeling in lymphocytes. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash.*
- Keating C.** Neuroendocrine mechanisms in mental illness. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Keating S.** The role of epigenetic chromatin remodelling in the expression of genes relevant to diabetic nephropathy. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*
- Kee K.** The effects of heart failure on the lung. Monash University. Anticipated completion: 2012. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Medicine, Monash.*
- Kelly V.** The effects of heterogeneity and airway closure on airway distensibility measurements in asthma. Monash University. Completed: 2010. *Department of Allergy, Immunology and Respiratory Medicine, Alfred.*
- Khasawneh A.** Studies on the fusion mechanisms of the HIV-1 glycoproteins. Monash University. *Burnet.*
- Khong S.** The role of arginase II in cardiovascular pathology. Monash University. Anticipated completion: 2012. *Baker IDI / Department of Medicine, Monash.*
- Khoury G.** Viral reservoirs: role of naïve T-cells in pathogenesis of T-cell decline and long term persistence of HIV infection. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Infectious Diseases Unit, Alfred / Burnet.*
- Khurana I.** Chromatin immunopurification strategies for the application and standardisation of next generation sequencing. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Baker IDI.*
- Kim H.** An analysis of mechanisms for the enhancement of yields of influenza B viruses in the preparation of human vaccines. RMIT University. *Burnet.*
- Kimmel L.** Predicting the discharge disposition of orthopaedic trauma patients and analysing the outcomes. Monash University. Anticipated completion: 2018. *Department of Physiotherapy, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- Ko K.** Characterisation of pathogenic inflammatory cells in autoimmune disease. University of Melbourne. *Burnet.*
- Kouloyan-Ilic S.** Functional MRI in the brain. University of Melbourne. Anticipated completion: 2011. *Department of Radiology, Alfred.*
- Kowalski G.** The role of IL-10 in macrophages in obese insulin resistance mouse models. Monash University. Anticipated completion: 2011. *Baker IDI.*
- Kraakman M.** Role of 11-6 in obesity-induced insulin resistance: advantages and therapeutic strategies to overcome these pitfalls. Monash University. Anticipated completion: 2013. *Baker IDI.*

- Kumar N.** Role of dendritic cells in establishing HIV latency. Monash University. Anticipated completion: 2014. *Infectious Diseases Unit, Alfred / Burnet.*
- Kune C.** Cognitive impairment in heart failure. Swinburne University. Anticipated completion: 2012. *Department of Cardiothoracic Surgery, Alfred.*
- La J.** Small molecule inhibitors targeting HIV-1 reverse transcriptase dimerisation. Monash University. *Burnet.*
- Lai ZW.** Characterisation of ectodomain shedding of angiotensin-converting enzyme 2. Monash University. Anticipated completion: 2011. *Australian Centre for Blood Diseases, Monash.*
- Lam L.** The diagnosis and treatment of patients with acute decompensated heart failure. Monash University. Anticipated completion: 2011. *Clinical Pharmacology Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- Lam N.** Biology of stem cells in the failing heart. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI / Department of Cardiovascular Medicine, Alfred.*
- Latour P.** The optimisation of an immunotherapy to treat persistent HCV infection. Monash University. Anticipated completion: 2011. *Burnet.*
- Lee G.** Atrial arrhythmias post transplantation. University of Melbourne. Anticipated completion: 2012. *Department of Cardiovascular Medicine, Alfred / Baker IDI.*
- Lee GA.** The utility of the ECG in detecting and managing cardiovascular disease in South Africa: the heart of Soweto study. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash / Baker IDI.*
- Lee H.** Defining the role of protease-activated receptors in thrombosis. Monash University. Anticipated completion: 2013. *Australian Centre for Blood Diseases, Monash.*
- Lee PSS.** Influence of n3:n6 fatty acids ratio on vascular inflammatory profile in patients with hypercholesterolemia. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Department of Cardiovascular Medicine, Alfred / Baker IDI.*
- Lekawanvijit S.** Interaction between stem cell and antifibrotic drug therapy in heart failure. Monash University. Anticipated completion: 2012. *Clinical Pharmacology Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- LeMasurier J.** The effect of particles on acute allergic airway inflammation. Monash University. Anticipated completion: 2012. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Immunology, Monash.*
- Lewis P.** Methodological considerations in cerebral autoregulation assessment. Monash University. Anticipated completion: 2014. *Department of Neurosurgery, Alfred / Department of Surgery, Monash.*
- Li JB.** CDA1 modulates TGF- β signalling in vascular diseases. Monash University. Anticipated completion: 2013. *Department of Immunology, Monash / Baker IDI.*
- Lichtfuss G.** Quantification of HIV viral fitness and the relationship to treatment outcomes. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Infectious Diseases Unit, Alfred / Burnet.*
- Lin C.** The role of phosphatase CD45 in determining signalling, proliferation and therapeutic drug sensitivities of human myeloma cells. Monash University. Anticipated completion: 2012. *Australian Centre for Blood Diseases, Monash.*
- Lindsay E.** Cerebellar disease: exploring the application, reliability and validity of a diagnostic instrument for quantifying ataxia of the upper limbs. Monash University. Anticipated completion: 2018. *Department of Medicine, Monash.*
- Ling L-H.** Atrial fibrillation and heart failure. University of Melbourne. Anticipated completion: 2012. *Department of Cardiovascular Medicine, Alfred / Baker IDI.*
- Liu S.** Contribution of uremic toxins to cardiorenal syndrome in patients with co-morbid heart failure and kidney disease. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash.*
- Liu Y.** Macrophage migration inhibitory factor: pathological and therapeutic significance in cardiac ischemic injury. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash.*
- Livingstone Jones E.** Tetraspanin regulation of T cell proliferation. Monash University. Anticipated completion: 2014. *Department of Immunology, Monash.*
- Lorains F.** Investigating executive function among problem gamblers. Monash University. Anticipated completion: 2014. *Monash Alfred Psychiatry Research Centre.*
- Lowthian J.** Increasing demand for emergency patient services in the Australian community: underlying drivers, implications and potential solutions. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute, Alfred.*
- Lu B.** Structural and functional analysis of the interaction of plasmin lysine binding sites with antiplasmin C-terminus. Monash University. Anticipated completion: 2013. *Australian Centre for Blood Diseases, Monash.*
- Lunke S.** Epigenetic regulation of the human survival of motor neuron gene in spinal muscular atrophy. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*
- Lyons J.** Heart disease in women: inflammation and infection induced changes to HDL cholesterol. University of Melbourne. Anticipated completion: 2011. *Baker IDI.*
- MacFarlane E.** Occupational exposures and cancer risk in Australian workers. Monash University. Completed: 2010. *Department of Epidemiology and Preventive Medicine, Monash.*
- Mah LJ.** University of Melbourne. Anticipated completion: 2013. *Baker IDI.*
- Mathiyalagan P.** Epigenetics in human health and disease. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Baker IDI.*
- Maxwell S.** The MeCP2 associated regulatory complex in the brain epigenetics. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*
- McCaffrey K.** Characterisation of a novel HCV vaccine candidate. University of Melbourne. *Burnet.*
- McGrady M.** Epidemiological assessment of Aboriginal and non-Aboriginal Australians at high risk of developing heart failure. Monash University. Anticipated completion: 2011. *Clinical Pharmacology Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- McIlwraith F.** The role and impact of faith-based organisations in providing services in the non-government AOD sector. University of Queensland. Completed: 2010. *Burnet.*
- McKenzie J.** Methodological issues in meta-analysis of randomised controlled trials with continuous outcomes. Monash University. Anticipated completion: 2011. *Australasian Cochrane Centre, Monash.*

- McMahon J.** Social, behavioural and clinical factors associated with poor outcomes in patients living with HIV on antiretroviral therapy. Monash University. Anticipated completion: 2012. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash.*
- McQuilten Z.** Improving patient outcomes through understanding and changing transfusion practice. Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute.*
- McTier L.** Defining patient participation in treatment in acute care context. Deakin University. Anticipated completion: 2011. *Nursing, Alfred.*
- Medi C.** Atrial remodelling in pulmonary and systemic hypertension. University of Melbourne. Anticipated completion: 2011. *Department of Cardiovascular Medicine, Alfred.*
- Meehan A.** Investigating the function of natural killer cells during immunological responses following lung transplantation. Monash University. Anticipated completion: 2014. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Medicine, Monash.*
- Mitchell D.** Hypertension induced inflammation in the endothelium: the signalling pathways involved. Monash University. Anticipated completion: 2013. *Baker IDI / Department of Medicine, Monash.*
- Mitra B.** Transfusion practice in trauma resuscitation. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash / Emergency Medicine, Alfred / National Trauma Research Institute.*
- Mohamud R.** The effects of nanoparticles on regulatory T cells in lungs: implication for asthma developments and immunotherapy. Monash University. Anticipated completion: 2012. *Department of Immunology, Monash / Department of Allergy, Immunology and Respiratory Medicine, Alfred.*
- Mohebbi M.** Multilevel (hierarchical) regression models and their application to spatial statistics and reliability studies. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*
- Monaghan K.** Microenvironmental factors impacting on multiple myeloma drug resistance. Monash University. Anticipated completion: 2011. *Australian Centre for Blood Diseases, Monash.*
- Moore A.** Philosophical and professional aspects of Chinese medicine. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash.*
- Moore E.** A prospective study of the effects of erythropoietin and early, sustained hypothermia on renal biomarkers and renal function in patients with traumatic brain injury. Monash University. Anticipated completion: 2013. *Intensive Care Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- Morris KR.** Analysis of the Th2 response to a gastrointestinal nematode infection of pigs. Monash University. Anticipated completion: 2018. *Department of Immunology, Monash.*
- Mountford J.** Investigating class II phosphoinositide 3-kinase function in murine megakaryocytes. Monash University. Anticipated completion: 2011. *Australian Centre for Blood Disease, Monash.*
- Nair A.** Antifungal drugs can affect the immune function of T, natural killer and dendritic cells. Monash University. Anticipated completion: 2013. *Australian Centre for Blood Disease, Monash / Baker IDI.*
- Nasa Z.** The induction of immune tolerance through genetic manipulation of haematopoietic stem cells. Monash University. Anticipated completion: 2013. *Department of Immunology, Monash.*
- Nataraj S.** Bioethics and HIV interventions. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Neill E.** Investigating the neural basis of memory impairments in schizophrenia. Monash University. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre.*
- Neoh C.** Optimising the use of high-cost antifungal agents in Australian hospitals. Monash University. Anticipated completion: 2012. *Department of Allergy, Immunology and Respiratory Medicine, Alfred.*
- New P.** A study of patient flow through inpatient rehabilitation and potential for improvements. Monash University. Anticipated completion: 2017. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute, Alfred.*
- Newton E.** Social cognition, perception and temperament: associations with social adjustment in adolescents and young adults. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Newton J.** Psychosocial predictors of organ donation registration in Australia. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Nguyen H-A.** Development of a mouse model of chronic asthma and allergic inflammation. Monash University. Anticipated completion: 2011. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Immunology, Monash.*
- Nguyen THO.** Prevention of cytomegalovirus disease after stem cell transplantation. Monash University. Completed: 2010. *Department of Immunology, Monash.*
- Nheu LN.** Effects of androgens on cardiovascular cell physiology: events relevant to atherogenesis. Monash University. Anticipated completion: 2013. *Department of Medicine, Monash.*
- Nicholls C.** Regulation and inhibition of telomerase in cancer cells. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash.*
- Nicholls E.** Heat shock proteins and their role in the resistance of bone marrow cancer cells to standard and novel chemotherapeutic strategies. Monash University. Anticipated completion: 2013. *Australian Centre for Blood Diseases, Monash.*
- Nicholls H.** Inflammation in insulin signalling. RMIT University. Anticipated completion: 2011. *Baker IDI.*
- Niego B.** The effect of blood proteases on structure and function of the blood-brain barrier in health and disease. Monash University. Anticipated completion: 2013. *Australian Centre for Blood Diseases, Monash.*
- Nilsson J.** The relationship between allocentric and egocentric spatial memory and hippocampal volume in patients with major depressive disorder. Institute of Neuroscience, Newcastle, UK. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre.*
- O'Brien L.** Determining readiness of people with acute brain injury to engage in hand therapy treatment. Monash University. Anticipated completion: 2011. *Occupational Therapy Service, Alfred.*
- O'Connor D.** Understanding delusions in Alzheimer's disease. University of Melbourne. Completed: 2010. *Monash Alfred Psychiatry Research Centre.*
- O'Neil A.** Using communications technology to improve the health and wellbeing of patients following myocardial infarction. Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash.*
- Ooi J.** Epigenetic modification and the role of chromatin modifying determinants in the hypertrophied heart. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*

- O'Reilly G.** International Trauma Epidemiology: paths and challenges to the establishment of trauma registries in developing (and developed) countries. Monash University. Anticipated completion: 2016. *Emergency Medicine, Alfred / Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute, Alfred.*
- Orford N.** The effect of critical illness on bone metabolism and bone mineral density. Monash University. Anticipated completion: 2018. *Department of Epidemiology and Preventive Medicine, Monash / Intensive Care Unit, Alfred.*
- Orlowski C.** Epigenetic responses to external stimuli in embryonic stem cells. University of Melbourne. Anticipated completion: 2011. *Baker IDI.*
- Osadnik C.** Airway clearance techniques for chronic obstructive pulmonary disease. La Trobe University. Anticipated completion: 2012. *Physiotherapy Department, Alfred.*
- Panjari M.** Efficacy and safety of exogenous DHEA in postmenopausal women. Monash University. Completed: 2010. *Women's Health Program, Monash / Department of Medicine, Monash.*
- Park A.** Assessment of biodegradable nanoparticles as candidates for cancer vaccine therapies and the molecular pathways by which these nanoparticles activate the immune system. Monash University. Anticipated completion: 2014. *Department of Immunology, Monash.*
- Paszek J.** The functional significance of SMA for the origin of tics in Gilles de la Tourette syndrome. Heinrich Heine University, Dusseldorf, Germany. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Paul E.** Development and validation of a mortality risk prediction model for modern intensive care practice in Australia and New Zealand. Monash University. Anticipated completion: 2018. *Department of Epidemiology and Preventive Medicine, Monash / Intensive Care Unit, Alfred.*
- Pedrana A.** On the scene: the epidemiology of HIV among men who have sex with men in Victoria. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash / Burnet.*
- Peyton P.** The effect of V/Q inhomogeneity on the second gas effect during anaesthesia. University of Melbourne. Anticipated completion 2011. *Department of Allergy, Immunology and Respiratory Medicine, Alfred.*
- Phillips K.** Measuring patterns of care in the management of people with traumatic brain injury. Monash University. Anticipated completion: 2015. *Australasian Cochrane Centre, Monash / National Trauma Research Institute, Alfred.*
- Pratt B.** Developing a just policy framework for the conduct on international health research. Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash.*
- Pretorius L.** Beneficial role of genes activated in the athlete's heart in a setting of heart failure: role of PI3K (p110) and exercise. Monash University. Completed: 2010. *Department of Medicine, Monash / Baker IDI.*
- Pritchett S.** Processed EEG monitor development in anaesthesia. Monash University. Anticipated completion: 2011. *Department of Anaesthesia and Perioperative Medicine, Alfred.*
- Qiao JL.** Regulation of platelet receptors in health and disease. Monash University. Anticipated completion: 2013. *Australian Centre for Blood Diseases, Monash.*
- Quinn B.** The Un-MET Study: understanding the barriers to health service and treatment utilisation for methamphetamine users. Monash University. *Burnet.*
- Rahafi H.** University of Melbourne. Anticipated completion: 2013. *Baker IDI.*
- Rajasuriar R.** Biological determinants of immune reconstitution. Monash University. Anticipated completion: 2011. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash / Burnet.*
- Rawal LB.** Why do women in rural Nepal choose to deliver at home and not in a health facility? Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash.*
- Read T.** Sexually transmitted viruses in men who have sex with men. University of Melbourne. Anticipated completion: 2013. *Melbourne Sexual Health Centre, Alfred.*
- Rijal S.** Investigating the prognostic significance of phosphoinositide signalling in acute myeloid leukaemia. Monash University. Anticipated completion: 2014. *Australian Centre for Blood Diseases, Monash.*
- Roche M.** Understanding HIV-1 entry: insights through the envelope protein. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Burnet.*
- Rodrigo S.** Health effects of increased usage of recycled water and alternative water sources. Monash University. Completed: 2010. *Department of Epidemiology and Preventive Medicine, Monash.*
- Rogash N.** Prefrontal cortical plasticity and inhibition in the pathophysiology of schizophrenia. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Sacks-Davis R.** Genetics don't lie: predicting sources of HCV infections from social connections amongst injecting drug users. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash / Burnet.*
- Salimiseyadabad H.** The functional characterisation of HIV-1 Envs derived from the CNS and their role in HIV-associated dementia. Monash University. *Burnet.*
- Sanagou M.** Preoperative hierarchical risk prediction modelling for 30 day mortality following cardiac surgery in Australia. Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash.*
- Selathurai A.** CD4+ CD25+ T cells regulating atherosclerosis: mechanisms and therapeutic targets. Monash University. Anticipated completion: 2011. *Department of Cardiovascular Medicine, Alfred / Baker IDI.*
- Semple B.** Chemokines in secondary tissue damage following traumatic brain injury. Monash University. Completed: 2010. *Department of Medicine, Monash / National Trauma Research Institute, Alfred.*
- Sepulveda P.** Dissecting the mechanisms implicated in acute follistatin-mediated muscle growth. Deakin University. Anticipated completion: 2012. *Baker IDI.*
- Shmela M.** Mechanisms of abnormal expression of the IGF2 gene in disorders affecting foetal growth. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash.*
- Shrestha D.** Aspects of work/life satisfaction of doctors in Australia. Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash.*
- Smith B.** Novel approaches for the diagnosis and management of atherosclerosis. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Department of Cardiovascular Medicine, Alfred / Baker IDI.*
- Smith R.** Development of a real time high dose rate brachytherapy treatment verification system. Monash University. Anticipated completion: 2012. *William Buckland Radiotherapy Centre, Alfred.*

- Smyth R.** Recombination and the evolution of HIV. Monash University. Completed: 2010. *Burnet*.
- Socratous F.** Sympathetic activation in chronic renal disease: role of the novel soluble monoamine oxidase 'renalase'. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Baker IDI*.
- Sofian T.** Characterisation of the interaction between plasmin and antiplasmin. Monash University. Completed: 2010. *Australian Centre for Blood Diseases, Monash*.
- Soh S-E.** Health-related quality of life of Australians with Parkinson's disease. University of Melbourne. Anticipated completion: 2011. *Department of Physiotherapy, Alfred*.
- Spence A.** Mediators of child dietary patterns in a parent-directed intervention to improve toddler nutrition. Deakin University. Anticipated completion: 2011. *Department of Nutrition, Alfred*.
- Spitz G.** Cognitive impairment, its biological basis and association with outcome following traumatic brain injury. Monash University. Anticipated completion: 2013. *National Trauma Research Institute, Alfred*.
- Strange G.** Seeing the invisible: the impediments of timely diagnosis of pulmonary hypertension. Monash University. Anticipated completion: 2016. *Department of Epidemiology and Preventive Medicine, Monash*.
- Stub D.** Improving prognosis in out of hospital cardiac arrest utilising circulatory support. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Department of Cardiovascular Medicine, Alfred / Intensive Care Unit, Alfred / Baker IDI*.
- Stuckey R.** Evaluation of occupational health for light vehicle use. Monash University. Completed: 2010. *Department of Epidemiology and Preventive Medicine, Monash*.
- Szollosi I.** Characteristics of sleep disordered breathing in heart failure. Monash University. Completed: 2010. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Medicine, Monash*.
- Taechalertpaisarn T.** Investigation of human erythrocyte invasion by *Plasmodium falciparum*. University of Melbourne. *Burnet*.
- Tan CW.** Coagulation and platelet receptors. University of Sydney. Anticipated completion: 2012. *Australian Centre for Blood Diseases, Monash*.
- Tan E.** Speech disturbances and quality of life in schizophrenia. Monash University. Anticipated completion: 2013. *Monash Alfred Psychiatry Research Centre*.
- Tanamas S.** Novel approaches to musculoskeletal disease prevention. Monash University. Anticipated completion: 2013. *Department of Rheumatology, Alfred / Department of Epidemiology and Preventive Medicine, Monash*.
- Tavender EJ.** Management of mild traumatic brain injury in the emergency department: barriers, enablers to evidence uptake and development of an intervention to facilitate best practice and improve patient outcomes. Monash University. Anticipated completion: 2014. *Department of Surgery, Monash / National Trauma Research Institute, Alfred*.
- Tay C.** B cell subtypes in development and progression of atherosclerosis. Monash University. Anticipated completion: 2013. *Department of Cardiovascular Medicine, Alfred*.
- Teh A.** Electrical and structural changes associated with atrial fibrillation. University of Melbourne. Anticipated completion: 2011. *Department of Cardiovascular Medicine, Alfred*.
- Teichtahl A.** The determinants of articular cartilage health. Monash University. Anticipated completion: 2016. *Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred*.
- Thallas-Bonke V.** Advanced glycation end products by protein kinase C dependent pathways play a role in diabetic vascular complications. University of Melbourne. Anticipated completion: 2011. *Baker IDI / Department of Endocrinology and Diabetes, Alfred*.
- Thom O.** Preventative aspects of non invasive haemodynamic monitoring in severely ill patients in the Emergency Department. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash / Department of Anaesthesia and Perioperative Medicine, Alfred*.
- Tippett E.** Contribution of monocyte subsets to HIV-1 viral reservoirs. Monash University. Anticipated completion: 2013. *Department of Medicine, Monash / Burnet*.
- To YYK.** The mechanisms of action and suppression of natural killer T cells in atherosclerosis. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash / Baker IDI / Department of Cardiovascular Medicine, Alfred*.
- Tran L.** Therapeutic targeting of signalling pathways in cardiovascular disease. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash / Clinical Pharmacology Unit, Alfred*.
- Tuano N.** Epigenetic modification and responses in embryonic stem cells. Monash University. Anticipated completion: 2013. *Department of Medicine, Monash / Baker IDI*.
- van der Merwe J.** Effect of VentrAssist pump on the peripheral circulation and the response of the pump to exercise. Monash University. Anticipated completion: 2014. *Department of Surgery, Monash / Department of Cardiothoracic Surgery, Alfred*.
- Van Rheenen T.** Self identity and bipolar disorder. Monash University. Anticipated completion: 2013. *Monash Alfred Psychiatry Research Centre*.
- Varnfield M.** Clinical outcomes of an ICT-based home care model in primary and secondary prevention with lifestyle modifications for chronic diseases and mental health. Monash University. Anticipated completion: 2013. *Department of Epidemiology and Preventive Medicine, Monash*.
- Vasireddy R.** Molecular genetics of human radiation sensitivity. University of Melbourne. Completed: 2010. *Baker IDI*.
- Walker J.** Chlamydia incidence and re-infection rates: a longitudinal study of young Australian women. University of Melbourne. Anticipated completion: 2011. *Melbourne Sexual Health Centre, Alfred*.
- Walker PA.** Immune reconstitution in haemopoietic stem cell transplantation. Monash University. Anticipated completion: 2014. *Australian Centre for Blood Diseases, Monash*.
- Walls H.** Effectiveness, cost-effectiveness and equity of obesity prevention strategies. Monash University. Completed: 2010. *Department of Epidemiology and Preventive Medicine, Monash*.
- Walsh NM.** Psychosocial, environmental and pharmacotherapy determinants of antiviral treatment in injecting drug users. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash*.
- Wang L.** Investigation of gene-engineered T-cells in a self-antigen mouse model. Monash University. Anticipated completion: 2013. *Department of Immunology, Monash*.
- Wang XW.** Novel single-chain antibody-targeted ultrasound-based contrast agents for molecular imaging of atherosclerotic plaques in a mouse model of atherosclerotic disease. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Baker IDI*.

- Wapling J.** Role of highly conserved reverse transcriptase (RT) residues in RT dimerisation, maturation and HIV-1 replication. Monash University. *Burnet*.
- Wasiak J.** The physical and psychosocial outcomes following burn injury: a 12-month follow-up study. Monash University. Anticipated completion: 2015. *Burns Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash*.
- Watson C.** Use of oral garlic (*Allium sativum*) in recurrent thrush (vulvovaginal candidiasis). University of Melbourne. Anticipated completion: 2012. *Melbourne Sexual Health Centre, Alfred*.
- Weeks K.** Targeting critical nodes on the IGF1-PI3K (p110alpha) signalling pathway to improve function of the failing heart. University of Melbourne. Anticipated completion: 2011. *Baker IDI*.
- Weller C.** Chronic wounds: outcomes for people attending specialist wound clinics. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash*.
- White D.** Macrophage migration inhibitory factor: pathological and therapeutic significance in post-myocardial infarct inflammation. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Baker IDI*.
- Wightman F.** The role of histone deacetylase inhibitors in reversing HIV latency. Monash University. Anticipated completion: 2014. *Australian Centre for Blood Diseases, Monash / Infectious Diseases Unit, Alfred*.
- Wijemunige R.** Improving the prevention and early detection of secondary brain injury in severe TBI patients. Monash University. Anticipated completion: 2011. *Department of Neurosurgery, Alfred / Intensive Care Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash*.
- Winter R.** Examining drug-related morbidity and mortality among prisoners and ex-prisoners. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash / Burnet*.
- Wong E.** Modelling risk of comorbidities of cardiovascular disease, diabetes and chronic kidney disease using Markov chain. Monash University. Anticipated completion: 2018. *Department of Epidemiology and Preventive Medicine, Monash*.
- Wong P.** An examination of the families' perspective of the intensive care experience. La Trobe University. Anticipated completion: 2012. *Nursing, Alfred*.
- Wong SS.** The function of the M protein of Dengue virus. University of Melbourne. Completed: 2010. *Burnet*.
- Wright E.** Neuropathogenesis of HIV dementia. Monash University. Anticipated completion: 2011. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash / Burnet*.
- Wrobel J.** Pulmonary mechanics and pulmonary hypertension in severe COPD. Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Department of Allergy, Immunology and Respiratory Medicine, Alfred*.
- Wynne R.** Pulmonary dysfunction and pulmonary complications after cardiac surgery: antecedents from the postoperative context. Deakin University. Completed: 2010. *Nursing, Alfred*.
- Yang E.** Targeting oncoproteins by combined immunotherapy for breast and prostate cancer. University of Melbourne. *Burnet*.
- Yap FYT.** The contribution of AGEs and their receptors to beta cell dysfunction. Monash University. Anticipated completion: 2013. *Department of Immunology, Monash / Baker IDI*.
- Yap SH.** Role of mutations in the connection domain of the HIV reverse transcriptase in drug resistance. Monash University. *Burnet*.
- Yong M.** Cytomegalovirus infection post transplantation. Monash University. Anticipated completion: 2014. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash*.
- Yu K.** Implementing a core dataset for the reporting of medication incidents. Monash University. Completed: 2010. *Pharmacy Department, Alfred*.
- Zaffino L.** Role of FoxO proteins in the regulation of skeletal muscle anabolism, catabolism and insulin sensitivity. Monash University. Anticipated completion: 2011. *Baker IDI*.
- Zardo P.** Application of research evidence in Australian health policy: how to build support and capacity for evidence based decision making. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute, Alfred*.
- Zhu TP.** Succinate receptor, GPR91, mediates activation of the renin-angiotensin system in retinal diseases. Monash University. Anticipated completion: 2014. *Department of Immunology, Monash*.
- Zimmet H.** Stem cells in treatment of heart failure. Monash University. Anticipated completion: 2011. *Clinical Pharmacology Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash*.
- Zomer E.** Epidemiological modelling of cardiovascular disease and prevention strategies in patients with metabolic syndrome. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash*.
- Zou H.** Human papilloma virus in men who have sex with men. University of Melbourne. Anticipated completion: 2012. *Melbourne Sexual Health Centre, Alfred*.

Other Doctorates

- Abouzeid M.** Prevalence of post-traumatic stress disorder and comorbid hypertension amongst Australian veterans of the Gulf War. Doctor of Public Health, Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash*.
- Andrews S.** Mirror neuron system in schizophrenia. Doctor of Psychology, Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre*.
- Bacon T.** The active therapeutic processes in acceptance and commitment therapy for medication-resistant psychosis. Doctor of Psychology, La Trobe University. Anticipated completion: 2012. *Department of Psychology, Alfred*.
- Buttigieg K.** An investigation of the psychosocial correlates to optimal health management in young people with insulin-dependent diabetes mellitus. Doctor of Psychology, Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre*.
- Cox A.** The schoolyard participation project. Doctor of Occupational Therapy, La Trobe University. Anticipated completion: 2012. *Occupational Therapy Service, Alfred*.
- Doolan G.** Occupational exposure using self reports and a job exposure matrix in relation to prostate cancer from an Australian case-control study. Doctor of Public Health, Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash*.
- Duncan G.** Incidence and prevalence study of people experience chronic wounds in the community in Victoria. Doctor of Public Health, Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash*.
- Field S.** Memory processing in patients with schizophrenia who experience verbal auditory hallucinations. Doctor of Psychology, Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre*.

- Furtado C.** A prospective longitudinal study into the cognitive impairments and neuroanatomic abnormalities associated with a major depressive episode and after symptomatic recovery. Doctor of Psychology, Monash University. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre.*
- Gibbs Z.** Psychoneuroendocrinological relationship between menopause and mood. Doctor of Psychology, Monash University. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre.*
- Gibson K.** Developing WHO guidance on viral hepatitis B and C for people who use drugs. Doctor of Public Health, Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Gould K.** Psychiatric disorders following traumatic brain injury: a prospective study. Doctor of Psychology, Monash University. Completed: 2010. *National Trauma Research Institute, Alfred.*
- Grills N.** Epidemiological prevalence survey of dermatological conditions in mountainous North India. Doctor of Public Health, Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*
- Habeeb L.** International medical graduate adjustment to Australian healthcare teams. Doctor of Psychology, Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Hackman K.** Risk factors for diabetes after lung transplantation: focus on CMV infection. Doctor of Medicine, Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Department of Endocrinology and Diabetes, Alfred / Department of Allergy, Immunology and Respiratory Medicine, Alfred.*
- Harding P.** Physical activity following hip and knee arthroplasty. Doctor of Physiotherapy, University of Melbourne. Anticipated completion: 2011. *Department of Physiotherapy, Alfred.*
- Headley E.** Health system performance assessment activities and the PATH project. Doctor of Public Health, Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*
- Heywood S.** Evidence and policy approaches to address health and social inequalities. Doctor of Public Health, Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Hsieh M-Y.** Use of motivational interviewing and cognitive behaviour therapy to treat anxiety disorders following traumatic brain injury. Doctor of Psychology, Monash University. Anticipated completion: 2011. *National Trauma Research Institute, Alfred.*
- Inledon E.** Psychosocial predictors of overweight and obesity in children and preadolescents. Doctor of Psychology, Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Kelly A.** Self-concept following traumatic brain injury. Doctor of Psychology, Monash University. Anticipated completion: 2011. *National Trauma Research Institute, Alfred.*
- Kipsaina C.** Collaborative development of the WHO guideline for Mortuary based injury surveillance. Doctor of Public Health, Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*
- Lee A.** The relationship between current symptoms of mental illness and childhood abuse in women. Doctor of Clinical Psychology, Monash University. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre.*
- Lee S.** Rehabilitation of planning following traumatic brain injury. Doctor of Psychology, Monash University. Anticipated completion: 2011. *National Trauma Research Institute, Alfred.*
- Leet A.** Myocardial fibrosis and function after heart transplantation. Doctor of Medicine, Monash University. Anticipated completion: 2014. *Department of Medicine, Monash / Department of Cardiovascular Medicine, Alfred.*
- Mbakile L.** The experience of families of those with brain injury in Botswana. Doctor of Psychology, Monash University. Anticipated completion: 2012. *National Trauma Research Institute, Alfred.*
- Moore K.** Strathfieldsaye and districts health and wellbeing needs assessment. Doctor of Public Health, Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*
- O'Halloran C.** The localisation and fractionation of executive attention and social cognition within the cerebellum following cerebellar infarction. Doctor of Clinical Neuropsychology, La Trobe University. Completed: 2010. *Department of Neurology, Alfred.*
- Renison B.** The use of virtual reality in assessment of executive function. Doctor of Psychology, Monash University. Anticipated completion: 2012. *National Trauma Research Institute, Alfred.*
- Richardson C.** Self-awareness following TBI. Doctor of Psychology, Monash University. Anticipated completion: 2013. *National Trauma Research Institute, Alfred.*
- Rintoul A.** Coronial deaths involving oxycodone, Victoria, 2000-2009. Doctor of Public Health, Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*
- Segrave R.** EEG, alpha and depression. Doctor of Clinical Neuropsychology, Monash University. Completed: 2010. *Monash Alfred Psychiatry Research Centre.*
- Sheehan J.** The development and evaluation of an education program for parents of children with cystic fibrosis. Doctor of Psychology, Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*
- Sinclair K.** Fatigue and sleep disturbance following traumatic brain injury: treatment with bright light therapy. Doctor of Psychology, Monash University. Anticipated completion: 2012. *Monash Alfred Psychiatry Research Centre / National Trauma Research Institute, Alfred.*
- Tobin C.** Victorian community attitudes survey on healthy sporting environment. Doctor of Public Health, Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Trickey M.** Processes of change in acceptance and commitment therapy and befriending therapy for chronic psychosis. Doctor of Psychology, La Trobe University. Anticipated completion: 2011. *Department of Psychology, Alfred.*
- Tweedly L.** Impact of intervention for substance use problems following traumatic brain injury. Doctor of Psychology, Monash University. Anticipated completion: 2011. *National Trauma Research Institute, Alfred.*
- Yan BPY.** Drug-eluting stent utilisation and impact in contemporary Australian interventional cardiology practice: insight from the Melbourne Interventional Group Registry. Doctor of Medicine, Monash University. Anticipated completion: 2017. *Department of Epidemiology and Preventive Medicine, Monash.*



Journal Articles

Abbott AL. Current medical intervention alone is now the best solution for asymptomatic carotid stenosis. Letter to the editors of *Journal of Vascular Surgery* and the *European Journal of Vascular and Endovascular Surgery* regarding trans-atlantic debate no. 1. *Eur J Vasc Endovasc Surg* 2010;40(5):678-9. Letter.

Abdel Rahman AM, Lopata AL, O'Hehir RE, Robinson JJ, Banoub JH, Helleur RJ. Characterization and *de novo* sequencing of snow crab tropomyosin enzymatic peptides by both electrospray ionization and matrix-assisted laser desorption ionization QqToF tandem mass spectrometry. *J Mass Spectrom* 2010;45(4):372-81.

Abdullah A, Peeters A, de Courten M, Stoelwinder J. The magnitude of association between overweight and obesity and the risk of diabetes: a meta-analysis of prospective cohort studies. *Diabetes Res Clin Pract* 2010;89(3):309-19.

Abdullah A, Stoelwinder J, Shortreed S, Wolfe R, Stevenson C, Walls H, de Courten M, Peeters A. The duration of obesity and the risk of Type 2 diabetes. *Public Health Nutr* 2010;14(1):119-26.

Abraham D, Delbridge L, Clifton-Bligh R, Clifton-Bligh P, Grodski S, Robinson BG, Messina M, Sidhu S. Medullary thyroid carcinoma presenting with an initial CEA elevation. *ANZ J Surg* 2010;80(11):831-3.

Abraham G, Kowalczyk A, Loi S, Haviv I, Zobel J. Prediction of breast cancer prognosis using gene set statistics provides signature stability and biological context. *BMC Bioinformatics* 2010;11(1):277.

Abrahamson SJ, Enticott PG, Tonge BJ. High-functioning pervasive developmental disorders in adults. *Med J Aust* 2010;192(1):44-8. Review.

Abramson MJ, Benke GP, Cui J, de Klerk NH, Del Monaco A, Dennekamp M, Fritschi L, Musk AW, Sim MR. Is potroom asthma due more to sulphur dioxide than fluoride? An inception cohort study in the Australian aluminium industry. *Occup Environ Med* 2010;67(10):679-85

Abramson MJ, Puy RM, Weiner JM. Injection allergen immunotherapy for asthma. *Cochrane Database Syst Rev* 2010;(8):CD001186. Review.

Abramson MJ, Schattner RL, Sulaiman ND, Birch KE, Simpson PP, Del Colle EA, Aroni RA, Wolfe R, Thien FC. Do spirometry and regular follow-up improve health outcomes in general practice patients with asthma or COPD? A cluster randomised controlled trial. *Med J Aust* 2010;193(2):104-9.

Ademi Z, Liew D, Hollingsworth B, Steg PG, Bhatt DL, Reid CM; REACH Registry Investigators. Predictors of annual pharmaceutical costs in Australia for community-based individuals with, or at risk of, cardiovascular disease: analysis of Australian data from the REACH registry. *Am J Cardiovasc Drugs* 2010;10(2):85-94.

Ademi Z, Liew D, Hollingsworth B, Wolfe R, Steg GP, Bhatt DL, Reid CM; REACH Registry Investigators. The economic implications of treating atherothrombotic disease in Australia, from the government perspective. *Clin Ther* 2010;32(1):119-32.

Ademi Z, Walls HL, Peeters A, Liew D, Hollingsworth B, Stevenson C, Steg PG, Bhatt DL, Reid CM. Economic implications of obesity among people with atherothrombotic disease. *Int J Obes* 2010;34(8):1284-92.

Agostino M, Sandrin MS, Thompson PE, Yuriev E, Ramsland PA. Identification of preferred carbohydrate binding modes in xenoreactive antibodies by combining conformational filters and binding site maps. *Glycobiology* 2010;20(6):724-35.

Ahimastos AA, Aggarwal A, Savarirayan R, Dart AM, Kingwell BA. A role for plasma transforming growth factor- β and matrix metalloproteinases in aortic aneurysm surveillance in Marfan syndrome? *Atherosclerosis* 2010;209(1):211-4.

Ahola AJ, Mäkimattila S, Saraheimo M, Mikkilä V, Forsblom C, Freese R, Groop PH; FinnDIANE Study Group. Many patients with Type 1 diabetes estimate their prandial insulin need inappropriately. *J Diabetes* 2010;2(3):194-202.

Ahrens I, Lip GY, Peter K. New oral anticoagulant drugs in cardiovascular disease. *Thromb Haemost* 2010;104(1):49-60. Review.

Al-Badriyeh D, Heng SC, Neoh CF, Slavin M, Stewart K, Kong DC. Pharmacoeconomics of voriconazole in the management of invasive fungal infections. *Expert Rev Pharmacoecon Outcomes Res* 2010;10(6):623-36.

Al-Badriyeh D, Neoh CF, Stewart K, Kong DC. Clinical utility of voriconazole eye drops in ophthalmic fungal keratitis. *Clin Ophthalmol* 2010;4:391-405. Review.

Al-Badriyeh D, Slavin M, Liew D, Thursky K, Downey M, Grigg A, Bajel A, Stewart K, Kong DC. Pharmacoeconomic evaluation of voriconazole versus posaconazole for antifungal prophylaxis in acute myeloid leukaemia. *J Antimicrob Chemother* 2010;65(5):1052-61.

Alderuccio F, Chan J, Ko HJ, Chung JY, Nasa Z, Toh BH. A molecular Trojan horse: hijacking the bone marrow to treat autoimmune diseases. *Discov Med* 2010;9(49):512-8.

Alexander DC, Butt WW, Best JD, Donath SM, Monagle PT, Shekerdemian LS. Correlation of thromboelastography with standard tests of anticoagulation in paediatric patients receiving extracorporeal life support. *Thromb Res* 2010;125(5):387-92.

Allen SJ, Sidebotham DA. Seizures and shock after radiofrequency ablation for atrial fibrillation. *J Cardiothorac Vasc Anesth* 2010;24(4):716-8.

Allen TL, Febbraio MA. IL6 as a mediator of insulin resistance: fat or fiction? *Diabetologia* 2010;53(3):399-402. Review.

Alsayali M, Atkin C, Rahim R, Niggemeyer L, Doody O, Varma D. Traumatic adrenal gland injury: epidemiology and outcomes in a major Australian trauma center. *Eur J Trauma Emerg S* 2010;36(6):567-72.

Altmann DR, Korte W, Maeder MT, Fehr T, Haager P, Rickli H, Kleger GR, Rodriguez R, Ammann P. Elevated cardiac troponin I in sepsis and septic shock: no evidence for thrombus associated myocardial necrosis. *PLoS One* 2010;5(2):e9017.

Amante FH, Haque A, Stanley AC, Rivera Fde L, Randall LM, Wilson YA, Yeo G, Pieper C, Crabb BS, de Koning-Ward TF, Lundie RJ, Good MF, Pinzon-Charry A, Pearson MS, Duke MG, McManus DP, Loukas A, Hill GR, Engwerda CR. Immune-mediated mechanisms of parasite tissue sequestration during experimental cerebral malaria. *J Immunol* 2010;185(6):3632-42.

Amar MJ, D'Souza W, Turner S, Demosky S, Sviridov D, Stonik J, Luchoomun J, Voogt J, Hellerstein M, Sviridov D, Remaley AT. 5A apolipoprotein mimetic peptide promotes cholesterol efflux and reduces atherosclerosis in mice. *J Pharmacol Exp Ther* 2010;334(2):634-41.

Anderson JF, Rosenfeld JV. Long-term cognitive outcome after transcallosal resection of hypothalamic hamartoma in older adolescents and adults with gelastic seizures. *Epilepsy Behav* 2010;18(1-2):81-7.

Andrew NE, Gabbe BJ, Wolfe R, Cameron PA. Evaluation of instruments for measuring the burden of sport and active recreation injury. *Sports Med* 2010;40(2):141-61. Review.

- Andrews KL, Moore XL, Chin-Dusting JP.** Anti-atherogenic effects of high-density lipoprotein on nitric oxide synthesis in the endothelium. *Clin Exp Pharmacol Physiol* 2010;37(7):736-42. Review.
- Anstey JR, Fazio TN, Gordon DL, Hogg G, Jenney AW, Maiwald M, Wilksch JJ.** Community-acquired *Klebsiella pneumoniae* liver abscesses – an “emerging disease” in Australia. *Med J Aust* 2010;193(9):543-5.
- Anstey KJ, Byles JE, Luszcz MA, Mitchell P, Steel D, Booth H, Browning C, Butterworth P, Cumming RG, Healy J, Windsor TD, Ross L, Bartsch L, Burns RA, Kiely K, Birrell CL, Broe GA, Shaw J, Kendig H.** Cohort profile: the dynamic analyses to optimize ageing (DYNOPTA) project. *Int J Epidemiol* 2010;39(1):44-51.
- ANZIC Influenza Investigators and Australasian Maternity Outcomes Surveillance System.** Critical illness due to 2009 A/H1N1 influenza in pregnant and postpartum women: population based cohort study. *Br Med J* 2010;340:c1279.
- Ao TT, Sam N, Kiwelu I, Mahal A, Subramanian SV, Wyshak G, Kapiga S.** Risk factors of alcohol problem drinking among female bar/hotel workers in Moshi, Tanzania: a multi-level analysis. *AIDS Behav* 2010;15(2):330-9.
- Apostolopoulos V, Marincola FM.** Methods to measure vaccine immunity. *Expert Rev Vaccines* 2010;9(6):545-6. Editorial.
- Appuhamy RD, Tent J, Mackenzie JS.** Toponymous diseases of Australia. *Med J Aust* 2010;193(11-12):642-6.
- Arnott A, Jardine D, Wilson K, Gorry PR, Merlin K, Grey P, Law MG, Dax EM, Kelleher AD, Smith DE, McPhee DA; Pulse Study Team.** High viral fitness during acute HIV-1 infection. *PLoS One* 2010;5(9):pii: e12631.
- Arns M, Spronk D, Fitzgerald PB.** Potential differential effects of 9 Hz rTMS and 10 Hz rTMS in the treatment of depression. *Brain Stimul* 2010;3(2):124-6. Letter.
- Aroney CN, Hickman PE, Schneider HG, Tate JR, Than M.** Troponin measurement and the new assays: how low can we go? *Med J Aust* 2010;192(5):245-6. Editorial.
- Asadollahi S, de Steiger R, Gruen R, Richardson M.** Management guideline in haemodynamically unstable patients with pelvic fractures: outcomes and challenges. *Emerg Med Australas* 2010;22(6):556-64.
- Aschner P, Horton E, Leiter LA, Munro N, Skyler JS; Global Partnership for Effective Diabetes Management.** Practical steps to improving the management of Type 1 diabetes: recommendations from the Global Partnership for Effective Diabetes Management. *Int J Clin Pract* 2010;64(3):305-15.
- Ashton E, Windebank E, Skiba M, Reid C, Schneider H, Rosenfeldt F, Tonkin A, Krum H.** Why did high-dose rosuvastatin not improve cardiac remodeling in chronic heart failure? Mechanistic insights from the UNIVERSE study. *Int J Cardiol* 2010;146(3):404-7.
- Assarian Z, O'Brien TJ, Chamberlain AJ.** When the hue is blue. *Med Today* 2010;11(8):73-4.
- Astrup A, Clifton P, Layman DK, Mattes RD, Westerterp-Plantenga M.** Meat intake's influence on body fatness cannot be assessed without measurement of body fat. *Am J Clin Nutr* 2010;92(5):1274-5. Letter.
- Asztalos BF, Mujawar Z, Morrow MP, Grant A, Pushkarsky T, Wanke C, Shannon R, Geyer M, Kirchoff F, Sviridov D, Fitzgerald ML, Bukrinsky M, Mansfield KG.** Circulating Nef induces dyslipidemia in simian immunodeficiency virus-infected macaques by suppressing cholesterol efflux. *J Infect Dis* 2010;202(4):614-23.
- Atkins RC, Zimmet P; 2010 International Society of Nephrology/ International Federation of Kidney Foundations World Kidney Day Steering Committee; International Diabetes Federation.** Diabetic kidney disease: act now or pay later. *Acta Diabetol; Acta Physiol Hung; Am J Kidney Dis; Am J Med Sci; Am J Nephrol; Arch Cardiol Mex; Arch Iran Med; Blood Purif; Clin Nephrol; Diabetes Res Clin Pract; Iran J Kidney Dis; J Am Soc Hypertens; J Hypertens; J Nephrol, Kidney Blood Press Res, Kidney Int, Med J Aust, Nat Rev Nephrol, Nephrology, Nephron Clin Pract, Pediatr Nephrol, Saudi J Kidney Dis Transpl, Ther Apher Dial* 2010. Editorial published in many relevant journals.
- Audsley J, Littlejohn M, Yuen L, Sasadeusz J, Ayres A, Desmond C, Spelman T, Lau G, Matthews GV, Avihingsanon A, Seaberg E, Philp F, Saulynas M, Ruxrungtham K, Dore GJ, Locarnini SA, Thio CL, Lewin SR, Revill PA.** HBV mutations in untreated HIV-HBV co-infection using genomic length sequencing. *Virology* 2010;405(2):539-47.
- Augustin S, Horton A, Butt W, Bennett M, Horton S.** Centrifugal pump inlet pressure site affects measurement. *Perfusion-UK* 2010;25(5):313-20.
- Avery S, Barker JN.** Cord blood transplants: one, two or more units? *Curr Opin Hematol* 2010;17(6):531-7. Review.
- Avihingsanon A, Lewin SR, Kerr S, Chang JJ, Piyawat K, Napissanant N, Matthews GV, Dore GJ, Bowden S, Lange J, Ruxrungtham K.** Efficacy of tenofovir disoproxil fumarate/emtricitabine compared with emtricitabine alone in antiretroviral-naive HIV-HBV coinfection in Thailand. *Antivir Ther* 2010;15(6):917-22.
- Azarpazhooh MR, Etemadi MM, Donnan GA, Mokhber N, Majdi MR, Ghayour-Mobarhan M, Ghandehary K, Farzadfard MT, Kiani R, Panahandeh M, Thrift AG.** Excessive incidence of stroke in Iran. Evidence from the Mashhad Stroke Incidence Study (MSIS), a population-based study of stroke in the Middle East. *Stroke* 2010;41(1):e3-e10.
- Azhar M, Wang PY, Frugier T, Koishi K, Deng C, Noakes PG, McLennan IS.** Myocardial deletion of *Smad4* using a novel α skeletal muscle actin Cre recombinase transgenic mouse causes misalignment of the cardiac outflow tract. *Int J Biol Sci* 2010;6(6):546-55.
- Azzopardi P, Gray N.** Developing country health in a developed country: personal perspectives. *J Paediatr Child Health* 2010;46(9):549-51.
- Backholer K, Bowden M, Gamber K, Bjørbaek C, Iqbal J, Clarke IJ.** Melanocortins mimic the effects of leptin to restore reproductive function in lean hypogonadotropic ewes. *Neuroendocrinology* 2010;91(1):27-40.
- Backholer K, Smith JT, Rao A, Pereira A, Iqbal J, Ogawa S, Li Q, Clarke IJ.** Kisspeptin cells in the ewe brain respond to leptin and communicate with neuropeptide Y and proopiomelanocortin cells. *Endocrinology* 2010;151(5):2233-43.
- Backholer K, Walls HL, Magliano DJ, Peeters A.** Setting population targets for measuring successful obesity prevention. *Am J Public Health* 2010;100(11):2033-7.
- Baglietto L, Severi G, English DR, Krishnan K, Hopper JL, McLean C, Morris HA, Tilley WD, Giles GG.** Circulating steroid hormone levels and risk of breast cancer for postmenopausal women. *Cancer Epidemiol Biomarkers Prev* 2010;19(2):492-502.
- Bagshaw SM, Bennett M, Haase M, Haase-Fielitz A, Egi M, Morimatsu H, D'amico G, Goldsmith D, Devarajan P, Bellomo R.** Plasma and urine neutrophil gelatinase-associated lipocalin in septic versus non-septic acute kidney injury in critical illness. *Intensive Care Med* 2010;36(3):452-61.
- Bagshaw SM, Cruz DN, Aspromonte N, Daliento L, Ronco F, Sheinfeld G, Anker SD, Anand I, Bellomo R, Berl T, Bobek I, Davenport A, Haapio M, Hillege H, House A, Katz N, Maisel A, Mankad S, McCullough P, Mebazaa A, Palazzuoli A, Ponikowski P, Shaw A, Soni S, Vescovo G, Zamperetti N, Zanco P, Ronco C; Acute Dialysis Quality Initiative Consensus Group.** Epidemiology of cardio-renal syndromes: workgroup statements from the 7th ADQI Consensus Conference. *Nephrol Dial Transplant* 2010;25(5):1406-16. Review.
- Bagshaw SM, Mondor EE, Scouten C, Montgomery C, Slater-MacLean L, Jones DA, Bellomo R, Gibney RT; Capital Health Medical Emergency Team Investigators.** A survey of nurses' beliefs about the medical emergency team system in a Canadian tertiary hospital. *Am J Crit Care* 2010;19(1):74-83.
- Baker AR, Baker AB.** Anaesthesia for endoscopic sinus surgery. *Acta Anaesthesiol Scand* 2010;54(7):795-803. Review.
- Baker EK, El-Osta A.** Epigenetic regulation of multidrug resistance 1 gene expression: profiling CpG methylation status using bisulphite sequencing. *Methods Mol Biol* 2010;596:183-98.
- Baker JA, Keady J, Hardman P, Kay J, Jones L, Jolley D.** Medicine use in older people's inpatient mental health services. *J Psychiatr Ment Health Nurs* 2010;17(3):280-5.

- Bakris GL, Lindholm LH, Black HR, Krum H, Linas S, Linseman JV, Arterburn S, Sager P, Weber M.** Divergent results using clinic and ambulatory blood pressures: report of a darusentan-resistant hypertension trial. *Hypertension* 2010;56(5):824-30.
- Balamurali M, Petravic J, Loh L, Alcantara S, Kent SJ, Davenport MP.** Does cytolysis by CD8+ T cells drive immune escape in HIV infection? *J Immunol* 2010;185(9):5093-101.
- Balcerczyk A, Pirola L.** Therapeutic potential of activators and inhibitors of sirtuins. *Biofactors* 2010;36(5):383-93. Review.
- Ball C.** Joseph Clover and the cobra: a tale of snake envenomation and attempted resuscitation with bellows in London, 1852. *Anaesth Intensive Care* 2010;38 Suppl 1:5-9. Comment.
- Ball C, Thomson KR, Kavnoudias H.** Irreversible electroporation: a new challenge in "out of operating theater" anesthesia. *Anesth Analg* 2010;110(5):1305-9.
- Ball C, Westhorpe RN.** The history of depth of anaesthesia monitoring. *Anaesth Intensive Care* 2010;38(5):797. Comment.
- Ballinger ML, Osman N, Hashimura K, de Haan JB, Jandeleit-Dahm K, Allen T, Tannock LR, Rutledge JC, Little PJ.** Imatinib inhibits vascular smooth muscle proteoglycan synthesis and reduces LDL binding *in vitro* and aortic lipid deposition *in vivo*. *J Cell Mol Med* 2010;14(6B):1408-18.
- Barker J, Weller C.** Developing clinical practice guidelines for the prevention and management of venous leg ulcers. *Wound Pract Res* 2010;18(2):62-64.
- Barker PJ, Freeman AD, Urquhart DM, Anderson CR, Briggs CA.** The middle layer of lumbar fascia can transmit tensile forces capable of fracturing the lumbar transverse processes: an experimental study. *Clin Biomech* 2010;25(6):505-9.
- Barlovic DP, Thomas MC, Jandeleit-Dahm K.** Cardiovascular disease: what's all the AGE/RAGE about? *Cardiovasc Hematol Disord Drug Targets* 2010;10(1):7-15. Review.
- Barnsley L, Buchbinder R, Riminton S.** Anti-cytokine therapies for primary systemic necrotizing vasculitis. *Cochrane Database Syst Rev* 2010;(1):CD008333. Protocol.
- Barr EL, Cameron AJ, Balkau B, Zimmet PZ, Welborn TA, Tonkin AM, Shaw JE.** HOMA insulin sensitivity index and the risk of all-cause mortality and cardiovascular disease events in the general population: the Australian Diabetes, Obesity and Lifestyle Study (AusDiab) study. *Diabetologia* 2010;53(1):79-88.
- Barr MS, Farzan F, Tran LC, Chen R, Fitzgerald PB, Daskalakis ZJ.** Evidence for excessive frontal evoked gamma oscillatory activity in schizophrenia during working memory. *Schizophr Res* 2010;121(1-3):146-52.
- Bassed RB, Briggs C, Drummer OH.** Analysis of time of closure of the spheno-occipital synchondrosis using computed tomography. *Forensic Sci Int* 2010;200(1-3):161-4.
- Baumert M, Lambert E, Vaddadi G, Sari CI, Esler M, Lambert G, Sanders P, Nalivaiko E.** Cardiac repolarization variability in patients with postural tachycardia syndrome during graded head-up tilt. *Clin Neurophysiol* 2010;122(2):405-9.
- Bayles R, Baker E, Eikelis N, El-Osta A, Lambert G.** Histone modifications regulate the norepinephrine transporter gene. *Cell Cycle* 2010;9(22):4600-1.
- Bear RE, Fitzgerald P, Rosenfeld JV, Bittar RG.** Neurosurgery for obsessive-compulsive disorder: contemporary approaches. *J Clin Neurosci* 2010;17(1):1-5.
- Beauchamp A, Peeters A, Tonkin A, Turrell G.** Best practice for prevention and treatment of cardiovascular disease through an equity lens: a review. *Eur J Cardiovasc Prev Rehabil* 2010;17(5):599-606. Review.
- Beauchamp A, Peeters A, Wolfe R, Turrell G, Harriss LR, Giles GG, English DR, McNeil J, Magliano D, Harrap S, Liew D, Hunt D, Tonkin AM.** Inequalities in cardiovascular disease mortality: the role of behavioural, physiological and social risk factors. *J Epidemiol Community Health* 2010;64(6):542-8.
- Beauchamp A, Tonkin A, Peeters A, Wolfe R, Turrell G, Harriss L, Giles GG, English DR, Jenkins AJ.** Associations among smoking status, lifestyle and lipoprotein subclasses. *J Clin Lipidol* 2010;4(6):522-30.
- Becker AC, Libhaber E, Sliwa K, Stewart S, Essop MR.** Markers of inflammation and endothelial activation in black South Africans with HIV and acute coronary syndromes. *J AIDS HIV Res* 2010;2(6):104-10.
- Becker AC, Sliwa K, Stewart S, Libhaber E, Essop AR, Zambakides CA, Essop MR.** Acute coronary syndromes in treatment-naïve black South Africans with human immunodeficiency virus infection. *J Interv Cardiol* 2010;23(1):70-7.
- Bell RJ, Lijovic M, La China M, Schwarz M, Fradkin P, Bradbury J, Davis SR.** Psychological well-being in a cohort of women with invasive breast cancer nearly 2 years after diagnosis. *Support Care Cancer* 2010;18(8):921-9.
- Bellamy-McIntyre AK, Bär S, Ludlow L, Drummer HE, Poubourios P.** Role for the disulfide-bonded region of human immunodeficiency virus type 1 gp41 in receptor-triggered activation of membrane fusion function. *Biochem Biophys Res Commun* 2010;394(4):904-8.
- Bellomo R.** Mortality in severe sepsis: an inconvenient truth. *Crit Care Resusc* 2010;12(1):6-8. Editorial.
- Bellomo R, Pettilä V, Webb SA, Bailey M, Howe B, Seppelt IM.** Acute kidney injury and 2009 H1N1 influenza-related critical illness. *Contrib Nephrol* 2010;165:310-4.
- Belobrajdic DP, Frystyk J, Jeyaratnaganathan N, Espelund U, Flyvbjerg A, Clifton PM, Noakes M.** Moderate energy restriction-induced weight loss affects circulating IGF levels independent of dietary composition. *Eur J Endocrinol* 2010;162(6):1075-82.
- Benassi-Evans B, Clifton P, Noakes M, Fenech M.** High-protein/high red meat and high-carbohydrate weight-loss diets do not differ in their effect on faecal water genotoxicity tested by use of the WIL2-NS cell line and with other biomarkers of bowel health. *Mutat Res* 2010;703(2):130-6.
- Bennell K, Wee E, Coburn S, Green S, Harris A, Staples M, Forbes A, Buchbinder R.** Efficacy of standardised manual therapy and home exercise programme for chronic rotator cuff disease: randomised placebo controlled trial. *Br Med J* 2010;340:c2756.
- Bennell KL, Creaby MW, Wrigley TV, Bowles KA, Hinman RS, Cicuttini F, Hunter DJ.** Bone marrow lesions are related to dynamic knee loading in medial knee osteoarthritis. *Ann Rheum Dis* 2010;69(6):1151-4.
- Bennett CM, Dharmage SC, Matheson M, Gras JL, Markos J, Mészáros D, Hopper J, Walters EH, Abramson MJ.** Ambient wood smoke exposure and respiratory symptoms in Tasmania, Australia. *Sci Total Environ* 2010;409(2):294-9.
- Bennie J, Timperio A, Dunstan D, Crawford D, Salmon J.** Environmental correlates of physical activity in Australian workplaces. *Int J Workplace Health Manag* 2010;3(1):25-33.
- Bentley R, Jolley D, Kavanagh AM.** Local environments as determinants of walking in Melbourne, Australia. *Soc Sci Med* 2010;70(11):1806-15.
- Bergenstrom A, McLeod R, Sharma M, Mesquita F, Dorabjee J, Atun R, Lewis G, Rao JV.** How much will it cost? Estimation of resource needs and availability for HIV prevention, treatment and care for people who inject drugs in Asia. *Int J Drug Policy* 2010;21(2):107-9.
- Bernard SA, Nguyen V, Cameron P, Masci K, Fitzgerald M, Cooper DJ, Walker T, Std BP, Myles P, Murray L, David, Taylor, Smith K, Patrick I, Edington J, Bacon A, Rosenfeld JV, Judson R.** Prehospital rapid sequence intubation improves functional outcome for patients with severe traumatic brain injury: a randomized controlled trial. *Ann Surg* 2010;252(6):959-65.
- Bernard SA, Smith K, Cameron P, Masci K, Taylor DM, Cooper DJ, Kelly AM, Silvester W; Rapid Infusion of Cold Hartmanns (RICH) Investigators.** Induction of therapeutic hypothermia by paramedics after resuscitation from out-of-hospital ventricular fibrillation cardiac arrest: a randomized controlled trial. *Circulation* 2010;122(7):737-42.

- Bernardo BC, Weeks KL, Pretorius L, McMullen JR.** Molecular distinction between physiological and pathological cardiac hypertrophy: experimental findings and therapeutic strategies. *Pharmacol Ther* 2010;128(1):191-227. Review.
- Berry PA, Maciewicz RA, Cicuttini FM, Jones MD, Hellowell CJ, Wluka AE.** Markers of bone formation and resorption identify subgroups of patients with clinical knee osteoarthritis who have reduced rates of cartilage loss. *J Rheumatol* 2010;37(6):1252-9.
- Berry PA, Maciewicz RA, Wluka AE, Downey-Jones MD, Forbes A, Hellowell CJ, Cicuttini FM.** Relationship of serum markers of cartilage metabolism to imaging and clinical outcome measures of knee joint structure. *Ann Rheum Dis* 2010;69(10):1816-22.
- Berry PA, Wluka AE, Davies-Tuck ML, Wang Y, Strauss BJ, Dixon JB, Proietto J, Jones G, Cicuttini FM.** The relationship between body composition and structural changes at the knee. *Rheumatology* 2010;49(12):2362-9.
- Berzsenyi MD, Roberts SK.** Viral response guided therapy for hepatitis C in the approaching era of direct acting anti-viral agents. *J Gastroenterol Hepatol* 2010;25(4):655-6. Editorial.
- Bhure UN, Lardinois D, Kalff V, Hany TF, Soltermann A, Seifert B, Steinert HC.** Accuracy of CT parameters for assessment of tumour size and aggressiveness in lung adenocarcinoma with bronchoalveolar elements. *Br J Radiol* 2010;83(994):841-9.
- Bialasiewicz S, Rockett R, Whiley DW, Abed Y, Allander T, Binks M, Boivin G, Cheng AC, Chung JY, Ferguson PE, Gilroy NM, Leach AJ, Lindau C, Rossen JW, Sorrell TC, Nissen MD, Sloots TP.** Whole-genome characterization and genotyping of global WU polyomavirus strains. *J Virol* 2010;84(12):6229-34.
- Bilardi JE, De Guingand DL, Temple-Smith MJ, Garland S, Fairley CK, Grover S, Wallace E, Hocking JS, Tabrizi S, Pirota M, Chen MY.** Young pregnant women's views on the acceptability of screening for chlamydia as part of routine antenatal care. *BMC Public Health* 2010;10:505.
- Bilardi JE, Fairley CK, Hopkins CA, Hocking JS, Sze JK, Chen MY.** Let Them Know: evaluation of an online partner notification service for chlamydia that offers e-mail and SMS messaging. *Sex Transm Dis* 2010;37(9):563-5.
- Bilardi JE, Fairley CK, Hopkins CA, Hocking JS, Temple-Smith MJ, Bowden FJ, Russell DB, Pitts M, Tomnay JE, Parker RM, Pavlin NL, Chen MY.** Experiences and outcomes of partner notification among men and women recently diagnosed with chlamydia and their views on innovative resources aimed at improving notification rates. *Sex Transm Dis* 2010;37(4):253-8.
- Bilardi JE, Fairley CK, Temple-Smith MJ, Pirota MV, McNamee KM, Bourke S, Gurrin LC, Hellard M, Sanci LA, Wills MJ, Walker J, Chen MY, Hocking JS.** Incentive payments to general practitioners aimed at increasing opportunistic testing of young women for chlamydia: a pilot cluster randomised controlled trial. *BMC Public Health* 2010;10:70.
- Billah B, Reid CM, Shardey GC, Smith JA.** A preoperative risk prediction model for 30-day mortality following cardiac surgery in an Australian cohort. *Eur J Cardiothorac Surg* 2010;37(5):1086-92.
- Bird D, Oldenburg B, Cassimatis M, Russell A, Ash S, Courtney MD, Scuffham PA, Stewart I, Wootton R, Friedman RH.** Randomised controlled trial of an automated, interactive telephone intervention to improve Type 2 diabetes self-management (Telephone-Linked Care Diabetes Project): study protocol. *BMC Public Health* 2010;10:599. Protocol.
- Bissessor M, Fairley CK, Leslie D, Howley K, Chen MY.** Frequent screening for syphilis as part of HIV monitoring increases the detection of early asymptomatic syphilis among HIV-positive homosexual men. *J Acquir Immune Defic Syndr* 2010;55(2):211-6.
- Blood Observational Study Investigators of ANZICS-Clinical Trials Group, Westbrook A, Pettilä V, Nichol A, Bailey MJ, Syres G, Murray L, Bellomo R, Wood E, Phillips LE, Street A, French C, Orford N, Santamaria J, Cooper DJ.** Transfusion practice and guidelines in Australian and New Zealand intensive care units. *Intensive Care Med* 2010;36(7):1138-46.
- Blows FM, Driver KE, Schmidt MK, Broeks A, van Leeuwen FE, Wesseling J, Cheang MC, Gelmon K, Nielsen TO, Blomqvist C, Heikkilä P, Heikkinen T, Nevanlinna H, Akslen LA, Bégin LR, Foulkes WD, Couch FJ, Wang X, Cafourek V, Olson JE, Baglietto L, Giles GG, Severi G, McLean CA, Southey MC, Rakha E, Green AR, Ellis IO, Sherman ME, Lissowska J, Anderson WF, Cox A, Cross SS, Reed MW, Provenzano E, Dawson SJ, Dunning AM, Humphreys M, Easton DF, Garcia-Closas M, Caldas C, Pharoah PD, Huntsman D.** Subtyping of breast cancer by immunohistochemistry to investigate a relationship between subtype and short and long term survival: a collaborative analysis of data for 10,159 cases from 12 studies. *PLoS Med* 2010;7(5):e1000279.
- Blumberger DM, Fitzgerald PB, Mulsant BH, Daskalakis ZJ.** Repetitive transcranial magnetic stimulation for refractory symptoms in schizophrenia. *Curr Opin Psychiatr* 2010;23(2):85-90. Review.
- Bobik A.** Circulating microparticles. Markers or participants in carotid artery remodelling? *J Hypertens* 2010;28(4):673-5. Editorial.
- Boddey JA, Hodder AN, Günther S, Gilson PR, Patsiouras H, Kapp EA, Pearce JA, de Koning-Ward TF, Simpson RJ, Crabb BS, Cowman AF.** An aspartyl protease directs malaria effector proteins to the host cell. *Nature* 2010;463(7281):627-31.
- Bohensky MA, Jolley D, Sundararajan V, Evans S, Pilcher DV, Scott I, Brand CA.** Data linkage: a powerful research tool with potential problems. *BMC Health Serv Res* 2010;10:346.
- Böhm M, Baumhäkel M, Teo K, Sleight P, Probstfield J, Gao P, Mann JF, Diaz R, Dagenais GR, Jennings GL, Liu L, Jansky P, Yusuf S; ONTARGET/TRANSCEND Erectile Dysfunction Substudy Investigators.** Erectile dysfunction predicts cardiovascular events in high-risk patients receiving telmisartan, ramipril, or both: the ONgoing Telmisartan Alone and in combination with Ramipril Global Endpoint Trial/Telmisartan Randomized Assessment Study in ACE intolerant subjects with cardiovascular Disease (ONTARGET/TRANSCEND) Trials. *Circulation* 2010;121(12):1439-46.
- Bond ME, Williams MJ, Crammond B, Loff B.** Taxing junk food: applying the logic of the Henry tax review to food. *Med J Aust* 2010;193(8):472-3. Letter.
- Borchard K, Puy R, Nixon R.** Hyaluronidase allergy: a rare cause of periorbital inflammation. *Australas J Dermatol* 2010;51(1):49-51.
- Borg BM, Hartley MF, Fisher MT, Thompson BR.** Spirometry training does not guarantee valid results. *Respir Care* 2010;55(6):689-94.
- Bosch M, Wensing M, Bakx C, van der Weijden T, Hoes R, Grol R.** Behandeling van chronisch hartfalen. *Huisarts en Wetenschap* 2010;53(12):667-70.
- Botlero R, Bell RJ, Urquhart DM, Davis SR.** Urinary incontinence is associated with lower psychological general well-being in community-dwelling women. *Menopause* 2010;17(2):332-7.
- Bourdin A, Kotsimbos T, Nguyen K, Vachier I, Mainprice B, Farce M, Paganin F, Marty-Ané C, Vernhet H, Godard P, Chanez P.** Non-invasive assessment of small airway remodelling in smokers. *COPD* 2010;7(2):102-10.
- Bousquet J, Schünemann HJ, Zuberbier T, Bachert C, Baena-Cagnani CE, Bousquet PJ, Brozek J, Canonica GW, Casale TB, Demoly P, Gerth van Wijk R, Ohta K, Bateman ED, Calderon M, Cruz AA, Dolen WK, Haughney J, Lockey RF, Lötvall J, O'Byrne P, Spranger O, Togias A, Bonini S, Boulet LP, Camargos P, Carlsen KH, Chavannes NH, Delgado L, Durham SR, Fokkens WJ, Fonseca J, Haahtela T, Kalayci O, Kowalski ML, Larenas-Linnemann D, Li J, Mohammad Y, Mullol J, Naclerio R, O'Hehir RE, Papadopoulos N, Passalacqua G, Rabe KF, Pawankar R, Ryan D, Samolinski B, Simons FE, Valovirta E, Yorgancioglu A, Yusuf OM, Agache I, Ait-Khaled N, Annesi-Maesano I, Beghe B, Ben Kheder A, Blaiss MS, Boakye DA, Bouchard J, Burney PG, Busse WW, Chan-Yeung M, Chen Y, Chuchalin AG, Costa DJ, Custovic A, Dahl R, Denburg J,**

- Douagui H, Emuzyte R, Grouse L, Humbert M, Jackson C, Johnston SL, Kaliner MA, Keith PK, Kim YY, Klossek JM, Kuna P, Le LT, Lemiere C, Lipworth B, Mahboub B, Malo JL, Marshall GD, Mavale-Manuel S, Meltzer EO, Morais-Almeida M, Motala C, Naspitz C, Nekam K, Niggemann B, Nizankowska-Mogilnicka E, Okamoto Y, Orru MP, Ouedraogo S, Palkonen S, Popov TA, Price D, Rosado-Pinto J, Scadding GK, Sooronbaev TM, Stoloff SW, Toskala E, van Cauwenberge P, Vandenplas O, van Weel C, Viegi G, Virchow JC, Wang DY, Wickman M, Williams D, Yawn BP, Zar HJ, Zernotti M, Zhong N; In collaboration with the WHO Collaborating Center of Asthma and Rhinitis (Montpellier). Development and implementation of guidelines in allergic rhinitis – an ARIA-GA2LEN paper. *Allergy* 2010;65(10):1212-21.
- Boyko EJ, Gerstein HC, Mohan V, Yusuf S, Sheridan P, Anand S, Shaw JE; DREAM trial investigators. Effects of ethnicity on diabetes incidence and prevention: results of the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) trial. *Diabet Med* 2010;27(11):1226-32.
- Boyle MJ, Richards JS, Gilson PR, Chai W, Beeson JG. Interactions with heparin-like molecules during erythrocyte invasion by *Plasmodium falciparum* merozoites. *Blood* 2010;115(22):4559-68.
- Bozaoglu K, Curran JE, Stocker CJ, Zaibi MS, Segal D, Konstantopoulos N, Morrison S, Carless M, Dyer TD, Cole SA, Goring HH, Moses EK, Walder K, Cawthorne MA, Blangero J, Jowett JB. Chemerin, a novel adipokine in the regulation of angiogenesis. *J Clin Endocrinol Metab* 2010;95(5):2476-85.
- Brace RJ, Sorrenson B, Sviridov D, McCormick SP. A gel-based method for purification of apolipoprotein A-I from small volumes of plasma. *J Lipid Res* 2010;51(11):3370-6.
- Brack J, Sindone A, Funston R, Schneider H, Skiba M, Ueng KC, Krum H. Is addition of angiotensin receptor blockade superior to increasing ACE inhibitor dose in patients with heart failure? *Int J Cardiol* 2010;139(3):309-12.
- Bragge P. Asking good clinical research questions and choosing the right study design. *Injury* 2010;41 Suppl 1:S3-6.
- Brand C, Claydon-Platt K, McColl GJ, Bucknall TK. Meeting the needs of people diagnosed with rheumatoid arthritis: an analysis of patient-reported experience. *J Nurs Healthcare Chronic Illness* 2010;2(1):75-83.
- Brand CA, Amatya B, Gordon B, Tosti T, Gorelik A. Redesigning care for chronic conditions: improving hospital-based ambulatory care for people with osteoarthritis of the hip and knee. *Intern Med J* 2010;40(6):427-36.
- Brand CA, Kennedy MP, King-Kallimanis BL, Williams G, Bain CA, Russell DM. Evaluation of the impact of implementation of a Medical Assessment and Planning Unit on length of stay. *Aust Health Rev* 2010;34(3):334-9.
- Brand CA, Sundararajan V. A 10-year cohort study of the burden and risk of in-hospital falls and fractures using routinely collected hospital data. *Qual Saf Health Care* 2010;19(6):e51.
- Braun L. CMs are safe, say your customers. *Aust J Pharm* 2010;91(1081):52-3. Review.
- Braun L. Integrating CM into practice. *Aust J Pharm* 2010;91(1082):50-1. Review.
- Braun L. Integrative medicine in the US. *Aust J Pharm* 2010;91(1076):38-9. Review.
- Braun L. Iodine and fish oil in pregnancy. *Aust J Pharm* 2010;91(1086):54-5. Review.
- Braun L. Pelargonium: the new echinacea? Part 1. *Aust J Pharm* 2010;91(1078):46. Review.
- Braun L. Pelargonium: the new echinacea? Part 2. *Aust J Pharm* 2010;91(1079):57-8. Review.
- Braun L. Research rigorous and relevant. *Aust J Pharm* 2010;91(1084):68-9. Review.
- Braun LA, Tiralongo E, Wilkinson JM, Poole S, Spitzer O, Bailey M, Dooley M. Adverse reactions to complementary medicines: the Australian pharmacy experience. *Int J Pharm Pract* 2010;18(4):242-4.
- Braun LA, Tiralongo E, Wilkinson JM, Spitzer O, Bailey M, Poole S, Dooley M. Perceptions, use and attitudes of pharmacy customers on complementary medicines and pharmacy practice. *BMC Complement Altern Med* 2010;10:38.
- Brennan SL, Cicuttini FM, Pasco JA, Henry MJ, Wang Y, Kotowicz MA, Nicholson GC, Wluka AE. Does an increase in body mass index over 10 years affect knee structure in a population-based cohort study of adult women? *Arthritis Res Ther* 2010;2(4):R139.
- Brennan SL, Cicuttini FM, Shortreed S, Forbes A, Jones G, Stuckey SL, Wluka AE. Women lose patella cartilage at a faster rate than men: a 4.5-year cohort study of subjects with knee OA. *Maturitas* 2010;67(3):270-4.
- Brennan SL, Henry MJ, Kotowicz MA, Nicholson GC, Zhang Y, Pasco JA. Incident hip fracture and social disadvantage in an Australian population aged 50 years or greater. *Bone* 2010;48(3):607-10.
- Brennan SL, Henry MJ, Nicholson GC, Kotowicz MA, Pasco JA. Socioeconomic status, obesity and lifestyle in men: the Geelong Osteoporosis Study. *J Men's Health* 2010;7(1):31-41.
- Brennan SL, Henry MJ, Nicholson GC, Pasco JA. Urban-rural comparison of weight status among women and children living in socioeconomically disadvantaged neighbourhoods. *Med J Aust* 2010;193(3):187-8. Letter.
- Brennan SL, Henry MJ, Wluka AE, Nicholson GC, Kotowicz MA, Pasco JA. Socioeconomic status and bone mineral density in a population-based sample of men. *Bone* 2010;46(4):993-9.
- Brennan SL, Pasco JA, Urquhart DM, Oldenburg B, Hanna F, Wluka AE. Educational achievement and fracture risk: response to Clark and Tobias. *Osteoporos Int* 2010;21(9):1623. Author reply.
- Brennan SL, Pasco JA, Urquhart DM, Oldenburg B, Hanna FS, Wluka AE. The association between urban or rural locality and hip fracture in community-based adults: a systematic review. *J Epidemiol Community Health* 2010;64(8):656-65. Review.
- Briggs AM, Jordan JE, Buchbinder R, Burnett AF, O'Sullivan PB, Chua JY, Osborne RH, Straker LM. Health literacy and beliefs among a community cohort with and without chronic low back pain. *Pain* 2010;150(2):275-83.
- Brinkworth GD, Buckley JD, Noakes M, Clifton PM. Renal function following long-term weight loss in individuals with abdominal obesity on a very-low-carbohydrate diet vs high-carbohydrate diet. *J Am Diet Assoc* 2010;110(4):633-8.
- Briskman L, Zion D, Loff B. Challenge and collusion: health professionals and immigration detention in Australia. *Int J Hum Rights* 2010;14(7):1092-1106.
- Brodie L, Bugeja L, Ibrahim JE. Coroners' recommendations following fatal heavy vehicle crash investigations. *Aust N Z J Public Health* 2010;34:920:136-41.
- Brodie LR, Ibrahim JE. Fatal injury in tree felling and related activities, Victoria, Australia 1992-2007. *Inj Prev* 2010;16(1):53-6.
- Brooker JE, Fletcher JM, Dally MJ, Briggs RJ, Cousins VC, Smee RI, Malham GM, Kennedy RJ, Burney S. Quality of life among acoustic neuroma patients managed by microsurgery, radiation, or observation. *Otol Neurotol* 2010;31(6):977-84.
- Brooks NA, Pouniotis DS, Sheng KC, Apostolopoulos V, Pietersz GA. A membrane penetrating multiple antigen peptide (MAP) incorporating ovalbumin CD8 epitope induces potent immune responses in mice. *Biochim Biophys Acta-Biomembranes* 2010;1798(12):2286-95.
- Brooks NA, Pouniotis DS, Tang CK, Apostolopoulos V, Pietersz GA. Cell-penetrating peptides: application in vaccine delivery. *Biochim Biophys Acta-Rev Cancer* 2010;1805(1):25-34. Review.
- Brotherton JM, Fairley CK, Garland SM, Gertig D, Saville M. Closing editorial: processes, opportunities and challenges after introduction of human papillomavirus vaccine. *Sex Health* 2010;7(3):397-8. Editorial.

- Brown A.** Acute coronary syndromes in indigenous Australians: opportunities for improving outcomes across the continuum of care. *Heart Lung Circ* 2010;19(5-6):325-36.
- Brown A, Brieger D, Tonkin A, White H, Walsh W, Riddell T, Zeitz C, Jeremy R, Kritharides L.** Coronary disease in indigenous populations: summary from the CSANZ indigenous Cardiovascular Health Conference. *Heart Lung Circ* 2010;19(5-6):299-305. Review.
- Brown A, Kritharides L.** Cardiovascular disease. *Heart Lung Circ* 2010;19(5-6):263. Editorial.
- Brown A, Tonkin A, White H, Riddell T, Brieger D, Walsh W, Zeitz C, Jeremy R, Kritharides L.** The Cardiac Society Inaugural Cardiovascular Health Conference: conference findings and ways forward. *Heart Lung Circ* 2010;19(5-6):264-8. Review.
- Bruce E, Bauai L, Masta A, Rooney PJ, Panu M, Sapuri M, Keogh L, Kaldor J, Fairley CK.** A cross-sectional study of reported symptoms for sexually transmissible infections among female sex workers in Papua New Guinea. *Sex Health* 2010;7(1):71-6.
- Bruce E, Bauai L, Yeka W, Sapuri M, Keogh L, Kaldor J, Fairley CK.** Knowledge, attitudes, practices and behaviour of female sex workers in Port Moresby, Papua New Guinea. *Sex Health* 2010;7(1):85-6.
- Bruno S, Shiffman ML, Roberts SK, Gane EJ, Messinger D, Hadziyannis SJ, Marcellin P.** Efficacy and safety of peginterferon alfa-2a (40KD) plus ribavirin in hepatitis C patients with advanced fibrosis and cirrhosis. *Hepatology* 2010;51(2):388-97.
- Bryant RA, O'Donnell ML, Creamer M, McFarlane AC, Clark CR, Silove D.** The psychiatric sequelae of traumatic injury. *Am J Psychiatry* 2010;167(3):312-20.
- Buchbinder R, Kallmes DF.** Vertebroplasty: when randomized placebo-controlled trial results clash with common belief. *Spine J* 2010;10(3):241-3. Comment.
- Buchbinder R, Osborne RH, Kallmes D.** Invited editorial presents an accurate summary of the results of two randomised placebo-controlled trials of vertebroplasty. *Med J Aust* 2010;192(6):338-41. Review.
- Buchbinder R, Osborne RH, Kallmes DF.** Vertebroplasty appears no better than placebo for painful osteoporotic spinal fractures, and has potential to cause harm. *Med J Aust* 2010;192(3):175. Author reply.
- Buchbinder R, Pransky G, Hayden J.** Recent advances in the evaluation and management of nonspecific low back pain and related disorders. *Best Pract Res Clin Rheumatol* 2010;24(2):147-53. Review.
- Buchbinder R, Richards BL.** Is lateral epicondylitis a new indication for botulinum toxin? *CMAJ* 2010;182(8):749-50. Comment.
- Buchert M, Athineos D, Abud HE, Burke ZD, Faux MC, Samuel MS, Jarnicki AG, Winbanks CE, Newton IP, Meniel VS, Suzuki H, Stacker SA, Näthke IS, Tosh D, Huelsken J, Clarke AR, Heath JK, Sansom OJ, Ernst M.** Genetic dissection of differential signaling threshold requirements for the Wnt/ β -catenin pathway *in vivo*. *PLoS Genet* 2010;6(1):e1000816.
- Bugeja L, Ibrahim JE, Brodie L.** Occupational death investigation and prevention model for coroners and medical examiners. *Inj Prev* 2010;16(1):2-6. Comment.
- Burch ML, Ballinger ML, Yang SN, Getachew R, Itman C, Loveland K, Osman N, Little PJ.** Thrombin stimulation of proteoglycan synthesis in vascular smooth muscle is mediated by protease-activated receptor-1 transactivation of the transforming growth factor β type I receptor. *J Biol Chem* 2010;285(35):26798-805.
- Burch ML, Yang SN, Ballinger ML, Getachew R, Osman N, Little PJ.** TGF- β stimulates biglycan synthesis via p38 and ERK phosphorylation of the linker region of Smad2. *Cell Mol Life Sci* 2010;67(12):2077-90.
- Burgess MA, McIntyre PB, Hellard M, Ruff TA, Lefevre I, Bock HL.** Antibody persistence six years after two doses of combined hepatitis A and B vaccine. *Vaccine* 2010;28(10):2222-6.
- Burke SL, Evans RG, Head GA.** Effects of chronic sympatho-inhibition on reflex control of renal blood flow and plasma renin activity in renovascular hypertension. *Br J Pharmacol* 2010;159(2):438-48.
- Burns WC, Thomas MC.** The molecular mediators of type 2 epithelial to mesenchymal transition (EMT) and their role in renal pathophysiology. *Expert Rev Mol Med* 2010;12:e17.
- Burns WC, Thomas MC.** Angiotensin II and its role in tubular epithelial to mesenchymal transition associated with chronic kidney disease. *Cells Tissues Organs* 2010;193(1-2):74-84. Review.
- Burns WC, Velkoska E, Dean R, Burrell LM, Thomas MC.** Angiotensin II mediates epithelial-to-mesenchymal transformation in tubular cells by ANG 1-7/MAS-1-dependent pathways. *Am J Physiol Renal Physiol* 2010;299(3):F585-93.
- Burton PR, Brown WA, Laurie C, Hebbard G, O'Brien PE.** Criteria for assessing esophageal motility in laparoscopic adjustable gastric band patients: the importance of the lower esophageal contractile segment. *Obes Surg* 2010;20(3):316-25.
- Burton PR, Brown WA, Laurie C, Hebbard G, O'Brien PE.** Mechanisms of bolus clearance in patients with laparoscopic adjustable gastric bands. *Obes Surg* 2010;20(9):1265-72.
- Burton PR, Brown WA, Laurie C, Hebbard G, O'Brien PE.** Predicting outcomes of intermediate term complications and revisional surgery following laparoscopic adjustable gastric banding: utility of the CORE classification and Melbourne motility criteria. *Obes Surg* 2010;20(11):1516-23.
- Burton PR, Brown WA, Laurie C, Korin A, Yap K, Richards M, Owens J, Crosthwaite G, Hebbard G, O'Brien PE.** Pathophysiology of laparoscopic adjustable gastric bands: analysis and classification using high-resolution video manometry and a stress barium protocol. *Obes Surg* 2010;20(1):19-29.
- Burton PR, Yap K, Brown WA, Laurie C, O'Donnell M, Hebbard G, Kalff V, O'Brien PE.** Effects of adjustable gastric bands on gastric emptying, supra- and infraband transit and satiety: a randomized double-blind crossover trial using a new technique of band visualization. *Obes Surg* 2010;20(12):1690-7.
- Bush MR, Williams H, Fairley CK.** HIV is rare among low-risk heterosexual men and significant potential savings could occur through phone results. *Sex Health* 2010;7(4):495-7.
- Buyken AE, Flood V, Rohtchina E, Nestel P, Brand-Miller J, Mitchell P.** Modifications in dietary fat quality are associated with changes in serum lipids of older adults independently of lipid medication. *J Nutr* 2010;140(1):88-94.
- Buykx P, Dietze P, Ritter A, Loxley W.** Characteristics of medication overdose presentations to the ED: how do they differ from illicit drug overdose and self-harm cases? *Emerg Med J* 2010;27(7):499-503.
- Buykx P, Loxley W, Dietze P, Ritter A.** Medications used in overdose and how they are acquired - an investigation of cases attending an inner Melbourne emergency department. *Aust N Z J Public Health* 2010;34(4):401-4.
- Byrne MJ, Zatta A, Galli C, Power JM, Kaye DM.** Recirculating delivery improves myocardial cell engraftment. *J Interv Cardiol* 2010;23(1):14-7.
- Cadilhac DA, Dewey HM, Vos T, Carter R, Thrift AG.** The health loss from ischemic stroke and intracerebral hemorrhage: evidence from the North East Melbourne Stroke Incidence Study (NEMESIS). *Health Qual Life Outcomes* 2010;8:49.
- Cadilhac DA, Lannin NA, Anderson CS, Levi CR, Faux S, Price C, Middleton S, Lim J, Thrift AG, Donnan GA.** Protocol and pilot data for establishing the Australian Stroke Clinical Registry. *Int J Stroke* 2010;5(3):217-26.
- Cady CT, Powell MS, Harbeck RJ, Giclas PC, Murphy JR, Katial RK, Weber RW, Hogarth PM, Johnson S, Bonvini E, Koenig S, Cambier JC.** IgG antibodies produced during subcutaneous allergen immunotherapy mediate inhibition of basophil activation via a mechanism involving both Fc γ RIIA and Fc γ RIIB. *Immunol Lett* 2010;130(1-2):57-65.
- Calabria B, Degenhardt L, Briegleb C, Vos T, Hall W, Lynskey M, Callaghan B, Rana U, McLaren J.** Systematic review of prospective studies investigating "remission" from amphetamine, cannabis, cocaine or opioid dependence. *Addict Behav* 2010;35(8):741-9. Review.

- Calabria B, Degenhardt L, Hall W, Lynskey M.** Does cannabis use increase the risk of death? Systematic review of epidemiological evidence on adverse effects of cannabis use. *Drug Alcohol Rev* 2010;29(3):318-30. Review.
- Calzavacca P, Licari E, Tee A, Egi M, Downey A, Quach J, Haase-Fielitz A, Haase M, Bellomo R.** The impact of Rapid Response System on delayed emergency team activation patient characteristics and outcomes--a follow-up study. *Resuscitation* 2010;81(1):31-5.
- Calzavacca P, Tee A, Licari E, Bellomo R.** Assessment of point-of-care measurement of urinary creatinine and electrolytes in the intensive care unit. *Ren Fail* 2010;32(1):27-31.
- Cameron AJ, Sicree RA, Zimmet PZ, Alberti KG, Tonkin AM, Balkau B, Tuomilehto J, Chitson P, Shaw JE.** Cut-points for waist circumference in Europeans and South Asians. *Obesity* 2010;18(10):2039-46.
- Cameron J, Dart AM.** Determinants of raised pulse pressure in women. *J Am Coll Cardiol* 2010;55(12):1279. Letter.
- Cameron J, Worrall-Carter L, Page K, Riegel B, Lo SK, Stewart S.** Does cognitive impairment predict poor self-care in patients with heart failure? *Eur J Heart Fail* 2010;12(5):508-15.
- Cameron J, Worrall-Carter L, Page K, Stewart S.** Self-care behaviours and heart failure: does experience with symptoms really make a difference? *Eur J Cardiovasc Nurs* 2010;9(2):92-100.
- Cameron PU, Saleh S, Sallmann G, Solomon A, Wightman F, Evans VA, Boucher G, Haddad EK, Sekaly RP, Harman AN, Anderson JL, Jones KL, Mak J, Cunningham AL, Jaworowski A, Lewin SR.** Establishment of HIV-1 latency in resting CD4+ T cells depends on chemokine-induced changes in the actin cytoskeleton. *Proc Natl Acad Sci USA* 2010;107(39):16934-9.
- Campbell K, Andrianopoulos N, Hesketh K, Ball K, Crawford D, Brennan L, Corsini N, Timperio A.** Parental use of restrictive feeding practices and child BMI z-score. A 3-year prospective cohort study. *Appetite* 2010;55(1):84-8.
- Cao Z, Cooper ME, Allen TJ, Toh B-H, Chai Z.** Role for cell division autoantigen 1 in mediating TGF- β downstream signaling and extracellular matrix protein production in diabetic atherosclerosis. *J Clin Metab Diabetes* 2010;1(2):29-33. Review.
- Cardoso LE, Little PJ, Ballinger ML, Chan CK, Braun KR, Potter-Perigo S, Bornfeldt KE, Kinsella MG, Wight TN.** Platelet-derived growth factor differentially regulates the expression and post-translational modification of versican by arterial smooth muscle cells through distinct protein kinase C and extracellular signal-regulated kinase pathways. *J Biol Chem* 2010;285(10):6987-95.
- Carotid Stenting Guidelines Committee, Bladin C, Chambers B, New G, Denton M, Lawrence-Brown M.** Guidelines for patient selection and performance of carotid artery stenting. *ANZ J Surg* 2010;80(6):398-405. Statement.
- Carr A, Hoy J.** Low bone mineral density with tenofovir: does statistically significant mean clinically significant? *Clin Infect Dis* 2010;51(8):973-5. Letter.
- Carrington MJ, Jennings GL, Stewart S.** Pattern of blood pressure in Australian adults: results from a National Blood Pressure Screening Day of 13,825 adults. *Int J Cardiol* 2010;145(3):461-7.
- Carrington MJ, Stewart S; NIL-CHF Study Investigators.** Bridging the gap in heart failure prevention: rationale and design of the Nurse-led Intervention for Less Chronic Heart Failure (NIL-CHF) Study. *Eur J Heart Fail* 2010;12(1):82-8.
- Carter AW, Pilcher D, Bailey M, Cameron P, Duke GJ, Cooper J.** Is ED length of stay before ICU admission related to patient mortality? *Emerg Med Australas* 2010;22(2):145-50.
- Cassar L, Li H, Jiang FX, Liu JP.** TGF- β induces telomerase-dependent pancreatic tumor cell cycle arrest. *Mol Cell Endocrinol* 2010;320(1-2):97-105.
- Chan CJ, Andrews DM, McLaughlin NM, Yagita H, Gilfillan S, Colonna M, Smyth MJ.** DNAM-1/CD155 interactions promote cytokine and NK cell-mediated suppression of poorly immunogenic melanoma metastases. *J Immunol* 2010;184(2):902-11.
- Chan W, Clark DJ, Ajani AE, Yap CH, Andrianopoulos N, Brennan AL, Dinh DT, Shardey GC, Smith JA, Reid CM, Duffy SJ.** Progress towards a National Cardiac Procedure Database--development of the Australasian Society of Cardiac and Thoracic Surgeons (ASCTS) and Melbourne Interventional Group (MIG) registries. *Heart Lung Circ* 2010;20(1):10-8.
- Chan YM, Keramaris-Vrantsis E, Lidov HG, Norton JH, Zinchenko N, Gruber HE, Thresher R, Blake DJ, Ashar J, Rosenfeld J, Lu QL.** Fukutin-related protein is essential for mouse muscle, brain and eye development and mutation recapitulates the wide clinical spectrums of dystroglycanopathies. *Hum Mol Genet* 2010;19(20):3995-4006.
- Chandra R, Pilgrim CH, Usatoff V.** Staged liver resection for colorectal metastases: a valuable strategy or a waste of time? *Hepatobiliary Pancreat Dis Int* 2010;9(6):600-4.
- Chau JY, der Ploeg HP, van Uffelen JG, Wong J, Riphagen I, Healy GN, Gilson ND, Dunstan DW, Bauman AE, Owen N, Brown WJ.** Are workplace interventions to reduce sitting effective? A systematic review. *Prev Med* 2010;51(5):352-6. Review.
- Chen AWJ, Khumra S, Eaton V, Kong DCM.** Snapshot of antimicrobial stewardship in Australian hospitals. *J Pharm Pract Res* 2010;40(1):19-25.
- Chen B, Mahal A.** Measuring the health of the Indian elderly: evidence from National Sample Survey data. *Popul Health Metr* 2010;8:30.
- Chen D, La Greca L, Head GA, Walther T, Mayorov DN.** The day-night difference of blood pressure is increased in AT_{1A}-receptor knockout mice on a high-sodium diet. *Am J Hypertens* 2010;23(5):481-7.
- Chen J, Bellomo R, Hillman K, Flabouris A, Finfer S; MERIT Study Investigators for the Simpson Centre and the ANZICS Clinical Trials Group.** Triggers for emergency team activation: a multicenter assessment. *J Crit Care* 2010;25(2):359.e1-7.
- Chen L, Magliano DJ, Balkau B, Colagiuri S, Zimmet PZ, Tonkin AM, Mitchell P, Phillips PJ, Shaw JE.** AUSDRISK: an Australian Type 2 Diabetes Risk Assessment Tool based on demographic, lifestyle and simple anthropometric measures. *Med J Aust* 2010;192(4):197-202.
- Chen MY, Bilardi JE, Lee D, Cummings R, Bush M, Fairley CK.** Australian men who have sex with men prefer rapid oral HIV testing over conventional blood testing for HIV. *Int J STD AIDS* 2010;21(6):428-30.
- Chen MY, Donovan B, Harcourt C, Morton A, Moss L, Wallis S, Cook K, Batras D, Groves J, Tabrizi SN, Garland S, Fairley CK.** Estimating the number of unlicensed brothels operating in Melbourne. *Aust N Z J Public Health* 2010;34(1):67-71.
- Chen RQ, Davis SR, Wong CM, Lam TH.** Validity and cultural equivalence of the standard Greene Climacteric Scale in Hong Kong. *Menopause* 2010;17(3):630-5.
- Chen W, Xiao BK, Liu JP, Chen SM, Tao ZZ.** Alternative lengthening of telomeres in hTERT-inhibited laryngeal cancer cells. *Cancer Sci* 2010;101(8):1769-76.
- Cheng AC.** Melioidosis: advances in diagnosis and treatment. *Curr Opin Infect Dis* 2010;23(6):554-9. Review.
- Cheng AC, Spelman T, Jones P, Spelman D.** Critical evaluation: are patients after splenectomy at risk of infections? *ANZ J Surg* 2010;80(11):844-5. Review.
- Cheng WS, Roberts SK, McCaughan G, Sievert W, Weltman M, Crawford D, Rawlinson W, Marks PS, Thommes J, Rizkalla B, Yoshihara M, Dore GJ; CHARIOT Study Group.** Low virological response and high relapse rates in hepatitis C genotype 1 patients with advanced fibrosis despite adequate therapeutic dosing. *J Hepatol* 2010;53(4):616-23.
- Cherry CL, Affandi JS, Brew BJ, Creighton J, Djauzi S, Hooker DJ, Imran D, Kamarulzaman A, Kamerman P, McArthur JC, Moore RD, Price P, Smyth K, Tan IL, Vanar S, Wadley A, Wesselingh SL, Yunihastuti E.** Hepatitis C seropositivity is not a risk factor for sensory neuropathy among patients with HIV. *Neurology* 2010;74(19):1538-42.
- Cherry CL, Mobarok M, Wesselingh SL, Fain R, Weinstock S, Tachedjian G, Srivastava S, Tyssen DP, Glass JD, Hooker DJ.** Ubisol-Aqua: coenzyme Q₁₀ prevents antiretroviral toxic neuropathy in an *in vitro* model. *Curr HIV Res* 2010;8(3):232-9.

- Chew P, Yuen DY, Stefanovic N, Pete J, Coughlan MT, Jandeleit-Dahm KA, Thomas MC, Rosenfeldt F, Cooper ME, de Haan JB.** Antiatherosclerotic and renoprotective effects of ebselen in the diabetic apolipoprotein E/GPx1-double knockout mouse. *Diabetes* 2010;59(12):3198-207.
- Cholesterol Treatment Trialists' (CTT) Collaboration, Baigent C, Blackwell L, Emberson J, Holland LE, Reith C, Bhalra N, Peto R, Barnes EH, Keech A, Simes J, Collins R.** Efficacy and safety of more intensive lowering of LDL cholesterol: a meta-analysis of data from 170,000 participants in 26 randomised trials. *Lancet* 2010;376(9753):1670-71.
- Christensen DL, Witte DR, Kaduka L, Jørgensen ME, Borch-Johnsen K, Mohan V, Shaw JE, Tabák AG, Vistisen D.** Moving to an A1C-based diagnosis of diabetes has a different impact on prevalence in different ethnic groups. *Diabetes Care* 2010;33(3):580-2.
- Chu PY, Mariani J, Finch S, McMullen JR, Sadoshima J, Marshall T, Kaye DM.** Bone marrow-derived cells contribute to fibrosis in the chronically failing heart. *Am J Pathol* 2010;176(4):1735-42.
- Ciciriello S, Johnston RV, Osborne RH, Wicks I, deKroo T, Cleahan R, Buchbinder R.** Multimedia educational interventions for consumers about prescribed and over the counter medications. *Cochrane Database Syst Rev* 2010;(3):CD008416. Protocol.
- Clark AW, Li HM.** Teaching medical information retrieval and application courses in Chinese universities: a case study. *Health Info Libr J* 2010;27(4):316-22.
- Clark BK, Sugiyama T, Healy GN, Salmon J, Dunstan DW, Shaw JE, Zimmet PZ, Owen N.** Socio-demographic correlates of prolonged television viewing time in Australian men and women: the AusDiab study. *J Phys Act Health* 2010;7(5):595-601.
- Clements CJ, Coghlan B, Creati M, Locarnini S, Tedder RS, Torresi J.** Global control of hepatitis B virus: does treatment-induced antigenic change affect immunization? *Bull World Health Organ* 2010;88(1):66-73.
- Clifton P.** Diabetes: treatment of Type 2 diabetes mellitus with bariatric surgery. *Nat Rev Endocrinol* 2010;6(4):191-3. Review.
- Clifton P.** Nutrition in people with poorly controlled Type 2 diabetes. *Br Med J* 2010;341:c3393. Editorial.
- Clifton PM.** Nutrition and metabolism. *Curr Opin Lipidol* 2010;21(2):155-6. Review.
- Cohen N.** Diabetes: intensive glucose-lowering therapy-weighing up the evidence. *Nat Rev Endocrinol* 2010;6(1):9-10. Review.
- Colagiuri S, Lee CM, Colagiuri R, Magliano D, Shaw JE, Zimmet PZ, Caterson ID.** The cost of overweight and obesity in Australia. *Med J Aust* 2010;192(5):260-4.
- Cole LJ, Farrell MJ, Gibson SJ, Egan GF.** Age-related differences in pain sensitivity and regional brain activity evoked by noxious pressure. *Neurobiol Aging* 2010;31(3):494-503.
- Collins K.** A patient-centered approach to enteral nutrition in head and neck cancer patients. *J Parenter Enteral Nutr* 2010;34(3):353. Letter.
- Connell W, Andrews JM, Brown S, Sparrow M.** Practical guidelines for treating inflammatory bowel disease safely with anti-tumour necrosis factor therapy in Australia. *Intern Med J* 2010;40(2):139-49.
- Cooper ME, El-Osta A.** Epigenetics: mechanisms and implications for diabetic complications. *Circ Res* 2010;107(12):1403-13.
- Cornall A, Sharma L, Solomon A, Gorry PR, Crowe SM, Cameron PU, Lewin SR.** A novel, rapid method to detect infectious HIV-1 from plasma of persons infected with HIV-1. *J Virol Methods* 2010;165(1):90-6.
- Coulson CE, Williams LJ, Henry MJ, Berk M, Lubman DI, Brennan SL, Nicholson GC, Kotowicz MA, Korn S, Pasco JA.** Patterns of alcohol use and associated physical and lifestyle characteristics according to new Australian guidelines. Patterns of alcohol use and associated physical and lifestyle characteristics according to new Australian guidelines. *Aust N Z J Psychiatry* 2010;44(10):946-51.
- Coutsouvelis J, Corallo CE, Dooley MJ, Foo J, Whitfield A.** Implementation of a pharmacist-initiated pharmaceutical handover for oncology and haematology patients being transferred to critical care units. *Support Care Cancer* 2010;18(7):811-6.
- Cox H, Ford N, McDermid C, van Cutsem G, Goemaere E.** Extensively drug-resistant tuberculosis in South Africa. *Lancet* 2010;376(9742):681. Letter.
- Cox HS, McDermid C, Azevedo V, Muller O, Coetzee D, Simpson J, Barnard M, Coetzee G, van Cutsem G, Goemaere E.** Epidemic levels of drug resistant tuberculosis (MDR and XDR-TB) in a high HIV prevalence setting in Khayelitsha, South Africa. *PLoS One* 2010;5(11):e13901.
- Crabb BS, de Koning-Ward TF, Gilson PR.** Protein export in *Plasmodium* parasites: from the endoplasmic reticulum to the vacuolar export machine. *Int J Parasitol* 2010;40(5):509-13. Review.
- Crane M, Sirivichayakul S, Chang JJ, Avihingsanon A, Ubolyam S, Buranapraditkun S, Thantiworasit P, Wightman F, Locarnini S, Matthews G, Dore GJ, Ruxrungtham K, Lewin SR.** No increase in hepatitis B virus (HBV)-specific CD8+ T cells in patients with HIV-1-HBV coinfections following HBV-active highly active antiretroviral therapy. *J Virol* 2010;84(6):2657-65.
- Crawford D, Cleland V, Timperio A, Salmon J, Andrianopoulos N, Roberts R, Giles-Corti B, Baur L, Ball K.** The longitudinal influence of home and neighbourhood environments on children's body mass index and physical activity over 5 years: the CLAN study. *Int J Obes* 2010;34(7):1177-87.
- Creaby MW, Wang Y, Bennell KL, Hinman RS, Metcalf BR, Bowles KA, Cicuttini FM.** Dynamic knee loading is related to cartilage defects and tibial plateau bone area in medial knee osteoarthritis. *Osteoarthritis Cartilage* 2010;18(11):1380-5.
- Crosbie JC, Anderson RL, Rothkamm K, Restall CM, Cann L, Ruwanpura S, Meachem S, Yagi N, Svalbe I, Lewis RA, Williams BR, Rogers PA.** Tumor cell response to synchrotron microbeam radiation therapy differs markedly from cells in normal tissues. *Int J Radiat Oncol Biol Phys* 2010;77(3):886-94.
- Crowe SM, Westhorpe CL, Mukhamedova N, Jaworowski A, Sviridov D, Bukrinsky M.** The macrophage: the intersection between HIV infection and atherosclerosis. *J Leukoc Biol* 2010;87(4):589-98. Review.
- Crowe SM, Ziegler-Heitbrock L.** Monocyte subpopulations and lentiviral infection. *J Leukoc Biol* 2010;87(4):541-3. Editorial.
- Cruz-Gonzalez I, Yan BP, Lam YY.** Left atrial appendage exclusion: state-of-the-art. *Catheter Cardiovasc Interv* 2010;75(5):806-13. Review.
- Cui J, Forbes A, Kirby A, Marschner I, Simes J, Hunt D, West M, Tonkin A.** Semi-parametric risk prediction models for recurrent cardiovascular events in the LIPID study. *BMC Med Res Methodol* 2010;10:27.
- Cummings N, Dyer TD, Kotea N, Kowlessur S, Chitson P, Zimmet P, Blangero J, Jowett JB.** Genome-wide scan identifies a quantitative trait locus at 4p15.3 for serum urate. *Eur J Hum Genet* 2010;18(11):1243-7.
- Cummings N, King R, Rickers A, Kaspi A, Lunke S, Haviv I, Jowett JB.** Combining target enrichment with barcode multiplexing for high throughput SNP discovery. *BMC Genomics* 2010;11:641.
- Curley G, Contreras MM, Nichol AD, Higgins BD, Laffey JG.** Hypercapnia and acidosis in sepsis: a double-edged sword? *Anesthesiology* 2010;112(2):462-72.
- Curran JE, Jowett JB, Abraham LJ, Diepeveen LA, Elliott KS, Dyer TD, Kerr-Bayles LJ, Johnson MP, Comuzzie AG, Moses EK, Walder KR, Collier GR, Blangero J, Kissebah AH.** Genetic variation in PARL influences mitochondrial content. *Hum Genet* 2010;127(2):183-90.
- Currey J, Pilcher DV, Davies A, Scheinkestel C, Botti M, Bailey M, Snell G.** Implementation of a management guideline aimed at minimizing the severity of primary graft dysfunction after lung transplant. *J Thorac Cardiovasc Surg* 2010;139(1):154-61.
- Currie BJ, Ward L, Cheng AC.** The epidemiology and clinical spectrum of melioidosis: 540 cases from the 20 year Darwin prospective study. *PLoS Negl Trop Dis* 2010;4(11):e900.

- Curtis AJ, Russell CO, Stoelwinder JU, McNeil JJ.** Waiting lists and elective surgery: ordering the queue. *Med J Aust* 2010;192(4):217-20. Review.
- Daffern M, Thomas S, Ferguson M, Podubinski T, Hollander Y, Kulkhani J, Decastella A, Foley F.** The impact of psychiatric symptoms, interpersonal style, and coercion on aggression and self-harm during psychiatric hospitalization. *Psychiatry-Interpers Biol Process* 2010;73(4):365-81.
- Dale K, Kirk M, Sinclair M, Hall R, Leder K.** Reported waterborne outbreaks of gastrointestinal disease in Australia are predominantly associated with recreational exposure. *Aust N Z J Public Health* 2010;34(5):527-30.
- Damasceno A, Gomes J, Azevedo A, Carrilho C, Lobo V, Lopes H, Madede T, Pravinrai P, Silva-Matos C, Jalla S, Stewart S, Lunet N.** An epidemiological study of stroke hospitalizations in Maputo, Mozambique: a high burden of disease in a resource-poor country. *Stroke* 2010;41(11):2463-9.
- Davern PJ, Jackson KL, Nguyen-Huu TP, La Greca L, Head GA.** Cardiovascular reactivity and neuronal activation to stress in Schlager genetically hypertensive mice. *Neuroscience* 2010;170(2):551-8.
- Davern PJ, Jackson KL, Nguyen-Huu TP, La Greca L, Head GA.** Cardiovascular responses to aversive and nonaversive stressors in Schlager genetically hypertensive mice. *Am J Hypertens* 2010;23(8):838-44.
- Davern PJ, McKinley MJ.** Forebrain regions affected by lateral parabrachial nucleus serotonergic mechanisms that influence sodium appetite. *Brain Res* 2010;1339:41-8.
- Davies A, Jones D, Gattas D.** Extracorporeal membrane oxygenation for ARDS due to 2009 influenza A(H1N1). *JAMA* 2010;303(10):942. Author reply.
- Davies AR.** Gastric residual volume in the ICU: can we do without measuring it? *J Parenter Enteral Nutr* 2010;34(2):160-2. Editorial.
- Davies AR, McArthur C, Seppelt IM, Webb SA.** Extracorporeal life support. ECMO patients overestimated. *Br Med J* 2010;341:c6847. Letter.
- Davies AR, Webb SA, Seppelt IM, Bellomo R.** Comparison of adult patients hospitalised with pandemic (H1N1) 2009 influenza and seasonal influenza during the "PROTECT" phase of the pandemic response. *Med J Aust* 2010;192(6):356-7. Letter.
- Davies P, Taylor F, Beswick A, Wise F, Moxham T, Rees K, Ebrahim S.** Promoting patient uptake and adherence in cardiac rehabilitation. *Cochrane Database Syst Rev* 2010;(7):CD007131.
- Davies S, Esler M, Nutt D.** Anxiety – bridging the heart/mind divide. *J Psychopharmacol* 2010;24(5):633-8. Review.
- Davies-Tuck ML, Wluka AE, Forbes A, Wang Y, English DR, Giles GG, Cicuttini F.** Smoking is associated with increased cartilage loss and persistence of bone marrow lesions over 2 years in community-based individuals. *Rheumatology* 2010;48(10):1227-31.
- Davies-Tuck ML, Wluka AE, Forbes A, Wang Y, English DR, Giles GG, O'Sullivan R, Cicuttini FM.** Development of bone marrow lesions is associated with adverse effects on knee cartilage while resolution is associated with improvement--a potential target for prevention of knee osteoarthritis: a longitudinal study. *Arthritis Res Ther* 2010;12(1):R10.
- Davis JS, Cross GB, Charles PG, Currie BJ, Anstey NM, Cheng AC.** Pneumonia risk stratification in tropical Australia: does the SMART-COP score apply? *Med J Aust* 2010;192(3):133-6.
- Davis P, Bultitude MF, Koukounaras J, Royce PL, Corcoran NM.** Assessing the usefulness of delayed imaging in routine followup for renal trauma. *J Urol* 2010;184(3):973-7.
- Davis P, Corcoran N, Hanegbi U, Bultitude M.** Systemic amyloidosis presenting with lower urinary tract symptoms. *ANZ J Surg* 2010;80(10):759-60. Letter.
- Davis SR.** Should women receive androgen replacement therapy, and if so, how? *Clin Endocrinol* 2010;72(2):149-54. Comment.
- Davis SR, Jane F.** Drugs for the treatment of menopausal symptoms. *Expert Opin Pharmacother* 2010;11(8):1329-41. Review.
- Davis SR, Lijovic M, Fradkin P, Bradbury J, La China M, Schwarz M, Bell RJ.** Use of complementary and alternative therapy by women in the first 2 years after diagnosis and treatment of invasive breast cancer. *Menopause* 2010;17(5):1004-9.
- Dawson AP, Steele EJ, Hodges PW, Stewart S.** Utility of the Oswestry Disability Index for studies of back pain related disability in nurses: evaluation of psychometric and measurement properties. *Int J Nurs Stud* 2010;47(5):604-7.
- Dawson SJ, Makretsov N, Blows FM, Driver KE, Provenzano E, Le Quesne J, Baglietto L, Severi G, Giles GG, McLean CA, Callagy G, Green AR, Ellis I, Gelmon K, Turashvili G, Leung S, Aparicio S, Huntsman D, Caldas C, Pharoah P.** BCL2 in breast cancer: a favourable prognostic marker across molecular subtypes and independent of adjuvant therapy received. *Br J Cancer* 2010;103(5):668-75.
- de Graaf R, Radovanovic M, van Laar M, Fairman B, Degenhardt L, Aguilar-Gaxiola S, Bruffaerts R, de Girolamo G, Fayyad J, Gureje O, Haro JM, Huang Y, Kostychenko S, Lépine JP, Matschinger H, Mora ME, Neumark Y, Ormel J, Posada-Villa J, Stein DJ, Tachimori H, Wells JE, Anthony JC.** Early cannabis use and estimated risk of later onset of depression spells: epidemiologic evidence from the population-based World Health Organization World Mental Health Survey Initiative. *Am J Epidemiol* 2010;172(2):149-59.
- Deasy C, Bernard SA, Cameron P, Jaison A, Smith K, Harriss L, Walker T, Masci K, Tibballs J.** Epidemiology of paediatric out-of-hospital cardiac arrest in Melbourne, Australia. *Resuscitation* 2010;81(9):1095-100.
- Deenick EK, Po L, Chapatte L, Murakami K, Lu YC, Elford AR, Saibil SD, Ruland J, Gerondakis S, Mak TW, Ohashi PS.** c-Rel phenocopies PKC θ but not Bcl-10 in regulating CD8+ T-cell activation versus tolerance. *Eur J Immunol* 2010;40(3):867-77.
- Degenhardt L, Bruno R, Topp L.** Is ecstasy a drug of dependence? *Drug Alcohol Depend* 2010;107(1):1-10. Review.
- Degenhardt L, Coffey C, Carlin JB, Swift W, Moore E, Patton GC.** Outcomes of occasional cannabis use in adolescence: findings from a 10-year follow up study of adolescents in Victoria, Australia. *Br J Psychiatry* 2010;196:290-5.
- Degenhardt L, Dierker L, Chiu WT, Medina-Mora ME, Neumark Y, Sampson N, Alonso J, Angermeyer M, Anthony JC, Bruffaerts R, de Girolamo G, de Graaf R, Gureje O, Karam AN, Kostyuchenko S, Lee S, Lépine JP, Levinson D, Nakamura Y, Posada-Villa J, Stein D, Wells JE, Kessler RC.** Evaluating the drug use "gateway" theory using cross-national data: consistency and associations of the order of initiation of drug use among participants in the WHO World Mental Health Surveys. *Drug Alcohol Depend* 2010;108(1-2):84-97.
- Degenhardt L, Mathers B, Guarinieri M, Panda S, Phillips B, Strathdee SA, Tyndall M, Wiessing L, Wodak A, Howard J; Reference Group to the United Nations on HIV and injecting drug use.** Meth/amphetamine use and associated HIV: implications for global policy and public health. *Int J Drug Policy* 2010;21(5):347-58.
- Degenhardt L, Mathers B, Vickerman P, Rhodes T, Latkin C, Hickman M.** Prevention of HIV infection for people who inject drugs: why individual, structural, and combination approaches are needed. *Lancet* 2010;376(9737):285-301. Review.
- Delles C, Schiffer E, von Zur Muhlen C, Peter K, Rossing P, Parving HH, Dymott JA, Neisius U, Zimmerli LU, Snell-Bergeon JK, Maahs DM, Schmieder RE, Mischak H, Dominiczak AF.** Urinary proteomic diagnosis of coronary artery disease: identification and clinical validation in 623 individuals. *J Hypertens* 2010;28(11):2316-22.
- Dellios NL, Lappas M, Young IR, Palliser HK, Hirst JJ, Oliva K, Ayhan M, Rice GE.** Increased expression of alpha-enolase in cervico-vaginal fluid during labour. *Eur J Obstet Gynecol Reprod Biol* 2010;153(1):16-22.
- Demars J, Shmela ME, Rossignol S, Okabe J, Netchine I, Azzi S, Cabrol S, Le Caignec C, David A, Le Bouc Y, El-Osta A, Gicquel C.** Analysis of the IGF2/H19 imprinting control region uncovers new genetic defects, including mutations of OCT-binding sequences, in patients with 11p15 fetal growth disorders. *Hum Mol Genet* 2010;19(5):803-14.

- Denholm JT, Gordon CL, Johnson PD, Hewagama SS, Stuart RL, Aboltins C, Jeremiah C, Knox J, Lane GP, Tramontana AR, Slavin MA, Schulz TR, Richards M, Birch CJ, Cheng AC. Hospitalised adult patients with pandemic (H1N1) 2009 influenza in Melbourne, Australia. *Med J Aust* 2010;192(2):84-6.
- Denholm JT, Jones PA, Spelman DW, Cameron PU, Woolley IJ. Spleen registry may help reduce the incidence of overwhelming postsplenectomy infection in Victoria. *Med J Aust* 2010;192(1):49-50.
- Dennekamp M, Akram M, Abramson MJ, Tonkin A, Sim MR, Fridman M, Erbas B. Outdoor air pollution as a trigger for out-of-hospital cardiac arrests. *Epidemiology* 2010;21(4):494-500.
- Dennekamp M, Carey M. Air quality and chronic disease: why action on climate change is also good for health. *NSW Public Health Bull* 2010;21(5-6):115-21. Editorial.
- Devi S, Kuligowski MP, Kwan RY, Westein E, Jackson SP, Kitching AR, Hickey MJ. Platelet recruitment to the inflamed glomerulus occurs via an $\alpha_{IIb}\beta_3$ /GPVI-dependent pathway. *Am J Pathol* 2010;177(3):1131-42.
- DeVita MA, Smith GB, Adam SK, Adams-Pizarro I, Buist M, Bellomo R, Bonello R, Cerchiari E, Farlow B, Goldsmith D, Haskell H, Hillman K, Howell M, Hravnak M, Hunt EA, Hvarfner A, Kellett J, Lighthall GK, Lippert A, Lippert FK, Mahroof R, Myers JS, Rosen M, Reynolds S, Rotondi A, Rubulotta F, Winters B. "Identifying the hospitalised patient in crisis"--a consensus conference on the afferent limb of rapid response systems. *Resuscitation* 2010;81(4):375-82.
- Dharmarajah J, Arthur JF, Sobey CG, Drummond GR. The anti-platelet effects of apocynin in mice are not mediated by inhibition of NADPH oxidase activity. *Naunyn Schmiedebergs Arch Pharmacol* 2010;382(4):377-84.
- Di Valentino M, Maeder MT, Jaggi S, Schumann J, Sommerfeld K, Piazzalunga S, Hoffmann A. Prognostic value of cycle exercise testing prior to and after outpatient cardiac rehabilitation. *Int J Cardiol* 2010;140(1):34-41.
- DiBona GF, Esler M. Translational medicine: the antihypertensive effect of renal denervation. *Am J Physiol Regul Integr Comp Physiol* 2010;298(2):R245-53. Review.
- Dietze P, Stoové M, Miller P, Kinner S, Bruno R, Alati R, Burns L. The self-reported personal wellbeing of a sample of Australian injecting drug users. *Addiction* 2010;105(12):2141-8.
- Dietze PM, Livingston M. The relationship between alcohol supply source and young people's risky drinking and alcohol-related problem behaviours in Victoria, Australia. *Aust N Z J Public Health* 2010;34(4):364-7.
- Dietze PM, Powell MB, Thomson DM. Mental reinstatement of context with child witnesses: does it matter whether context is reinstated 'out loud'? *Psychol Crime Law* 2010;16(5):439-48.
- Diez BD, Statkevich P, Zhu Y, Abutarif MA, Xuan F, Kantesaria B, Cutler D, Cantillon M, Schwarz M, Pallotta MG, Ottaviano FH. Evaluation of the exposure equivalence of oral versus intravenous temozolomide. *Cancer Chemother Pharmacol* 2010;65(4):727-34.
- Ding C, Cicuttini F, Boon C, Boon P, Srikanth V, Cooley H, Jones G. Knee and hip radiographic osteoarthritis predict total hip bone loss in older adults: a prospective study. *J Bone Miner Res* 2010;25(4):858-65.
- Ding C, Jones G, Wluka AE, Cicuttini F. What can we learn about osteoarthritis by studying a healthy person against a person with early onset of disease? *Curr Opin Rheumatol* 2010;22(5):520-7. Review.
- Ding C, Parameswaran V, Blizzard L, Burgess J, Jones G. Not a simple fat-soluble vitamin: changes in serum 25-(OH)D levels are predicted by adiposity and adipocytokines in older adults. *J Intern Med* 2010;268(5):501-10.
- Dixon JB. The effect of obesity on health outcomes. *Mol Cell Endocrinol* 2010;316(2):104-8. Editorial.
- Dobson M, Del Porto L, Maartens NF. Comment on "Non-surgical treatment of hormone-secreting pituitary tumors". *J Clin Neurosci* 2010;17(9):1220-1. Comment.
- Dodd S, Brnabic AJ, Berk L, Fitzgerald PB, de Castella AR, Folia S, Folia K, Kelin K, Smith M, Montgomery W, Kulkarni J, Berk M. A prospective study of the impact of smoking on outcomes in bipolar and schizoaffective disorder. *Compr Psychiatry* 2010;51(5):504-9.
- Dodd S, Kulkarni J, Berk L, Ng F, Fitzgerald PB, de Castella AR, Folia S, Folia K, Montgomery W, Kelin K, Smith M, Brnabic A, Berk M. A prospective study of the impact of subthreshold mixed states on the 24-month clinical outcomes of bipolar I disorder or schizoaffective disorder. *J Affect Disord* 2010;124(1-2):22-8.
- Donkor ON, Shah NP, Apostolopoulos V, Vasiljevic T. Development of allergic responses related to microorganisms exposure in early life. *Int Dairy J* 2010;20(6):373-85.
- Donovan B, Harcourt C, Egger S, Fairley CK. Improving the health of sex workers in NSW: maintaining success. *NSW Public Health Bull* 2010;21(3-4):74-7.
- Doré D, Quinn S, Ding C, Winzenberg T, Cicuttini F, Jones G. Subchondral bone and cartilage damage: a prospective study in older adults. *Arthritis Rheum* 2010;62(7):1967-73.
- Doré D, Winzenberg T, Ding C, Cicuttini F, Jones G. Reply. *Arthritis Rheum* 2010;62(12):3831-2. Author reply.
- Dore GJ, Hellard M, Matthews GV, Grebely J, Haber PS, Petoumenos K, Yeung B, Marks P, van Beek I, McCaughan G, White P, French R, Rawlinson W, Lloyd AR, Kaldor JM; Australian Trial In Acute Hepatitis C Study Group. Effective treatment of injecting drug users with recently acquired hepatitis C virus infection. *Gastroenterology* 2010;138(1):123-35.
- Douglass JA, Carroll K, Voskamp A, Bourke P, Wei A, O'Hehir RE. Omalizumab is effective in treating systemic mastocytosis in a nonatopic patient. *Allergy* 2010;65(7):926-7.
- Downie LE, Hatzopoulos KM, Pianta MJ, Vingrys AJ, Wilkinson-Berka JL, Kalloniatis M, Fletcher EL. Angiotensin type-1 receptor inhibition is neuroprotective to amacrine cells in a rat model of retinopathy of prematurity. *J Comp Neurol* 2010;518(1):41-63.
- D'Souza W, Stonik JA, Murphy A, Demosky SJ, Sethi AA, Moore XL, Chin-Dusting J, Remaley AT, Sviridov D. Structure/function relationships of apolipoprotein a-I mimetic peptides: implications for antiatherogenic activities of high-density lipoprotein. *Circ Res* 2010;107(2):217-27.
- Du AT, Onan D, Dinh DT, Lew MJ, Zogas J, Aguilar MI, Pattenden LK, Thomas WG. Ligand-supported purification of the urotensin-II receptor. *Mol Pharmacol* 2010;78(4):639-47.
- Du XJ, Bathgate RA, Samuel CS, Dart AM, Summers RJ. Cardiovascular effects of relaxin: from basic science to clinical therapy. *Nat Rev Cardiol* 2010;7(1):48-58. Review.
- Duce JA, Tsatsanis A, Cater MA, James SA, Robb E, Wikke K, Leong SL, Perez K, Johanssen T, Greenough MA, Cho HH, Galatis D, Moir RD, Masters CL, McLean C, Tanzi RE, Cappai R, Barnham KJ, Ciccotosto GD, Rogers JT, Bush AI. Iron-export ferroxidase activity of β -amyloid precursor protein is inhibited by zinc in Alzheimer's disease. *Cell* 2010;142(6):857-67.
- Dudley FJ. Autoimmune hepatitis: an evolving demography? *J Gastroenterol Hepatol* 2010;25(10):1591-2. Editorial.
- Duffy SJ, Ruygrok P, Juergens CP, Sievert H, Richards M, Blake J, Whitbourn R, Farouque HO, Pertile T, Kaye DM. Removal of contrast media from the coronary sinus attenuates renal injury after coronary angiography and intervention. *J Am Coll Cardiol* 2010;56(6):525-6.
- Dunai J, Labuschagne I, Castle DJ, Kyrios M, Rossell SL. Executive function in body dysmorphic disorder. *Psychol Med* 2010;40(9):1541-8.
- Dunn M, Day C, Bruno R, Degenhardt L, Campbell G. Sexual and injecting risk behaviours among regular ecstasy users. *Addict Behav* 2010;35(2):157-60.
- Dunn M, Degenhardt L, Bruno R. Transition to and from injecting drug use among regular ecstasy users. *Addict Behav* 2010;35(10):909-12.

- Dunstan DW, Barr EL, Healy GN, Salmon J, Shaw JE, Balkau B, Magliano DJ, Cameron AJ, Zimmet PZ, Owen N. Television viewing time and mortality: the Australian Diabetes, Obesity and Lifestyle Study (AusDiab). *Circulation* 2010;121(3):384-91.
- Dunstan DW, Barr ELM, Shaw JE, Magliano DJ, Zimmet PZ, Salmon J, Cameron AJ, Owen N, Healy GN, Balkau B. Response to letters regarding article, "Television viewing time and mortality: the Australian Diabetes, Obesity and Lifestyle Study (AusDiab)". *Circulation* 2010;122(13):e473. Author reply.
- Dupic L, Huet O, Harrois A, Duranteau J. Hypoxia and mitochondrial function. *Réanimation* 2010;19(5):399-405. Review.
- Dwyer JM, Liu JP. Ets2 transcription factor, telomerase activity and breast cancer. *Clin Exp Pharmacol Physiol* 2010;37(1):83-7. Review.
- Eades SJ, Read AW, McAullay D, McNamara B, O'Dea K, Stanley FJ. Modern and traditional diets for Noongar infants. *J Paediatr Child Health* 2010;46(7-8):398-403.
- Eades SJ, Taylor B, Bailey S, Williamson AB, Craig JC, Redman S; SEARCH Investigators. The health of urban Aboriginal people: insufficient data to close the gap. *Med J Aust* 2010;193(9):521-4. Review.
- Eakin EG, Reeves MM, Marshall AL, Dunstan DW, Graves N, Healy GN, Bleier J, Barnett AG, O'Moore-Sullivan T, Russell A, Wilkie K. Living Well with Diabetes: a randomized controlled trial of a telephone-delivered intervention for maintenance of weight loss, physical activity and glycaemic control in adults with Type 2 diabetes. *BMC Public Health* 2010;10:452. Protocol.
- Eckel RH, Alberti KG, Grundy SM, Zimmet PZ. The metabolic syndrome. *Lancet* 2010;375(9710):181-3. Comment.
- Edgell TA, Barraclough DL, Rajic A, Dhulia J, Lewis KJ, Armes JE, Barraclough R, Rudland PS, Rice GE, Autelitano DJ. Increased plasma concentrations of anterior gradient 2 protein are positively associated with ovarian cancer. *Clin Sci* 2010;118(12):717-25.
- Edvardsson D, Fetherstonhaugh D, Nay R, Gibson S. Development and initial testing of the Person-centered Care Assessment Tool (P-CAT). *Int Psychogeriatr* 2010;22(1):101-8.
- Egger G, Dixon J. Inflammatory effects of nutritional stimuli: further support for the need for a big picture approach to tackling obesity and chronic disease. *Obes Rev* 2010;11(2):137-49. Review.
- Egger GJ, Dixon JB. Obesity and global warming: are they similar "canaries" in the same "mineshaft"? *Med J Aust* 2010;193(11-12):635-7. Editorial.
- Egi M, Bellomo R, Stachowski E, French CJ, Hart GK, Taori G, Hegarty C, Bailey M. Hypoglycemia and outcome in critically ill patients. *Mayo Clin Proc* 2010;85(3):217-24.
- Egi M, Toda Y, Katayama H, Yokoyama M, Morita K, Arai H, Yamatsuji T, Bailey M, Naomoto Y. Safer glycemic control using isomaltulose-based enteral formula: a pilot randomized crossover trial. *J Crit Care* 2010;25(1):90-6.
- Ehsani JP, Ibrahim JE, Bugeja L, Cordner S. The role of epidemiology in determining if a simple short fall can cause fatal head injury in an infant: a subject review and reflection. *Am J Forensic Med Pathol* 2010;31(3):287-98.
- Einsiedel L, Cherry CL, Sheeran FL, Friedhuber A, Wesselingh SL, Pepe S. Mitochondrial dysfunction in CD4+ lymphocytes from stavudine-treated HIV patients. *Mitochondrion* 2010;10(5):534-9.
- El-Hayek C, Bergeri I, Hellard ME, Pedrana AE, Higgins N, Breschkin A, Stoové M. The changing age distribution of men who have sex with men diagnosed with HIV in Victoria. *Med J Aust* 2010;193(11-12):655-8.
- Elliott J. Second line antiretroviral therapy for treatment of HIV in Asia. *Asian Biomed* 2010;4(5):673-8. Review.
- Engel DC, Mikocka-Walus A, Cameron PA, Maegele M. Pre-hospital and in-hospital parameters and outcomes in patients with traumatic brain injury: a comparison between German and Australian trauma registries. *Injury* 2010;41(7):837-42.
- Engelhardt M, Kleber M, Udi J, Wäsch R, Spencer A, Patriarca F, Knop S, Bruno B, Gramatzki M, Morabito F, Kropff M, Neri A, Sezer O, Hajek R, Bunjes D, Boccadoro M, Straka C, Cavo M, Polliack A, Einsele H, Palumbo A. Consensus statement from European experts on the diagnosis, management, and treatment of multiple myeloma: from standard therapy to novel approaches. *Leuk Lymphoma* 2010;51(8):1424-43. Review.
- Engelhardt M, Udi J, Kleber M, Spencer A, Rocci A, Knop S, Bruno B, Bringham S, Pérez-Simón JA, Zweegman S, Driessen C, Patriarca F, Gramatzki M, Terpos E, Sezer O, Kropff M, Straka C, Johnsen HE, Waage A, Boegsted M, Lokhorst H, Hájek R, Morgan G, Boccadoro M, Ludwig H, Cavo M, Polliack A, Sonneveld P, Einsele H, Palumbo A. European Myeloma Network: the 3rd Trialist Forum Consensus Statement from the European experts meeting on multiple myeloma. *Leuk Lymphoma* 2010;51(11):2006-11. Statement.
- Enticott PG, Kennedy HA, Bradshaw JL, Rinehart NJ, Fitzgerald PB. Understanding mirror neurons: evidence for enhanced corticospinal excitability during the observation of transitive but not intransitive hand gestures. *Neuropsychologia* 2010;48(9):2675-80.
- Enticott PG, Rinehart NJ, Tonge BJ, Bradshaw JL, Fitzgerald PB. A preliminary transcranial magnetic stimulation study of cortical inhibition and excitability in high-functioning autism and Asperger disorder. *Dev Med Child Neurol* 2010;52(8):e179-83.
- Ernest D, Chia M, Corallo CE. Profound hypokalaemia due to Nurofen Plus and Red Bull misuse. *Crit Care Resusc* 2010;12(2):109-10.
- Esler M. Sympathetic nervous activation in essential hypertension: commonly neglected as a therapeutic target, usually ignored as a drug side effect. *Hypertension* 2010;55(5):1090-1. Editorial.
- Esler M. The 2009 Carl Ludwig Lecture: Pathophysiology of the human sympathetic nervous system in cardiovascular diseases: the transition from mechanisms to medical management. *J Appl Physiol* 2010;108(2):227-37. Review.
- Esler M, Lambert E, Schlaich M. Point: Chronic activation of the sympathetic nervous system is the dominant contributor to systemic hypertension. *J Appl Physiol* 2010;109(6):1996-8; discussion 2016. Review.
- Esler MD, Masuo K. Pharmacological treatments for obesity-related hypertension. *Curr Hypertens Rev* 2010;6(2):92-9. Review.
- Evans RG, Eppel GA, Michaels S, Burke SL, Nematbakhsh M, Head GA, Carroll JF, O'Connor PM. Multiple mechanisms act to maintain kidney oxygenation during renal ischemia in anesthetized rabbits. *Am J Physiol Renal Physiol* 2010;298(5):F1235-F1243.
- Evans RG, Head GA, Eppel GA, Burke SL, Rajapakse NW. Angiotensin II and neurohumoral control of the renal medullary circulation. *Clin Exp Pharmacol Physiol* 2010;37(2):e58-69. Review.
- Evans SM, Murray A, Patrick I, Fitzgerald M, Smith S, Andrianopoulos N, Cameron P. Assessing clinical handover between paramedics and the trauma team. *Injury* 2010;41(5):460-4.
- Evans SM, Murray A, Patrick I, Fitzgerald M, Smith S, Cameron P. Clinical handover in the trauma setting: a qualitative study of paramedics and trauma team members. *Qual Saf Health Care* 2010;19(6):e57.
- Eyre NS, Drummer HE, Beard MR. The SR-BI partner PDZK1 facilitates hepatitis C virus entry. *PLoS Pathog* 2010;6(10):pii: e1001130.
- Fairley CK. An international perspective of the newly published Standards for the Management of STIs. *Sex Transm Infect* 2010;86(2):80-1. Editorial.
- Fairley CK, Donovan B. What can surveillance of genital warts tell us? *Sex Health* 2010;7(3):325-7. Review.
- Fairley CK, Sze JK, Vodstrcil LA, Chen MY. Computer-assisted self interviewing in sexual health clinics. *Sex Transm Dis* 2010;37(11):665-8. Review.
- Fang L, Du XJ, Gao XM, Dart AM. Activation of peripheral blood mononuclear cells and extracellular matrix and inflammatory gene profile in acute myocardial infarction. *Clin Sci* 2010;119(4):175-83.

- Farzan F, Barr MS, Levinson AJ, Chen R, Wong W, Fitzgerald PB, Daskalakis ZJ.** Evidence for gamma inhibition deficits in the dorsolateral prefrontal cortex of patients with schizophrenia. *Brain* 2010;133(Pt 5):1505-14.
- Farzan F, Barr MS, Levinson AJ, Chen R, Wong W, Fitzgerald PB, Daskalakis ZJ.** Reliability of long-interval cortical inhibition in healthy human subjects: a TMS-EEG study. *J Neurophysiol* 2010;104(3):1339-46.
- Febbraio MA, Rose-John S, Pedersen BK.** Is interleukin-6 receptor blockade the Holy Grail for inflammatory diseases? *Clin Pharmacol Ther* 2010;87(4):396-8. Comment.
- Fedele CG, Ooms LM, Ho M, Vieusseux J, O'Toole SA, Millar EK, Lopez-Knowles E, Sriravana A, Gurung R, Baglietto L, Giles GG, Bailey CG, Rasko JE, Shields BJ, Price JT, Majerus PW, Sutherland RL, Tiganis T, McLean CA, Mitchell CA.** Inositol polyphosphate 4-phosphatase II regulates PI3K/Akt signaling and is lost in human basal-like breast cancers. *Proc Natl Acad Sci USA* 2010;107(51):22231-6.
- Feigin A, Higgs P, Hellard M, Dietze P.** Further research required to determine link between khat consumption and driver impairment. *Bull World Health Organ* 2010;88(6):480. Letter.
- Feil J, Sheppard D, Fitzgerald PB, Yücel M, Lubman DI, Bradshaw JL.** Addiction, compulsive drug seeking, and the role of frontostriatal mechanisms in regulating inhibitory control. *Neurosci Biobehav Rev* 2010;35(2):248-75. Review.
- Ferguson CD, Clancy P, Bourke B, Walker PJ, Dear A, Buckenham T, Norman P, Golledge J.** Association of statin prescription with small abdominal aortic aneurysm progression. *Am Heart J* 2010;159(2):307-13.
- Fernandez AZ, Siebel AL, El-Osta A.** Atherogenic factors and their epigenetic relationships. *Int J Vasc Med* 2010;2010:437809. Review.
- Fillipas S, Cherry CL, Cicuttini F, Smirneos L, Holland AE.** The effects of exercise training on metabolic and morphological outcomes for people living with HIV: a systematic review of randomised controlled trials. *HIV Clin Trials* 2010;11(5):270-82. Review.
- Fillipas S, Cicuttini F, Holland AE, Cherry CL.** The international physical activity questionnaire overestimates moderate and vigorous physical activity in HIV-infected individuals compared with accelerometry. *J Assoc Nurses AIDS Care* 2010;21(2):173-81.
- Finfer S, Liu B, Taylor C, Bellomo R, Billot L, Cook D, Du B, McArthur C, Myburgh J; SAFE TRIPS Investigators.** Resuscitation fluid use in critically ill adults: an international cross-sectional study in 391 intensive care units. *Crit Care* 2010;14(5):R185.
- Fishbain J, Peleg AY.** Treatment of *Acinetobacter* infections. *Clin Infect Dis* 2010;51(1):79-84. Review.
- Fitzgerald M.** Prehospital airway management. *Emerg Med J* 2010;27(3):172.
- Fitzgerald M, Bartlett CA, Harvey AR, Dunlop SA.** Early events of secondary degeneration after partial optic nerve transection: an immunohistochemical study. *J Neurotrauma* 2010;27(2):439-52.
- Fitzgerald M, Gerraty RP.** Thrombolysis for stroke. *Med J Aust* 2010;193(8):436-7.
- Fitzgerald M, Tan G, Gruen R, Smit de V, Martin K, Newton-Brown E, Luckhoff C, Maini A.** Emergency physician credentialing for resuscitative thoracotomy for trauma. *Emerg Med Australas* 2010;22(4):332-6.
- Fitzgerald PB.** TMS-EEG: a technique that has come of age? *Clin Neurophysiol* 2010;121(3):265-7. Editorial.
- Fitzgerald PB.** BL-1020, an oral antipsychotic agent that reduces dopamine activity and enhances GABAA activity, for the treatment of schizophrenia. *Curr Opin Investig Drugs* 2010;11(1):92-100. Review.
- Fitzgibbon BM, Enticott PG, Rich AN, Giummarra MJ, Georgiou-Karistianis N, Tsao JW, Weeks SR, Bradshaw JL.** High incidence of 'synaesthesia for pain' in amputees. *Neuropsychologia* 2010;48(12):3675-8.
- Fitzgibbon BM, Giummarra MJ, Georgiou-Karistianis N, Enticott PG, Bradshaw JL.** Shared pain: from empathy to synaesthesia. *Neurosci Biobehav Rev* 2010;34(4):500-12. Review.
- Flabouris A, Chen J, Hillman K, Bellomo R, Finfer S; MERIT Study Investigators from the Simpson Centre and the ANZICs Clinical Trials Group.** Timing and interventions of emergency teams during the MERIT study. *Resuscitation* 2010;81(1):25-30.
- Fletcher CA, Groom JR, Woehl B, Leung H, Mackay C, Mackay F.** Development of autoimmune nephritis in genetically asplenic and splenectomized BAFF transgenic mice. *J Autoimmun* 2010;36(2):125-34.
- Fletcher EL, Phipps JA, Ward MM, Vessey KA, Wilkinson-Berka JL.** The renin-angiotensin system in retinal health and disease: Its influence on neurons, glia and the vasculature. *Prog Retin Eye Res* 2010;29(4):284-311.
- Flower O, Phillips LE, Cameron P, Gunn K, Dunkley S, Watts A, Rajbhandari D.** Recombinant activated factor VII in liver patients: a retrospective cohort study from Australia and New Zealand. *Blood Coagul Fibrinolysis* 2010;21(3):207-15.
- Forbes JM.** The physiological deadlock between AMPK and gluconeogenesis: SOGA, a novel protein, may provide the key. *Am J Pathol* 2010;177(4):1600-2. Editorial.
- Ford N, Darder M, Spelman T, Maclean E, Mills E, Boule A.** Early adherence to antiretroviral medication as a predictor of long-term HIV virological suppression: five-year follow up of an observational cohort. *PLoS One* 2010;5(5):e10460.
- Franklin N, O'Connor CC, Shaw M, Guy R, Grulich A, Fairley CK, Chen MY, Hellard M, Dickson B, Marshall L, Donovan B; ACCESS Collaboration.** Chlamydia at an inner metropolitan sexual health service in Sydney, NSW: Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS) Project. *Sex Health* 2010;7(4):478-83.
- Freak-Poli R, Wolfe R, Peeters A.** Risk of cardiovascular disease and diabetes in a working population with sedentary occupations. *J Occup Environ Med* 2010;52(11):1132-7.
- Fredericks B.** Reempowering ourselves: Australian Aboriginal women. *Signs* 2010;35(3):546-50. Editorial.
- Fredericks B.** What'em with the apology? : the National Apology to the Stolen Generations two years on. *J Aust Indigenous Issues* 2010;13(1):19-30.
- Fredericks B.** What health services within rural communities tell us about Aboriginal people and Aboriginal health. *J Res Rural Regional Soc Issues Aus* 2010;20(1):10-20.
- Fredericks B.** We've had the Redfern Park Speech and The Apology: what's next? *Outskirts* 2010;23(1):online.
- Fredericks B, Thompson M.** Collaborative voices: ongoing reflections on cultural competency and the health care of Australian Indigenous people. *J Aust Indigenous Issues* 2010;13(3):10-20.
- French SD, Green S, Buchbinder R, Barnes H.** Interventions for improving the appropriate use of imaging in people with musculoskeletal conditions. *Cochrane Database Syst Rev* 2010;(1):CD006094. Review.
- French SD, Walker BF, Perle SM.** Chiropractic care for children: too much, too little or not enough? *Chiropr Osteopat* 2010;18:17. Editorial.
- Frugier T, Morganti-Kossmann MC, O'Reilly D.** *In situ* detection of inflammatory mediators in post mortem human brain tissue after traumatic injury. *J Neurotrauma* 2010;27(3):497-507.
- Fu P, Liang GJ, Khot SS, Phan R, Bach LA.** Cross-talk between MAP kinase pathways is involved in IGF-independent, IGFBP-6-induced Rh30 rhabdomyosarcoma cell migration. *J Cell Physiol* 2010;224(3):636-43.
- Fu Y.** Rate-limiting factors of cholesterol efflux in reverse cholesterol transport: acceptors and donors. *Clin Exp Pharmacol Physiol* 2010;37(7):703-9. Review.
- Furnish EJ, Brophy CM, Harris VA, Macomson S, Winger J, Head GA, Shaver EG.** Treatment with transducible phosphopeptide analogues of the small heat shock-related protein, HSP20, after experimental subarachnoid hemorrhage: prevention and reversal of delayed decreases in cerebral perfusion. *J Neurosurg* 2010;112(3):631-9.
- Gabbe BJ, Bailey M, Cook JL, Makdissi M, Scase E, Ames N, Wood T, McNeil JJ, Orchard JW.** The association between hip and groin injuries in the elite junior football years and injuries sustained during elite senior competition. *Br J Sports Med* 2010;44(11):799-802.

- Gabbe BJ, Harris IA, Collie A, Cameron PA.** Does access to compensation have an impact on recovery outcomes after injury? *Med J Aust* 2010;193(3):188. Letter.
- Gabbe BJ, Simpson PM, Sutherland AM, Palmer CS, Butt W, Bevan C, Cameron PA.** Agreement between parent and child report of health-related quality of life: impact of time postinjury. *J Trauma* 2010;69(6):1578-82.
- Gabbe BJ, Sutherland AM, Hart MJ, Cameron PA.** Population-based capture of long-term functional and quality of life outcomes after major trauma: the experiences of the Victorian State Trauma Registry. *J Trauma* 2010;69(3):532-6.
- Gagnon C, Magliano DJ, Ebeling PR, Dunstan DW, Zimmet PZ, Shaw JE, Daly RM.** Association between hyperglycaemia and fracture risk in non-diabetic middle-aged and older Australians: a national, population-based prospective study (AusDiab). *Osteoporos Int* 2010;21(12):2067-74.
- Gaire RK, Bailey J, Bearfoot J, Campbell IG, Stuckey PJ, Haviv I.** MIRAGAA--a methodology for finding coordinated effects of microRNA expression changes and genome aberrations in cancer. *Bioinformatics* 2010;26(2):161-7.
- Gall SL, Donnan G, Dewey H, Thrift A.** Sex differences in presentation, severity, and management of stroke in a population-based study. *Neurology* 2010;75(7):670-1. Author reply.
- Gall SL, Donnan G, Dewey HM, Macdonell R, Sturm J, Gilligan A, Srikanth V, Thrift AG.** Sex differences in presentation, severity, and management of stroke in a population-based study. *Neurology* 2010;74(12):975-81.
- Galletly C, Fitzgerald P, Clarke P, Gill S, Burton C, Turnbull C.** A practical guide to setting up a repetitive transcranial magnetic stimulation (rTMS) service. *Australas Psychiatry* 2010;18(4):314-7.
- Gallicchio MA, Bach LA.** Advanced glycation end products inhibit Na⁺ K⁺ ATPase in proximal tubule epithelial cells: role of cytosolic phospholipase A₂α and phosphatidylinositol 4-phosphate 5-kinase γ. *Biochim Biophys Acta-Mol Cell Res* 2010;1803(8):919-30.
- Gane EJ, Roberts SK, Stedman CA, Angus PW, Ritchie B, Elston R, Ipe D, Morcos PN, Baher L, Najera I, Chu T, Lopatin U, Berrey MM, Bradford W, Laughlin M, Shulman NS, Smith PF.** Oral combination therapy with a nucleoside polymerase inhibitor (RG7128) and danoprevir for chronic hepatitis C genotype 1 infection (INFORM-1): a randomised, double-blind, placebo-controlled, dose-escalation trial. *Lancet* 2010;376(9751):1467-75.
- Gao XM, Ming Z, Su Y, Fang L, Kiriazis H, Xu Q, Dart AM, Du XJ.** Infarct size and post-infarct inflammation determine the risk of cardiac rupture in mice. *Int J Cardiol* 2010;143(1):20-8.
- Garcia A, Kim S, Bhavaraju K, Schoenwaelder SM, Kunapuli SP.** Role of phosphoinositide 3-kinase β in platelet aggregation and thromboxane A₂ generation mediated by G_i signalling pathways. *Biochem J* 2010;429(2):369-77.
- Gardiner EE.** A GPIb-IX-V complex signaling environment. *J Thromb Haemost* 2010;8(5):1075-6. Letter.
- Gardiner EE, Arthur JF, Shen Y, Karunakaran D, Moore LA, Am Esch JS 2nd, Andrews RK, Berndt MC.** GPIbα-selective activation of platelets induces platelet signaling events comparable to GPVI activation events. *Platelets* 2010;21(4):244-52.
- Gardiner EE, Berndt MC.** Arterial thrombosis: going, gone! *Blood* 2010;116(13):2201-2. Editorial.
- Gardiner EE, Thom JY, Al-Tamimi M, Hughes A, Berndt MC, Andrews RK, Baker RI.** Restored platelet function after romiplostim treatment in a patient with immune thrombocytopenic purpura. *Br J Haematol* 2010;149(4):625-8.
- Garland SM, Brotherton JM, Fairley CK, Gertig DM, Saville M.** Advancements in the control of genital human papillomavirus infections and related diseases: highlighting Australia's role. *Sex Health* 2010;7(3):227-9. Editorial.
- Garner DJ, Pilcher D.** The management of pulmonary embolism. *Anaesth Intensive Care Med* 2010;11(12):512-8.
- Garner DJ, Tuxen D.** Asthma and chronic obstructive pulmonary disease in the intensive care unit. *Anaesth Intensive Care Med* 2010;11(11):481-486.
- Gartlan KH, Belz GT, Tarrant JM, Minigo G, Katsara M, Sheng KC, Sofi M, van Spruel AB, Apostolopoulos V, Plebanski M, Robb L, Wright MD.** A complementary role for the tetraspanins CD37 and Tssc6 in cellular immunity. *J Immunol* 2010;185(6):3158-66.
- Gautret P, Lim PL, Shaw M, Leder K.** Rabies post-exposure prophylaxis in travellers returning from Bali, Indonesia, November 2008 to March 2010. *Clin Microbiol Infect* 2010;17(3):445-7.
- Gavrilescu M, Rossell S, Stuart GW, Shea TL, Innes-Brown H, Henshall K, McKay C, Sergejew AA, Copolov D, Egan GF.** Reduced connectivity of the auditory cortex in patients with auditory hallucinations: a resting state functional magnetic resonance imaging study. *Psychol Med* 2010;40(7):1149-58.
- Gearry RB, Day AS, Barclay ML, Leong RW, Sparrow MP.** Azathioprine and allopurinol: a two-edged interaction. *J Gastroenterol Hepatol* 2010;25(4):653-5. Editorial.
- Genovese G, Tonna SJ, Knob AU, Appel GB, Katz A, Bernhardt AJ, Needham AW, Lazarus R, Pollak MR.** A risk allele for focal segmental glomerulosclerosis in African Americans is located within a region containing APOL1 and MYH9. *Kidney Int* 2010;78(7):698-704.
- George J.** Patient deviations from treatment recommendations: does it matter what we call it? *Int J Pharm Pract* 2010;18(1):3-5. Editorial.
- George J, Kinner SA, Bruno R, Degenhardt L, Dunn M.** Contextualising psychological distress among regular ecstasy users: the importance of sociodemographic factors and patterns of drug use. *Drug Alcohol Rev* 2010;29(3):243-9.
- Georgiadis JR, Farrell MJ, Boessen R, Denton DA, Gavrilescu M, Kortekaas R, Renken RJ, Hoogduin JM, Egan GF.** Dynamic subcortical blood flow during male sexual activity with ecological validity: a perfusion fMRI study. *Neuroimage* 2010;50(1):208-16.
- Gerondakis S, Siebenlist U.** Roles of the NF-κB pathway in lymphocyte development and function. *Cold Spring Harb Perspect Biol* 2010;2(5):a000182.
- Getachew R, Ballinger ML, Burch ML, Little PJ, Osman N.** Characterisation of Ki11502 as a potent inhibitor of PDGF β receptor-mediated proteoglycan synthesis in vascular smooth muscle cells. *Eur J Pharmacol* 2010;626(2-3):186-92.
- Getachew R, Ballinger ML, Burch ML, Reid JJ, Khachigian LM, Wight TN, Little PJ, Osman N.** PDGF β-receptor kinase activity and ERK1/2 mediate glycosaminoglycan elongation on biglycan and increases binding to LDL. *Endocrinology* 2010;151(9):4356-67.
- Gibson JH, Slobedman B, Kaipanickal H, Williamson SL, Minchenko D, El-Osta A, Stern JL, Christodoulou J.** Downstream targets of methyl CpG binding protein 2 and their abnormal expression in the frontal cortex of the human Rett syndrome brain. *BMC Neurosci* 2010;11:53.
- Gibson K, Day L, Hill KD, Jolley D, Newstead S, Cicuttini F, Segal L, Flicker L.** Screening for pre-clinical disability in different residential settings. *BMC Geriatr* 2010;10:52.
- Gilligan C, Sanson-Fisher R, Eades S, Wenitong M, Panaretto K, D'Este C.** Assessing the accuracy of self-reported smoking status and impact of passive smoke exposure among pregnant Aboriginal and Torres Strait Islander women using cotinine biochemical validation. *Drug Alcohol Rev* 2010;29(1):35-40.
- Gillman A, Douglass JA.** What do asthmatics have to fear from food and additive allergy? *Clin Exp Allergy* 2010;40(9):1295-302. Review.
- Ginès P, Wong F, Watson H, Terg R, Bruha R, Zarski JP, Dudley F; NormoCAT Study Investigators.** Clinical trial: short-term effects of combination of satavaptan, a selective vasopressin V2 receptor antagonist, and diuretics on ascites in patients with cirrhosis without hyponatraemia--a randomized, double-blind, placebo-controlled study. *Aliment Pharmacol Ther* 2010;31(8):834-45.
- Girschik J, Glass D, Ambrosini GL, Fritschi L.** Could mining be protective against prostate cancer? A study and literature review. *Occup Environ Med* 2010;67(6):365-74. Review.

- Giummarra MJ, Fitzgibbon BM, Georgiou-Karistianis N, Nicholls ME, Gibson SJ, Bradshaw JL.** Ouch! My phantom leg jumps/hurts when you stab "my" virtual hand. *Perception* 2010;39(10):1396-407.
- Giummarra MJ, Georgiou-Karistianis N, Nicholls ME, Gibson SJ, Bradshaw JL.** The phantom in the mirror: a modified rubber-hand illusion in amputees and normals. *Perception* 2010;39(1):103-18.
- Giummarra MJ, Georgiou-Karistianis N, Nicholls ME, Gibson SJ, Chou M, Bradshaw JL.** Corporeal awareness and proprioceptive sense of the phantom. *Br J Psychol* 2010;101(Pt 4):791-808.
- Giunti S, Calkin AC, Forbes JM, Allen TJ, Thomas MC, Cooper ME, Jandeleit-Dahm KA.** The pleiotropic actions of rosuvastatin confer renal benefits in the diabetic Apo-E knockout mouse. *Am J Physiol Renal Physiol* 2010;299(3):F528-35.
- Glaspole I, Goh NS.** Differentiating between IPF and NSIP. *Chron Respir Dis* 2010;7(3):187-95. Review.
- Glass DC, Armstrong TW, Pearlman ED, Verma DK, Schnatter AR, Rushton L.** Ensuring comparability of benzene exposure estimates across three nested case-control studies in the petroleum industry in support of a pooled epidemiological analysis. *Chem Biol Interact* 2010;184(1-2):101-11.
- Glenister KM, Sparrow RL.** Level of platelet-derived cytokines in leukoreduced red blood cells is influenced by the processing method and type of leukoreduction filter. *Transfusion* 2010;50(1):185-9.
- Gogos A, Gavrilescu M, Davison S, Searle K, Adams J, Rossell SL, Bell R, Davis SR, Egan GF.** Greater superior than inferior parietal lobule activation with increasing rotation angle during mental rotation: an fMRI study. *Neuropsychologia* 2010;48(2):529-35.
- Gogos A, Joshua N, Rossell SL.** Use of the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS) to investigate group and gender differences in schizophrenia and bipolar disorder. *Aust N Z J Psychiatry* 2010;44(3):220-9.
- Goh PY, Dobson M, Iseli T, Maartens NF.** Forestier's disease presenting with dysphagia and dysphonia. *J Clin Neurosci* 2010;17(10):1336-8.
- Gold J, Lim MS, Hellard ME, Hocking JS, Keogh L.** What's in a message? Delivering sexual health promotion to young people in Australia via text messaging. *BMC Public Health* 2010;10:792.
- Goldhaber-Fiebert JD, Lipsitch M, Mahal A, Zaslavsky AM, Salomon JA.** Quantifying child mortality reductions related to measles vaccination. *PLoS One* 2010;5(11):e13842.
- Goldschlager T, Ghosh P, Zannettino A, Gronthos S, Rosenfeld JV, Itescu S, Jenkin G.** Cervical motion preservation using mesenchymal progenitor cells and pentosan polysulfate, a novel chondrogenic agent: preliminary study in an ovine model. *Neurosurg Focus* 2010;28(6):E4.
- Goldschlager T, Jenkin G, Ghosh P, Zannettino A, Rosenfeld JV.** Potential applications for using stem cells in spine surgery. *Curr Stem Cell Res Ther* 2010;5(4):345-55.
- Goller JL, Guy RJ, Gold J, Lim MS, El-Hayek C, Stoope MA, Bergeri I, Fairley CK, Leslie DE, Clift P, White B, Hellard ME.** Establishing a linked sentinel surveillance system for blood-borne viruses and sexually transmissible infections: methods, system attributes and early findings. *Sex Health* 2010;7(4):425-33.
- Gong J, Zhang Y, Durfee J, Weng D, Liu C, Koido S, Song B, Apostolopoulos V, Calderwood SK.** A heat shock protein 70-based vaccine with enhanced immunogenicity for clinical use. *J Immunol* 2010;184(1):488-96.
- Good DM, Zürgbig P, Argilés A, Bauer HW, Behrens G, Coon JJ, Dakna M, Decramer S, Delles C, Dominiczak AF, Ehrich JH, Eitner F, Fliser D, Frommberger M, Ganser A, Girolami MA, Golovko I, Gwinner W, Haubitz M, Herget-Rosenthal S, Jankowski J, Jahn H, Jerums G, Julian BA, Kellmann M, Kliem V, Kolch W, Krolewski AS, Luppi M, Massy Z, Melter M, Neusüss C, Novak J, Peter K, Rossing K, Rupprecht H, Schanstra JP, Schiffer E, Stolzenburg JU, Tarnow L, Theodorescu D, Thongboonkerd V, Vanholder R, Weissinger EM, Mischak H, Schmitt-Kopplin P.** Naturally occurring human urinary peptides for use in diagnosis of chronic kidney disease. *Mol Cell Proteomics* 2010;9(11):2424-37.
- Goodnow CC, Vinuesa CG, Randall KL, Mackay F, Brink R.** Control systems and decision making for antibody production. *Nat Immunol* 2010;11(8):681-8. Review.
- Gordon AC, Russell JA, Walley KR, Singer J, Ayers D, Storms MM, Holmes CL, Hébert PC, Cooper DJ, Mehta S, Granton JT, Cook DJ, Presneill JJ.** The effects of vasopressin on acute kidney injury in septic shock. *Intensive Care Med* 2010;36(1):83-91.
- Gordon CL, Johnson PD, Permezel M, Holmes NE, Gutteridge G, McDonald CF, Eisen DP, Stewardson AJ, Edington J, Charles PG, Crinis N, Black MJ, Torresi J, Grayson ML.** Association between severe pandemic 2009 influenza A (H1N1) virus infection and immunoglobulin G₂ subclass deficiency. *Clin Infect Dis* 2010;50(5):672-8.
- Gosling CM, Forbes AB, McGivern J, Gabbe BJ.** A profile of injuries in athletes seeking treatment during a triathlon race series. *Am J Sports Med* 2010;38(5):1007-14.
- Gowans EJ, Roberts S, Jones K, Dinatale I, Latour PA, Chua B, Eriksson EM, Chin R, Li S, Wall DM, Sparrow RL, Moloney J, Loudovaris M, Ffrench R, Prince HM, Hart D, Zeng W, Torresi J, Brown LE, Jackson DC.** A Phase I clinical trial of dendritic cell immunotherapy in HCV-infected individuals. *J Hepatol* 2010;53(4):599-607.
- Grantham NM, Magliano DJ, Tai G, Cohen N, Shaw JE.** Anti-platelets in diabetes management. *Intern Med J* 2010;40(6):458-62.
- Graudins LV, Dooley MJ.** Generic medicines literacy – minimising the potential for patient confusion. *Med J Aust* 2010;193(7):427.
- Grebely J, Petoumenos K, Hellard M, Matthews GV, Suppiah V, Applegate T, Yeung B, Marks P, Rawlinson W, Lloyd AR, Booth D, Kaldor JM, George J, Dore GJ; ATAC Study Group.** Potential role for interleukin-28B genotype in treatment decision-making in recent hepatitis C virus infection. *Hepatology* 2010;52(4):1216-24.
- Grebely J, Petoumenos K, Matthews GV, Haber P, Marks P, Lloyd AR, Kaldor JM, Dore GJ, Hellard M; ATAC Study Group.** Factors associated with uptake of treatment for recent hepatitis C virus infection in a predominantly injecting drug user cohort: The ATAC Study. *Drug Alcohol Depend* 2010;107(2-3):244-9.
- Greening DW, Glenister KM, Sparrow RL, Simpson RJ.** International blood collection and storage: clinical use of blood products. *J Proteomics* 2010;73(3):386-95. Review.
- Grigg AP, Stone J, Milner AD, Schwarzer AP, Wolf M, Prince HM, Seymour J, Gill D, Ellis D, Bashford J; Australasian Leukaemia & Lymphoma Group.** Phase II study of autologous stem cell transplant using busulfan-melphalan chemotherapy-only conditioning followed by interferon for relapsed poor prognosis follicular non-Hodgkin lymphoma. *Leuk Lymphoma* 2010;51(4):641-9.
- Grigoriadis G, Anderson MA, Whitehead S.** Charcot-Leyden crystals. *Intern Med J* 2010;40(11):792. Image.
- Grigoriadis G, Whitehead S.** CD138 shedding in plasma cell myeloma. *Br J Haematol* 2010;150(3):249. Image.
- Grills N, Piers LS, Barr I, Vaughan LM, Lester R, Magliano DJ, Shaw JE, Carnie JA.** A lower than expected adult Victorian community attack rate for pandemic (H1N1) 2009. *Aust N Z J Public Health* 2010;34(3):228-31. Erratum: *Aust N Z J Public Health* 2010;34(4):426.
- Gross DP, Russell AS, Ferrari R, Battié MC, Schopflocher D, Hu R, Waddell G, Buchbinder R.** Evaluation of a Canadian back pain mass media campaign. *Spine* 2010;35(8):906-13.
- Gruen RL.** Trauma research: what is so special? *Injury* 2010;41 Suppl 1:S2. Editorial.
- Guild SJ, Barrett CJ, McBryde FD, Van Vliet BN, Head GA, Burke SL, Malpas SC.** Quantifying sympathetic nerve activity: problems, pitfalls and the need for standardization. *Exp Physiol* 2010;95(1):41-50. Review.
- Gurvitch R, Lefkovits J, Warren RJ, Duffy SJ, Clark DJ, Eccleston D, Yan BP, Reid C, Brennan A, Andrianopoulos N, Ajani AE.** Clinical outcomes of drug-eluting stent use in patients with ST elevation myocardial infarction. *Int J Cardiol* 2010;143(3):283-8.

- Guy R, Goller JL, Spelman T, El-Hayek C, Gold J, Lim M, Leslie D, Tee BK, Roth N, Anderson J, Fairley CK, Kaldor J, Hellard M. Does the frequency of HIV and STI testing among men who have sex with men in primary care adhere with Australian guidelines? *Sex Transm Infect* 2010;86(5):371-6.
- Guy RJ, Kong F, Goller J, Franklin N, Bergeri I, Dimech W, Reilly N, Sullivan E, Ward J, Kaldor JM, Hellard M, Donovan B; ACCESS Collaboration. A new national Chlamydia Sentinel Surveillance System in Australia: evaluation of the first stage of implementation. *Commun Dis Intell* 2010;34(3):319-28.
- Ha T, Hu Y, Liu L, Lu C, McMullen JR, Kelley J, Kao RL, Williams DL, Gao X, Li C. TLR2 ligands induce cardioprotection against ischaemia/reperfusion injury through a PI3K/Akt-dependent mechanism. *Cardiovasc Res* 2010;87(4):694-703.
- Habersberger J, Eisenhardt S, Peter K. C-reactive protein measurement and cardiovascular disease. *Lancet* 2010;375(9720):1078. Letter.
- Hackman KL, Davis AL, Curnow PA, Serpell JW, McLean CA, Topliss DJ. Cushing syndrome in a young woman due to primary pigmented nodular adrenal disease. *Endocr Pract* 2010;16(1):84-8.
- Haddow LJ, Colebunders R, Meintjes G, Lawn SD, Elliott JH, Manabe YC, Bohjanen PR, Sungkanuparph S, Easterbrook PJ, French MA, Boulware DR; International Network for the Study of HIV-associated IRIS (INSHI). Cryptococcal immune reconstitution inflammatory syndrome in HIV-1-infected individuals: proposed clinical case definitions. *Lancet Infect Dis* 2010;10(11):791-802.
- Hagemeyer CE, Ahrens I, Bassler N, Dschachutaschwili N, Chen YC, Eisenhardt SU, Bode C, Peter K. Genetic transfer of fusion proteins effectively inhibits VCAM-1-mediated cell adhesion and transmigration via inhibition of cytoskeletal anchorage. *J Cell Mol Med* 2010;14(1-2):290-302.
- Hagemeyer CE, Bürck C, Schwab R, Knoth R, Meyer RP. 7-Benzyloxyresorufin-O-dealkylase activity as a marker for measuring cytochrome P450 CYP3A induction in mouse liver. *Anal Biochem* 2010;398(1):104-11.
- Hagemeyer CE, Peter K. Targeting the platelet integrin GPIIb/IIIa. *Curr Pharm Des* 2010;16(37):4119-33. Review.
- Hagmann S, Reddy N, Neugebauer R, Purswani M, Leder K. Identifying future VFR travelers among immigrant families in the Bronx, New York. *J Travel Med* 2010;17(3):193-6.
- Haji K, Haji D, Tiruvoipati R, Bailey M, Blanc VL, Botha JA. Impact of length of stay in emergency department on the outcome in patient with severe sepsis. *Crit Care Shock* 2010;13:137.
- Hall W, Degenhardt L. What are the policy implications of the evidence on cannabis use and psychosis? *Addiction* 2010;105(8):1332-3. Comment.
- Hall W, Degenhardt L. Adverse health effects of non-medical cannabis use – authors' reply. *Lancet* 2010;375(9710):197. Author reply.
- Handolias D, Salemi R, Murray W, Tan A, Liu W, Viros A, Dobrovic A, Kelly J, McArthur GA. Mutations in KIT occur at low frequency in melanomas arising from anatomical sites associated with chronic and intermittent sun exposure. *Pigment Cell Melanoma Res* 2010;23(2):210-5.
- Hankey GJ, Wong KS, Chankrachang S, Chen C, Crimmins D, Frayne J, Kim JS, Li Y, Liou CW, Merican JS, Misbach J, Navarro J, Shinohara Y, Wang Y, Yoon BW; Working Group on Stroke and Lipids Management in Asia Consensus Panel. Management of cholesterol to reduce the burden of stroke in Asia: consensus statement. *Int J Stroke* 2010;5(3):209-16. Statement.
- Hannaford-Turner K, Elder D, Sim MR, Abramson MJ, Johnson AR, Yates DH. Surveillance of Australian workplace Based Respiratory Events (SABRE) in New South Wales. *Occup Med* 2010;60(5):376-82.
- Harcourt C, O'Connor J, Egger S, Fairley CK, Wand H, Chen MY, Marshall L, Kaldor JM, Donovan B. The decriminalization of prostitution is associated with better coverage of health promotion programs for sex workers. *Aust N Z J Public Health* 2010;34(5):482-6.
- Hardy CL, Lemasurier JS, Olsson F, Dang T, Yao J, Yang M, Plebanski M, Phillips DJ, Mollard R, Rolland JM, O'Hehir RE. Interleukin-13 regulates secretion of the tumor growth factor- β superfamily cytokine activin A in allergic airway inflammation. *Am J Respir Cell Mol Biol* 2010;42(6):667-75.
- Harikrishnan KN, Bayles R, Ciccotosto GD, Maxwell S, Cappai R, Pelka GJ, Tam PP, Christodoulou J, El-Osta A. Alleviating transcriptional inhibition of the norepinephrine *Slc6a2* transporter gene in depolarized neurons. *J Neurosci* 2010;30(4):1494-501.
- Harousseau JL, Dimopoulos MA, Wang M, Corso A, Chen C, Attal M, Spencer A, Yu Z, Olesnyckyj M, Zeldis JB, Knight RD, Weber DM. Better quality of response to lenalidomide plus dexamethasone is associated with improved clinical outcomes in patients with relapsed or refractory multiple myeloma. *Haematologica* 2010;95(10):1738-44.
- Harrigan PW, Webb SA, Seppelt IM, O'Leary M, Totaro R, Patterson D, Davies AR, Streat S. The practical experience of managing the H1N1 2009 influenza pandemic in Australian and New Zealand intensive care units. *Crit Care Resusc* 2010;12(2):121-30.
- Harris HJ, Davis C, Mullins JG, Hu K, Goodall M, Farquhar MJ, Mee CJ, McCaffrey K, Young S, Drummer H, Balfe P, McKeating JA. Claudin association with CD81 defines hepatitis C virus entry. *J Biol Chem* 2010;285(27):21092-102.
- Harvey AR, Morris ME, Graham HK, Wolfe R, Baker R. Reliability of the functional mobility scale for children with cerebral palsy. *Phys Occup Ther Pediatr* 2010;30(2):139-49.
- Hawker J, Walker K. An objective structured clinical examination to assess preclinical skills. *Nutr Diet* 2010;67(2):102-5.
- Hawker JA, Walker KZ, Barrington V, Andrianopoulos N. Measuring the success of an objective structured clinical examination for dietetic students. *J Hum Nutr Diet* 2010;23(3):212-6.
- Hayden MJ, Dixon JB, Dixon ME, O'Brien PE. Confirmatory factor analysis of the Beck Depression Inventory in obese individuals seeking surgery. *Obes Surg* 2010;20(4):432-9.
- Hayden MJ, Dixon ME, Dixon JB, Playfair J, O'Brien PE. Perceived discrimination and stigmatisation against severely obese women: age and weight loss make a difference. *Obes Facts* 2010;3(1):7-14.
- Hayes NE, Wheelahan JM, Ross A. Self-reported post-discharge symptoms following obstetric neuraxial blockade. *Int J Obstet Anesth* 2010;19(4):405-9.
- He SM, Li CG, Liu JP, Chan E, Duan W, Zhou SF. Disposition pathways and pharmacokinetics of herbal medicines in humans. *Curr Med Chem* 2010;17(33):4072-113. Review.
- Head GA. Exciting challenges ahead for integrative and regulatory physiology. *Front Integr Physiol* 2010;:doi: 10.3389/fphys.2010.00127. Review.
- Head GA, Burke SL. Comments on Point:Counterpoint: The dominant contributor to systemic hypertension: Chronic activation of the sympathetic nervous system vs. activation of the intrarenal renin-angiotensin system. *J Appl Physiol* 2010;109(6):2010. Comment.
- Head GA, Chatzivlastou K, Lukoshkova EV, Jennings GL, Reid CM. A novel measure of the power of the morning blood pressure surge from ambulatory blood pressure recordings. *Am J Hypertens* 2010;23(10):1074-81.
- Head GA, Mihailidou AS, Duggan KA, Beilin LJ, Berry N, Brown MA, Bune AJ, Cowley D, Chalmers JP, Howe PR, Hodgson J, Ludbrook J, Mangoni AA, McGrath BP, Nelson MR, Sharman JE, Stowasser M. Reply to: "Clinical thresholds for ambulatory blood pressure measurement reinvented?" *Br Med J* 2010;Rapid response:14 May. Author reply.
- Head GA, Mihailidou AS, Duggan KA, Beilin LJ, Berry N, Brown MA, Bune AJ, Cowley D, Chalmers JP, Howe PR, Hodgson J, Ludbrook J, Mangoni AA, McGrath BP, Nelson MR, Sharman JE, Stowasser M; Ambulatory Blood Pressure Working Group of the High Blood Pressure Research Council of Australia. Definition of ambulatory blood pressure targets for diagnosis and treatment of hypertension in relation to clinic blood pressure: prospective cohort study. *Br Med J* 2010;340:c1104.

- Healy GN, Owen N.** Sedentary conduct and biomarkers of cardiometabolic risk in adolescents: a scientific and emerging public health problem. *Rev Esp Cardiol* 2010;63(3):261-4. Editorial.
- Hearps AC, Ryan CE, Morris LM, Plate MM, Greengrass V, Crowe SM.** Stability of dried blood spots for HIV-1 drug resistance analysis. *Curr HIV Res* 2010;8(2):134-40.
- Hellard ME, Wang YHJ, Sacks-Davis R.** The role of general practitioners in managing and treating hepatitis C. *Med J Aust* 2010;192(4):239. Author reply.
- Hellewell SC, Yan EB, Agyapomaa DA, Bye N, Morganti-Kossmann MC.** Post-traumatic hypoxia exacerbates brain tissue damage: analysis of axonal injury and glial responses. *J Neurotrauma* 2010;27(11):1997-2010.
- Heng YJ, Di Quinzio MK, Permezel M, Ayhan M, Rice GE, Georgiou HM.** Temporal proteomic analysis of human cervicovaginal fluid with impending term labor. *J Proteome Res* 2010;9(3):1344-50.
- Hennebry SC, Eikelis N, Socratous F, Desir G, Lambert G, Schlaich M.** Renalase, a novel soluble FAD-dependent protein, is synthesized in the brain and peripheral nerves. *Mol Psychiatry* 2010;15(3):234-6.
- Henstridge DC, Febbraio MA.** Adiponectin sparks an interest in calcium. *Cell Metab* 2010;11(6):447-9. Comment.
- Henstridge DC, Forbes JM, Penfold SA, Formosa MF, Dougherty S, Gasser A, de Courten MP, Cooper ME, Kingwell BA, de Courten B.** The relationship between heat shock protein 72 expression in skeletal muscle and insulin sensitivity is dependent on adiposity. *Metabolism* 2010;59(11):1556-61.
- Herbert D, Cregan K, Street A, Bankier A, Komesaroff P.** The lived experiences of families and individuals affected by haemophilia in relation to the availability of genetic testing services. *Curr Narratives* 2010;(2):27-43.
- Hetrick SE, McKenzie JE, Merry SN.** The use of SSRIs in children and adolescents. *Curr Opin Psychiatr* 2010;23(1):53-7. Review.
- Hewagama S, Walker SP, Stuart RL, Gordon C, Johnson PD, Friedman ND, O'Reilly M, Cheng AC, Giles ML.** 2009 H1N1 influenza A and pregnancy outcomes in Victoria, Australia. *Clin Infect Dis* 2010;50(5):686-90.
- Hewson ID, Makhmalloaf P.** Management of third molar removal with a single dose of recombinant Factor IX (BeneFIX) and local measures in severe haemophilia B. *Aust Dent J* 2010;55(3):322-4.
- Heyland DK, Heyland RD, Cahill NE, Dhaliwal R, Day AG, Jiang X, Morrison S, Davies AR.** Creating a culture of clinical excellence in critical care nutrition: the 2008 "Best of the Best" award. *J Parenter Enteral Nutr* 2010;34(6):707-15.
- Hietala K, Harjutsalo V, Forsblom C, Summanen P, Groop PH; FinnDiane Study Group.** Age at onset and the risk of proliferative retinopathy in Type 1 diabetes. *Diabetes Care* 2010;33(6):1315-9.
- Higgins AM, Pettila V, Bellomo R, Harris AH, Nichol AD, Morrison SS.** Expensive care – a rationale for economic evaluations in intensive care. *Crit Care Resusc* 2010;12(1):62-6.
- Hill S, Spink J, Cadilhac D, Edwards A, Kaufman C, Rogers S, Ryan R, Tonkin A.** Absolute risk representation in cardiovascular disease prevention: comprehension and preferences of health care consumers and general practitioners involved in a focus group study. *BMC Public Health* 2010;10:108.
- Hiller RJ, Mikocka-Walus AA, Cameron PA.** Aortic transection: demographics, treatment and outcomes in Victoria, Australia. *Emerg Med J* 2010;27(5):368-71.
- Hindman BJ, Bayman EO, Pfisterer WK, Torner JC, Todd MM; IHASt Investigators.** No association between intraoperative hypothermia or supplemental protective drug and neurologic outcomes in patients undergoing temporary clipping during cerebral aneurysm surgery: findings from the Intraoperative Hypothermia for Aneurysm Surgery Trial. *Anesthesiology* 2010;112(1):86-101.
- Hirakata A, Okumi M, Griesemer AD, Shimizu A, Nobori S, Tena A, Moran S, Arn S, Boyd RL, Sachs DH, Yamada K.** Reversal of age-related thymic involution by an LHRH agonist in miniature swine. *Transpl Immunol* 2010;24(1):76-81.
- Ho JJ, Pattanittum P, Japaraj RP, Turner T, Swadpanich U, Crowther CA; SEA-ORCHID Study Group.** Influence of training in the use and generation of evidence on episiotomy practice and perineal trauma. *Int J Gynaecol Obstet* 2010;111(1):13-8.
- Hobgood C, Anantharaman V, Bandiera G, Cameron P, Halpern P, Holliman CJ, Jouriles N, Kilroy D, Mulligan T, Singer A; International Federation for Emergency Medicine.** International Federation for Emergency Medicine model curriculum for medical student education in emergency medicine. *Int J Emerg Med* 2010;3(1):1-7. Statement.
- Hockings L, Heaney M, Chambers NA, Erb TO, von Ungern-Sternberg BS.** Reduced air leakage by adjusting the cuff pressure in pediatric laryngeal mask airways during spontaneous ventilation. *Pediatr Anesth* 2010;20(4):313-7.
- Hodge AM, Maple-Brown L, Cunningham J, Boyle J, Dunbar T, Weeramanthri T, Shaw J, O'Dea K.** Abdominal obesity and other risk factors largely explain the high CRP in Indigenous Australians relative to the general population, but not gender differences: a cross-sectional study. *BMC Public Health* 2010;10:700.
- Hoe V, Kelsall H, Urquhart D, Sim M.** Ergonomic design and training for preventing work-related musculoskeletal disorders of the upper limb and neck in adults. *Cochrane Database Syst Rev* 2010;(7):CD008570. Protocol.
- Holdsworth-Carson S, Lim R, Mitton A, Whitehead C, Rice G, Permezel M, Lappas M.** Peroxisome proliferator-activated receptors are altered in pathologies of the human placenta: gestational diabetes mellitus, intrauterine growth restriction and preeclampsia. *Placenta* 2010;31(3):222-9.
- Holland AE.** The BODE index. *J Physiother* 2010;56(1):62. Comment.
- Holland AE.** Exercise limitation in interstitial lung disease – mechanisms, significance and therapeutic options. *Chron Respir Dis* 2010;7(2):101-11. Review.
- Holland AE, Hill CJ, McDonald CF.** Breathing exercises for chronic obstructive pulmonary disease. *Cochrane Database Syst Rev* 2010;(1):CD008250. Protocol.
- Holland AE, Hill CJ, Rasekaba T, Lee A, Naughton MT, McDonald CF.** Updating the minimal important difference for six-minute walk distance in patients with chronic obstructive pulmonary disease. *Arch Phys Med Rehabil* 2010;91(2):221-5.
- Holman RR, Haffner SM, McMurray JJ, Bethel MA, Holzhauer B, Hua TA, Belenkov Y, Boolell M, Buse JB, Buckley BM, Chacra AR, Chiang FT, Charbonnel B, Chow CC, Davies MJ, Deedwania P, Diem P, Einhorn D, Fonseca V, Fulcher GR, Krum H, NAVIGATOR Study Group.** Effect of nateglinide on the incidence of diabetes and cardiovascular events. *N Engl J Med* 2010;362(16):1463-76.
- Holmes A, Williamson O, Hogg M, Arnold C, Prosser A, Clements J, Konstantatos A, O'Donnell M.** Predictors of pain severity 3 months after serious injury. *Pain Med* 2010;11(7):990-1000.
- Holmes A, Williamson O, Hogg M, Arnold C, Prosser A, Clements J, Konstantatos A, O'Donnell M.** Predictors of pain 12 months after serious injury. *Pain Med* 2010;11(11):1599-611.
- Holmes W.** Adding to the menu of modern methods--the diaphragm. *Sex Health* 2010;7(2):101-2. Editorial.
- Hopkins CA, Temple-Smith MJ, Fairley CK, Pavlin NL, Tomnay JE, Parker RM, Bowden FJ, Russell DB, Hocking JS, Chen MY.** Telling partners about chlamydia: how acceptable are the new technologies? *BMC Infect Dis* 2010;10:58.
- Hoppenbrouwers SS, Farzan F, Barr MS, Voineskos AN, Schutter DJ, Fitzgerald PB, Daskalakis ZJ.** Personality goes a long way: an interhemispheric connectivity study. *Front Psychiatry* 2010;1:140.
- Horton S, d'Udekem Y, Shann F, Butt W, Bennett M, Best D, Brizard C.** Extracorporeal membrane oxygenation via sternotomy for circulatory shock. *J Thorac Cardiovasc Surg* 2010;139(2):e12-3.
- Horyniak D, Guy R, Prybylski D, Hellard M, Kaldor J.** The utility of voluntary counselling and testing data as a source of information on HIV prevalence: a systematic review. *Int J STD AIDS* 2010;21(5):305-11. Review.

- Horyniak D, Higgs P, Lewis J, Winter R, Dietze P, Aitken C.** An evaluation of a heroin overdose prevention and education campaign. *Drug Alcohol Rev* 2010;29(1):5-11.
- Hoy D, March L, Brooks P, Woolf A, Blyth F, Vos T, Buchbinder R.** Measuring the global burden of low back pain. *Best Pract Res Clin Rheumatol* 2010;24(2):155-65.
- Hoy DG, Fransen M, March L, Brooks P, Durham J, Toole MJ.** In rural Tibet, the prevalence of lower limb pain, especially knee pain, is high: an observational study. *J Physiother* 2010;56(1):49-54.
- Hoy KE, Enticott PG, Daskalakis ZJ, Fitzgerald PB.** Can a behavioral intervention enhance the effect of repetitive transcranial magnetic stimulation on mood? *Brain Stimul* 2010;3(4):200-6.
- Hoy KE, Fitzgerald PB.** Brain stimulation in psychiatry and its effects on cognition. *Nat Rev Neurol* 2010;6(5):267-75. Review.
- Hoy KE, Fitzgerald PB.** Introducing magnetic seizure therapy: a novel therapy for treatment resistant depression. *Aust N Z J Psychiatry* 2010;44(7):591-8. Review.
- Hoy RF, Abramson MJ, Sim MR.** Work related asthma – diagnosis and management. *Aust Fam Physician* 2010;39(1-2):39-42.
- Huang D, Zhuang Y, Zhai S, Song Y, Liu Q, Zhao S, Wang S, Li X, Kang W, Greengrass V, Plate M, Crowe SM, Sun Y.** HIV reverse transcriptase activity assay: a feasible surrogate for HIV viral load measurement in China. *Diagn Microbiol Infect Dis* 2010;68(3):208-13.
- Hume C, Dunstan D, Salmon J, Healy G, Andrianopoulos N, Owen N.** Are barriers to physical activity similar for adults with and without abnormal glucose metabolism? *Diabetes Educ* 2010;36(3):495-502.
- Husain-Ponnampalam R, Turnbull V, Tarlac V, Storey E.** Expression and purification of ataxin-1 protein. *J Neurosci Methods* 2010;189(1):30-5.
- Hussain SY, Marriott JL, Beattie J, Nation RL, Dooley MJ.** A palliative cancer care flexible education program for Australian community pharmacists. *Am J Pharm Educ* 2010;74(2):24.
- Hutchinson A, Brand C, Irving L, Roberts C, Thompson P, Campbell D.** Acute care costs of patients admitted for management of chronic obstructive pulmonary disease exacerbations: contribution of disease severity, infection and chronic heart failure. *Intern Med J* 2010;40(5):364-71.
- Hutchinson AF, Black J, Thompson MA, Bozinovski S, Brand CA, Smallwood DM, Irving LB, Anderson GP.** Identifying viral infections in vaccinated chronic obstructive pulmonary disease (COPD) patients using clinical features and inflammatory markers. *Influenza Other Respi Viruses* 2010;4(1):33-9.
- Hutchinson AT, Ramsland PA, Jones DR, Agostino M, Lund ME, Jennings CV, Bockhorni V, Yuriev E, Edmondson AB, Raison RL.** Free Ig light chains interact with sphingomyelin and are found on the surface of myeloma plasma cells in an aggregated form. *J Immunol* 2010;185(7):4179-88.
- Hutton J, Dent A, Buykx P, Burgess S, Flander L, Dietze P.** The characteristics of acute non-fatal medication-related events attended by ambulance services in the Melbourne Metropolitan Area 1998-2002. *Drug Alcohol Rev* 2010;29(1):53-8.
- Huynh K, McMullen JR, Julius TL, Tan JW, Love JE, Cemerlang N, Kiriazis H, Du XJ, Ritchie RH.** Cardiac-specific IGF-1 receptor transgenic expression protects against cardiac fibrosis and diastolic dysfunction in a mouse model of diabetic cardiomyopathy. *Diabetes* 2010;59(6):1512-20.
- Hwang PY, Lewis PM, Balasubramani YV, Madan A, Rosenfeld JV.** The epidemiology of BICVI at a single state trauma centre. *Injury* 2010;41(7):991-6.
- Hyland RA, Yates DH, Benke G, Sim M, Johnson AR.** Occupational exposure to asbestos in New South Wales, Australia (1970-1989): development of an asbestos task exposure matrix. *Occup Environ Med* 2010;67(3):201-6.
- Ibrahim J, Major J.** Corruption in the health care system: the circumstantial evidence. *Aust Health Rev* 2010;25(2):20-6. Review.
- Ibrahim JE, Cunningham NY, O'Brien AJ, Charles AJ, Young CM.** The impact of a clinical team assisting the Coroner's investigation of healthcare-related deaths: reflections on six-years of service. *Leg Med (Tokyo)* 2010;12(1):28-34.
- Ibrahim JE, Ehsani JP, McInnes JA.** The effect of printed educational material from the coroner in Victoria, Australia, on changing aged care health professional practice: a subscriber survey. *J Am Geriatr Soc* 2010;58(3):585-91.
- Ikin JF, Creamer MC, Sim MR, McKenzie DP.** Comorbidity of PTSD and depression in Korean War veterans: prevalence, predictors, and impairment. *J Affect Disord* 2010;125(1-3):279-86.
- Ilic D.** The role of the internet on patient knowledge management, education, and decision-making. *Telemed J E Health* 2010;16(6):664-9.
- Ilic D, Forbes K.** Integrating evidence based medicine into the medical curriculum: barriers, enablers and implementation strategies. *Med Teach* 2010;32(5):443-4. Letter.
- Ilic D, Forbes K.** Undergraduate medical student perceptions and use of evidence based medicine: a qualitative study. *BMC Med Educ* 2010;10:58.
- Inglis SC, Clark RA, McAlister FA, Ball J, Lewinter C, Cullington D, Stewart S, Cleland JG.** Structured telephone support or telemonitoring programmes for patients with chronic heart failure. *Cochrane Database Syst Rev* 2010;(8):CD007228. Review.
- Inglis SC, McMurray JJ, Böhm M, Schaufelberger M, van Veldhuisen DJ, Lindberg M, Dunselman P, Hjalmarson A, Kjekshus J, Waagstein F, Wedel H, Wikstrand J; CORONA Study Group.** Intermittent claudication as a predictor of outcome in patients with ischaemic systolic heart failure: analysis of the Controlled Rosuvastatin Multinational Trial in Heart Failure trial (CORONA). *Eur J Heart Fail* 2010;12(7):698-705.
- Inyang I, Benke G, Dimitriadis C, Simpson P, McKenzie R, Abramson M.** Predictors of mobile telephone use and exposure analysis in Australian adolescents. *J Paediatr Child Health* 2010;46(5):226-33.
- Inyang I, Benke G, McKenzie R, Wolfe R, Abramson MJ.** A new method to determine laterality of mobile telephone use in adolescents. *Occup Environ Med* 2010;67(8):507-12.
- Inyang I, Benke G, Morrissey J, McKenzie R, Abramson M.** How well do adolescents recall use of mobile telephones? Results of a validation study. *BMC Med Res Methodol* 2010;9:36.
- Ioannides-Demos LL, Makarounas-Kirchmann K, Ashton E, Stoelwinder J, McNeil JJ.** Cost of myocardial infarction to the Australian community: a prospective, multicentre survey. *Clin Drug Investig* 2010;30(8):533-43.
- Iosef C, Vilk G, Gkourasas T, Lee KJ, Chen BP, Fu P, Bach LA, Lajoie G, Gupta MB, Li SS, Han VK.** Insulin-like growth factor binding protein-6 (IGFBP-6) interacts with DNA-end binding protein Ku80 to regulate cell fate. *Cell Signal* 2010;22(7):1033-43.
- Ireland DM, Clifton PM, Keogh JB.** Achieving the salt intake target of 6 g/day in the current food supply in free-living adults using two dietary education strategies. *J Am Diet Assoc* 2010;110(5):763-7.
- Iser DM, Warner N, Revill PA, Solomon A, Wightman F, Saleh S, Crane M, Cameron PU, Bowden S, Nguyen T, Pereira CF, Desmond PV, Locarnini SA, Lewin SR.** Coinfection of hepatic cell lines with human immunodeficiency virus and hepatitis B virus leads to an increase in intracellular hepatitis B surface antigen. *J Virol* 2010;84(12):5860-7.
- Ito H, Abramson M, Ito K, Swanson E, Cho N, Ruan DT, Swanson RS, Whang EE.** Surgery and staging of pancreatic neuroendocrine tumors: a 14-year experience. *J Gastrointest Surg* 2010;14(5):891-8.
- Jabbour A, Macdonald PS, Keogh AM, Kotlyar E, Mellemkjaer S, Coleman CF, Elsik M, Krum H, Hayward CS.** Differences between beta-blockers in patients with chronic heart failure and chronic obstructive pulmonary disease: a randomized crossover trial. *J Am Coll Cardiol* 2010;55(17):1780-7.
- Jackson PA, Rahman WN, Wong CJ, Ackerly T, Geso M.** Potential dependent superiority of gold nanoparticles in comparison to iodinated contrast agents. *Eur J Radiol* 2010;75(1):104-9.

- Jackson SP, Schoenwaelder SM.** Procoagulant platelets: are they necrotic? *Blood* 2010;116(12):2011-8.
- Jakobsen MR, Ellett A, Churchill MJ, Gorry PR.** Viral tropism, fitness and pathogenicity of HIV-1 subtype C. *Future Virol* 2010;5(2):219-231.
- Jakobsen MR, Tolstrup M, Søgaard OS, Jørgensen LB, Gorry PR, Laursen A, Ostergaard L.** Transmission of HIV-1 drug-resistant variants: prevalence and effect on treatment outcome. *Clin Infect Dis* 2010;50(4):566-73.
- Jarman KE, Moretti PA, Zebol JR, Pitson SM.** Translocation of sphingosine kinase 1 to the plasma membrane is mediated by calcium- and integrin-binding protein 1. *J Biol Chem* 2010;285(1):483-92.
- Jennings G.** Obesity and left ventricular hypertrophy: does my heart look big on this? *J Hypertens* 2010;28(11):2190-3. Editorial.
- Jennings G, Parati G.** Blood pressure up in a puff of smoke. *J Hypertens* 2010;28(9):1806-8. Editorial.
- Jennings GL.** Hypertension and adherence to physical activity programs--a sticky matter! *Br J Sports Med* 2010;44(14):994-7. Editorial.
- Jensen GL, Mirtallo J, Compher C, Dhaliwal R, Forbes A, Grijalba RF, Hardy G, Kondrup J, Labadarios D, Nyulasi I, Castillo Pineda JC, Waitzberg D; International Consensus Guideline Committee.** Adult starvation and disease-related malnutrition: a proposal for etiology-based diagnosis in the clinical practice setting from the International Consensus Guideline Committee. *Clin Nutr* 2010;29(2):151-3.
- Jensen GL, Mirtallo J, Compher C, Dhaliwal R, Forbes A, Grijalba RF, Hardy G, Kondrup J, Labadarios D, Nyulasi I, Castillo Pineda JC, Waitzberg D; International Consensus Guideline Committee.** Adult starvation and disease-related malnutrition: a proposal for etiology-based diagnosis in the clinical practice setting from the International Consensus Guideline Committee. *J Parenter Enteral Nutr* 2010;34(2):156-9.
- Jeremy R, Tonkin A, White H, Riddell T, Brieger D, Walsh W, Zeitz C, Brown A, Kritharides L.** Improving cardiovascular care for indigenous populations. *Heart Lung Circ* 2010;19(5-6):344-50. Review.
- Jeremy RW, Brown A.** Measuring the gap--it may well be worse than we thought. *Heart Lung Circ* 2010;19(12):695-6. Editorial.
- Jette DU, Bourgeois MC, Buchbinder R.** Pulmonary rehabilitation following acute exacerbation of chronic obstructive pulmonary disease. *Phys Ther* 2010;90(1):9-12. Review.
- Jette DU, Buchbinder R.** PTJ helps clinicians link evidence to patient care. *Phys Ther* 2010;90(1):6-7. Editorial.
- Johnatty SE, Beesley J, Chen X, Macgregor S, Duffy DL, Spurdle AB, deFazio A, Gava N, Webb PM, Rossing MA, Doherty JA, Goodman MT, Lurie G, Thompson PJ, Wilkens LR, Ness RB, Moysich KB, Chang-Claude J, Wang-Gohrke S, Cramer DW, Terry KL, Hankinson SE, Tworoger SS, Garcia-Closas M, Yang H, Lissowska J, Chanock SJ, Pharoah PD, Song H, Whitmore AS, Pearce CL, Stram DO, Wu AH, Pike MC, Gayther SA, Ramus SJ, Menon U, Gentry-Maharaj A, Anton-Culver H, Zogas A, Hogdall E, Kjaer SK, Hogdall C, Berchuck A, Schildkraut JM, Iversen ES, Moorman PG, Phelan CM, Sellers TA, Cunningham JM, Vierkant RA, Rider DN, Goode EL, Haviv I, Chenevix-Trench G; Ovarian Cancer Association Consortium; Australian Ovarian Cancer Study Group; Australian Cancer Study (Ovarian Cancer).** Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility "hot-spot". *PLoS Genet* 2010;6(7):e1001016.
- Johnston PJ, Enticott PG, Mayes AK, Hoy KE, Herring SE, Fitzgerald PB.** Symptom correlates of static and dynamic facial affect processing in schizophrenia: evidence of a double dissociation? *Schizophr Bull* 2010;36(4):680-7.
- Jones D, McEvoy S, Merz TM, Higgins A, Bellomo R, Cooper JD, Hollis S, McArthur C, Myburgh JA, Taylor C, Liu B, Norton R, Finfer S.** International albumin use: 1995 to 2006. *Anaesth Intensive Care* 2010;38(2):266-73.
- Jones G, Ding C.** Tocilizumab: a review of its safety and efficacy in rheumatoid arthritis. *Clin Med Insights Arthritis Musculoskelet Disord* 2010;3:81-9.
- Jones KL, Roche M, Gantier MP, Begum NA, Honjo T, Caradonna S, Williams BR, Mak J.** X4 and R5 HIV-1 have distinct post-entry requirements for uracil DNA glycosylase during infection of primary cells. *J Biol Chem* 2010;285(24):18603-14.
- Jones P, Leder K, Woolley I, Cameron P, Cheng A, Spelman D.** Postsplenectomy infection – strategies for prevention in general practice. *Aust Fam Physician* 2010;39(6):383-6. Review.
- Jordan JE, Buchbinder R, Osborne RH.** Conceptualising health literacy from the patient perspective. *Patient Educ Couns* 2010;79(1):36-42.
- Jowett JB.** Interplay of genetic and environmental factors: innate immunity genetic polymorphisms in MBL2 affect endothelial dysfunction and risk of atherosclerosis. *Atherosclerosis* 2010;208(1):32-3. Comment.
- Jowett JB, Curran JE, Johnson MP, Carless MA, Göring HH, Dyer TD, Cole SA, Comuzzie AG, Maccluer JW, Moses EK, Blangero J.** Genetic variation at the FTO locus influences RBL2 gene expression. *Diabetes* 2010;59(3):726-32.
- Jowett JBM, Blangero J.** Response to Comment on: Jowett *et al.* (2010) Genetic variation at the FTO locus influences RBL2 gene expression. *Diabetes*;59:726–732. *Diabetes* 2010;59(7):e10. Author reply.
- Joyce CM, Piterman L.** Nurse-patient encounters in general practice: patterns in general practitioner involvement and use of nurse-specific Medicare items. *Aust J Prim Health* 2010;16(3):224-30.
- Joyce CM, Scott A, Jeon SH, Humphreys J, Kalb G, Witt J, Leahy A.** The "Medicine in Australia: Balancing Employment and Life (MABEL)" longitudinal survey--protocol and baseline data for a prospective cohort study of Australian doctors' workforce participation. *BMC Health Serv Res* 2010;10:50.
- Jung C, Alford FP, Topliss DJ, Burgess JR, Long F, Gome JJ, Stockigt JR, Inder WJ.** The 4-mg intravenous dexamethasone suppression test in the diagnosis of Cushing's syndrome. *Clin Endocrinol* 2010;73(1):78-84.
- Kalil AC.** Wanted: early goal-directed therapy for septic shock--dead or alive, but not critically ill! *Intensive Care Med* 2010;36(1):1-3. Editorial.
- Kalkhoran S, Milne O, Zalaudek I, Puig S, Malvey J, Kelly JW, Marghoob AA.** Historical, clinical, and dermoscopic characteristics of thin nodular melanoma. *Arch Dermatol* 2010;146(3):311-8.
- Kallmes DF, Jarvik JG, Osborne RH, Comstock BA, Staples MP, Heagerty PJ, Turner JA, Buchbinder R.** Clinical utility of vertebroplasty: elevating the evidence. *Radiology* 2010;255(3):675-80. **Kam A.** Commentary: the past, present and future of imaging in multiple sclerosis. *J Clin Neurosci* 2010;17(11):1482. Comment.
- Kamili A, Wat E, Chung RW, Tandy S, Weir JM, Meikle PJ, Cohn JS.** Hepatic accumulation of intestinal cholesterol is decreased and fecal cholesterol excretion is increased in mice fed a high-fat diet supplemented with milk phospholipids. *Nutr Metab* 2010;7:90.
- Kanellakis P, Pomilio G, Agrotis A, Gao X, Du XJ, Curtis D, Bobik A.** Darbepoetin-mediated cardioprotection after myocardial infarction involves multiple mechanisms independent of erythropoietin receptor-common β -chain heteroreceptor. *Br J Pharmacol* 2010;160(8):2085-96.
- Kaparakis M, Turnbull L, Carneiro L, Firth S, Coleman HA, Parkington HC, Le Bourhis L, Karrar A, Viala J, Mak J, Hutton ML, Davies JK, Crack PJ, Hertzog PJ, Philpott DJ, Girardin SE, Whitchurch CB, Ferrero RL.** Bacterial membrane vesicles deliver peptidoglycan to NOD1 in epithelial cells. *Cell Microbiol* 2010;12(3):372-85.
- Kaplan Z, Al-Daher S, Salem H.** The thienopyridine class of antiplatelet drugs. *Med Today* 2010;11(8):LF to check in library. Review.
- Kaplan ZS, Jackson SP.** SR-BI and fatty platelets. *Blood* 2010;116(11):1827-8. Editorial.
- Karagiannis TC, Lin AJ, Ververis K, Chang L, Tang MM, Okabe J, El-Osta A.** Trichostatin A accentuates doxorubicin-induced hypertrophy in cardiac myocytes. *Aging* 2010;2(10):659-68.
- Karagounis LG, Yaspelkis BB 3rd, Reeder DW, Lancaster GI, Hawley JA, Coffey VG.** Contraction-induced changes in TNF α and Akt-mediated signalling are associated with increased myofibrillar protein in rat skeletal muscle. *Eur J Appl Physiol* 2010;109(5):839-48.

- Karantonis DM, Lim E, Mason DG, Salamonsen RF, Ayre PJ, Lovell NH.** Noninvasive activity-based control of an implantable rotary blood pump: comparative software simulation study. *Artif Organs* 2010;34(2):E34-45.
- Karunaratne AS, Korenman SG, Thomas SL, Myles PS, Komesaroff PA.** Improving communication when seeking informed consent: a randomised controlled study of a computer-based method for providing information to prospective clinical trial participants. *Med J Aust* 2010;192(7):388-92.
- Kavanagh A, Bentley RJ, Turrell G, Shaw J, Dunstan D, Subramanian SV.** Socioeconomic position, gender, health behaviours and biomarkers of cardiovascular disease and diabetes. *Soc Sci Med* 2010;71(6):1150-60.
- Kaye DM, Byrne MJ, Power JM.** Reply to Bridges. *Gene Ther* 2010;17(4):565-6. Author reply.
- Kaye DM, Iles L, Taylor AJ.** Myocardial fibrosis in hypertrophic cardiomyopathy. *N Engl J Med* 2010;363(20):1971. Letter.
- Keating C.** Anorexia nervosa: a single region of interest for self-referent processing of pictures of body images? *Am J Psychiatry* 2010;167(5):601-2. Letter.
- Keating DT, Marasco SF, Negri J, Esmore D, Burton JH, Griffiths AP, Buckland M, Westall GP, Williams TJ, Snell GI.** Long-term outcomes of cadaveric lobar lung transplantation: helping to maximize resources. *J Heart Lung Transplant* 2010;29(4):439-44.
- Keating DT, Michaelides A, Mifsud NA, Bowden S, Kotsimbos TC.** Respiratory epithelium: an unlikely reservoir for latent human polyomavirus infection but a likely portal of entry. *Transplantation* 2010;89(5):634-5. Letter.
- Keating SF, Thompson JP, Lee GA.** Perceived barriers to the sustainability and progression of nurse practitioners. *Int Emerg Nurs* 2010;18(3):147-53.
- Kee K, Naughton MT.** Heart failure and the lung. *Circ J* 2010;74(12):2507-16.
- Kee K, Sands SA, Edwards BA, Berger PJ, Naughton MT.** Positive airway pressure in congestive heart failure. *Sleep Med Clin* 2010;5(3):393-405.
- Kelly VJ, Brown NJ, King GG, Thompson BR.** A method to determine *in vivo*, specific airway compliance, in humans. *Med Biol Eng Comput* 2010;48(5):489-96.
- Kent SJ, Cooper DA, Chhi Vun M, Shao Y, Zhang L, Ganguly N, Bela B, Tamashiro H, Ditango R, Rerks-Ngarm S, Pitisuttithum P, Van Kinh N, Bernstein A, Osmanov S; AIDS Vaccine for Asia Network investigators and supporters.** AIDS vaccine for Asia Network (AVAN): expanding the regional role in developing HIV vaccines. *PLoS Med* 2010;7(9):e1000331.
- Keogh JB, Woonton BW, Taylor CM, Janakievski F, Desilva K, Clifton PM.** Effect of glycomacropptide fractions on cholecystokinin and food intake. *Br J Nutr* 2010;104(2):286-90.
- Khan F, Pallant JF, Pallant JI, Brand C, Kilpatrick TJ.** A randomised controlled trial: outcomes of bladder rehabilitation in persons with multiple sclerosis. *J Neurol Neurosurg Psychiatry* 2010;81(9):1033-8.
- Kimura E, Li S, Gregorevic P, Fall BM, Chamberlain JS.** Dystrophin delivery to muscles of mdx mice using lentiviral vectors leads to myogenic progenitor targeting and stable gene expression. *Mol Ther* 2010;18(1):206-13.
- King AC, Goldberg JH, Salmon J, Owen N, Dunstan D, Weber D, Doyle C, Robinson TN.** Identifying subgroups of U.S. adults at risk for prolonged television viewing to inform program development. *Am J Prev Med* 2010;38(1):17-26.
- King SJ, Nyulasi IB, Strauss BJ, Kotsimbos T, Bailey M, Wilson JW.** Fat-free mass depletion in cystic fibrosis: associated with lung disease severity but poorly detected by body mass index. *Nutrition* 2010;26(7-8):753-9.
- Kinner SA.** Commentary on Merrill *et al.* (2010): understanding mortality and health outcomes for ex-prisoners – first steps on a long road. *Addiction* 2010;105(9):1555-6. Comment.
- Kistler PM, Teh AW.** Pulmonary vein tachycardia: is the sinus rhythm P-wave useful. *Rev Esp Cardiol* 2010;63(2):134-6. Editorial.
- Kleinschnitz C, Grund H, Wingler K, Armitage ME, Jones E, Mittal M, Barit D, Schwarz T, Geis C, Kraft P, Barthel K, Schuhmann MK, Herrmann AM, Meuth SG, Stoll G, Meurer S, Schrewe A, Becker L, Gailus-Durner V, Fuchs H, Klopstock T, de Angelis MH, Jandeleit-Dahm K, Shah AM, Weissmann N, Schmidt HH.** Post-stroke inhibition of induced NADPH oxidase type 4 prevents oxidative stress and neurodegeneration. *PLoS Biol* 2010;8(9):pii: e1000479.
- Knight M, Pierce M, Seppelt I, Kurinczuk JJ, Spark P, Brocklehurst P, McLintock C, Sullivan E; UK's Obstetric Surveillance System, the ANZIC Influenza Investigators, Australasian Maternity Outcomes Surveillance System.** Critical illness with AH1N1v influenza in pregnancy: a comparison of two population-based cohorts. *BJOG* 2010;8(2):232-9.
- Ko HJ, Kinkel SA, Hubert FX, Nasa Z, Chan J, Siatskas C, Hirubalan P, Toh BH, Scott HS, Alderuccio F.** Transplantation of autoimmune regulator-encoding bone marrow cells delays the onset of experimental autoimmune encephalomyelitis. *Eur J Immunol* 2010;40(12):3499-509.
- Koïtka A, Cao Z, Koh P, Watson AM, Sourris KC, Loufrani L, Soro-Paavonen A, Walther T, Woollard KJ, Jandeleit-Dahm KA, Cooper ME, Allen TJ.** Angiotensin II subtype 2 receptor blockade and deficiency attenuate the development of atherosclerosis in an apolipoprotein E-deficient mouse model of diabetes. *Diabetologia* 2010;53(3):584-92.
- Kompa AR, Wang BH, Phrommintikul A, Ho PY, Kelly DJ, Behm DJ, Douglas SA, Krum H.** Chronic urotensin II receptor antagonist treatment does not alter hypertrophy or fibrosis in a rat model of pressure-overload hypertrophy. *Peptides* 2010;31(8):1523-30.
- Kong FY, Hocking JS, Link CK, Chen MY, Hellard ME.** Sex and sport: sexual risk behaviour in young people in rural and regional Victoria. *Sex Health* 2010;7(2):205-11. **Korner PI.** The phenotypic patterns of essential hypertension are the key to identifying "high blood pressure" genes. *Physiol Res* 2010;59(6):841-57. Review.
- Kotecha D, Flather M, McGrady M, Pepper J, New G, Krum H, Eccleston D.** Contemporary predictors of coronary artery disease in patients referred for angiography. *Eur J Cardiovasc Prev Rehabil* 2010;17(3):280-8.
- Koti M, Farrugia W, Nagy E, Ramsland PA, Kaushik AK.** Construction of single-chain Fv with two possible CDR3H conformations but similar inter-molecular forces that neutralize bovine herpesvirus 1. *Mol Immunol* 2010;47(5):953-60.
- Kotsimbos T, Waterer G, Jenkins C, Kelly PM, Cheng A, Hancox RJ, Holmes M, Wood-Baker R, Bowler S, Irving L, Thompson P; Thoracic Society of Australia and New Zealand H1N1 Influenza 09 Task Force.** Influenza A/H1N1_09: Australia and New Zealand's winter of discontent. *Am J Respir Crit Care Med* 2010;181(4):300-6.
- Krishna SM, Dear AE, Norman PE, Golledge J.** Genetic and epigenetic mechanisms and their possible role in abdominal aortic aneurysm. *Atherosclerosis* 2010;212(1):16-29.
- Kritharides L, Brown A, Brieger D, Ridell T, Zeitz C, Jeremy R, Tonkin A, Walsh W, White H.** Overview and determinants of cardiovascular disease in indigenous populations. *Heart Lung Circ* 2010;19(5-6):337-43. Review.
- Kritharides L, Brown A, Brieger D, Ridell T, Zeitz C, Jeremy R, Tonkin A, Walsh W, White H; CSANZ IHC Writing Group.** Recommendations arising from the inaugural CSANZ Conference on Indigenous Cardiovascular Health. *Heart Lung Circ* 2010;19(5-6):269-72. Comment.
- Krum H, Maggioni A.** Renin inhibitors in chronic heart failure: the Aliskiren Observation of Heart Failure Treatment study in context. *Clin Cardiol* 2010;33(9):536-41. Review.
- Krum H, McMurray JJ, Horton E, Gerlock T, Holzhauer B, Zuurman L, Haffner SM, Bethel MA, Holman RR, Califf RM.** Baseline characteristics of the Nateglinide and Valsartan Impaired Glucose Tolerance Outcomes Research (NAVIGATOR) trial population: comparison with other diabetes prevention trials. *Cardiovasc Ther* 2010;28(2):124-32.

- Kulkarni J.** Special issues in managing long-term mental illness in women. *Int Rev Psychiatry* 2010;22(2):183-90. Review.
- Kulkarni J, Gurvich C, Lee SJ, Gilbert H, Gavriliadis E, de Castella A, Berk M, Dodd S, Fitzgerald PB, Davis SR.** Piloting the effective therapeutic dose of adjunctive selective estrogen receptor modulator treatment in postmenopausal women with schizophrenia. *Psychoneuroendocrinology* 2010;35(8):1142-7.
- Kvansakul M, Wei AH, Fletcher JI, Willis SN, Chen L, Roberts AW, Huang DC, Colman PM.** Structural basis for apoptosis inhibition by Epstein-Barr virus BHRF1. *PLoS Pathog* 2010;6(12):e1001236.
- Kyaw T, Tay C, Khan A, Dumouchel V, Cao A, To K, Kehry M, Dunn R, Agrotis A, Tipping P, Bobik A, Toh BH.** Conventional B2 B cell depletion ameliorates whereas its adoptive transfer aggravates atherosclerosis. *J Immunol* 2010;185(7):4410-9.
- Labuschagne I, Castle DJ, Dunai J, Kyrios M, Rossell SL.** An examination of delusional thinking and cognitive styles in body dysmorphic disorder. *Aust N Z J Psychiatry* 2010;44(8):706-12.
- Laimou DK, Katsara M, Matsoukas MT, Apostolopoulos V, Troganis AN, Tselios TV.** Structural elucidation of Leuprolide and its analogues in solution: insight into their bioactive conformation. *Amino Acids* 2010;39(5):1147-60.
- Lalani T, Cabell CH, Benjamin DK, Lasca O, Naber C, Fowler VG Jr, Corey GR, Chu VH, Fenely M, Pachirat O, Tan RS, Watkin R, Ionac A, Moreno A, Mestres CA, Casabé J, Chipigina N, Eisen DP, Spelman D, Delahaye F, Peterson G, Olaison L, Wang A; International Collaboration on Endocarditis-Pro prospective Cohort Study (ICE-PCS) Investigators.** Analysis of the impact of early surgery on in-hospital mortality of native valve endocarditis: use of propensity score and instrumental variable methods to adjust for treatment-selection bias. *Circulation* 2010;121(8):1005-13.
- Lam LL, Cameron PA, Schneider HG, Abramson MJ, Müller C, Krum H.** Meta-analysis: effect of B-type natriuretic peptide testing on clinical outcomes in patients with acute dyspnea in the emergency setting. *Ann Intern Med* 2010;153(11):728-35.
- Lambers Heerspink HJ, Gansevoort RT, Brenner BM, Cooper ME, Parving HH, Shahinfar S, de Zeeuw D.** Comparison of different measures of urinary protein excretion for prediction of renal events. *J Am Soc Nephrol* 2010;21(8):1355-60.
- Lambers Heerspink HJ, Ninomiya T, Perkovic V, Woodward M, Zoungas S, Cass A, Cooper M, Grobbee DE, Mancina G, Mogensen CE, Neal B, Chalmers J; for the ADVANCE Collaborative Group.** Effects of a fixed combination of perindopril and indapamide in patients with Type 2 diabetes and chronic kidney disease. *Eur Heart J* 2010;31(23):2888-96.
- Lambert E, Dawood T, Straznicki N, Sari C, Schlaich M, Esler M, Lambert G.** Association between the sympathetic firing pattern and anxiety level in patients with the metabolic syndrome and elevated blood pressure. *J Hypertens* 2010;28(3):543-50.
- Lambert E, Sari CI, Dawood T, Nguyen J, McGrane M, Eikelis N, Chopra R, Wong C, Chatzivlastou K, Head G, Straznicki N, Esler M, Schlaich M, Lambert G.** Sympathetic nervous system activity is associated with obesity-induced subclinical organ damage in young adults. *Hypertension* 2010;56(3):351-8.
- Lambert G, Grassi G.** Indices of sympathetic activity and the paradox of chromogranin A. *J Hypertens* 2010;28(4):676-8. Editorial.
- Lambert G, Schlaich M, Lambert E, Dawood T, Esler M.** Stress reactivity and its association with increased cardiovascular risk: a role for the sympathetic nervous system? *Hypertension* 2010;55(6):e20. Letter.
- Lambert GW, Masuo K.** Imidazoline receptor agonists in obesity-related hypertension: therapeutic targeting of the sympathetic nervous system. *Immun Endoc Metab Agents Med Chem* 2010;10(2):59-65. Review.
- Lambert GW, Straznicki NE, Lambert EA, Dixon JB, Schlaich MP.** Sympathetic nervous activation in obesity and the metabolic syndrome-causes, consequences and therapeutic implications. *Pharmacol Ther* 2010;126(2):159-72. Review.
- Lampe FC, Duprez DA, Kuller LH, Tracy R, Otvos J, Stroes E, Cooper DA, Hoy J, Paton NI, Friis-Møller N, Neuhaus J, Liappis AP, Phillips AN; INSIGHT SMART Study Group.** Changes in lipids and lipoprotein particle concentrations after interruption of antiretroviral therapy. *J Acquir Immune Defic Syndr* 2010;54(3):275-84.
- Lancefield T, Clark DJ, Andrianopoulos N, Brennan AL, Reid CM, Johns J, Freeman M, Charter K, Duffy SJ, Ajani AE, Proietto J, Farouque O; MIG (Melbourne Interventional Group) Registry.** Is there an obesity paradox after percutaneous coronary intervention in the contemporary era? An analysis from a multicenter Australian registry. *JACC Cardiovasc Interv* 2010;3(6):660-8.
- Lau R, Stewart K, McNamara KP, Jackson SL, Hughes JD, Peterson GM, Bortoletto DA, McDowell J, Bailey MJ, Hsueh A, George J.** Evaluation of a community pharmacy-based intervention for improving patient adherence to antihypertensives: a randomised controlled trial. *BMC Health Serv Res* 2010;10:34.
- Laursen NS, Gordon N, Hermans S, Lorenz N, Jackson N, Wines B, Spillner E, Christensen JB, Jensen M, Fredslund F, Bjerre M, Sottrup-Jensen L, Fraser JD, Andersen GR.** Structural basis for inhibition of complement C5 by the SSL7 protein from *Staphylococcus aureus*. *Proc Natl Acad Sci USA* 2010;107(8):3681-6.
- Lauterbach H, Bathke B, Gilles S, Traidl-Hoffmann C, Luber CA, Fejer G, Freudenberg MA, Davey GM, Vremec D, Kallies A, Wu L, Shortman K, Chaplin P, Suter M, O'Keefe M, Hochrein H.** Mouse CD8 α + DCs and human BDCA3+ DCs are major producers of IFN- λ in response to poly IC. *J Exp Med* 2010;207(12):2703-17.
- Lavis JN, Wilson MG, Grimshaw JM, Haynes RB, Ouimet M, Raina P, Gruen RL, Graham ID.** Supporting the use of health technology assessments in policy making about health systems. *Int J Technol Assess Health Care* 2010;26(4):405-14.
- Le Bouc Y, Rossignol S, Azzi S, Brioude F, Cabrol S, Gicquel C, Netchine I.** Epigenetics, genomic imprinting and developmental disorders. *Bull Acad Natl Med* 2010;194(2):287-97. Review.
- Le Bouc Y, Rossignol S, Azzi S, Steunou V, Netchine I, Gicquel C.** Epigenetics, genomic imprinting and assisted reproductive technology. *Ann Endocrinol* 2010;71(3):237-8. Review.
- Lee AL, Burge A, Jones AP, Rowe BH, Holland AE.** Airway clearance techniques for bronchiectasis. *Cochrane Database Syst Rev* 2010;(2):CD008351. Protocol.
- Lee AL, Cecins N, Hill CJ, Holland AE, Rautela L, Stirling RG, Thompson PJ, McDonald CF, Jenkins S.** The effects of pulmonary rehabilitation in patients with non-cystic fibrosis bronchiectasis: protocol for a randomised controlled trial. *BMC Pulm Med* 2010;10:5. Protocol.
- Lee CY, George J, Elliot RA, Stewart K.** Prevalence of medication-related risk factors among retirement village residents: a cross-sectional survey. *Age Ageing* 2010;39(5):581-7.
- Lee D, Fairley C, Cummings R, Bush M, Read T, Chen M.** Men who have sex with men prefer rapid testing for syphilis and may test more frequently using it. *Sex Transm Dis* 2010;37(9):557-8.
- Lee G, Wu H, Kalman JM, Esmore D, Williams T, Snell G, Kistler PM.** Atrial fibrillation following lung transplantation: double but not single lung transplant is associated with long-term freedom from paroxysmal atrial fibrillation. *Eur Heart J* 2010;31(22):2774-82.
- Lee I, Hackman K, Liubinas S, Maartens N, Colman P.** A giant aneurysm of internal carotid artery causing hypopituitarism. *Intern Med J* 2010;40(6):464-5.
- Lee S, Castella A, Freidin J, Kennedy A, Kroschel J, Humphrey C, Kerr R, Hollows A, Wilkins S, Kulkarni J.** Mental health care on the streets: An integrated approach. *Aust N Z J Psychiatry* 2010;44(6):505-12.
- Lee SJ, Katona LJ, De Bono SE, Lewis KL.** Routine screening for psychological distress on an Australian inpatient haematology and oncology ward: impact on use of psychosocial services. *Med J Aust* 2010;193(5):S74-8.
- Lee YC, Phan TG, Jolley DJ, Castley HC, Ingram DA, Reutens DC.** Accuracy of clinical signs, SEP, and EEG in predicting outcome of hypoxic coma: a meta-analysis. *Neurology* 2010;74(7):572-80.

- Lee YM, Samaranyake A, Fairley CK, Chen MY, MacFarlane F, Bradshaw CS, Hocking JS.** Pelvic examination leads to changed clinical management in very few women diagnosed with asymptomatic chlamydia infection. *Sex Health* 2010;7(4):498-9.
- Leeansyah E, Zhou J, Paukovics G, Lewin SR, Crowe SM, Jaworowski A.** Decreased NK Cell FcR γ in HIV-1 infected individuals receiving combination antiretroviral therapy: a cross sectional study. *PLoS One* 2010;5(3):e9643.
- Leggat PA, Leder K.** Reducing the impact of influenza among travelers. *J Travel Med* 2010;17(6):363-6. Editorial.
- Lekawanvijit S, Adrahtas A, Kelly DJ, Kompa AR, Wang BH, Krum H.** Does indoxyl sulfate, a uraemic toxin, have direct effects on cardiac fibroblasts and myocytes? *Eur Heart J* 2010;31(14):1771-9.
- Lemoh CN, Baho S, Grierson J, Hellard M, Street A, Biggs BA.** African Australians living with HIV: a case series from Victoria. *Sex Health* 2010;7(2):142-8.
- Lemon JM, Gargaro B, Enticott PG, Rinehart NJ.** Executive functioning in autism spectrum disorders: a gender comparison of response inhibition. *J Autism Dev Disord* 2010;41(3):352-6.
- Lenné MG, Dietze PM, Triggs TJ, Walmsley S, Murphy B, Redman JR.** The effects of cannabis and alcohol on simulated arterial driving: Influences of driving experience and task demand. *Accid Anal Prev* 2010;42(3):859-66.
- Lenters V, Basinas I, Beane-Freeman L, Boffetta P, Checkoway H, Coggon D, Portengen L, Sim M, Wouters IM, Heederik D, Vermeulen R.** Endotoxin exposure and lung cancer risk: a systematic review and meta-analysis of the published literature on agriculture and cotton textile workers. *Cancer Causes Control* 2010;21(4):523-55. Review.
- Leong JY, van der Merwe J, Pepe S, Bailey M, Perkins A, Lymbury R, Esmore D, Marasco S, Rosenfeldt F.** Perioperative metabolic therapy improves redox status and outcomes in cardiac surgery patients: a randomised trial. *Heart Lung Circ* 2010;19(10):584-91.
- Leslie K, Chan MT, Myles PS, Forbes A, McCulloch TJ.** Posttraumatic stress disorder in aware patients from the B-aware trial. *Anesth Analg* 2010;110(3):823-8.
- Leslie K, Myles PS, Forbes A, Chan MT.** The effect of bispectral index monitoring on long-term survival in the B-aware trial. *Anesth Analg* 2010;110(3):816-22.
- Levinson AJ, Fitzgerald PB, Favalli G, Blumberger DM, Daigle M, Daskalakis ZJ.** Evidence of cortical inhibitory deficits in major depressive disorder. *Biol Psychiatry* 2010;67(5):458-64.
- Lewis PM, Goldschlager T, Rosenfeldt JV.** Image guidance for rapid temporal acoustic window localisation prior to transcranial Doppler ultrasound in the neurosurgical patient. *Br J Neurosurg* 2010;24(3):303-5.
- Leykauf K, Treeck M, Gilson PR, Nebel T, Bräulke T, Cowman AF, Gilberger TW, Crabb BS.** Protein kinase a dependent phosphorylation of apical membrane antigen 1 plays an important role in erythrocyte invasion by the malaria parasite. *PLoS Pathog* 2010;6(6):e1000941.
- Li H, Simpson ER, Liu JP.** Oestrogen, telomerase, ovarian ageing and cancer. *Clin Exp Pharmacol Physiol* 2010;37(1):78-82. Review.
- Lifson AR; INSIGHT Endpoint Review Committee Writing Group, Belloso WH, Davey RT, Duprez D, Gatell JM, Hoy JF, Krum EA, Nelson R, Pedersen C, Perez G, Price RW, Prineas RJ, Rhame FS, Sampson JH, Worley J, INSIGHT Study Group.** Development of diagnostic criteria for serious non-AIDS events in HIV clinical trials. *HIV Clin Trials* 2010;11(4):205-19.
- Lilja M, Rolandsson O, Shaw JE, Pauvaday V, Cameron AJ, Tuomilehto J, Alberti KG, Zimmet PZ, Söderberg S.** Higher leptin levels in Asian Indians than Creoles and Europeans: a potential explanation for increased metabolic risk. *Int J Obes* 2010;34(5):878-85.
- Lim AK, Ma FY, Nikolic-Paterson DJ, Kitching AR, Thomas MC, Tesch GH.** Lymphocytes promote albuminuria, but not renal dysfunction or histological damage in a mouse model of diabetic renal injury. *Diabetologia* 2010;53(8):1772-82.
- Lim EJ, Leung C, Pitman A, Stella DL, Brown G, Slattery M, Marion K, Macrae F.** Magnetic resonance colonography for colorectal cancer screening in patients with Lynch syndrome gene mutation. *Fam Cancer* 2010;9(4):555-61.
- Lim HK, Jayaweera S, Calderone A, Pepe S, Rosenfeldt FL, Marasco SF.** Protective role of coenzyme Q₁₀ in two models of rat lung injury. *ANZ J Surg* 2010;80(4):265-70.
- Lim MS, Hellard ME, Hocking JS, Spelman TD, Aitken CK.** Surveillance of drug use among young people attending a music festival in Australia, 2005-2008. *Drug Alcohol Rev* 2010;29(2):150-6.
- Lim MS, Sacks-Davis R, Aitken CK, Hocking JS, Hellard ME.** Randomised controlled trial of paper, online and SMS diaries for collecting sexual behaviour information from young people. *J Epidemiol Community Health* 2010;64(10):885-9.
- Lim SS, Noakes M, Keogh JB, Clifton PM.** Long-term effects of a low carbohydrate, low fat or high unsaturated fat diet compared to a no-intervention control. *Nutr Metab Cardiovasc Dis* 2010;20(8):599-607.
- Limmathurotsakul D, Jansen K, Arayawichanon A, Simpson JA, White LJ, Lee SJ, Wuthiekanun V, Chantratita N, Cheng A, Day NP, Verzilli C, Peacock SJ.** Defining the true sensitivity of culture for the diagnosis of melioidosis using Bayesian latent class models. *PLoS One* 2010;5(8):e12485.
- Lin E, Symons JA.** Volatile anaesthetic myocardial protection: a review of the current literature. *HSR Proceedings Intens Care Cardiovasc Anaes* 2010;2(2):7-11. Review.
- Lin RC, Weeks KL, Gao XM, Williams RB, Bernardo BC, Kiriazis H, Matthews VB, Woodcock EA, Bouwman RD, Mollica JP, Speirs HJ, Dawes IW, Daly RJ, Shioi T, Izumo S, Febbraio MA, Du XJ, McMullen JR.** PI3K(p110 α) protects against myocardial infarction-induced heart failure: identification of PI3K-regulated miRNA and mRNA. *Arterioscler Thromb Vasc Biol* 2010;30(4):724-32.
- Lin T, Santos M, Aboltins C, Chiu H, Van Gaal W, Wong C.** A case of intra-cardiac right-sided mural infective endocarditis associated with ventricular septal defect despite prophylactic antibiotics: a case report. *Heart Lung Circ* 2010;19(9):566-71.
- Ling A, Dawkins R, Bailey M, Leung M, Cleland H, Serpell J, Kelly J.** Short-term morbidity associated with sentinel lymph node biopsy in cutaneous malignant melanoma. *Australas J Dermatol* 2010;51(1):13-7.
- Ling H, O'Sullivan SS, Holton JL, Revesz T, Massey LA, Williams DR, Paviour DC, Lees AJ.** Does corticobasal degeneration exist? A clinicopathological re-evaluation. *Brain* 2010;133(Pt 7):2045-57.
- Linko R, Suojaranta-Ylinen R, Karlsson S, Ruokonen E, Varpula T, Pettilä V; FINNALI study investigators.** One-year mortality, quality of life and predicted life-time cost-utility in critically ill patients with acute respiratory failure. *Crit Care* 2010;14(2):R60.
- Little JS, Martin FH, Thomson RH.** Speech versus non-speech as irrelevant sound: controlling acoustic variation. *Biol Psychol* 2010;85(1):62-70.
- Little PJ, Bhattacharya R, Moreyra AE, Korichneva IL.** Zinc and cardiovascular disease. *Nutrition* 2010;26(11-12):1050-7. Review.
- Little PJ, Burch ML, Getachew R, Al-aryahi S, Osman N.** Endothelin-1 stimulation of proteoglycan synthesis in vascular smooth muscle is mediated by endothelin receptor transactivation of the transforming growth factor- β type I receptor. *J Cardiovasc Pharmacol* 2010;56(4):360-8.
- Littleton SM, Cameron D, Poustie SJ, Hughes DC, Robinson BJ, Neeman T, Smith PN.** The association of compensation on longer term health status for people with musculoskeletal injuries following road traffic crashes: emergency department inception cohort study. *Injury* 2010;41(7):904-10.

- Liu H, Patel A, Brown A, Eades S, Hayman N, Jan S, Ring I, Stewart G, Tonkin A, Weeramanthri T, Wade V, Rodgers A, Usherwood T, Neal B, Peiris D, Burke H, Reid C, Cass A; Kanyini Vascular Collaboration, Kanyini GAP Study Team. Rationale and design of the Kanyini guidelines adherence with the polypill (Kanyini-GAP) study: a randomised controlled trial of a polypill-based strategy amongst indigenous and non indigenous people at high cardiovascular risk. *BMC Public Health* 2010;10:458. Protocol.
- Liu JP, Chen SM, Cong YS, Nicholls C, Zhou SF, Tao ZZ, Li H. Regulation of telomerase activity by apparently opposing elements. *Ageing Res Rev* 2010;9(3):245-56. Review.
- Liu JP, Chen W, Schwarzer AP, Li H. Telomerase in cancer immunotherapy. *Biochim Biophys Acta-Rev Cancer* 2010;1805(1):35-42. Review.
- Liu JP, Li H. Telomerase in the ovary. *Reproduction* 2010;140(4):215-22. Review.
- Liu JP, Nicholls C, Chen SM, Li H, Tao ZZ. Strategies of treating cancer by cytokine regulation of chromosome end remodelling. *Clin Exp Pharmacol Physiol* 2010;37(1):88-92. Review.
- Liu JP, Tang Y, Zhou S, Toh BH, McLean C, Li H. Cholesterol involvement in the pathogenesis of neurodegenerative diseases. *Mol Cell Neurosci* 2010;43(1):33-42. Review.
- Liu JP, Zhou SF. 2009 Nobel Prize in physiology and medicine awarded for an enzyme in cancer. *Clin Exp Pharmacol Physiol* 2010;37(1):75-7. Editorial.
- Liu S, Etto T, Rodríguez-Cruz T, Li Y, Wu C, Fulbright OJ, Hwu P, Radvanyi L, Lizée G. TGF- β 1 induces preferential rapid expansion and persistence of tumor antigen-specific CD8+ T cells for adoptive immunotherapy. *J Immunother* 2010;33(4):371-81.
- Liu ZH, Dworkin LD, Atkins RC. Lei-Shi Li: a giant in international nephrology. *Kidney Int* 2010;77(12):1051-2. Editorial.
- Liubinas SV, Maartens N, Drummond KJ. Primary melanocytic neoplasms of the central nervous system. *J Clin Neurosci* 2010;17(10):1227-32.
- Livingston PM, Craike MJ, White VM, Hordern AJ, Jefford M, Botti MA, Lethborg C, Oldroyd JC. A nurse-assisted screening and referral program for depression among survivors of colorectal cancer: feasibility study. *Med J Aust* 2010;193(5 Suppl):S83-7.
- Lodge CJ, Khalafzai RU, Dharmage SC, Lowe AJ, Thomas PS, Abramson MJ. Checking zero calibration of the HypAir FeNO. *Am J Respir Crit Care Med* 2010;182(5):719-20. Letter.
- Loff B. World trade, the poor and swine flu. *Indian J Med Ethics* 2010;7(1):4-5. Comment.
- Loff B, Crammond BR. Wanted: politicians to champion health (not obesity). *Med J Aust* 2010;192(7):397-9.
- Loff B, Crammond BR. Junk food packaging – a challenge to the Prime Minister. *Med J Aust* 2010;193(3):192. Letter.
- Loff B, Overs C. Ethical standards in Cambodia: is silent witnessing sufficient? *Lancet* 2010;375(9718):892. Comment.
- Loftin LM, Kienzle MF, Yi Y, Lee B, Lee FH, Gray L, Gorry PR, Collman RG. Constrained use of CCR5 on CD4+ lymphocytes by R5X4 HIV-1: efficiency of Env-CCR5 interactions and low CCR5 expression determine a range of restricted CCR5-mediated entry. *Virology* 2010;402(1):135-48.
- Lokuge A, Lam L, Cameron P, Krum H, de Villiers S, Bystrycki A, Naughton MT, Eccleston D, Flannery G, Federman J, Schneider HG. B-type natriuretic peptide testing and the accuracy of heart failure diagnosis in the emergency department. *Circ Heart Fail* 2010;3(1):104-10.
- Lopata AL, O'Hehir RE, Lehrer SB. Shellfish allergy. *Clin Exp Allergy* 2010;40(6):850-8. Review.
- Louis SN, Chow L, Rezman L, Krezel MA, Catt KJ, Tikellis C, Frauman AG, Louis WJ. Expression and function of ATIP/MTUS1 in human prostate cancer cell lines. *Prostate* 2010;70(14):1563-74.
- Lowe AJ, Carlin JB, Bennett CM, Hosking CS, Allen KJ, Robertson CF, Axelrad C, Abramson MJ, Hill DJ, Dharmage SC. Paracetamol use in early life and asthma: prospective birth cohort study. *Br Med J* 2010;341:c4616.
- Lowthian JA, Curtis AJ, Cameron PA, Stoelwinder JU, Cooke MW, McNeil JJ. Systematic review of trends in emergency department attendances: an Australian perspective. *Emerg Med J* 2010;28(5):373-7.
- Lu ZX, Walker KZ, O'Dea K, Sikaris KA, Shaw JE. A1C for screening and diagnosis of Type 2 diabetes in routine clinical practice. *Diabetes Care* 2010;33(4):817-9.
- Luber CA, Cox J, Lauterbach H, Fancke B, Selbach M, Tschopp J, Akira S, Wiegand M, Hochrein H, O'Keefe M, Mann M. Quantitative proteomics reveals subset-specific viral recognition in dendritic cells. *Immunity* 2010;32(2):279-89.
- Lukas G, Davies AR, Hilton AK, Pellegrino VA, Scheinkestel CD, Ridley E. Nutritional support in adult patients receiving extracorporeal membrane oxygenation. *Crit Care Resusc* 2010;12(4):230-4.
- Lumsden NG, Khambata RS, Hobbs AJ. C-type natriuretic peptide (CNP): cardiovascular roles and potential as a therapeutic target. *Curr Pharm Des* 2010;16(37):4080-8. Review.
- Lundie RJ, Young LJ, Davey GM, Villadangos JA, Carbone FR, Heath WR, Crabb BS. Blood-stage *Plasmodium berghei* infection leads to short-lived parasite-associated antigen presentation by dendritic cells. *Eur J Immunol* 2010;40(6):1674-81.
- Luo G, Cheng W, He W, Wang X, Tan J, Fitzgerald M, Li X, Wu J. Promotion of cutaneous wound healing by local application of mesenchymal stem cells derived from human umbilical cord blood. *Wound Repair Regen* 2010;18(5):506-13.
- Luo G, Peng Y, Yuan Z, Liu Y, Cheng W, Huang Y, Li X, Fitzgerald M, Wu J. Inhalation injury in southwest China--the evolution of care. *Burns* 2010;36(4):506-10.
- Luong ML, Morrissey O, Husain S. Assessment of infection risks prior to lung transplantation. *Curr Opin Infect Dis* 2010;23(6):578-83. Review.
- Lynch BM, Dunstan DW, Healy GN, Winkler E, Eakin E, Owen N. Objectively measured physical activity and sedentary time of breast cancer survivors, and associations with adiposity: findings from NHANES (2003-2006). *Cancer Causes Control* 2010;21(2):283-8.
- Lynch BM, Healy GN, Dunstan DW, Owen N. Sedentary versus inactive: distinctions for disease prevention. *Nat Rev Cardiol* 2010;7(11):doi:10.1083/nrcardio.2010.68-c1. Letter.
- Lynch BM, White SL, Owen N, Healy GN, Chadban SJ, Atkins RC, Dunstan DW. Television viewing time and risk of chronic kidney disease in adults: the AusDiab Study. *Ann Behav Med* 2010;40(3):265-74.
- Lynen L, Van Griensven J, Elliott J. Monitoring for treatment failure in patients on first-line antiretroviral treatment in resource-constrained settings. *Curr Opin HIV AIDS* 2010;5(1):1-5. Review.
- MacFarlane E, Benke G, Del Monaco A, Sim MR. Causes of death and incidence of cancer in a cohort of Australian pesticide-exposed workers. *Ann Epidemiol* 2010;20(4):273-80.
- MacInnis R, Antoniou A, Eeles R, Severi G, Guy M, McGuffog L, Hall AL, O'Brien LT, Wilkinson RA, Dearnaley DP, Arden-Jones AT, Horwich A, Khoo VS, Parker CC, Huddart RA, McCredie MR, Smith C, Southey MC, Staples MP, English D, Hopper J, Giles G, Easton D. Prostate cancer segregation analyses using 4390 families from UK and Australian population-based studies. *Genet Epidemiol* 2010;34(1):42-50.
- Macintyre G, Bailey J, Gustafsson D, Haviv I, Kowalczyk A. Using gene ontology annotations in exploratory microarray clustering to understand cancer etiology. *Pattern Recogn Lett* 2010;31(14):2138-46.
- Macintyre G, Bailey J, Haviv I, Kowalczyk A. is-rSNP: a novel technique for *in silico* regulatory SNP detection. *Bioinformatics* 2010;26(18):i524-30.
- Mackay F, Figgitt WA, Saulep D, Lepage M, Hibbs ML. B-cell stage and context-dependent requirements for survival signals from BAFF and the B-cell receptor. *Immunol Rev* 2010;237(1):205-25. Review.

- Mackie K.** International workshop on adverse drug reactions and comorbidities in HIV. *J Pharm Pract Res* 2010;40(1):78-9. Letter.
- MacLaren DJ, Conigrave KM, Robertson JA, Ivers RG, Eades S, Clough AR.** Using breath carbon monoxide to validate self-reported tobacco smoking in remote Australian Indigenous communities. *Popul Health Metr* 2010;8(1):2.
- Madebo M, Perkins A, Fox C, Johnston P, Kron T.** Study of X-ray field junction dose using an a-Si electronic portal imaging device. *Australas Phys Eng Sci Med* 2010;33(1):45-50.
- Maeder MT, Ammann P, Schoch OD, Rickli H, Korte W, Hürny C, Myers J, Münzer T.** Determinants of postexercise heart rate recovery in patients with the obstructive sleep apnea syndrome. *Chest* 2010;137(2):310-7.
- Maeder MT, Brutsche MH, Arenja N, Socrates T, Reiter M, Meissner J, Staub D, Morgenthaler NG, Bergmann A, Mueller C.** Biomarkers and peak oxygen uptake in patients with chronic lung disease. *Respiration* 2010;80(6):543-52.
- Maeder MT, Brutsche MH, Christ A, Staub D, Noveanu M, Breidhardt T, Schaub N, Potocki M, Reichlin T, Morgenthaler NG, Bergmann A, Mueller C.** Midregional pro-A-type natriuretic peptide for the evaluation of exercise intolerance. *Int J Cardiol* 2010;145(2):326-8.
- Maeder MT, Duerring C, Engel RP, Boesch C, Pfisterer ME, Myers J, Müller-Brand J, Zellweger MJ.** Predictors of impaired heart rate recovery: a myocardial perfusion SPECT study. *Eur J Cardiovasc Prev Rehabil* 2010;17(3):303-8.
- Maeder MT, Kaye DM.** Response to Does the wall stress alone stimulate the natriuretic peptide system? *Hypertension* 2010;56(6):e176. Author reply.
- Maeder MT, Mariani JA, Kaye DM.** Hemodynamic determinants of myocardial B-type natriuretic peptide release: relative contributions of systolic and diastolic wall stress. *Hypertension* 2010;56(4):682-9.
- Maeder MT, Thompson BR, Brunner-La Rocca HP, Kaye DM.** Hemodynamic basis of exercise limitation in patients with heart failure and normal ejection fraction. *J Am Coll Cardiol* 2010;56(11):855-63.
- Magliano DJ, Söderberg S, Zimmet PZ, Cartensen B, Balkau B, Pauvaday V, Kowlessur S, Tuomilehto J, Alberti KG, Shaw JE.** Mortality, all-cause and cardiovascular disease, over 15 years in multiethnic mauritius: impact of diabetes and intermediate forms of glucose tolerance. *Diabetes Care* 2010;33(9):1983-9.
- Mah LJ, El-Osta A, Karagiannis TC.** GammaH2AX: a sensitive molecular marker of DNA damage and repair. *Leukemia* 2010;24(4):679-86. Review.
- Mah LJ, El-Osta A, Karagiannis TC.** GammaH2AX as a molecular marker of aging and disease. *Epigenetics* 2010;5(2):129-36. Review.
- Mah LJ, Vasireddy RS, Tang MM, Georgiadis GT, El-Osta A, Karagiannis TC.** Quantification of gammaH2AX foci in response to ionising radiation. *J Vis Exp* 2010;(38):pii:1957.
- Mahar P, Padiglione AA, Cleland H, Paul E, Hinrichs M, Wasiak J.** Pseudomonas aeruginosa bacteraemia in burns patients: risk factors and outcomes. *Burns* 2010;36(8):1228-33.
- Mahar P, Sengupta S, Ludlow K, Corcoran N.** Prostate specific antigen – useful screening tool or potential liability? *Aust Fam Physician* 2010;39(8):598-600. Review.
- Maher L, White B, Hellard M, Madden A, Prins M, Kerr T, Page K.** Candidate hepatitis C vaccine trials and people who inject drugs: challenges and opportunities. *Vaccine* 2010;28(45):7273-8.
- Mahfoud F, Kindermann M, Ukena C, Sobotka PA, Kindermann I, Schlaich M, Böhm M.** Interventional renal denervation for resistant hypertension. *J Hypertonie* 2010;14(3):18-20. Review.
- Mahmud N, Schonstein E, Schaafsma F, Lehtola MM, Fassier JB, Verbeek JH, Reneman MF.** Functional capacity evaluations for the prevention of occupational re-injuries in injured workers. *Cochrane Database Syst Rev* 2010;(7):CD007290. Review.
- Main CJ, Buchbinder R, Porcheret M, Foster N.** Addressing patient beliefs and expectations in the consultation. *Best Pract Res Clin Rheumatol* 2010;24(2):219-25.
- Main CJ, Foster N, Buchbinder R.** How important are back pain beliefs and expectations for satisfactory recovery from back pain? *Best Pract Res Clin Rheumatol* 2010;24(2):205-17. Review.
- Mainvil LA, Lawson R, Horwath CC, McKenzie JE, Hart I.** Validated scales to assess adult decisional balance to eat more fruits and vegetables. *Appetite* 2010;55(3):454-65.
- Maisa A, Westhorpe C, Elliott J, Jaworowski A, Hearps AC, Dart AM, Hoy J, Crowe SM.** Premature onset of cardiovascular disease in HIV-infected individuals: the drugs and the virus. *HIV Ther* 2010;4(6):675-92. Review.
- Makoutonina M, Iansek R, Simpson P.** Optimizing care of residents with Parkinsonism in supervised facilities. *Parkinsonism Relat Disord* 2010;16(5):351-4.
- Maller JJ, Thomson RH, Lewis PM, Rose SE, Pannek K, Fitzgerald PB.** Traumatic brain injury, major depression, and diffusion tensor imaging: making connections. *Brain Res Rev* 2010;64(1):213-40. Review.
- Maloney E, Degenhardt L, Darke S, Nelson EC.** Investigating the co-occurrence of self-mutilation and suicide attempts among opioid-dependent individuals. *Suicide Life Threat Behav* 2010;40(1):50-62.
- Mannan H, Stevenson C.** SAS macros for point and interval estimation of area under the receiver operating characteristic curve for non-proportional and proportional hazards Weibull models. *J Eval Clin Pract* 2010;16(4):756-70.
- Mannan HR, Knuiman M, Hobbs M.** Using a Markov simulation model to assess the impact of changing trends in coronary heart disease incidence on requirements for coronary artery revascularization procedures in Western Australia. *BMC Cardiovasc Disord* 2010;10:2.
- Mannan HR, Stevenson C, Peeters A, Walls H, McNeil J.** Framingham risk prediction equations for incidence of cardiovascular disease using detailed measures for smoking. *Heart Int* 2010;5(2):e11.
- Maple-Brown LJ, Lawton PD, Hughes JT, Sharma SK, Jones GR, Ellis AG, Hoy W, Cass A, Macisaac RJ, Sinha AK, Thomas MA, Piers LS, Ward LC, Drabsch K, Panagiotopoulos S, McDermott R, Warr K, Cherian S, Brown A, Jerums G, O'Dea K.** Study Protocol—accurate assessment of kidney function in Indigenous Australians: aims and methods of the eGFR study. *BMC Public Health* 2010;10:80. Protocol.
- Marasco SF, Pilcher D, Oto T, Chang W, Griffiths A, Pellegrino V, Chan J, Bailey M.** Aprotinin in lung transplantation is associated with an increased incidence of primary graft dysfunction. *Eur J Cardiothorac Surg* 2010;37(2):420-5.
- Marasco SF, Sutalo ID, Bui AV.** Mode of failure of rib fixation with absorbable plates: a clinical and numerical modeling study. *J Trauma* 2010;68(5):1225-33.
- Marasco SF, Vale M, Pellegrino V, Prevolos A, Leet A, Kras A, Schulberg E, Bergin P, Esmore DS.** Extracorporeal membrane oxygenation in primary graft failure after heart transplantation. *Ann Thorac Surg* 2010;90(5):1541-6.
- March L, Amatya B, Osborne RH, Brand C.** Developing a minimum standard of care for treating people with osteoarthritis of the hip and knee. *Best Pract Res Clin Rheumatol* 2010;24(1):121-45. Review.
- Marfurt J, Smith TA, Hastings IM, Müller I, Sie A, Oa O, Baisor M, Reeder JC, Beck HP, Genton B.** *Plasmodium falciparum* resistance to anti-malarial drugs in Papua New Guinea: evaluation of a community-based approach for the molecular monitoring of resistance. *Malar J* 2010;9:8.
- Mariani JA, Dawson MA, Avery S, Taylor AJ.** Primary cardiac lymphoma. *J Am Coll Cardiol* 2010;55(13):e23.
- Mariani JA, Kaye DM.** Delivery of gene and cellular therapies for heart disease. *J Cardiovasc Transl Res* 2010;3(4):417-26. Review.

- Mark DB, Anstrom KJ, McNulty SE, Flaker GC, Tonkin AM, Smith WM, Toff WD, Dorian P, Clapp-Channing NE, Anderson J, Johnson G, Schron EB, Poole JE, Lee KL, Bardy GH.** Quality of life effects of automatic external defibrillators in the home: results from the Home Automatic External Defibrillator Trial (HAT). *Am Heart J* 2010;159(4):627-34.e7.
- Markman PL, Rowland MA, Leong JY, Van Der Merwe J, Storey E, Marasco S, Negri J, Bailey M, Rosenfeldt FL.** Skeletonized internal thoracic artery harvesting reduces chest wall dysesthesia after coronary bypass surgery. *J Thorac Cardiovasc Surg* 2010;139(3):674-9.
- Martin A, Amin J, Cooper DA, Carr A, Kelleher AD, Bloch M, Baker D, Woolley I, Emery S; STEAL study group.** Abacavir does not affect circulating levels of inflammatory or coagulopathic biomarkers in suppressed HIV: a randomized clinical trial. *AIDS* 2010;24(17):2657-63.
- Martin JH, Connelly KA, Boyle A, Kompa A, Zhang Y, Kelly D, Gilbert RE, Krum H.** Effect of atorvastatin on cardiac remodelling and mortality in rats following hyperglycemia and myocardial infarction. *Int J Cardiol* 2010;143(3):353-60.
- Martin JM, Gorayski P, Zwahlen D, Fay M, Keller J, Millar J.** Is radiotherapy a good adjuvant strategy for men with a history of cryptorchism and stage I seminoma? *Int J Radiat Oncol Biol Phys* 2010;76(1):65-70.
- Martin JM, Hart GK, Hicks P.** A unique snapshot of intensive care resources in Australia and New Zealand. *Anaesth Intensive Care* 2010;38(1):149-58.
- Marwan K, Staples MP, Thursfield V, Bell SW.** The rate of abdominoperineal resections for rectal cancer in the state of Victoria, Australia: a population-based study. *Dis Colon Rectum* 2010;53(12):1645-51.
- Masuo K.** Human recombinant leptin administration as a potential obesity therapy. *Immun Endoc Metab Agents Med Chem* 2010;10(2):50-4. Review.
- Masuo K.** Obesity, hypertension, and the metabolic syndrome. *Curr Hypertens Rev* 2010;6(2):72. Editorial.
- Masuo K.** Pharmacological treatments for obesity and obesity-hypertension. *Immun Endoc Metab Agents Med Chem* 2010;10(2):43. Editorial.
- Masuo K.** Roles of β - and β 3-adrenoceptor polymorphisms in hypertension and metabolic syndrome. *Int J Hypertens* 2010;2010:832821. Review.
- Masuo K, Esler MD.** Role of sympathetic nerve activity in obesity, hypertension and metabolic syndrome. *Curr Hypertens Rev* 2010;6(2):83-91. Review.
- Masuo K, Esler MD, Lambert GW.** Pharmacological treatments for obesity. *Immun Endoc Metab Agents Med Chem* 2010;10(2):44-9. Review.
- Masuo K, Lambert GW.** Calcium channel blockers in obesity-related hypertension. *Immun Endoc Metab Agents Med Chem* 2010;10(2):66-75. Review.
- Masuo K, Lambert GW, Dixon JB.** Weight loss in obesity and metabolic syndrome. *Curr Hypertens Rev* 2010;6(2):130-8. Review.
- Masuo K, Lambert GW, Esler MD.** Epinephrine and its role in the development of obesity, hypertension and obesity-related hypertension. *Int J Med Biol Front* 2010;15(5-6):371-86. Review.
- Masuo K, Lambert GW, Esler MD, Rakugi H, Ogihara T, Schlaich MP.** The role of sympathetic nervous activity in renal injury and end-stage renal disease. *Hypertens Res* 2010;33(6):521-8. Review.
- Masuo K, Rakugi H, Ogihara T.** Relationships of β - and β 3-adrenoceptor polymorphisms with obesity, hypertension and metabolic syndrome. *Curr Hypertens Rev* 2010;6(2):118-29. Review.
- Masuo K, Rakugi H, Ogihara T, Esler MD, Lambert GW.** Cardiovascular and renal complications of Type 2 diabetes in obesity: role of sympathetic nerve activity and insulin resistance. *Curr Diabetes Rev* 2010;6(2):58-67. Review.
- Mathers B, Cook C, Degenhardt L.** Improving the data to strengthen the global response to HIV among people who inject drugs. *Int J Drug Policy* 2010;21(2):100-2. Editorial.
- Mathers BM, Degenhardt L, Ali H, Wiessing L, Hickman M, Mattick RP, Myers B, Ambekar A, Strathdee SA; 2009 Reference Group to the UN on HIV and Injecting Drug Use.** HIV prevention, treatment, and care services for people who inject drugs: a systematic review of global, regional, and national coverage. *Lancet* 2010;375(9719):1014-28. Review.
- Matheson MC, Haydn Walters E, Burgess JA, Jenkins MA, Giles GG, Hopper JL, Abramson MJ, Dharmage SC.** Childhood immunization and atopic disease into middle-age--a prospective cohort study. *Pediatr Allergy Immunol* 2010;21(2 Pt 1):301-6.
- Mathiyalagan P, Chang L, Du XJ, El-Osta A.** Cardiac ventricular chambers are epigenetically distinguishable. *Cell Cycle* 2010;9(3):612-7.
- Matthews VB, Allen TL, Risis S, Chan MH, Henstridge DC, Watson N, Zaffino LA, Babb JR, Boon J, Meikle PJ, Jowett JB, Watt MJ, Jansson JO, Bruce CR, Febbraio MA.** Interleukin-6-deficient mice develop hepatic inflammation and systemic insulin resistance. *Diabetologia* 2010;53(11):2431-41.
- Mc Namara KP, George J, O'Reilly SL, Jackson SL, Peterson GM, Howarth H, Bailey MJ, Duncan G, Trinder P, Morabito E, Finch J, Bunker S, Janus E, Emery J, Dunbar JA.** Engaging community pharmacists in the primary prevention of cardiovascular disease: protocol for the Pharmacist Assessment of Adherence, Risk and Treatment in Cardiovascular Disease (PAART CVD) pilot study. *BMC Health Serv Res* 2010;10:264. Protocol.
- McDermott F, Corder S, Winship V.** Addressing inadequacies in Victoria's trauma system: responses of the Consultative Committee on Road Traffic Fatalities and Victorian trauma services. *Emerg Med Australas* 2010;22(3):224-31.
- McDermott FT, Corder SM, Winship VC.** Seeking optimal trauma care in Victoria. *ANZ J Surg* 2010;80(3):123-5. Review.
- McDonald S, Turner T, Chamberlain C, Lumbiganon P, Thinkhamrop J, Festin MR, Ho JJ, Mohammad H, Henderson-Smart DJ, Short J, Crowther CA, Martis R, Green S; SEA-ORCHID Study Group.** Building capacity for evidence generation, synthesis and implementation to improve the care of mothers and babies in South East Asia: methods and design of the SEA-ORCHID Project using a logical framework approach. *BMC Med Res Methodol* 2010;10:61. Protocol.
- McGrail MR, Humphreys JS, Scott A, Joyce CM, Kalb G.** Professional satisfaction in general practice: does it vary by size of community? *Med J Aust* 2010;193(2):94-8.
- McGrath J, Welham J, Scott J, Varghese D, Degenhardt L, Hayatbakhsh MR, Alati R, Williams GM, Bor W, Najman JM.** Association between cannabis use and psychosis-related outcomes using sibling pair analysis in a cohort of young adults. *Arch Gen Psychiatry* 2010;67(5):440-7.
- McIlroy DR, Wallace S, Roubos N.** Brain natriuretic peptide (BNP) as a biomarker of myocardial ischemia-reperfusion injury in cardiac transplantation. *J Cardiothorac Vasc Anesth* 2010;24(6):939-45.
- McInnes JA, Ibrahim JE.** Minimising harm to older Victorians from heatwaves: a qualitative study of the role of community-based health profession and carer organisations. *Australas J Ageing* 2010;29(3):104-10.
- McIntosh AS, McCrory P, Finch CF, Wolfe R.** Head, face and neck injury in youth rugby: incidence and risk factors. *Br J Sports Med* 2010;44(3):188-93.
- McIntosh AS, Savage TN, McCrory P, Fréchède BO, Wolfe R.** Tackle characteristics and injury in a cross section of rugby union football. *Med Sci Sports Exerc* 2010;42(5):977-84.
- McKenzie DP, Clarke DM, Forbes AB, Sim MR.** Pessimism, worthlessness, anhedonia, and thoughts of death identify DSM-IV major depression in hospitalized, medically ill patients. *Psychosomatics* 2010;51(4):302-11.
- McKenzie DP, Creamer M, Kelsall HL, Forbes AB, Ikin JF, Sim MR, McFarlane AC.** Temporal relationships between Gulf War deployment and subsequent psychological disorders in Royal Australian Navy Gulf War veterans. *Soc Psychiatry Psychiatr Epidemiol* 2010;45(9):843-52.

- McKenzie JE, Herbison GP, Roth P, Paul C.** Obstacles to researching the researchers: a case study of the ethical challenges of undertaking methodological research investigating the reporting of randomised controlled trials. *Trials* 2010;11:28.
- McKenzie JE, O'Connor DA, Page MJ, Mortimer DS, French SD, Walker BF, Keating JL, Grimshaw JM, Michie S, Francis JJ, Green SE.** Improving the care for people with acute low-back pain by allied health professionals (the ALIGN trial): A cluster randomised trial protocol. *Implement Sci* 2010;5:86. Protocol.
- McKenzie JE, Priest P, Audas R, Poore MR, Brunton CR, Reeves LM.** Hand sanitisers for reducing illness absences in primary school children in New Zealand: a cluster randomised controlled trial study protocol. *Trials* 2010;11:7. Protocol.
- McKenzie M, Clarke DM, McKenzie DP, Smith GC.** Which factors predict the persistence of DSM-IV depression, anxiety, and somatoform disorders in the medically ill three months post hospital discharge? *J Psychosom Res* 2010;68(1):21-8.
- McLellan A, Taylor AJ.** Managing diabetics with coronary artery disease. *Diabetes Manag J* 2010;30:10. Review.
- McLennan SN, Mathias JL, Brennan LC, Russell ME, Stewart S.** Cognitive impairment predicts functional capacity in dementia-free patients with cardiovascular disease. *J Cardiovasc Nurs* 2010;25(5):390-7.
- McNamee JJ, Pilcher DV, Bailey MJ, Moore EC, Cleland HJ.** Mortality prediction and outcomes among burns patients from Australian and New Zealand intensive care units. *Crit Care Resusc* 2010;12(3):196-201.
- McNeil JJ, Evans SM, Johnson NP, Cameron PA.** Clinical-quality registries: their role in quality improvement. *Med J Aust* 2010;192(5):244-5. Editorial.
- McNeil JJ, Piccenna L, Ioannides-Demos LL.** Smoking cessation-recent advances. *Cardiovasc Drugs Ther* 2010;24(4):359-67. Review.
- McNeilly B, Ibrahim JE, Bugeja L, Ozanne-Smith J.** The prevalence of work-related deaths associated with alcohol and drugs in Victoria, Australia, 2001-6. *Inj Prev* 2010;16(6):423-8.
- Meehan AC, Sullivan LC, Mifsud NA, Brooks AG, Snell GI, Kotsimbos TC, Westall GP.** Natural killer cell activation in the lung allograft early posttransplantation. *Transplantation* 2010;89(6):756-63.
- Mellor K, Ritchie RH, Meredith G, Woodman OL, Morris MJ, Delbridge LM.** High-fructose diet elevates myocardial superoxide generation in mice in the absence of cardiac hypertrophy. *Nutrition* 2010;26(7-8):842-8.
- Mellor KM, Ritchie RH, Davidoff AJ, Delbridge LM.** Elevated dietary sugar and the heart: experimental models and myocardial remodeling. *Can J Physiol Pharmacol* 2010;88(5):525-40. Review.
- Mellor KM, Ritchie RH, Delbridge LM.** Reactive oxygen species and insulin resistant cardiomyopathy. *Clin Exp Pharmacol Physiol* 2010;37(2):222-8.
- Melmed GY, Spiegel BM, Bressler B, Cheifetz AS, Devlin SM, Harrell LE, Irving PM, Jones J, Kaplan GG, Kozuch PL, Velayos FS, Baidoo L, Sparrow MP, Siegel CA.** The appropriateness of concomitant immunomodulators with anti-tumor necrosis factor agents for Crohn's disease: one size does not fit all. *Clin Gastroenterol Hepatol* 2010;8(8):655-9.
- Mészáros D, Dharmage SC, Matheson MC, Venn A, Wharton CL, Johns DP, Abramson MJ, Giles GG, Hopper JL, Walters EH.** Poor lung function and tonsillectomy in childhood are associated with mortality from age 18 to 44. *Respir Med* 2010;104(6):808-15.
- Mifsud NA, Nguyen TH, Tait BD, Kotsimbos TC.** Quantitative and functional diversity of cross-reactive EBV-specific CD8+ T cells in a longitudinal study cohort of lung transplant recipients. *Transplantation* 2010;90(12):1439-49.
- Mihreshahi S, Brand C, Ibrahim JE, Evans S, Jolley D, Cameron P.** Validity of the indicator 'death in low-mortality diagnosis-related groups' for measuring patient safety and healthcare quality in hospitals. *Intern Med J* 2010;40(4):250-7. Review.
- Mikocka-Walus A, Beevor HC, Gabbe B, Gruen RL, Winnett J, Cameron P.** Management of spleen injuries: the current profile. *ANZ J Surg* 2010;80(3):157-61.
- Mikocka-Walus A, Gabbe B, Cameron P.** Motorcycle-related major trauma: on-road versus off-road incidence and profile of cases. *Emerg Med Australas* 2010;22(5):470-6.
- Miles LF, Wakeman CJ, Farmer KC.** Giant villous adenoma presenting as McKittrick-Wheelock syndrome and pseudo-obstruction. *Med J Aust* 2010;192(4):225-7.
- Miller A, Pilcher D, Mercado N, Leong T, Scheinkestel C, Schildcrout J.** What can paper-based clinical information systems tell us about the design of computerized clinical information systems (CIS) in the ICU? *Aust Crit Care* 2010;23(3):130-40.
- Miller AG, Tan G, Binger KJ, Pickering RJ, Thomas MC, Nagaraj RH, Cooper ME, Wilkinson-Berka JL.** Candesartan attenuates diabetic retinal vascular pathology by restoring glyoxalase-I function. *Diabetes* 2010;59(12):3208-15.
- Miller PG, Johnston J, Dunn M, Fry CL, Degenhardt L.** Comparing probability and non-probability sampling methods in Ecstasy research: implications for the internet as a research tool. *Subst Use Misuse* 2010;45(3):437-50.
- Miller SM, Hansell NK, Ngo TT, Liu GB, Pettigrew JD, Martin NG, Wright MJ.** Genetic contribution to individual variation in binocular rivalry rate. *Proc Natl Acad Sci USA* 2010;107(6):2664-8.
- Minden M, Wei A.** Revisiting late relapses in acute myeloid leukemia. *Leuk Lymphoma* 2010;51(5):735-6.
- Mischak H, Allmaier G, Apweiler R, Attwood T, Baumann M, Benigni A, Bennett SE, Bischoff R, Bongcam-Rudloff E, Capasso G, Coon JJ, D'Haese P, Dominiczak AF, Dakna M, Dihazi H, Ehrlich JH, Fernandez-Llama P, Fliser D, Frokiaer J, Garin J, Girolami M, Hancock WS, Haubitz M, Hochstrasser D, Holman RR, Ioannidis JP, Jankowski J, Julian BA, Klein JB, Kolch W, Luider T, Massy Z, Mattes WB, Molina F, Monsarrat B, Novak J, Peter K, Rossing P, Sánchez-Carbayo M, Schanstra JP, Semmes OJ, Spasovski G, Theodorescu D, Thongboonkerd V, Vanholder R, Veenstra TD, Weissinger E, Yamamoto T, Vlahou A.** Recommendations for biomarker identification and qualification in clinical proteomics. *Sci Transl Med* 2010;2(46):46ps42.
- Misso ML, Egberts KJ, Page M, O'Connor D, Shaw J.** Continuous subcutaneous insulin infusion (CSII) versus multiple insulin injections for Type 1 diabetes mellitus. *Cochrane Database Syst Rev* 2010;(1):CD005103. Review.
- Mistiaen PJ, Jolley DJ, McGowan S, Hickey MB, Spreuuenberg P, Francke AL.** A multilevel analysis of three randomised controlled trials of the Australian Medical Sheepskin in the prevention of sacral pressure ulcers. *Med J Aust* 2010;193(11-12):638-41.
- Mitchell TW, Turner N, Else PL, Hulbert AJ, Hawley JA, Lee JS, Bruce CR, Blanksby SJ.** The effect of exercise on the skeletal muscle phospholipidome of rats fed a high-fat diet. *Int J Mol Sci* 2010;11(10):3954-64.
- Mithraprabhu S, Grigoriadis G, Khong T, Spencer A.** Deactylase inhibition in myeloproliferative neoplasms. *Invest New Drugs* 2010;28(Suppl 1):S50-7. Review.
- Mitra B, Al Jubair J, Cameron PA, Gabbe BJ.** Tram-related trauma in Melbourne, Victoria. *Emerg Med Australas* 2010;22(4):337-42.
- Mitra B, Cameron PA, de Villiers Smit P.** Whole-of-hospital response to admission access block: the need for a clinical revolution. *Med J Aust* 2010;192(6):354. Letter.
- Mitra B, Fitzgerald M, Cameron PA, Gruen RL.** Tranexamic acid for trauma. *Lancet* 2010;376(9746):1049. Letter.
- Mitra B, Mori A, Cameron PA, Fitzgerald M, Paul E, Street A.** Fresh frozen plasma (FFP) use during massive blood transfusion in trauma resuscitation. *Injury* 2010;41(1):35-9.

- Mitra B, Phillips L, Cameron PA, Billah B, Reid C.** The safety of recombinant factor VIIa in cardiac surgery. *Anaesth Intensive Care* 2010;38(4):671-7.
- Mittag D, Scholzen A, Varese N, Baxter L, Paukovics G, Harrison LC, Rolland JM, O'Hehir RE.** The effector T cell response to ryegrass pollen is counterregulated by simultaneous induction of regulatory T cells. *J Immunol* 2010;184(9):4708-16.
- Mo X, Nguyen NX, Mu FT, Yang W, Luo SZ, Fan H, Andrews RK, Berndt MC, Li R.** Transmembrane and trans-subunit regulation of ectodomain shedding of platelet glycoprotein Ib α . *J Biol Chem* 2010;285(42):32096-104.
- Mokhtar SA, McCombe PF, Williamson OD, Morgan MK, White GJ, Sears WR.** Health-related quality of life: a comparison of outcomes after lumbar fusion for degenerative spondylolisthesis with large joint replacement surgery and population norms. *Spine J* 2010;10(4):306-12.
- Moneghetti KJ, Westall GP, Snell GI.** An update in lung transplantation. *Minerva Pneumol* 2010;49(1):45-63. Review.
- Moore E, Bellomo R, Nichol A.** Biomarkers of acute kidney injury in anesthesia, intensive care and major surgery: from the bench to clinical research to clinical practice. *Minerva Anestesiologica* 2010;76(6):425-40. Review.
- Moore EC, Padiglione AA, Wasiak J, Paul E, Cleland H.** Candida in burns: risk factors and outcomes. *J Burn Care Res* 2010;31(2):257-63.
- Moore EC, Pilcher DV, Bailey MJ, Cleland H, McNamee J.** A simple tool for mortality prediction in burns patients: APACHE III score and FTSA. *Burns* 2010;36(7):1086-91.
- Moore EM, Bellomo R, Nichol A, Harley N, Macisaac C, Cooper DJ.** The incidence of acute kidney injury in patients with traumatic brain injury. *Ren Fail* 2010;32(9):1060-5.
- Moran LJ, Meyer C, Hutchison SK, Zoungas S, Teede HJ.** Novel inflammatory markers in overweight women with and without polycystic ovary syndrome and following pharmacological intervention. *J Endocrinol Invest* 2010;33(4):258-65.
- Moran LJ, Noakes M, Clifton PM, Norman RJ.** The effect of modifying dietary protein and carbohydrate in weight loss on arterial compliance and postprandial lipidemia in overweight women with polycystic ovary syndrome. *Fertil Steril* 2010;94(6):2451-4.
- Morgan GW, Barton M, Atkinson C, Millar J, Kumar Gogna N, Yeoh E.** 'GAP' in radiotherapy services in Australia and New Zealand in 2009. *J Med Imaging Radiat Oncol* 2010;54(3):287-97.
- Morganti-Kossmann MC, Yan E, Bye N.** Animal models of traumatic brain injury: is there an optimal model to reproduce human brain injury in the laboratory? *Injury* 2010;41 Suppl 1:S10-3.
- Morrow MP, Grant A, Mujawar Z, Dubrovsky L, Pushkarsky T, Kiselyeva Y, Jennelle L, Mukhamedova N, Remaley AT, Kashanchi F, Sviridov D, Bukrinsky M.** Stimulation of the liver X receptor pathway inhibits HIV-1 replication via induction of ATP-binding cassette transporter A1. *Mol Pharmacol* 2010;78(2):215-25.
- Mu FT, Cranmer SL, Andrews RK, Berndt MC.** Functional association of phosphoinositide-3-kinase with platelet glycoprotein Ib α , the major ligand-binding subunit of the glycoprotein Ib-IX-V complex. *J Thromb Haemost* 2010;8(2):324-30.
- Mujawar Z, Tamehiro N, Grant A, Sviridov D, Bukrinsky M, Fitzgerald ML.** Mutation of the ATP cassette binding transporter A1 (ABCA1) C-terminus disrupts HIV-1 Nef binding but does not block the Nef enhancement of ABCA1 protein degradation. *Biochemistry* 2010;49(38):8338-49.
- Murnaghan ML, Simpson P, Robin JG, Shore BJ, Selber P, Graham HK.** The cerebral palsy hip classification is reliable: an inter- and intra-observer reliability study. *J Bone Joint Surg Br* 2010;92(3):436-41.
- Murphy AJ, Remaley AT, Sviridov D.** HDL therapy: two kinds of right? *Curr Pharm Des* 2010;16(37):4134-47. Review.
- Murphy AJ, Woollard KJ.** High-density lipoprotein: a potent inhibitor of inflammation. *Clin Exp Pharmacol Physiol* 2010;37(7):710-8. Review.
- Murray KJ, Hill K, Phillips B, Waterston J.** Does otolith organ dysfunction influence outcomes after a customized program of vestibular rehabilitation? *J Neurol Phys Ther* 2010;34(2):70-5.
- Myles PS.** Equivalence and noninferiority in anaesthesia research. *Anaesth Intensive Care* 2010;38(4):621-2. Editorial.
- Myles PS, Devereaux PJ.** Pros and cons of composite endpoints in anesthesia trials. *Anesthesiology* 2010;113(4):776-8. Editorial.
- Myles PS, Haller G.** Global distribution of access to surgical services. *Lancet* 2010;376(9746):1027-8. Comment.
- Namachivayam P, Shann F, Shekerdemian L, Taylor A, van Sloten I, Delzoppo C, Daffey C, Butt W.** Three decades of pediatric intensive care: who was admitted, what happened in intensive care, and what happened afterward. *Pediatr Crit Care Med* 2010;11(5):549-55.
- Narain JP, Dash AP, Parnell B, Bhattacharya SK, Barua S, Bhatia R, Savioli L.** Elimination of neglected tropical diseases in the South-East Asia Region of the World Health Organization. *Bull World Health Organ* 2010;88(3):206-10. Review.
- Naughton M.** Positive airway treatment for central sleep apnoea in heart failure. *Respir Circ* 2010;58(3):317-23. Review.
- Naughton MT.** Loop gain in apnea: gaining control or controlling the gain? *Am J Respir Crit Care Med* 2010;181(2):103-5. Editorial.
- NAVIGATOR Study Group, McMurray JJ, Holman RR, Haffner SM, Bethel MA, Holzhauer B, Hua TA, Belenkov Y, Boolell M, Buse JB, Buckley BM, Chacra AR, Chiang FT, Charbonnel B, Chow CC, Davies MJ, Deedwania P, Diem P, Einhorn D, Fonseca V, Fulcher GR, Gaciong Z, Gaztambide S, Giles T, Horton E, Ilkova H, Jenssen T, Kahn SE, Krum H, Laakso M, Leiter LA, Levitt NS, Mareev V, Martinez F, Masson C, Mazzone T, Meaney E, Nesto R, Pan C, Prager R, Raptis SA, Rutten GE, Sandstroem H, Schaper F, Scheen A, Schmitz O, Sinay I, Soska V, Stender S, Tamás G, Tognoni G, Tuomilehto J, Villamil AS, Vozár J, Califf RM.** Effect of valsartan on the incidence of diabetes and cardiovascular events. *N Engl J Med* 2010;362(16):1477-90. Erratum: *N Engl J Med* 2010;362(18):1748.
- Nelson MR, Alkhateeb AN, Ryan P, Willson K, Gartlan JG, Reid CM; Second Australian National Blood Pressure Management Committee.** Physical activity, alcohol and tobacco use and associated cardiovascular morbidity and mortality in the Second Australian National Blood Pressure study cohort. *Age Ageing* 2010;39(1):112-6.
- Nelson MR, Ryan P, Tonkin AM, Ramsay E, Willson K, Wing LW, Reid CM; Second Australian National Blood Pressure Study Management Committee.** Prediction of cardiovascular events in subjects in the second Australian National Blood Pressure study. *Hypertension* 2010;56(1):44-8.
- Neoh CF, He H, Li J, Fullinfaw RO, Leung L, Misra A, Vajpayee RB, Davies GE, Stewart K, Kong DC.** Rapid and sensitive liquid chromatography/mass spectrometry assay for caspofungin in human aqueous humor. *Antimicrob Agents Chemother* 2010;54(10):4467-70.
- Nestel P.** Linoleic acid reassessed. *Curr Opin Lipidol* 2010;21(3):253-5. Comment.
- New PW.** A multidisciplinary consultation team to address the unmet needs of hospitalized patients with spinal cord injury. *Arch Neurol* 2010;67(9):1074-6. Comment.
- New PW, Jackson T.** The costs and adverse events associated with hospitalization of patients with spinal cord injury in Victoria, Australia. *Spine* 2010;35(7):762-802.
- Ng H, McGinley JL, Jolley D, Morris M, Workman B, Srikanth V.** Effects of footwear on gait and balance in people recovering from stroke. *Age Ageing* 2010;34(4):507-10. Letter.
- Ng JC, Swain S, Dowling JP, Wolfe R, Simpson P, Kelly JW.** The impact of partial biopsy on histopathologic diagnosis of cutaneous melanoma: experience of an Australian tertiary referral service. *Arch Dermatol* 2010;146(3):234-9.
- Ngo DT, Sverdlov AL, McNeil JJ, Horowitz JD.** Does vitamin D modulate asymmetric dimethylarginine and C-reactive protein concentrations? *Am J Med* 2010;123(4):335-41.

- Nguyen HP, Zaroff JG, Bayman EO, Gelb AW, Todd MM, Hindman BJ; IHASt-MIDS and IHASt Investigators.** Perioperative hypothermia (33 degrees C) does not increase the occurrence of cardiovascular events in patients undergoing cerebral aneurysm surgery: findings from the Intraoperative Hypothermia for Aneurysm Surgery Trial. *Anesthesiology* 2010;113(2):327-42.
- Nguyen TH, Sullivan LC, Kotsimbos TC, Schwarzer AP, Mifsud NA.** Cross-presentation of HCMV chimeric protein enables generation and measurement of polyclonal T cells. *Immunol Cell Biol* 2010;88(6):676-84.
- Nichol AD, Bailey M, Cooper DJ; POLAR; EPO Investigators.** Challenging issues in randomised controlled trials. *Injury* 2010;41 Suppl 1:S20-3.
- Nichol AD, Egi M, Pettila V, Bellomo R, French C, Hart G, Davies A, Stachowski E, Reade MC, Bailey M, Cooper DJ.** Relative hyperlactatemia and hospital mortality in critically ill patients: a retrospective multi-centre study. *Crit Care* 2010;14(1):R25.
- Nichol AD, O’Cronin DF, Naughton F, Hopkins N, Boylan J, McLoughlin P.** Hypercapnic acidosis reduces oxidative reactions in endotoxin-induced lung injury. *Anesthesiology* 2010;113(1):116-25.
- Nicolaides AN, Kakkos SK, Kyriacou E, Griffin M, Sabetai M, Thomas DJ, Tegos T, Geroulakos G, Labropoulos N, Doré CJ, Morris TP, Naylor R, Abbott AL; Asymptomatic Carotid Stenosis and Risk of Stroke (ACRS) Study Group.** Asymptomatic internal carotid artery stenosis and cerebrovascular risk stratification. *J Vasc Surg* 2010;52(6):1486-1496.e5.
- Ning F, Qiao Q, Tuomilehto J, Hammar N, Ho SY, Söderberg S, Zimmet PZ, Shaw JE, Nakagami T, Mohan V, Ramachandran A, Lam TH, Andersson SW, Janus ED, Boyko EJ, Fujimoto WY, Pang ZC; DECODA Study Group.** Does abnormal insulin action or insulin secretion explain the increase in prevalence of impaired glucose metabolism with age in populations of different ethnicities? *Diabetes Metab Res Rev* 2010;26(4):245-53.
- Ninomiya T, Zoungas S, Neal B, Woodward M, Patel A, Perkovic V, Cass A, Cooper M, Grobbee D, Hamet P, Harrap S, Liu L, Mancia G, Mogensen CE, Poulter N, Rodgers A, Williams B, MacMahon S, Chalmers J; ADVANCE Collaborative Group.** Efficacy and safety of routine blood pressure lowering in older patients with diabetes: results from the ADVANCE trial. *J Hypertens* 2010;28(6):1141-9.
- Nobelius AM, Kalina B, Pool R, Whitworth J, Chesters J, Power R.** Delaying sexual debut amongst out-of-school youth in rural southwest Uganda. *Cult Health Sex* 2010;12(6):663-76.
- Nobelius A-M, Kalina B, Pool R, Whitworth J, Chesters J, Power R.** Sexual and reproductive health information sources preferred by out-of-school adolescents in rural southwest Uganda. *Sex Education* 2010;10(1):91-107.
- Nobelius AM, Kalina B, Pool R, Whitworth J, Chesters J, Power R.** “You still need to give her a token of appreciation”: the meaning of the exchange of money in the sexual relationships of out-of-school adolescents in rural southwest Uganda. *J Sex Res* 2010;47(5):490-503.
- Norman PE, Davis WA, Coughlan MT, Forbes JM, Golledge J, Davis TM.** Reply. *J Vasc Surg* 2010;52(2):536. Author reply.
- Obeyesekere MN, Chan W, Stub D, Prabhu S, Teo EP, Toogood G, Mariani J, Broughton A, Kistler PM.** Left ventricular ejection fraction and absence of ACE inhibitor/angiotensin II receptor blocker predicts appropriate defibrillator therapy in the primary prevention population. *Pacing Clin Electrophysiol* 2010;33(6):696-704.
- O’Brien A, Cross W, Higgs P, Munro I, Bloomer M.** Nurse led CBT program for Indigenous people. *Aust Nurs J* 2010;17(8):35.
- O’Brien AP, Cross WM, Higgs P, Munro I, Bloomer MJ, Chou KR.** Australians living with and managing hepatitis C. *Issues Ment Health Nurs* 2010;31(8):520-4.
- O’Brien KA, Varigos E, Black C, Komesaroff PA.** Laser acupuncture does not improve menopausal symptoms. *Menopause* 2010;17(3):636-41.
- O’Brien L.** Adherence to therapeutic splint wear in adults with acute upper limb injuries: a systematic review. *Hand Ther* 2010;15(1):3-12. Review.
- O’Brien L, Presnell S.** Patient experience of distraction splinting for complex finger fracture dislocations. *J Hand Ther* 2010;23(3):249-9.
- O’Brien PE.** Bariatric surgery: mechanisms, indications and outcomes. *J Gastroenterol Hepatol* 2010;25(8):1358-65. Review.
- O’Brien PE, Sawyer SM, Dixon JB.** Laparoscopic gastric banding vs lifestyle intervention in severely obese adolescents. *JAMA* 2010;303(23):2356-7. Author reply.
- O’Brien PE, Sawyer SM, Laurie C, Brown WA, Skinner S, Veit F, Paul E, Burton PR, McGrice M, Anderson M, Dixon JB.** Laparoscopic adjustable gastric banding in severely obese adolescents: a randomized trial. *JAMA* 2010;303(6):519-26.
- O’Connor DW, Sierakowski C, Chin LF, Singh D.** The safety and tolerability of clozapine in aged patients: a retrospective clinical file review. *World J Biol Psychiatry* 2010;11(6):788-91.
- Odom GL, Banks GB, Schultz BR, Gregorevic P, Chamberlain JS.** Preclinical studies for gene therapy of Duchenne muscular dystrophy. *J Child Neurol* 2010;25(9):1149-57.
- O’Donnell ML, Creamer M, Holmes AC, Ellen S, McFarlane AC, Judson R, Silove D, Bryant RA.** Posttraumatic stress disorder after injury: does admission to intensive care unit increase risk? *J Trauma* 2010;69(3):627-32.
- O’Donnell ML, Creamer M, McFarlane AC, Silove D, Bryant RA.** Should A2 be a diagnostic requirement for posttraumatic stress disorder in DSM-V? *Psychiatry Res* 2010;176(2-3):257-60.
- O’Donnell ML, Creamer MC, Bryant RA, McFarlane AC, Silove D.** Does access to compensation have an impact on recovery outcomes after injury? *Med J Aust* 2010;193(3):190. Author reply.
- O’Donnell ML, Creamer MC, McFarlane AC, Silove D, Bryant RA.** Does access to compensation have an impact on recovery outcomes after injury? *Med J Aust* 2010;192(6):328-33.
- Oliver BG, Elliott JH, Price P, Phillips M, Saphonn V, Vun MC, Kaldor JM, Cooper DA, French MA.** Mediators of innate and adaptive immune responses differentially affect immune restoration disease associated with *Mycobacterium tuberculosis* in HIV patients beginning antiretroviral therapy. *J Infect Dis* 2010;202(11):1728-37.
- Oliver BG, Elliott JH, Saphonn V, Vun MC, French MA, Price P.** Interferon- γ and IL-5 production correlate directly in HIV patients co-infected with *Mycobacterium tuberculosis* with or without immune restoration disease. *AIDS Res Hum Retrovir* 2010;26(12):1287-9.
- Olivieri M, Mirabelli MC, Plana E, Radon K, Antó JM, Bakke P, Benke G, D’Errico A, Henneberger P, Kromhout H, Norbäck D, Torén K, van Sprundel M, Villani S, Wieslander G, Zock JP, Kogevinas M.** Healthy hire effect, job selection and inhalation exposure among young adults with asthma. *Eur Respir J* 2010;36(3):517-23.
- Olver J, Esquenazi A, Fung VS, Singer BJ, Ward AB; Cerebral Palsy Institute.** Botulinum toxin assessment, intervention and aftercare for lower limb disorders of movement and muscle tone in adults: international consensus statement. *Eur J Neurol* 2010;17(Suppl2):57-73.
- Olver J, Wise F.** Stroke rehabilitation intervention in the short and long term. *Med Today* 2010;11(7):36-41. Review.
- O’Neil A, Sanderson K, Oldenburg B.** Depression as a predictor of work resumption following myocardial infarction (MI): a review of recent research evidence. *Health Qual Life Outcomes* 2010;8:95. Review.
- Ong OL, Churchyard AC, New PW.** The importance of early diagnosis of herpes zoster myelitis. *Med J Aust* 2010;193(9):546-7.
- Oracki SA, Tsantikos E, Quilici C, Light A, Schmidt T, Lew AM, Martin JE, Smith KG, Hibbs ML, Tarlinton DM.** CTLA4lg alters the course of autoimmune disease development in *Lyn^{-/-}* mice. *J Immunol* 2010;184(2):757-63.
- Oracki SA, Walker JA, Hibbs ML, Corcoran LM, Tarlinton DM.** Plasma cell development and survival. *Immunol Rev* 2010;237(1):140-59. Review.
- O’Reilly GM, Cameron PA, Tan GA, Mulligan T, Hill C.** The dawn of emergency medicine in Vietnam. *Emerg Med Australas* 2010;22(5):457-62.

- O'Reilly GM, Jolley DJ, Cameron PA, Gabbe B. Missing in action: a case study of the application of methods for dealing with missing data to trauma system benchmarking. *Acad Emerg Med* 2010;17(10):1122-9.
- Osadnik CR, McDonald CF, Jones AP, Rowe BH, Holland AE. Airway clearance techniques for chronic obstructive pulmonary disease. *Cochrane Database Syst Rev* 2010;(1):CD008328. Protocol.
- Ota M, Duong BH, Torkamani A, Doyle CM, Gavin AL, Ota T, Nemazee D. Regulation of the B cell receptor repertoire and self-reactivity by BAFF. *J Immunol* 2010;185(7):4128-36.
- Oto T, Okazaki M, Takata K, Egi M, Yamane M, Toyooka S, Sano Y, Snell GI, Goto K, Miyoshi S. Calcineurin inhibitor-related cholestasis complicating lung transplantation. *Ann Thorac Surg* 2010;89(5):1664-5.
- Oto T, Snell GI, Goto K, Miyoshi S. Hemophagocytic syndrome: a rare but specific complication of lung transplantation. *J Thorac Cardiovasc Surg* 2010;140(3):e58-9.
- O'Toole J, Sinclair M, Leder K. Quantitative microbial risk assessment in water recycling. *Food Aust* 2010;62:408.
- Owen N, Healy GN, Matthews CE, Dunstan DW. Too much sitting: the population health science of sedentary behavior. *Exerc Sport Sci Rev* 2010;38(3):105-13. Review.
- Owen N, Sparling PB, Healy GN, Dunstan DW, Matthews CE. Sedentary behavior: emerging evidence for a new health risk. *Mayo Clin Proc* 2010;85(12):1138-41. Comment.
- Padiglione A, Aleksic E, French M, Arnott A, Wilson KM, Tippett E, Kaye M, Gray L, Ellett A, Crane M, Leslie DE, Lewin SR, Breschkin A, Birch C, Gorry PR, McPhee DA, Crowe SM. Extremely prolonged HIV seroconversion associated with an MHC haplotype carrying disease susceptibility genes for antibody deficiency disorders. *Clin Immunol* 2010;137(2):199-208.
- Pan Y, Cowell L, Chamberlain AJ. The power of polarisation. *Med Today* 2010;11(3):60-61.
- Panay N, Al-Azzawi F, Bouchard C, Davis SR, Eden J, Lodhi I, Rees M, Rodenberg CA, Rymer J, Schwenkhagen A, Sturdee DW. Testosterone treatment of HSDD in naturally menopausal women: the ADORE study. *Climacteric* 2010;13(2):121-31.
- Panjari M, Bell R, Lijovic M, La China M, Schwarz M, Fradkin P, Bradbury J, Farrugia H, Davis SR. The relationship between hormone therapy use at the time of diagnosis of breast cancer and tumor characteristics. *Horm Canc* 2010;1(2):93-9.
- Panjari M, Davis SR. DHEA for postmenopausal women: a review of the evidence. *Maturitas* 2010;66(2):172-9. Review.
- Paraskeva M, McLean C, Snell GI, Westall GP. Lung transplant survival despite unexpected pulmonary metastatic thyroid cancer in the explant. *Transpl Int* 2010;23(9):e45-8.
- Parikh S, Shrank WH, Mogun H, Choudhry NK. Statin utilization in nursing home patients after cardiac hospitalization. *J Gen Intern Med* 2010;25(12):1293-9.
- Pasco JA, Nicholson GC, Williams LJ, Jacka FN, Henry MJ, Kotowicz MA, Schneider HG, Leonard BE, Berk M. Association of high-sensitivity C-reactive protein with *de novo* major depression. *Br J Psychiatry* 2010;197:372-7.
- Patil S, Spencer A, Schwarzer A, Lewis I, Hertzberg M, Avery S, Wei A, Noutsos T, Paul E, Taouk Y, Muirhead J. Reduced-intensity conditioned allogeneic haematopoietic stem cell transplantation results in durable disease-free and overall survival in patients with poor prognosis myeloid and lymphoid malignancies: eighty-month follow-up. *Bone Marrow Transplant* 2010;45(7):1154-60.
- Pavlin NL, Parker RM, Piggitt AK, Hopkins CA, Temple-Smith MJ, Fairley CK, Tomnay JE, Bowden FJ, Russell DB, Hocking JS, Pitts MK, Chen MY. Better than nothing? Patient-delivered partner therapy and partner notification for chlamydia: the views of Australian general practitioners. *BMC Infect Dis* 2010;10:274.
- Pearce DC, Dowling K, Gerson AR, Sim MR, Sutton SR, Newville M, Russell R, McOrist G. Arsenic microdistribution and speciation in toenail clippings of children living in a historic gold mining area. *Sci Total Environ* 2010;408(12):2590-9.
- Pedersen BK, Febbraio MA. Diabetes: treatment of diabetes mellitus: new tricks by an old player. *Nat Rev Endocrinol* 2010;6(9):482-3. Review.
- Peel TN, Bhatti D, De Boer JC, Stratov I, Spelman DW. Chronic cutaneous ulcers secondary to *Haemophilus ducreyi* infection. *Med J Aust* 2010;192(6):348-50.
- Peleg AY, Hogan DA, Mylonakis E. Medically important bacterial-fungal interactions. *Nat Rev Microbiol* 2010;8(5):340-9. Review.
- Peleg AY, Hooper DC. Hospital-acquired infections due to gram-negative bacteria. *N Engl J Med* 2010;362(19):1804-13. Review.
- Peleg AY, Hooper DC. Hospital-acquired infections due to gram-negative bacteria. *N Engl J Med* 2010;363(15):1483-4. Author reply.
- Peleg AY, Pillai S, Mylonakis E, Moellering RC, Jr, Eliopoulos G. Reduced susceptibility to vancomycin influences pathogenicity in *Staphylococcus aureus* infection – authors' reply. *J Infect Dis* 2010;201(2):312-3. Author reply.
- Pellegrino VA, Davies AR. CESAR: deliverance or just the beginning? *Crit Care Resusc* 2010;12(2):75-7. Editorial.
- Penfold SA, Coughlan MT, Patel SK, Srivastava PM, Sourris KC, Steer D, Webster DE, Thomas MC, MacIsaac RJ, Jerums G, Burrell LM, Cooper ME, Forbes JM. Circulating high-molecular-weight RAGE ligands activate pathways implicated in the development of diabetic nephropathy. *Kidney Int* 2010;78(3):287-95.
- Pepper DJ, Marais S, Wilkinson RJ, Bhaijee F, Maartens G, McIlleron H, De Azevedo V, Cox H, McDermid C, Sokhela S, Patel J, Meintjes G. Clinical deterioration during antituberculosis treatment in Africa: incidence, causes and risk factors. *BMC Infect Dis* 2010;10:83.
- Perugini M, Brown AL, Salerno DG, Booker GW, Stojkoski C, Hercus TR, Lopez AF, Hibbs ML, Gonda TJ, D'Andrea RJ. Alternative modes of GM-CSF receptor activation revealed using activated mutants of the common beta-subunit. *Blood* 2010;115(16):3346-53.
- Peter K. Proteomics unravels platelet function. *Blood* 2010;115(20):4008-9. Editorial.
- Peter K, Lip GY. Thrombosis and cardiovascular disease: exciting perspectives in cardiovascular prevention and therapy. *Thromb Haemost* 2010;103(5):875-6. Editorial.
- Peter K, Lip GY. Changing the scope of preventative and therapeutic approaches in atherothrombosis. *Thromb Haemost* 2010;103(3):487-8. Editorial.
- Pflugger HB, Maeder MT, Lagerche A, Taylor AJ. One- and two-dimensional estimation of right and left ventricular size and function-comparison with cardiac magnetic resonance imaging volumetric analysis. *Heart Lung Circ* 2010;19(9):541-8.
- Pham Y, Tu Y, Wu T, Allen TJ, Calkin AC, Watson AM, Li J, Jandeleit-Dahm KA, Toh BH, Cao Z, Cooper ME, Chai Z. Cell division autoantigen 1 plays a profibrotic role by modulating downstream signalling of TGF- β in a murine diabetic model of atherosclerosis. *Diabetologia* 2010;53(1):170-9.
- Philip J, Gold M, Schwarz M, Komesaroff P. Second medical opinions: the views of oncology patients and their physicians. *Support Care Cancer* 2010;18(9):1199-205.
- Phillips TJ, Cherry CL, Cox S, Marshall SJ, Rice AS. Pharmacological treatment of painful HIV-associated sensory neuropathy: a systematic review and meta-analysis of randomised controlled trials. *PLoS One* 2010;5(12):e14433.
- Phillips TJ, Cherry CL, Moss PJ, Rice AS. Painful HIV-associated sensory neuropathy. *Pain Clin Update* 2010;18(3):1-8. Review.
- Phrommintikul A, Abdel-Aty H, Schulz-Menger J, Friedrich MG, Taylor AJ. Acute oedema in the evaluation of microvascular reperfusion and myocardial salvage in reperfused myocardial infarction with cardiac magnetic resonance imaging. *Eur J Radiol* 2010;74(3):e12-7.

- Pickering G, Gibson SJ, Serbouti S, Odetti P, Ferraz Gonçalves J, Gambassi G, Guarda H, Hamers JP, Lussier D, Monacelli F, Pérez-Castejón Garrote JM, Zwakhalen SM, Barneto D; Collectif Doloplus, Wary B. Reliability study in five languages of the translation of the pain behavioural scale Doloplus. *Eur J Pain* 2010;14(5):545.e1-10.
- Pilcher DV, Hoffman T, Thomas C, Ernest D, Hart GK. Risk-adjusted continuous outcome monitoring with an EWMA chart: could it have detected excess mortality among intensive care patients at Bundaberg Base Hospital? *Crit Care Resusc* 2010;12(1):36-41.
- Pilgrim CH, McIntyre R, Bailey M. Prospective audit of parastomal hernia: prevalence and associated comorbidities. *Dis Colon Rectum* 2010;53(1):71-6.
- Pirola L. A special BioFactors issue dedicated to resveratrol. *Biofactors* 2010;36(5):329-30. Editorial.
- Pirola L, Balcerczyk A, Okabe J, El-Osta A. Epigenetic phenomena linked to diabetic complications. *Nat Rev Endocrinol* 2010;6(12):665-75. Review.
- Plebanski M, Katsara M, Sheng KC, Xiang SD, Apostolopoulos V. Methods to measure T-cell responses. *Expert Rev Vaccines* 2010;9(6):595-600. Review.
- Plinke C, Cox HS, Zarkua N, Karimovich HA, Braker K, Diel R, Rüscherdes S, Feuerriegel S, Niemann S. *embCAB* sequence variation among ethambutol-resistant *Mycobacterium tuberculosis* isolates without *embB306* mutation. *J Antimicrob Chemother* 2010;65(7):1359-67.
- Plotnik AN, Foley PT, Koukounaras J, Lyon SM. How I do it: lymphangiography. *J Med Imaging Radiat Oncol* 2010;54(1):43-6.
- Polizzotto MN, Jones P, Cameron PU, Spelman D, Woolley IJ. The influence of splenectomy on the infectious complications and outcomes of people with HIV: marked, sustained elevation in risk of severe infection with bacteria including *Streptococcus pneumoniae*. *J Acquir Immune Defic Syndr* 2010;55(3):e24-6. Letter.
- Ponsford J, Schönberger M. Family functioning and emotional state two and five years after traumatic brain injury. *J Int Neuropsychol Soc* 2010;16(2):306-17.
- Popescu A, Currey J, Botti M. Multifactorial influences on and deviations from medication administration safety and quality in the acute medical/surgical context. *Worldviews Evidence Based Nurs* 2010;8(1):15-24.
- Porapakkham P, Porapakkham P, Krum H. Is target dose of beta-blocker more important than achieved heart rate or heart rate change in patients with systolic chronic heart failure? *Cardiovasc Ther* 2010;28(2):93-100.
- Porapakkham P, Porapakkham P, Zimmet H, Billah B, Krum H. B-type natriuretic peptide-guided heart failure therapy: a meta-analysis. *Arch Intern Med* 2010;170(6):507-14.
- Powell MB, Cavezza C, Hughes-Scholes C, Stoove M. Examination of the consistency of interviewer performance across three distinct interview contexts. *Psychol Crime Law* 2010;16(7):585-600.
- Powell MB, Hughes-Scholes CH, Cavezza C, Stoove MA. Examination of the stability and consistency of investigative interviewer performance across similar mock interview contexts. *Legal Criminol Psychol* 2010;15(2):243-60.
- Power I, McCormack JG, Myles PS. Regional anaesthesia and pain management. *Anaesthesia* 2010;65 Suppl 1:38-47. Review.
- PRAISE Investigators, Bhandari M, Sprague S, Dosanjh S, Wu V, Schemitsch EH. PRevalence of Abuse and Intimate Partner Violence Surgical Evaluation (P.R.A.I.S.E.): rationale and design of a multi-center cross-sectional study. *BMC Musculoskelet Disord* 2010;11:77. Protocol.
- Pransky G, Buchbinder R, Hayden J. Contemporary low back pain research – and implications for practice. *Best Pract Res Clin Rheumatol* 2010;24(2):291-8. Review.
- Prato SD, LaSalle J, Matthaei S, Bailey CJ; Global Partnership for Effective Diabetes Management. Tailoring treatment to the individual in Type 2 diabetes practical guidance from the Global Partnership for Effective Diabetes Management. *Int J Clin Pract* 2010;64(3):295-304.
- Price SE, Kinsella GJ, Ong B, Mullaly E, Phillips M, Pangnadasa-Fox L, Perre D, Storey E. Learning and memory in amnesic mild cognitive impairment: contribution of working memory. *J Int Neuropsychol Soc* 2010;16(2):342-51.
- Price TJ, Tebbutt NC, Karapetis CS, Segelov E, Pavlakis N, Cunningham D, Sobrero AF, Haller DG, Shapiro JD. Current opinion on optimal treatment choices in first-line therapy for advanced or metastatic colorectal cancer: report from the Adelaide Colorectal Tumour Group Meeting; Stockholm, Sweden; September 2008. *Clin Colorectal Cancer* 2010;9(1):8-14. Review.
- Prior LJ, Eikelis N, Armitage JA, Davern PJ, Burke SL, Montani JP, Barzel B, Head GA. Exposure to a high-fat diet alters leptin sensitivity and elevates renal sympathetic nerve activity and arterial pressure in rabbits. *Hypertension* 2010;55(4):862-8.
- Prior MJ, Foletta VC, Jowett JB, Segal DH, Carless MA, Curran JE, Dyer TD, Moses EK, McAinch AJ, Konstantopoulos N, Bozaoglu K, Collier GR, Cameron-Smith D, Blangero J, Walder KR. The characterization of Abelson helper integration site-1 in skeletal muscle and its links to the metabolic syndrome. *Metabolism* 2010;59(7):1057-64.
- Qiao JL, Shen Y, Gardiner EE, Andrews RK. Proteolysis of platelet receptors in humans and other species. *Biol Chem* 2010;391(8):893-900. Review.
- Qiu MR, Jiang L, Matthaei KI, Schoenwaelder SM, Kuffner T, Mangin P, Joseph JE, Low J, Connor D, Valenzuela SM, Curmi PM, Brown LJ, Mahaut-Smith M, Jackson SP, Breit SN. Generation and characterization of mice with null mutation of the chloride intracellular channel 1 gene. *Genesis* 2010;48(2):127-36.
- Quinn T, Wasiak J, Cleland H. An examination of factors that affect return to work following burns: a systematic review of the literature. *Burns* 2010;36(7):1021-6. Review.
- Racunica T, Cassidy D, Cicuttini F, Hall A. Trouble with tumor necrosis factor α inhibitors, not just tuberculosis. *Arthritis Care Res* 2010;62(6):770-4.
- Radzio J, Yap SH, Tachedjian G, Sluis-Cremer N. N348I in reverse transcriptase provides a genetic pathway for HIV-1 to select thymidine analogue mutations and mutations antagonistic to thymidine analogue mutations. *AIDS* 2010;24(5):659-67.
- Rahman F, Mitra B, Cameron PA, Coleridge J. Stress testing before discharge is not required for patients with low and intermediate risk of acute coronary syndrome after emergency department short stay assessment. *Emerg Med Australas* 2010;22(5):449-56.
- Raikundalia GK, Tropea J, Bain C, Black J, Brand C. Development of and usability findings for a web-based osteoarthritis guide. *J Theor Appl Inform Technol* 2010;18(1):48-61.
- Raj MD, Grodski S, Martin SA, Yeung M, Serpell JW. The role of fine-needle aspiration cytology in the surgical management of thyroid cancer. *ANZ J Surg* 2010;80(11):827-30.
- Rajasuriar R, Booth D, Solomon A, Chua K, Spelman T, Gouillou M, Schlub TE, Davenport M, Crowe S, Elliott J, Hoy J, Fairley C, Stewart G, Cameron P, Lewin SR. Biological determinants of immune reconstitution in HIV-infected patients receiving antiretroviral therapy: the role of interleukin 7 and interleukin 7 receptor α and microbial translocation. *J Infect Dis* 2010;202(8):1254-64.
- Ramiro S, Radner H, van der Heijde D, van Tubergen A, Buchbinder R, Aletaha D, Landewé RBM. Combination therapy for pain management in inflammatory arthritis. *Cochrane Database Syst Rev* 2010;(12):CD008886. Protocol.
- Rana I, Stebbing M, Kompa A, Kelly DJ, Krum H, Badoer E. Microglia activation in the hypothalamic PVN following myocardial infarction. *Brain Res* 2010;1326:96-104.
- Razali MF, Fairley CK, Hocking J, Bradshaw CS, Chen MY. Sampling technique and detection rates for pharyngeal gonorrhoea using culture. *Sex Transm Dis* 2010;37(8):522-4.

- Reade MC, Delaney A, Bailey MJ, Harrison DA, Yealy DM, Jones PG, Rowan KM, Bellomo R, Angus DC. Prospective meta-analysis using individual patient data in intensive care medicine. *Intensive Care Med* 2010;36(1):11-21.
- Reavley N, Livingston J, Buchbinder R, Bennell K, Stecki C, Osborne RH. A systematic grounded approach to the development of complex interventions: the Australian WorkHealth Program--arthritis as a case study. *Soc Sci Med* 2010;70(3):342-50.
- Redmayne M, Inyang I, Dimitriadis C, Benke G, Abramson MJ. Cordless telephone use: implications for mobile phone research. *J Environ Monit* 2010;12(4):809-12.
- Reece JC, Loh L, Alcantara S, Fernandez CS, Stambas J, Sexton A, De Rose R, Petravic J, Davenport MP, Kent SJ. Timing of immune escape linked to success or failure of vaccination. *PLoS One* 2010;5(9):pii:e12774.
- Regli A, Hockings LE, Musk GC, Roberts B, Noffsinger B, Singh B, van Heerden PV. Commonly applied positive end-expiratory pressures do not prevent functional residual capacity decline in the setting of intra-abdominal hypertension: a pig model. *Crit Care* 2010;14(4):R128.
- Reid CM, Brennan AL, Dinh DT, Billah B, Costoloe CB, Shardey GC, Ajani AE. Measuring safety and quality to improve clinical outcomes--current activities and future directions for the Australian Cardiac Procedures Registry. *Med J Aust* 2010;193(8 Suppl):S107-10.
- Reiling L, Richards JS, Fowkes FJ, Barry AE, Triglia T, Chokeyindachai W, Michon P, Tavul L, Siba PM, Cowman AF, Mueller I, Beeson JG. Evidence that the erythrocyte invasion ligand PfRh2 is a target of protective immunity against *Plasmodium falciparum* malaria. *J Immunol* 2010;185(10):6157-67.
- Repse S, Pepe S, Anderson J, McLean C, Rosenfeldt FL. Cardiac reanimation for donor heart transplantation after cardiocirculatory death. *J Heart Lung Transplant* 2010;29(7):747-55.
- Rerks-Ngarm S, Pitisuttithum P, Ganguly N, Zhang L, Tamashiro H, Cooper DA, Vun MC, Bela B, Ditangco R, Van Kinh N, Bernstein A, Osmanov S, Mathieson B, Kent SJ, Shao Y. Defining the objectives of the AIDS vaccine for Asia network: report of the WHO-UNAIDS/Global HIV vaccine enterprise regional consultation on expanding AIDS vaccine research and development capacity in Asia. *Curr Opin HIV AIDS* 2010;5(5):453-52. Statement.
- Reutens AT. Diabetes: Individualized therapy for diabetes mellitus--just a promise? *Nat Rev Endocrinol* 2010;6(8):426-7. Review.
- Ribas V, Nguyen MT, Henstridge DC, Nguyen AK, Beaven SW, Watt MJ, Hevener AL. Impaired oxidative metabolism and inflammation are associated with insulin resistance in ER α -deficient mice. *Am J Physiol Endocrinol Metab* 2010;298(2):E304-19.
- Richardson LJ, Towers RJ, Cheng AC, Currie BJ, Carapetis JR, Giffard PM, McDonald MI. Diversity of *emm* sequence types in group A beta-haemolytic streptococci in two remote Northern Territory Indigenous communities: implications for vaccine development. *Vaccine* 2010;28(32):5301-5.
- Rissel C, Bonfiglioli C, Emilsen A, Smith BJ. Representations of cycling in metropolitan newspapers--changes over time and differences between Sydney and Melbourne, Australia. *BMC Public Health* 2010;10:371.
- Ritchie CW, Harrigan S, Mastwyk M, Macfarlane S, Cheesman N, Ames D. Predictors of adherence to atypical antipsychotics (risperidone or olanzapine) in older patients with schizophrenia: an open study of 3½ years duration. *Int J Geriatr Psychiatry* 2010;25(4):411-8.
- Ritzema J, Troughton R, Melton I, Crozier I, Doughty R, Krum H, Walton A, Adamson P, Kar S, Shah PK, Richards M, Eigler NL, Whiting JS, Haas GJ, Heywood JT, Frampton CM, Abraham WT; Hemodynamically Guided Home Self-Therapy in Severe Heart Failure Patients (HOMEOSTASIS) Study Group. Physician-directed patient self-management of left atrial pressure in advanced chronic heart failure. *Circulation* 2010;121(9):1086-95.
- Robertson MS, Nichol AD, Higgins AM, Bailey MJ, Presneill JJ, Cooper DJ, Webb SA, McArthur C, MacIsaac CM; VTE Point Prevalence Investigators for the Australian and New Zealand Intensive Care Research Centre; Australian and New Zealand Intensive Care Society Clinical Trials Group. Venous thromboembolism prophylaxis in the critically ill: a point prevalence survey of current practice in Australian and New Zealand intensive care units. *Crit Care Resusc* 2010;12(1):9-15.
- Rodrigo S, Sinclair M, Leder K. A survey of the characteristics and maintenance of rainwater tanks in urban areas of South Australia. *Water Sci Technol* 2010;61(6):1569-77.
- Rolf J, Fairfax K, Turner M. Signaling pathways in T follicular helper cells. *J Immunol* 2010;184(12):6563-8. Review.
- Rolland JM, Gardner LM, O'Hehir RE. Functional regulatory T cells and allergen immunotherapy. *Curr Opin Allergy Clin Immunol* 2010;10(6):559-66.
- Ronaldson KJ, Taylor AJ, Fitzgerald PB, Topliss DJ, Elsik M, McNeil JJ. Diagnostic characteristics of clozapine-induced myocarditis identified by an analysis of 38 cases and 47 controls. *J Clin Psychiatry* 2010;71(8):976-81.
- Rosenfeld JA, Malhotra AK, Lencz T. Novel multi-nucleotide polymorphisms in the human genome characterized by whole genome and exome sequencing. *Nucleic Acids Res* 2010;38(18):6102-11.
- Rosenfeld JV. How confident can we be in predicting outcome in patients with a minimal Glasgow Coma Score? Re: Nijboer *et al.* Patients beyond salvation? Various categories of trauma patients with a minimal Glasgow Coma Score. *Injury* 2010;41(1):50-1. Editorial.
- Rosenfeld JV. How will we produce the next generation of military surgeons? Re: Skill sets and competencies for the modern military surgeon: lessons from UK military operations in Southern Afghanistan. *Injury* 2010;41(5):435-6. Editorial.
- Rosenfeld JV, Cooper DJ. What is the role for decompressive craniectomy in severe traumatic brain injury? Re: Decompressive craniectomy: surgical control of intracranial hypertension may improve outcome. *Injury* 2010;41(9):899-900. Editorial.
- Rosenfeld JV, Ford NL. Bomb blast, mild traumatic brain injury and psychiatric morbidity: a review. *Injury* 2010;41(5):437-43. Review.
- Rossell SL, Batty RA, Hughes L. Impaired semantic memory in the formation and maintenance of delusions post-traumatic brain injury: a new cognitive model of delusions. *Eur Arch Psychiatry Clin Neurosci* 2010;260(8):571-81.
- Rosso R, Kistler PM. Focal atrial tachycardia. *Heart* 2010;96(3):181-5. Review.
- Rosso R, Kistler PM. Sinus rhythm with isolated pulmonary vein fibrillation. *Heart* 2010;96(4):322.
- Rosso R, Sparks PB, Morton JB, Kistler PM, Vohra JK, Halloran K, Medi C, Kalman JM. Vagal paroxysmal atrial fibrillation: prevalence and ablation outcome in patients without structural heart disease. *J Cardiovasc Electrophysiol* 2010;21(5):489-93.
- Rostambeigi N, Shaw JE, Atkins RC, Ghanbarian A, Cameron AJ, Forbes A, Momenan A, Hadaegh F, Mirmiran P, Zimmet PZ, Azizi F, Tonkin AM. Waist circumference has heterogeneous impact on development of diabetes in different populations: longitudinal comparative study between Australia and Iran. *Diabetes Res Clin Pract* 2010;88(1):117-24.
- Rotty J, Anderson D, Garcia M, Diaz J, Van de Waarsenburg S, Howard T, Dennison A, Lewin SR, Elliott JH, Hoy J. Preliminary assessment of *Treponema pallidum*-specific IgM antibody detection and a new rapid point-of-care assay for the diagnosis of syphilis in human immunodeficiency virus-1-infected patients. *Int J STD AIDS* 2010;21(11):758-64.
- Roxburgh A, Hall WD, Degenhardt L, McLaren J, Black E, Copeland J, Mattick RP. The epidemiology of cannabis use and cannabis-related harm in Australia 1993-2007. *Addiction* 2010;105(6):1071-9.

- Roxby KJ, Crosbie JC.** Pre-treatment verification of intensity modulated radiation therapy plans using a commercial electronic portal dosimetry system. *Australas Phys Eng Sci Med* 2010;33(1):51-7.
- Royce SG, Alsop K, Haydon A, Mead L, Smith LD, Tesoriero AA, Giles GG, Jenkins MA, Hopper JL, Southey MC.** The role of SMAD4 in early-onset colorectal cancer. *Colorectal Dis* 2010;12(3):213-9.
- Rumbold AR, Bailie RS, Si D, Dowden MC, Kennedy CM, Cox RJ, O'Donoghue L, Liddle HE, Kwedza RK, Thompson SC, Burke HP, Brown AD, Weeramanthri T, Connors CM.** Assessing the quality of maternal health care in Indigenous primary care services. *Med J Aust* 2010;192(10):597-8. Letter.
- Rusjan PM, Barr MS, Farzan F, Arenovich T, Maller JJ, Fitzgerald PB, Daskalakis ZJ.** Optimal transcranial magnetic stimulation coil placement for targeting the dorsolateral prefrontal cortex using novel magnetic resonance image-guided neuronavigation. *Hum Brain Mapp* 2010;31(11):1643-52.
- Russell M, Williams M, May E, Stewart S.** The conundrum of detecting stable angina pectoris in the community setting. *Nat Rev Cardiol* 2010;7(2):106-13.
- Russell MA, Hill KD, Day LM, Blackberry I, Schwartz J, Giummarra MJ, Dorevitch M, Ibrahim JE, Dalton AC, Dharmage SC.** A randomized controlled trial of a multifactorial falls prevention intervention for older fallers presenting to emergency departments. *J Am Geriatr Soc* 2010;58(12):2265-74.
- Ruta LA, Dickinson H, Thomas MC, Denton KM, Anderson WP, Kett MM.** High-salt diet reveals the hypertensive and renal effects of reduced nephron endowment. *Am J Physiol Renal Physiol* 2010;298(6):F1384-92.
- Sabharwal A, Christelis N.** Anaesthesia for bariatric surgery. *Contin Educ Anaesth Crit Care Pain* 2010;10(4):99-103.
- Sacks-Davis R, Gold J, Aitken CK, Hellard ME.** Home-based chlamydia testing of young people attending a music festival--who will pee and post? *BMC Public Health* 2010;10:376.
- Sallinen R, Kaunisto MA, Forsblom C, Thomas M, Fagerudd J, Pettersson-Fernholm K, Groop PH, Wessman M; Finnish Diabetic Nephropathy Study Group.** Association of the *SLC22A1*, *SLC22A2*, and *SLC22A3* genes encoding organic cation transporters with diabetic nephropathy and hypertension. *Ann Med* 2010;42(4):296-304.
- Samaranayake A, Chen MY, McNeil J, Read TR, Hocking JS, Bradshaw CS, Fairley CK.** Definitions of antiretroviral treatment failure for measuring quality outcomes. *HIV Med* 2010;11(7):427-31.
- Santen RJ, Allred DC, Ardoin SP, Archer DF, Boyd N, Braunstein GD, Burger HG, Colditz GA, Davis SR, Gambacciani M, Gower BA, Henderson VW, Jarjour WN, Karas RH, Kleerekoper M, Lobo RA, Manson JE, Marsden J, Martin KA, Martin L, Pinkerton JV, Rubinow DR, Teede H, Thiboutot DM, Utian WH; Endocrine Society.** Postmenopausal hormone therapy: an Endocrine Society scientific statement. *J Clin Endocrinol Metab* 2010;95(7 Suppl 1):s1-s66. Statement.
- Saotome T, Langenberg C, Wan L, Ramchandra R, May CN, Bellomo R, Bailey M, Bagshaw SM.** Early and sustained systemic and renal hemodynamic effects of intravenous radiocontrast. *Blood Purif* 2010;29(4):339-46.
- Sashindranath M, McLean KJ, Trounce IA, Cotton RG, Cook MJ.** Early hippocampal oxidative stress is a direct consequence of seizures in the rapid electrical amygdala kindling model. *Epilepsy Res* 2010;90(3):285-94.
- Sata Y, Krum H.** The future of pharmacological therapy for heart failure. *Circ J* 2010;74(5):809-17. Review.
- Scarr B, Mitra B, Maini A, Cleland H.** Liquefied petroleum gas cold burn sustained while refueling a car. *Emerg Med Australas* 2010;22(1):82-4.
- Schlagenhauf P, Chen LH, Wilson ME, Freedman DO, Tcheng D, Schwartz E, Pandey P, Weber R, Nadal D, Berger C, von Sonnenburg F, Keystone J, Leder K; GeoSentinel Surveillance Network.** Sex and gender differences in travel-associated disease. *Clin Infect Dis* 2010;50(6):826-32.
- Schlaich MP, Grassi G.** Sympathoexcitation in calcineurin inhibitor-induced hypertension: villain or innocent bystander? *J Hypertens* 2010;28(9):1809-10. Editorial.
- Schlaich MP, Krum H, Esler MD.** New therapeutic approaches to resistant hypertension. *Curr Hypertens Rep* 2010;12(4):296-302. Review.
- Schlaich MP, Krum H, Sobotka PA.** Renal sympathetic nerve ablation: the new frontier in the treatment of hypertension. *Curr Hypertens Rep* 2010;12(1):39-46. Review.
- Schlub TE, Smyth RP, Grimm AJ, Mak J, Davenport MP.** Accurately measuring recombination between closely related HIV-1 genomes. *PLoS Comput Biol* 2010;6(4):e1000766.
- Schoenwaelder SM, Ono A, Nesbitt WS, Lim J, Jarman K, Jackson SP.** Phosphoinositide 3-kinase p110 β regulates integrin $\alpha_{\text{v}}\beta_3$ avidity and the cellular transmission of contractile forces. *J Biol Chem* 2010;285(4):2886-96.
- Schönberger M, Ponsford J.** The factor structure of the Hospital Anxiety and Depression Scale in individuals with traumatic brain injury. *Psychiatry Res* 2010;179(3):342-9.
- Schönberger M, Ponsford J, Olver J, Ponsford M.** A longitudinal study of family functioning after TBI and relatives' emotional status. *Neuropsychol Rehabil* 2010;20(6):813-29.
- Schultz L, Wapling J, Mueller I, Ntsuke PO, Senn N, Nale J, Kiniboro B, Buckee CO, Tavul L, Siba PM, Reeder JC, Barry AE.** Multilocus haplotypes reveal variable levels of diversity and population structure of *Plasmodium falciparum* in Papua New Guinea, a region of intense perennial transmission. *Malar J* 2010;9:336.
- Scott D, Blizzard L, Fell J, Ding C, Winzenberg T, Jones G.** A prospective study of the associations between 25-hydroxy-vitamin D, sarcopenia progression and physical activity in older adults. *Clin Endocrinol* 2010;73(5):581-7.
- Seach KA, Dharmage SC, Lowe AJ, Dixon JB.** Delayed introduction of solid feeding reduces child overweight and obesity at 10 years. *Int J Obes* 2010;34(10):1475-9.
- Segrave RA, Thomson RH, Cooper NR, Croft RJ, Sheppard DM, Fitzgerald PB.** Upper alpha activity during working memory processing reflects abnormal inhibition in major depression. *J Affect Disord* 2010;127(1-3):191-8.
- Selzer R, McGartland M, Foley FM, Fitzgerald PB, Ellen S, Blashki G, Lee SJ.** Mailing GP reply letters after psychiatric assessment – a pilot randomised controlled trial. *Aust Fam Physician* 2010;39(12):959-62.
- Semple BD, Bye N, Rancan M, Ziebell JM, Morganti-Kossmann MC.** Role of CCL2 (MCP-1) in traumatic brain injury (TBI): evidence from severe TBI patients and CCL2^{-/-} mice. *J Cereb Blood Flow Metab* 2010;30(4):769-82.
- Semple BD, Bye N, Ziebell JM, Morganti-Kossmann MC.** Deficiency of the chemokine receptor CXCR2 attenuates neutrophil infiltration and cortical damage following closed head injury. *Neurobiol Dis* 2010;40(2):394-403.
- Semple BD, Frugier T, Morganti-Kossmann MC.** CCL2 modulates cytokine production in cultured mouse astrocytes. *J Neuroinflammation* 2010;7:67.
- Semple BD, Kossmann T, Morganti-Kossmann MC.** Role of chemokines in CNS health and pathology: a focus on the CCL2/CCR2 and CXCL8/CXCR2 networks. *J Cereb Blood Flow Metab* 2010;30(3):459-73.
- Senathi-Raja D, Ponsford J, Schönberger M.** The association of age and time postinjury with long-term emotional outcome following traumatic brain injury. *J Head Trauma Rehabil* 2010;25(5):330-8.
- Senathi-Raja D, Ponsford J, Schönberger M.** Impact of age on long-term cognitive function after traumatic brain injury. *Neuropsychology* 2010;24(3):336-44.
- Senn N, Maraga S, Sie A, Rogerson SJ, Reeder JC, Siba P, Mueller I.** Population hemoglobin mean and anemia prevalence in Papua New Guinea: new metrics for defining malaria endemicity. *PLoS One* 2010;5(2):e9375.

- Senn N, Riddell M, Omena M, Siba P, Reeder JC, Clements CJ, Morgan C.** Measles in Papua New Guinea: an age-specific serological survey. *Vaccine* 2010;28(7):1819-23.
- Serpell J.** Management guidelines for patients with thyroid nodules. *ANZ J Surg* 2010;80(11):765-6.
- Serpell JW.** New operative surgical concept of two fascial layers enveloping the recurrent laryngeal nerve. *Ann Surg Oncol* 2010;17(6):1628-36.
- Serpell JW, Grodski S, Yeung MJ.** The motor fibers of the recurrent laryngeal nerve are located in the anterior extralaryngeal branch. *Ann Surg* 2010;251(4):774-5. Author reply.
- Severi G, Baglietto L, Muller DC, English DR, Jenkins MA, Abramson MJ, Douglass JA, Hopper JL, Giles GG.** Asthma, asthma medications, and prostate cancer risk. *Cancer Epidemiol Biomarkers Prev* 2010;19(9):2318-24.
- Shanahan EM, Buchbinder R.** The painful shoulder. *Med Today* 2010;11(9):73-79.
- Sharp AS, Tapp RJ, Thom SA, Francis DP, Hughes AD, Stanton AV, Zambanini A, O'Brien E, Chaturvedi N, Lyons S, Byrd S, Poulter NR, Sever PS, Mayet J; ASCOT Investigators.** Tissue Doppler E/E' ratio is a powerful predictor of primary cardiac events in a hypertensive population: an ASCOT substudy. *Eur Heart J* 2010;31(6):747-52.
- Shaw JE, Sicree RA, Zimmet PZ.** Global estimates of the prevalence of diabetes for 2010 and 2030. *Diabetes Res Clin Pract* 2010;87(1):4-14.
- Sheeran FL, Rydström J, Shakhparonov MI, Pestov NB, Pepe S.** Diminished NADPH transhydrogenase activity and mitochondrial redox regulation in human failing myocardium. *Biochim Biophys Acta-Bioenergetics* 2010;1797(6-7):1138-48.
- Shekleton JA, Parcell DL, Redman JR, Phipps-Nelson J, Ponsford JL, Rajaratnam SM.** Sleep disturbance and melatonin levels following traumatic brain injury. *Neurology* 2010;74(21):1732-8.
- Sheng KC, Pietersz GA, Tang CK, Ramsland PA, Apostolopoulos V.** Reactive oxygen species level defines two functionally distinctive stages of inflammatory dendritic cell development from mouse bone marrow. *J Immunol* 2010;184(6):2863-72.
- Sherry NL, Woolley IJ, Korman TM.** Autoimmune haemolytic anaemia: an unusual presentation of HIV seroconversion disease. *AIDS* 2010;24(12):1968-70. Letter.
- Shi F, Leckie C, MacIntyre G, Haviv I, Boussioutas A, Kowalczyk A.** A bi-ordering approach to linking gene expression with clinical annotations in gastric cancer. *BMC Bioinformatics* 2010;11:477.
- Short J, McDonald S, Turner T, Martis R; SEA-ORCHID Study Group.** Improving capacity for evidence-based practice in South East Asia: evaluating the role of research fellowships in the SEA-ORCHID Project. *BMC Med Educ* 2010;10:37.
- Shortreed SM, Forbes AB.** Missing data in the exposure of interest and marginal structural models: a simulation study based on the Framingham Heart Study. *Stat Med* 2010;29(4):431-43.
- Si D, Bailie R, Dowden M, Kennedy C, Cox R, O'Donoghue L, Liddle H, Kwedza R, Connors C, Thompson S, Burke H, Brown A, Weeramanthri T.** Assessing quality of diabetes care and its variation in Aboriginal community health centres in Australia. *Diabetes Metab Res Rev* 2010;26(6):464-73.
- Siebel AL, Fernandez AZ, El-Osta A.** Glycemic memory associated epigenetic changes. *Biochem Pharmacol* 2010;80(12):1853-9. Review.
- Silveira-Moriyama L, Hughes G, Church A, Ayling H, Williams DR, Petrie A, Holton J, Revesz T, Kingsbury A, Morris HR, Burn DJ, Lees AJ.** Hyposmia in progressive supranuclear palsy. *Mov Disord* 2010;25(5):570-7.
- Simmons D, Joshi S, Shaw J.** Hypomagnesaemia is associated with diabetes: not pre-diabetes, obesity or the metabolic syndrome. *Diabetes Res Clin Pract* 2010;87(2):261-6.
- Sinclair M, O'Toole J, Forbes A, Carr D, Leder K.** Health status of residents of an urban dual reticulation system. *Int J Epidemiol* 2010;39(6):1667-75.
- Singh JA, Christensen R, Wells GA, Suarez-Almazor ME, Buchbinder R, Lopez-Olivo MA, Ghogomu ET, Tugwell P.** Biologics for rheumatoid arthritis: an overview of Cochrane reviews. *Sao Paulo Med J* 2010;128(5):309-10. Review.
- Singh JA, Sperling J, Buchbinder R, McMaken K.** Surgery for shoulder osteoarthritis. *Cochrane Database Syst Rev* 2010;(10):CD008089. Review.
- Sivarajan VB, Best D, Brizard CP, Shekerdeman LS, D'Udekem Y, Horton SB, Butt W.** Improved outcomes of paediatric extracorporeal support associated with technology change. *Interact Cardiovasc Thorac Surg* 2010;11(4):400-5.
- Skilton MR.** Parity and risk of stroke: fetal origins of adult disease? *Neurology* 2010;74(18):1408-9. Editorial.
- Skilton MR, Bonnet F, Begg LM, Juonala M, Kähönen M, Lehtimäki T, Viikari JS, Raitakari OT.** Childbearing, child-rearing, cardiovascular risk factors, and progression of carotid intima-media thickness. The Cardiovascular Risk in Young Finns Study. *Stroke* 2010;41(7):1332-7.
- Slee EL, McLennan PL, Owen AJ, Theiss ML.** Low dietary fish-oil threshold for myocardial membrane n-3 PUFA enrichment independent of n-6 PUFA intake in rats. *J Lipid Res* 2010;51(7):1841-8.
- Slegers C.** Signs of change: contemporary attitudes to Australian Sign Language. *Aus Rev Appl Linguist* 2010;33(1):05.1-05.20.
- Sliwa K, Carrington M, Mayosi BM, Zigiriadis E, Mvungi R, Stewart S.** Incidence and characteristics of newly diagnosed rheumatic heart disease in urban African adults: insights from the Heart of Soweto Study. *Eur Heart J* 2010;31(6):719-27.
- Sliwa K, Carrington MJ, Klug E, Opie L, Lee G, Ball J, Stewart S.** Predisposing factors and incidence of newly diagnosed atrial fibrillation in an urban African community: insights from the Heart of Soweto Study. *Heart* 2010;96(23):1878-82.
- Sluis-Cremer N, Moore K, Radzio J, Sonza S, Tachedjian G.** N348I in HIV-1 reverse transcriptase decreases susceptibility to tenofovir and etravirine in combination with other resistance mutations. *AIDS* 2010;24(2):317-9.
- Smith E, McGuinness W.** Managing venous leg ulcers in the community: personal financial cost to sufferers. *Wound Pract Res* 2010;18(3):134-9.
- Smyth RP, Schlub TE, Grimm A, Venturi V, Chopra A, Mallal S, Davenport MP, Mak J.** Reducing chimera formation during PCR amplification to ensure accurate genotyping. *Gene* 2010;469(1-2):45-51.
- Snell GI, Westall GP.** The contribution of airway ischemia and vascular remodelling to the pathophysiology of bronchiolitis obliterans syndrome and chronic lung allograft dysfunction. *Curr Opin Organ Transplant* 2010;15(5):558-62. Review.
- Snowdon RL, Balasubramaniam R, Teh AW, Haqqani HM, Medi C, Rosso R, Vohra JK, Kistler PM, Morton JB, Sparks PB, Kalman JM.** Linear ablation of right atrial free wall flutter: demonstration of bidirectional conduction block as an endpoint associated with long-term success. *J Cardiovasc Electrophysiol* 2010;21(5):526-31.
- Soon CP, Crouch PJ, Turner BJ, McLean CA, Laughton KM, Atkin JD, Masters CL, White AR, Li QX.** Serum matrix metalloproteinase-9 activity is dysregulated with disease progression in the mutant SOD1 transgenic mice. *Neuromuscul Disord* 2010;20(4):260-6.
- Soro-Paavonen A, Zhang WZ, Venardos K, Coughlan MT, Harris E, Tong DC, Brasacchio D, Paavonen K, Chin-Dusting J, Cooper ME, Kaye D, Thomas MC, Forbes JM.** Advanced glycation end-products induce vascular dysfunction via resistance to nitric oxide and suppression of endothelial nitric oxide synthase. *J Hypertens* 2010;28(4):780-8.
- Sourris KC, Morley AL, Koitka A, Samuel P, Coughlan MT, Penfold SA, Thomas MC, Bierhaus A, Nawroth PP, Yamamoto H, Allen TJ, Walther T, Hussain T, Cooper ME, Forbes JM.** Receptor for AGEs (RAGE) blockade may exert its renoprotective effects in patients with diabetic nephropathy via induction of the angiotensin II type 2 (AT2) receptor. *Diabetologia* 2010;53(11):2442-51.

- Spanakis EK, Kourkoupetis TK, Livanis G, Peleg AY, Mylonakis E.** Statin therapy and decreased incidence of positive *Candida* cultures among patients with Type 2 diabetes mellitus undergoing gastrointestinal surgery. *Mayo Clin Proc* 2010;85(12):1073-9.
- Sparrow M.** IBD: Switching metabolism—can two drugs be better than one? *Nat Rev Gastroenterol Hepatol* 2010;7(8):420-2. Comment.
- Sparrow RL.** Red blood cell storage and transfusion-related immunomodulation. *Blood Transfus* 2010;8(Suppl 3):s26-30. Review.
- Spencer A.** No longer the poor relations. *Blood* 2010;116(19):3685-6. Comment.
- Sprung CN, Vasireddy RS, Karagiannis TC, Loveridge SJ, Martin RF, McKay MJ.** Methylproamine protects against ionizing radiation by preventing DNA double-strand breaks. *Mutat Res* 2010;692(1-2):49-52.
- Stannus O, Jones G, Cicuttini F, Parameswaran V, Quinn S, Burgess J, Ding C.** Circulating levels of IL-6 and TNF- α are associated with knee radiographic osteoarthritis and knee cartilage loss in older adults. *Osteoarthritis Cartilage* 2010;18(11):1441-7.
- Stannus OP, Jones G, Quinn SJ, Cicuttini FM, Dore D, Ding C.** The association between leptin, interleukin-6, and hip radiographic osteoarthritis in older people: a cross-sectional study. *Arthritis Res Ther* 2010;12(3):R95.
- Staples MP, Forbes A, Green S, Buchbinder R.** Shoulder-specific disability measures showed acceptable construct validity and responsiveness. *J Clin Epidemiol* 2010;63(2):163-70.
- Staples MP, March L, Lassere M, Reid C, Buchbinder R.** Health-related quality of life and continuation rate on first-line anti-tumour necrosis factor therapy among rheumatoid arthritis patients from the Australian Rheumatology Association Database. *Rheumatology* 2010;50(1):166-75.
- Stark CD, Stark RJ.** Management of migraine. *Med Today* 2010;11(4):16-24. Review.
- Stark RJ.** Investigation of headache. *Med Today* 2010;11(12):50-7. Review.
- Stasinopoulos S, Mariasegaram M, Gafforini C, Nagamine Y, Medcalf RL.** The plasminogen activator inhibitor 2 transcript is destabilized via a multi-component 3' UTR localized adenylate and uridylylate-rich instability element in an analogous manner to cytokines and oncogenes. *FEBS J* 2010;277(5):1331-44.
- Steele P, Strange G, Wlodarczyk J, Dalton B, Stewart S, Gabbay E, Keogh A.** Hemodynamics in pulmonary arterial hypertension (PAH): do they explain long-term clinical outcomes with PAH-specific therapy? *BMC Cardiovasc Disord* 2010;10:9.
- Stella J, Bartley B, Jennings P.** Introduction of a prehospital critical incident monitoring system – final results. *Prehosp Disaster Med* 2010;25(6):515-20.
- Stephens JH, Rieger NA, Farmer KC, Bell SW, Hooper JE, Hewett PJ.** Implantation of ethylene vinyl alcohol copolymer for faecal incontinence management. *ANZ J Surg* 2010;80(5):324-30.
- Sterjovski J, Roche M, Churchill MJ, Ellett A, Farrugia W, Gray LR, Cowley D, Poubourios P, Lee B, Wesselingh SL, Cunningham AL, Ramsland PA, Gorry PR.** An altered and more efficient mechanism of CCR5 engagement contributes to macrophage tropism of CCR5-using HIV-1 envelopes. *Virology* 2010;404(2):269-78.
- Stevens MP, Twin J, Fairley CK, Donovan B, Tan SE, Yu J, Garland SM, Tabrizi SN.** Development and evaluation of an *ompA* quantitative real-time PCR assay for *Chlamydia trachomatis* serovar determination. *J Clin Microbiol* 2010;48(6):2060-5.
- Stevens WS, Scott LE, Crowe SM.** Quantifying HIV for monitoring antiretroviral therapy in resource-poor settings. *J Infect Dis* 2010;201(Suppl 1):S16-26.
- Stevenson IH, Roberts-Thomson KC, Kistler PM, Edwards GA, Spence S, Sanders P, Kalman JM.** Atrial electrophysiology is altered by acute hypercapnia but not hypoxemia: implications for promotion of atrial fibrillation in pulmonary disease and sleep apnea. *Heart Rhythm* 2010;7(9):1263-70.
- Stevenson WS, Hyland CD, Zhang JG, Morgan PO, Willson TA, Gill A, Hilton AA, Viney EM, Bahlo M, Masters SL, Hennebry S, Richardson SJ, Nicola NA, Metcalf D, Hilton DJ, Roberts AW, Alexander WS.** Deficiency of 5-hydroxyisourate hydrolase causes hepatomegaly and hepatocellular carcinoma in mice. *Proc Natl Acad Sci USA* 2010;107(38):16625-30.
- Stewardson AJ, Leder K, Torresi J, Johnson DF.** Two cases of Old World cutaneous leishmaniasis in Australian travelers visiting Morocco. *J Travel Med* 2010;17(4):278-80.
- Stewart D, George J, Bond C, Diack L, Cleland J, McCaig D, Cunningham S, MacLure K, Harkness S.** Developing and validating a tool for assessment of pharmacist prescribers' consultations. *Fam Pract* 2010;27(5):520-6.
- Stewart JE, Feinle-Bisset C, Golding M, Delahunty C, Clifton PM, Keast RS.** Oral sensitivity to fatty acids, food consumption and BMI in human subjects. *Br J Nutr* 2010;104(1):145-52.
- Stewart JM, Sanson-Fisher RW, Eades SJ, Mealing NM.** Strategies for increasing high-quality intervention research in Aboriginal and Torres Strait Islander health: views of leading researchers. *Med J Aust* 2010;192(10):612-5.
- Stewart S.** Heart failure management – a team based approach. *Aust Fam Physician* 2010;39(12):894-6. Review.
- Stewart S, Brown A.** Time to get anxious about the broken hearted? *Int J Cardiol* 2010;145(2):216-7. Editorial.
- Stewart S, Ekman I, Ekman T, Odén A, Rosengren A.** Population impact of heart failure and the most common forms of cancer: a study of 1 162 309 hospital cases in Sweden (1988 to 2004). *Circ Cardiovasc Qual Outcomes* 2010;3(6):573-80.
- Stiglitz DK, Amaratunge LN, Konstantatos AH, Lindholm DE.** Intraoperative nitrous oxide as a preventive analgesic. *Anaesth Intensive Care* 2010;38(5):890-3.
- Story DA, Leslie K, Myles PS, Fink M, Poustie SJ, Forbes A, Yap S, Beavis V, Kerridge R; REASON Investigators, Australian and New Zealand College of Anaesthetists Trials Group.** Complications and mortality in older surgical patients in Australia and New Zealand (the REASON study): a multicentre, prospective, observational study. *Anaesthesia* 2010;65(10):1022-30.
- Straub A, Smolich J, d'Udekem Y, Brizard C, Peter K, Horton S.** Activation of platelets in young infants during cardiopulmonary bypass. *Thromb Haemost* 2010;103(2):466-9.
- Straznicki N, Grassi G, Esler M, Lambert G, Dixon J, Lambert E, Jordan J, Schlaich M; European Society of Hypertension Working Group on Obesity; Australian, New Zealand Obesity Society.** European Society of Hypertension Working Group on Obesity Antihypertensive effects of weight loss: myth or reality? *J Hypertens* 2010;28(4):637-43. Review.
- Straznicki NE, Lambert EA, Nestel PJ, McGrane MT, Dawood T, Schlaich MP, Masuo K, Eikelis N, de Courten B, Mariani JA, Esler MD, Socratous F, Chopra R, Sari CI, Paul E, Lambert GW.** Sympathetic neural adaptation to hypocaloric diet with or without exercise training in obese metabolic syndrome subjects. *Diabetes* 2010;59(1):71-9.
- Straznicki NE, Lambert GW, Lambert EA.** Neuroadrenergic dysfunction in obesity: an overview of the effects of weight loss. *Curr Opin Lipidol* 2010;21(1):21-30. Review.
- Stuart RL, Tan K, Mahar JE, Kirkwood CD, Andrew Ramsden C, Andrianopoulos N, Jolley D, Bawden K, Doherty R, Kotsanas D, Bradford J, Buttery JP.** An outbreak of necrotizing enterocolitis associated with norovirus genotype GII.3. *Pediatr Infect Dis J* 2010;29(7):644-7.
- Stuchbery P, Kong DC, DeSantis GN, Lo SK.** Clinical pharmacy workload in medical and surgical patients: effect of patient partition, disease complexity and major disease category. *Int J Pharm Pract* 2010;18(3):159-66.

- Stuckey R, Glass DC, LaMontagne AD, Wolfe R, Sim MR.** Risk factors for worker injury and death from occupational light vehicles crashes in New South Wales (Australia). *Am J Ind Med* 2010;53(9):931-9.
- Stuckey R, LaMontagne AD, Glass DC, Sim MR.** Estimating fatality rates in occupational light vehicle users using vehicle registration and crash data. *Aust N Z J Public Health* 2010;34(2):142-145.
- Stuckey R, LaMontagne AD, Glass DC, Sim MR.** Occupational light vehicle use: characterising the at-risk population. *J Health Safety Res Pract* 2010;2(1):17-28.
- Study of Environment on Aboriginal Resilience and Child Health Investigators.** The Study of Environment on Aboriginal Resilience and Child Health (SEARCH): study protocol. *BMC Public Health* 2010;10:287. Protocol.
- Subramaniam A, Corallo C, Nagappan R.** Dapsone-associated methaemoglobinaemia in patients with a haematologic malignancy. *Anaesth Intensive Care* 2010;38(6):1070-6.
- Sulaiman ND, Barton CA, Liaw ST, Harris CA, Sawyer SM, Abramson MJ, Robertson C, Dharmage SC.** Do small group workshops and locally adapted guidelines improve asthma patients' health outcomes? A cluster randomized controlled trial. *Fam Pract* 2010;27(3):246-54.
- Sviridov D.** Frontiers in research series: Physiological and pathological functions of high-density lipoprotein. Introduction. *Clin Exp Pharmacol Physiol* 2010;37(7):700-2. Editorial.
- Swendsen J, Conway KP, Degenhardt L, Glantz M, Jin R, Merikangas KR, Sampson N, Kessler RC.** Mental disorders as risk factors for substance use, abuse and dependence: results from the 10-year follow-up of the National Comorbidity Survey. *Addiction* 2010;105(6):1117-28.
- Symplicity HTN-2 Investigators, Esler MD, Krum H, Sobotka PA, Schlaich MP, Schmieder RE, Böhm M.** Renal sympathetic denervation in patients with treatment-resistant hypertension (The Symplicity HTN-2 Trial): a randomised controlled trial. *Lancet* 2010;376(9756):1903-9.
- Szmulewicz DJ, Faragher MW.** Weak at the knees. *J Clin Neurosci* 2010;17(10):1304.
- Szmulewicz DJ, Storey E.** Bilateral dentate nucleus hyperintensities. *J Clin Neurosci* 2010;17(11):1406.
- Takiguchi M, James C, Josefsson EC, Carmichael CL, Premrsirut PK, Lowe SW, Hamilton JR, Huang DC, Kile BT, Dickins RA.** Transgenic, inducible RNAi in megakaryocytes and platelets in mice. *J Thromb Haemost* 2010;8(12):2751-6.
- Talbot EA, Chen LH, Sanford C, McCarthy A, Leder K; Research Committee of International Society of Travel Medicine.** Travel medicine research priorities: establishing an evidence base. *J Travel Med* 2010;17(6):410-5.
- Tan AL, Sourris KC, Harcourt BE, Thallas-Bonke V, Penfold S, Andrikopoulos S, Thomas MC, O'Brien RC, Bierhaus A, Cooper ME, Forbes JM, Coughlan MT.** Disparate effects on renal and oxidative parameters following RAGE deletion, AGE accumulation inhibition, or dietary AGE control in experimental diabetic nephropathy. *Am J Physiol Renal Physiol* 2010;298(3):F763-70.
- Tan MA, Fuller M, Zabidi-Hussin ZA, Hopwood JJ, Meikle PJ.** Biochemical profiling to predict disease severity in metachromatic leukodystrophy. *Mol Genet Metab* 2010;99(2):142-8.
- Tanamas SK, Teichtahl AJ, Wluka AE, Wang Y, Davies-Tuck M, Urquhart DM, Jones G, Cicuttini FM.** The associations between indices of patellofemoral geometry and knee pain and patella cartilage volume: a cross-sectional study. *BMC Musculoskelet Disord* 2010;11:87.
- Tanamas SK, Wluka AE, Pelletier JP, Martel-Pelletier J, Abram F, Wang Y, Cicuttini FM.** The association between subchondral bone cysts and tibial cartilage volume and risk of joint replacement in people with knee osteoarthritis: a longitudinal study. *Arthritis Res Ther* 2010;12(2):R58.
- Tanamas SK, Wluka AE, Pelletier JP, Pelletier JM, Abram F, Berry PA, Wang Y, Jones G, Cicuttini FM.** Bone marrow lesions in people with knee osteoarthritis predict progression of disease and joint replacement: a longitudinal study. *Rheumatology* 2010;49(12):2413-9.
- Tandy S, Chung RW, Kamili A, Wat E, Weir JM, Meikle PJ, Cohn JS.** Hydrogenated phosphatidylcholine supplementation reduces hepatic lipid levels in mice fed a high-fat diet. *Atherosclerosis* 2010;213(1):142-7.
- Tang MM, Mah LJ, Vasireddy RS, Georgiadis GT, El-Osta A, Royce SG, Karagiannis TC.** Quantitation of gammaH2AX foci in tissue samples. *J Vis Exp* 2010;(40):pii:2063.
- Tang Y, Li H, Liu JP.** Niemann-Pick Disease Type C: from molecule to clinic. *Clin Exp Pharmacol Physiol* 2010;37(1):132-40. Review.
- Tapp RJ, O'Neil A, Shaw JE, Zimmet PZ, Oldenburg BF; AusDiab Study Group.** Is there a link between components of health-related functioning and incident impaired glucose metabolism and Type 2 diabetes? The Australian Diabetes Obesity and Lifestyle (AusDiab) study. *Diabetes Care* 2010;33(4):757-62.
- Tapp RJ, Sharp A, Stanton AV, O'Brien E, Chaturvedi N, Poulter NR, Sever PS, Thom SA, Hughes AD, Mayet J; ASCOT Investigators.** Differential effects of antihypertensive treatment on left ventricular diastolic function: an ASCOT (Anglo-Scandinavian Cardiac Outcomes Trial) substudy. *J Am Coll Cardiol* 2010;55(17):1875-81.
- Taylor AJ, Elisk M, Broughton A, Cherayath J, Leet A, Wong C, Iles L, Butler M, Pfluger H.** Combined dyssynchrony and scar imaging with cardiac magnetic resonance imaging predicts clinical response and long-term prognosis following cardiac resynchronization therapy. *Europace* 2010;12(5):708-13.
- Taylor AJ, Vaddadi G, Pfluger H, Butler M, Bergin P, Leet A, Richardson M, Cherayath J, Iles L, Kaye DM.** Diagnostic performance of multisequential cardiac magnetic resonance imaging in acute cardiac allograft rejection. *Eur J Heart Fail* 2010;12(1):45-51.
- Taylor ML, McDermott LN, Johnston PN, Haynes M, Ackerly T, Kron T, Franich RD.** Stereotactic fields shaped with a micro-multileaf collimator: systematic characterization of peripheral dose. *Phys Med Biol* 2010;55(3):873-81.
- Teh AW, Kalman JM, Kistler PM, Lee G, Sutherland F, Morton JB, Vohra JK, Sparks PB.** Prevalence of fractionated electrograms in the coronary sinus: comparison between patients with persistent or paroxysmal atrial fibrillation and a control population. *Heart Rhythm* 2010;7(9):1200-4.
- Teh AW, Kalman JM, Medi C, Rosso R, Balasubramaniam R, Lee G, Halloran K, Sparks PB, Morton JB, Vohra JK, Kistler PM.** Long-term outcome following successful catheter ablation of atrial tachycardia originating from the pulmonary veins: absence of late atrial fibrillation. *J Cardiovasc Electrophysiol* 2010;21(7):747-50.
- Teichtahl AJ, Wluka AE, Wang Y, Jones G, Ding C, Cicuttini FM.** Identification of early knee osteoarthritis – a new horizon. *Curr Rheumatol Rev* 2010;6(4):251-6. Review.
- Teichtahl AJ, Wluka AE, Wang Y, Urquhart DM, Hanna FS, Berry PA, Jones G, Cicuttini FM.** Occupational activity is associated with knee cartilage morphology in females. *Maturitas* 2010;66(1):72-6.
- Temple-Smith M, Hopkins C, Fairley C, Tomnay J, Pavlin N, Parker R, Russell D, Bowden F, Hocking J, Pitts M, Chen M.** The right thing to do: patients' views and experiences of telling partners about chlamydia. *Fam Pract* 2010;27(4):418-23.
- Teutsch S, Luciani F, Scheuer N, McCredie L, Hosseiny P, Rawlinson W, Kaldor J, Dore GJ, Dolan K, Ffrench R, Lloyd A, Haber P, Levy M.** Incidence of primary hepatitis C infection and risk factors for transmission in an Australian prisoner cohort. *BMC Public Health* 2010;10:633.
- Thallas-Bonke V, Coughlan MT, Bach LA, Cooper ME, Forbes JM.** Preservation of kidney function with combined inhibition of NADPH oxidase and angiotensin-converting enzyme in diabetic nephropathy. *Am J Nephrol* 2010;32(1):73-82.
- Thom O, Taylor DM, Wolfe RE, Myles P, Krum H, Wolfe R.** Pilot study of the prevalence, outcomes and detection of occult hypoperfusion in trauma patients. *Emerg Med J* 2010;27(6):470-2.
- Thomas MC, Cooper ME.** Into the light? Diabetic nephropathy and vitamin D. *Lancet* 2010;376(9752):1521-2. Comment.

- Thomas MC, Pickering RJ, Tsorotes D, Koitka A, Sheehy K, Bernardi S, Toffoli B, Nguyen-Huu TP, Head GA, Fu Y, Chin-Dusting J, Cooper ME, Tikellis C.** Genetic *Ace2* deficiency accentuates vascular inflammation and atherosclerosis in the ApoE knockout mouse. *Circ Res* 2010;107(7):888-97.
- Thomas S, Benke G, Dimitriadis C, Inyang I, Sim MR, Wolfe R, Croft RJ, Abramson MJ.** Use of mobile phones and changes in cognitive function in adolescents. *Occup Environ Med* 2010;67(12):861-6.
- Thompson AJ, Nguyen T, Iser D, Ayres A, Jackson K, Littlejohn M, Slavin J, Bowden S, Gane EJ, Abbott W, Lau GK, Lewin SR, Visvanathan K, Desmond PV, Locarnini SA.** Serum hepatitis B surface antigen and hepatitis B e antigen titers: disease phase influences correlation with viral load and intrahepatic hepatitis B virus markers. *Hepatology* 2010;51(6):1933-44.
- Thomson JA, Widjaja C, Darmaputra AA, Lowe A, Matheson MC, Bennett CM, Allen K, Abramson MJ, Hosking C, Hill D, Dharmage SC.** Early childhood infections and immunisation and the development of allergic disease in particular asthma in a high-risk cohort: a prospective study of allergy-prone children from birth to six years. *Pediatr Allergy Immunol* 2010;21(7):1076-85.
- Thomson KR, Varma DK.** Safe use of radiographic contrast media. *Aust Prescr* 2010;33(1):19-22. Review.
- Thomson RL, Buckley JD, Lim SS, Noakes M, Clifton PM, Norman RJ, Brinkworth GD.** Lifestyle management improves quality of life and depression in overweight and obese women with polycystic ovary syndrome. *Fertil Steril* 2010;94(5):1812-6.
- Thorp AA, Healy GN, Owen N, Salmon J, Ball K, Shaw JE, Zimmet PZ, Dunstan DW.** Deleterious associations of sitting time and television viewing time with cardiometabolic risk biomarkers: Australian Diabetes, Obesity and Lifestyle (AusDiab) study 2004-2005. *Diabetes Care* 2010;33(2):327-34.
- Thrift AG.** Case-control studies: the importance of design and conduct. *Neuroepidemiology* 2010;34(4):264-6. Review.
- Thrift AG.** Design and methods of population surveys. *Neuroepidemiology* 2010;34(4):267-9. Review.
- Thrift AG.** Systematic review of observational studies. *Neuroepidemiology* 2010;34(4):262-3. Review.
- Thrift AG, Kim J.** Missed opportunities to prevent stroke recurrence. *Clin Exp Pharmacol Physiol* 2010;37(8):773-4. Editorial.
- Thrift AG, Srikanth V, Evans RG.** How generalisable is INTERSTROKE? *Lancet* 2010;376(9752):1538-9. Letter.
- Thrift AG, Srikanth V, Fitzgerald SM, Kalyanram K, Kartik K, Hoppe CC, Walker KZ, Evans RG.** Potential roles of high salt intake and maternal malnutrition in the development of hypertension in disadvantaged populations. *Clin Exp Pharmacol Physiol* 2010;37(2):e78-90.
- Tiralongo E, Braun LA, Wilkinson JM, Spitzer O, Bailey M, Poole S, Dooley M.** Exploring the integration of complementary medicines into Australian pharmacy practice with a focus on different practice settings and background knowledge. *J Complement Integr Med* 2010;7(1):20-4.
- Toh B-H, Tu Y, Cao Z, Cooper ME, Chai Z.** Role of cell division autoantigen 1 (CDA1) in cell proliferation and fibrosis. *Genes* 2010;1(3):335-48. Review.
- Toikilik S, Tuges G, Lagani J, Wafiware E, Posanai E, Coghlan B, Morgan C, Sweeney R, Miller N, Abramov A, Stewart A, Clements CJ.** Are hard-to-reach populations being reached with immunization services? Findings from the 2005 Papua New Guinea national immunization coverage survey. *Vaccine* 2010;28(29):4673-9.
- Tong SY, Lilliebridge RA, Bishop EJ, Cheng AC, Holt DC, McDonald MI, Giffard PM, Currie BJ, Boutlis CS.** Clinical correlates of Pantone-Valentine leukocidin (PVL), PVL isoforms, and clonal complex in the *Staphylococcus aureus* population of Northern Australia. *J Infect Dis* 2010;202(5):760-9.
- Tonkin AM, Chen L.** Effects of combination lipid therapy in the management of patients with Type 2 diabetes mellitus in the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial. *Circulation* 2010;122(8):850-2.
- Tonna S, El-Osta A, Cooper ME, Tikellis C.** Metabolic memory and diabetic nephropathy: potential role for epigenetic mechanisms. *Nat Rev Nephrol* 2010;6(6):332-41. Review.
- Tovar-Lopez FJ, Rosengarten G, Westein E, Khoshmanesh K, Jackson SP, Mitchell A, Nesbitt WS.** A microfluidics device to monitor platelet aggregation dynamics in response to strain rate micro-gradients in flowing blood. *Lab Chip* 2010;10(3):291-302. Erratum: *Lab Chip* 2010;10(24):3427.
- Tramontana AR, George B, Hurt AC, Doyle JS, Langan K, Reid AB, Harper JM, Thursky K, Worth LJ, Dwyer DE, Morrissey CO, Johnson PD, Buising KL, Harrison SJ, Seymour JF, Fergusson PE, Wang B, Denholm JT, Cheng AC, Slavin M.** Oseltamivir resistance in adult oncology and hematology patients infected with pandemic (H1N1) 2009 virus, Australia. *Emerg Infect Dis* 2010;16(7):1068-75.
- Tran L, Kompa AR, Kemp W, Phrommintikul A, Wang BH, Krum H.** Chronic urotensin-II infusion induces diastolic dysfunction and enhances collagen production in rats. *Am J Physiol Heart Circ Physiol* 2010;298(2):H608-13.
- Tsantikos E, Oracki SA, Quilici C, Anderson GP, Tarlinton DM, Hibbs ML.** Autoimmune disease in Lyn-deficient mice is dependent on an inflammatory environment established by IL-6. *J Immunol* 2010;184(3):1348-60.
- Turner T, Harris C, Green S.** A pragmatic model for evidence-based guideline development in hospitals. *Clin Gov* 2010;15(4):255-65.
- Turrell G, Haynes M, Burton NW, Giles-Corti B, Oldenburg B, Wilson LA, Giskes K, Brown WJ.** Neighborhood disadvantage and physical activity: baseline results from the HABITAT multilevel longitudinal study. *Ann Epidemiol* 2010;20(3):171-81.
- Tuxen D, Hodgson C.** Lung recruitment: who, when and how? *Crit Care Resusc* 2010;12(3):141-2. Editorial.
- Tye-Din JA, Anderson RP, Ffrench RA, Brown GJ, Hodsman P, Siegel M, Botwick W, Shreeniwas R.** The effects of ALV003 pre-digestion of gluten on immune response and symptoms in celiac disease *in vivo*. *Clin Immunol* 2010;134(3):289-95.
- Tyssen D, Henderson SA, Johnson A, Sterjovski J, Moore K, La J, Zanin M, Sonza S, Karellas P, Giannis MP, Krippner G, Wesselingh S, McCarthy T, Gorry PR, Ramsland PA, Cone R, Paull JR, Lewis GR, Tachedjian G.** Structure activity relationship of dendrimer microbicides with dual action antiviral activity. *PLoS One* 2010;5(8):e12309.
- Ukoumunne OC, Williamson E, Forbes AB, Gulliford MC, Carlin JB.** Confounder-adjusted estimates of the risk difference using propensity score-based weighting. *Stat Med* 2010;29(30):3126-36.
- Upton DJ, Cooper NR, Laycock R, Croft RJ, Fitzgerald PB.** A combined rTMS and ERP investigation of dorsolateral prefrontal cortex involvement in response inhibition. *Clin EEG Neurosci* 2010;41(3):127-31.
- Upton DJ, Enticott PG, Croft RJ, Cooper NR, Fitzgerald PB.** ERP correlates of response inhibition after-effects in the stop signal task. *Exp Brain Res* 2010;206(4):351-8.
- Urquhart DM, Hanna FS, Brennan SL, Wluka AE, Leder K, Cameron PA, Graves SE, Cicuttini FM.** Incidence and risk factors for deep surgical site infection after primary total hip arthroplasty: a systematic review. *J Arthroplasty* 2010;25(8):1216-22.e3. Review.
- Vaddadi G, Corcoran SJ, Esler M.** Management strategies for recurrent vasovagal syncope. *Intern Med J* 2010;40(8):554-60. Review.
- Vaddadi G, Esler MD, Dawood T, Lambert E.** Persistence of muscle sympathetic nerve activity during vasovagal syncope. *Eur Heart J* 2010;31(16):2027-33.
- Vainiola T, Pettilä V, Roine RP, Räsänen P, Rissanen AM, Sintonen H.** Comparison of two utility instruments, the EQ-5D and the 15D, in the critical care setting. *Intensive Care Med* 2010;36(12):2090-3.

- Vallely A, Page A, Dias S, Siba P, Lupiwa T, Law G, Millan J, Wilson DP, Murray JM, Toole M, Kaldor JM.** The prevalence of sexually transmitted infections in Papua New Guinea: a systematic review and meta-analysis. *PLoS One* 2010;5(12):e15586.
- Van de Velde NC, Mottram PL, Powell MS, Lim B, Holmdahl R, Hogarth PM.** Transgenic mice expressing human FcγRIIIa have enhanced sensitivity to induced autoimmune arthritis as well as elevated Th17 cells. *Immunol Lett* 2010;130(1-2):82-8.
- Van Deerlin VM, Sleiman PM, Martinez-Lage M, Chen-Plotkin A, Wang LS, Graff-Radford NR, Dickson DW, Rademakers R, Boeve BF, Grossman M, Arnold SE, Mann DM, Pickering-Brown SM, Seelaar H, Heutink P, van Swieten JC, Murrell JR, Ghetti B, Spina S, Grafman J, Hodges J, Spillantini MG, Gilman S, Lieberman AP, Kaye JA, Woltjer RL, Bigio EH, Mesulam M, Al-Sarraj S, Troakes C, Rosenberg RN, White CL 3rd, Ferrer I, Lladó A, Neumann M, Kretzschmar HA, Hulette CM, Welsh-Bohmer KA, Miller BL, Alzualde A, Lopez de Munain A, McKee AC, Gearing M, Levey AI, Lah JJ, Hardy J, Rohrer JD, Lashley T, Mackenzie IR, Feldman HH, Hamilton RL, Dekosky ST, van der Zee J, Kumar-Singh S, Van Broeckhoven C, Mayeux R, Vonsattel JP, Troncoso JC, Kril JJ, Kwok JB, Halliday GM, Bird TD, Ince PG, Shaw PJ, Cairns NJ, Morris JC, McLean CA, DeCarli C, Ellis WG, Freeman SH, Frosch MP, Growdon JH, Perl DP, Sano M, Bennett DA, Schneider JA, Beach TG, Reiman EM, Woodruff BK, Cummings J, Vinters HV, Miller CA, Chui HC, Alafuzoff I, Hartikainen P, Seilhean D, Galasko D, Masliah E, Cotman CW, Tuñón MT, Martínez MC, Munoz DG, Carroll SL, Marson D, Riederer PF, Bogdanovic N, Schellenberg GD, Hakonarson H, Trojanowski JQ, Lee VM.** Common variants at 7p21 are associated with frontotemporal lobar degeneration with TDP-43 inclusions. *Nat Genet* 2010;42(3):234-9.
- van Dooren K, Kinner SA, Butler T.** Young prisoners: an important group for health research. *J Correct Health Care* 2010;16(4):322-7.
- Van Doornum S, Brand C, Sundararajan V, Ajani AE, Wicks IP.** Rheumatoid arthritis patients receive less frequent acute reperfusion and secondary prevention therapy after myocardial infarction compared with the general population. *Arthritis Res Ther* 2010;12(5):R183.
- van Uffelen JG, Wong J, Chau JY, van der Ploeg HP, Riphagen I, Gilson ND, Burton NW, Healy GN, Thorp AA, Clark BK, Gardiner PA, Dunstan DW, Bauman A, Owen N, Brown WJ.** Occupational sitting and health risks: a systematic review. *Am J Prev Med* 2010;39(4):379-88. Review.
- Vasireddy RS, Karagiannis TC, El-Osta A.** γ -radiation-induced γ H2AX formation occurs preferentially in actively transcribing euchromatic loci. *Cell Mol Life Sci* 2010;67(2):291-4.
- Vasireddy RS, Tang MM, Mah LJ, Georgiadis GT, El-Osta A, Karagiannis TC.** Evaluation of the spatial distribution of γ H2AX following ionizing radiation. *J Vis Exp* 2010;(42):pii: 2203.
- Vickery J, Thorpe A, Johnson M, Robinson K, Bamblett M, Williams G, Austin G, Bamblett R, Peters B, Bell L, McInnes L, Bamblett E, Thorpe L, Kennedy H, Clarke A, Waddell N, Phillips G, Selam J, Vickery A, Muir J, Smith R, Atkinson N, Fredericks BL, Rose D, Morris I, Arbon V, Rose M, Brabham W.** Indigenous research and broader issues in the Academy. *World Indigenous Nations Higher Ed Consort J* 2010;(1):1-10.
- Vogt L, Chiurciu C, Chadha-Boreham H, Danaietash P, Dingemans J, Hadjadj S, Krum H, Navis G, Neuhart E, Parvanova AI, Ruggerenti P, Woittiez AJ, Zimlichman R, Remuzzi G, de Zeeuw D; PROLONG (PROteinuria Lowering with urOteNsin receptor antaGonists) Study Group.** Effect of the urotensin receptor antagonist palosuran in hypertensive patients with Type 2 diabetic nephropathy. *Hypertension* 2010;55(5):1206-9.
- Voineskos AN, Farzan F, Barr MS, Lobaugh NJ, Mulsant BH, Chen R, Fitzgerald PB, Daskalakis ZJ.** The role of the corpus callosum in transcranial magnetic stimulation induced interhemispheric signal propagation. *Biol Psychiatry* 2010;68(9):825-31.
- Volz J, Carvalho TG, Ralph SA, Gilson P, Thompson J, Tonkin CJ, Langer C, Crabb BS, Cowman AF.** Potential epigenetic regulatory proteins localise to distinct nuclear sub-compartments in *Plasmodium falciparum*. *Int J Parasitol* 2010;40(1):109-21.
- Waddell LB, Kreissl M, Kornberg A, Kennedy P, McLean C, Labarre-Vila A, Monnier N, North KN, Clarke NF.** Evidence for a dominant negative disease mechanism in cap myopathy due to TPM3. *Neuromuscul Disord* 2010;20(7):464-6.
- Wade J, Sterjovski J, Gray L, Roche M, Chiavaroli L, Ellett A, Jakobsen MR, Cowley D, Pereira Cda F, Saksena N, Wang B, Purcell DF, Karlsson I, Fenyö EM, Churchill M, Gorry PR.** Enhanced CD4+ cellular apoptosis by CCR5-restricted HIV-1 envelope glycoprotein variants from patients with progressive HIV-1 infection. *Virology* 2010;396(2):246-55.
- Walker BF, French SD, Grant W, Green S.** Combined chiropractic interventions for low-back pain. *Cochrane Database Syst Rev* 2010;(4):CD005427. Review.
- Walker J, Fairley CK, Walker SM, Gurrin LC, Gunn JM, Pirotta MV, Carter R, Hocking JS.** Computer reminders for Chlamydia screening in general practice: a randomized controlled trial. *Sex Transm Dis* 2010;37(7):445-50.
- Walker KZ, O'Dea K, Gomez M, Girgis S, Colagiuri R.** Diet and exercise in the prevention of diabetes. *J Hum Nutr Diet* 2010;23(4):344-52. Review.
- Walker KZ, Woods J, Ross J, Hechtman R.** Yoghurt and dairy snacks presented for sale to an Australian consumer: are they becoming less healthy? *Public Health Nutr* 2010;13(7):1036-41.
- Wall CJ, Lynch J, Harris IA, Richardson MD, Brand C, Lowe AJ, Sugrue M; Liverpool (Sydney) and Royal Melbourne Hospitals.** Clinical practice guidelines for the management of acute limb compartment syndrome following trauma. *ANZ J Surg* 2010;80(3):151-6. Statement.
- Wallace AB, Goergen SK, Schick D, Soblusky T, Jolley D.** Multidetector CT dose: clinical practice improvement strategies from a successful optimization program. *J Am Coll Radiol* 2010;7(8):614-24.
- Walls HL, Wolfe R, Haby MM, Magliano DJ, de Courten M, Reid CM, McNeil JJ, Shaw J, Peeters A.** Trends in BMI of urban Australian adults, 1980-2000. *Public Health Nutr* 2010;31(5):631-8.
- Walton SF, Pizzutto S, Slender A, Viberg L, Holt D, Hales BJ, Kemp DJ, Currie BJ, Rolland JM, O'Hehir R.** Increased allergic immune response to *Sarcoptes scabiei* antigens in crusted versus ordinary scabies. *Clin Vaccine Immunol* 2010;17(9):1428-38.
- Wand APF, Eades SJ, Corr MJ.** Considering culture in the psychiatric assessment of Aboriginal and Torres Strait Islander peoples. *Adv Ment Health* 2010;9(1):36-48.
- Wang B, Herman-Edelstein M, Koh P, Burns W, Jandeleit-Dahm K, Watson A, Saleem M, Goodall GJ, Twigg SM, Cooper ME, Kantharidis P.** E-cadherin expression is regulated by miR-192/215 by a mechanism that is independent of the profibrotic effects of transforming growth factor- β . *Diabetes* 2010;59(7):1794-802.
- Wang BH, Bertucci MC, Ma JY, Adrahtas A, Cheung RY, Krum H.** Celecoxib, but not rofecoxib or naproxen, attenuates cardiac hypertrophy and fibrosis induced *in vitro* by angiotensin and aldosterone. *Clin Exp Pharmacol Physiol* 2010;37(9):912-8.
- Wang K, Dorrack A, Choi J, Rahim R, Edwards E.** Post-operative numbness and patient satisfaction following plate fixation of clavicular fractures. *Injury* 2010;41(10):1002-5.
- Wang LL, Yang AK, Li Y, Liu JP, Zhou SF.** Phenotype prediction of deleterious nonsynonymous single nucleotide polymorphisms in human alcohol metabolism-related genes: a bioinformatics study. *Alcohol* 2010;44(5):425-38.
- Wang X, McLennan SV, Allen TJ, Twigg SM.** Regulation of pro-inflammatory and pro-fibrotic factors by CCN2/CTGF in H9c2 cardiomyocytes. *J Cell Commun Signal* 2010;4(1):15-23.
- Wang Y, Wluka AE, Pelletier JP, Martel-Pelletier J, Abram F, Ding C, Cicuttini FM.** Meniscal extrusion predicts increases in subchondral bone marrow lesions and bone cysts and expansion of subchondral bone in osteoarthritic knees. *Rheumatology* 2010;49(5):997-1004.

- Warner TD, Armstrong PC, Curzen NP, Mitchell JA.** Dual antiplatelet therapy in cardiovascular disease: does aspirin increase clinical risk in the presence of potent P2Y₁₂ receptor antagonists? *Heart* 2010;96(21):1693-4. Comment.
- Warren P, Gabbe BJ, Schneider-Kolsky M, Bennell KL.** Clinical predictors of time to return to competition and of recurrence following hamstring strain in elite Australian footballers. *Br J Sports Med* 2010;44(6):415-9.
- Watson AM, Li J, Schumacher C, de Gasparo M, Feng B, Thomas MC, Allen TJ, Cooper ME, Jandeleit-Dahm KA.** The endothelin receptor antagonist avosentan ameliorates nephropathy and atherosclerosis in diabetic apolipoprotein E knockout mice. *Diabetologia* 2010;53(1):192-203.
- Watson LF, Rayner JA, King J, Jolley D, Forster D, Lumley J.** Modelling sequence of prior pregnancies on subsequent risk of very preterm birth. *Paediatr Perinat Epidemiol* 2010;24(5):416-23.
- Watson LF, Rayner JA, King J, Jolley D, Forster D, Lumley J.** Modelling prior reproductive history to improve prediction of risk for very preterm birth. *Paediatr Perinat Epidemiol* 2010;24(5):402-15.
- Watts R, Botti M, Hunter M.** Nurses' perspectives on the care provided to cancer patients. *Cancer Nurs* 2010;33(2):E1-8.
- Weeks GR, Marriott J, George J.** Australian hospital pharmacists' experiences of a UK non-medical prescribing course. *J Pharm Pract Res* 2010;40(3):187-93.
- Wei J, Waithman J, Lata R, Mifsud NA, Cebon J, Kay T, Smyth MJ, Sadler AJ, Chen W.** Influenza A infection enhances cross-priming of CD8⁺ T cells to cell-associated antigens in a TLR7- and type I IFN-dependent fashion. *J Immunol* 2010;185(10):6013-22.
- Wein S, Voskoboinik A, Wein L, Billah B, Krum H.** Extending the boundaries of cardiac resynchronization therapy: efficacy in atrial fibrillation, New York heart association class II, and narrow QRS heart failure patients. *J Card Fail* 2010;16(5):432-8.
- Weisinger RS, Armitage JA, Chen N, Begg DP, Mathai ML, Jayasooriya AP, Sinclair AJ, Weisinger HS.** Sodium appetite in adult rats following ω -3 polyunsaturated fatty acid deficiency in early development. *Appetite* 2010;55(3):393-7.
- Weller C, Buchbinder R, Johnston RV.** Interventions for helping people adhere to compression treatments for venous leg ulceration. *Cochrane Database Syst Rev* 2010;(2):CD008378. Protocol.
- Weller C, Jolley D, Wolfe R, Myers K, McNeil J.** Effect of elasticity on subbandage pressure of three layer tubular compression bandages in healthy volunteers: a RCT. *J Wound Care* 2010;19(10):417, 420-3.
- Weller C, McNeil J.** CONSORT 2010 statement: updated guidelines can improve wound care. *J Wound Care* 2010;19(8):347-53. Statement.
- Weller CD, Evans S, Reid CM, Wolfe R, McNeil J.** Protocol for a pilot randomised controlled clinical trial to compare the effectiveness of a graduated three layer straight tubular bandaging system when compared to a standard short stretch compression bandaging system in the management of people with venous ulceration: 3VSS2008. *Trials* 2010;11:26. Protocol.
- Weller CD, Jolley D, McNeil J.** Sub-bandage pressure difference of tubular form and short-stretch compression bandages: *in-vivo* randomised controlled trial. *Wound Pract Res* 2010;18(2):100-105.
- Weller CD, McNeil J, Evans S, Reid C.** Improving venous ulcer healing: designing and reporting randomised controlled trials. *Int Wound J* 2010;7(1):41-7.
- Wengritzky R, Mettho T, Myles PS, Burke J, Kakos A.** Development and validation of a postoperative nausea and vomiting intensity scale. *Br J Anaesth* 2010;104(2):158-66.
- Wentworth JM, Naselli G, Brown WA, Doyle L, Phipson B, Smyth GK, Wabitsch M, O'Brien PE, Harrison LC.** Pro-inflammatory CD11c+CD206+ adipose tissue macrophages are associated with insulin resistance in human obesity. *Diabetes* 2010;59(7):1648-56.
- Westhorpe RN, Ball C.** The history of capnography. *Anaesth Intensive Care* 2010;38(4):611. Comment.
- Westwood JA, Darcy PK, Guru PM, Sharkey J, Pegram HJ, Amos SM, Smyth MJ, Kershaw MH.** Three agonist antibodies in combination with high-dose IL-2 eradicate orthotopic kidney cancer in mice. *J Transl Med* 2010;8:42.
- Whelan-Goodinson R, Ponsford JL, Schönberger M, Johnston L.** Predictors of psychiatric disorders following traumatic brain injury. *J Head Trauma Rehabil* 2010;25(5):320-9.
- White H, Walsh W, Brown A, Riddell T, Tonkin A, Jeremy R, Brieger D, Zeitz C, Kritharides L.** Rheumatic heart disease in indigenous populations. *Heart Lung Circ* 2010;19(5-6):273-81. Review.
- White SL, Polkinghorne KR, Atkins RC, Chadban SJ.** Comparison of the prevalence and mortality risk of CKD in Australia using the CKD Epidemiology Collaboration (CKD-EPI) and Modification of Diet in Renal Disease (MDRD) Study GFR estimating equations: the AusDiab (Australian Diabetes, Obesity and Lifestyle) Study. *Am J Kidney Dis* 2010;55(4):660-70.
- White V, Currey J, Botti M.** Multidisciplinary team developed and implemented protocols to assist mechanical ventilation weaning: a systematic review of literature. *Worldviews Evidence Based Nurs* 2010;8(1):51-9. Review.
- Whittle SL, Richards BL, Husni E, Buchbinder R.** Opioid therapy for treating rheumatoid arthritis pain. *Cochrane Database Syst Rev* 2010;(12):CD003113. Protocol.
- Wierman ME, Nappi RE, Avis N, Davis SR, Labrie F, Rosner W, Shifren JL.** Endocrine aspects of women's sexual function. *J Sex Med* 2010;7(1 Pt 2):561-85.
- Wightman F, Solomon A, Khoury G, Green JA, Gray L, Gorry PR, Ho YS, Saksena NK, Hoy J, Crowe SM, Cameron PU, Lewin SR.** Both CD31⁺ and CD31⁻ naive CD4⁺ T cells are persistent HIV type 1-infected reservoirs in individuals receiving antiretroviral therapy. *J Infect Dis* 2010;202(11):1738-48.
- Wijesekera H, Seneviratne S, Woolley I.** Cardiac computed tomography in endocarditis. *Heart* 2010;96(19):1604.
- Wijeyewickrema LC, Gardiner EE, Gladigau EL, Berndt MC, Andrews RK.** Nerve growth factor inhibits metalloproteinase-disintegrins and blocks ectodomain shedding of platelet glycoprotein VI. *J Biol Chem* 2010;285(16):11793-9.
- Wijndaele K, Healy GN, Dunstan DW, Barnett AG, Salmon J, Shaw JE, Zimmet PZ, Owen N.** Increased cardiometabolic risk is associated with increased TV viewing time. *Med Sci Sports Exerc* 2010;42(8):1511-8.
- Wilkinson-Berka JL, Heine R, Tan G, Cooper ME, Hatzopoulos KM, Fletcher EL, Binger KJ, Campbell DJ, Miller AG.** RILLKMP5V influences the vasculature, neurons and glia, and (pro)renin receptor expression in the retina. *Hypertension* 2010;55(6):1454-60.
- Wilkinson-Berka JL, Miller AG, Fletcher EL.** Prorenin and the (pro)renin receptor: do they have a pathogenic role in the retina? *Front Biosci* 2010;2:1054-64. Review.
- Williams DR.** Comment on "Association between mild parkinsonian signs and mortality in an elderly male cohort in China." *J Clin Neurosci* 2010;17(2):177. Comment.
- Williams DR, Lees AJ.** What features improve the accuracy of the clinical diagnosis of progressive supranuclear palsy-parkinsonism (PSP-P)? *Mov Disord* 2010;25(3):357-62.
- Williams ED, Tapp RJ, Magliano DJ, Shaw JE, Zimmet PZ, Oldenburg BF.** Health behaviours, socioeconomic status and diabetes incidence: the Australian Diabetes Obesity and Lifestyle Study (AusDiab). *Diabetologia* 2010;53(12):2538-45.
- Williams G, Galna B, Morris ME, Oliver J.** Spatiotemporal deficits and kinematic classification of gait following a traumatic brain injury: a systematic review. *J Head Trauma Rehabil* 2010;25(5):366-74. Review.
- Williams SB, Brand CA, Hill KD, Hunt SB, Moran H.** Feasibility and outcomes of a home-based exercise program on improving balance and gait stability in women with lower-limb osteoarthritis or rheumatoid arthritis: a pilot study. *Arch Phys Med Rehabil* 2010;91(1):106-14.

- Williamson A, Redman S, Dadds M, Daniels J, D'Este C, Raphael B, Eades S, Skinner T.** Acceptability of an emotional and behavioural screening tool for children in Aboriginal Community Controlled Health Services in urban NSW. *Aust N Z J Psychiatry* 2010;44(10):894-900.
- Williamson AB, Raphael B, Redman S, Daniels J, Eades SJ, Mayers N.** Emerging themes in Aboriginal child and adolescent mental health: findings from a qualitative study in Sydney, New South Wales. *Med J Aust* 2010;192(10):603-5.
- Willis C, Bird R, Mullany D, Cameron P, Phillips L.** Use of rFVIIa for critical bleeding in cardiac surgery: dose variation and patient outcomes. *Vox Sang* 2010;98(4):531-7.
- Willis CD, Cameron PA, Phillips L.** Variation in the use of recombinant activated factor VII in critical bleeding. *Intern Med J* 2010;40(7):486-93.
- Willis CD, Gabbe BJ, Jolley D, Harrison JE, Cameron PA.** Predicting trauma patient mortality: ICD [or ICD-10-AM] versus AIS based approaches. *ANZ J Surg* 2010;80(11):802-6.
- Willis CD, Stoelwinder JU, Lecky FE, Woodford M, Jenks T, Bouamra O, Cameron PA.** Applying composite performance measures to trauma care. *J Trauma* 2010;69(2):256-62.
- Wilson DW, Crabb BS, Beeson JG.** Development of fluorescent *Plasmodium falciparum* for *in vitro* growth inhibition assays. *Malar J* 2010;9:152.
- Wilson J, Hair C, Knight R, Catto-Smith A, Bell S, Kamm M, Desmond P, McNeil J, Connell W.** High incidence of inflammatory bowel disease in Australia: a prospective population-based Australian incidence study. *Inflamm Bowel Dis* 2010;16(9):1550-6.
- Winzenberg T, Oldenburg B, Jones G.** Bone density testing: an under-utilised and under-researched health education tool for osteoporosis prevention? *Nutrients* 2010;2(9):985-996.
- Wise FM.** Coronary heart disease--the benefits of exercise. *Aust Fam Physician* 2010;39(3):129-33. Review.
- Wong G, Leckie C, Gorringer KL, Haviv I, Campbell IG, Kowalczyk A.** Exploiting sequence similarity to validate the sensitivity of SNP arrays in detecting fine-scaled copy number variations. *Bioinformatics* 2010;26(8):1007-14.
- Wong GK, Poon WS, Chan MT, Boet R, Gin T, Ng SC, Zee BC; IMASH Investigators.** Intravenous magnesium sulphate for aneurysmal subarachnoid hemorrhage (IMASH): a randomized, double-blinded, placebo-controlled, multicenter Phase III trial. *Stroke* 2010;41(5):921-6.
- Wong SE, Winbanks CE, Samuel CS, Hewitson TD.** Lectin histochemistry for light and electron microscopy. *Methods Mol Biol* 2010;611:103-14.
- Wong WC, Fairley CK.** Sexual health consultation for men who have sex with men. *Br Med J* 2010;340:c958.
- Wood BM, Nicholas MK, Blyth F, Asghari A, Gibson S.** The utility of the short version of the Depression Anxiety Stress Scales (DASS-21) in elderly patients with persistent pain: does age make a difference? *Pain Med* 2010;11(12):1780-90.
- Wood BM, Nicholas MK, Blyth F, Asghari A, Gibson S.** Assessing pain in older people with persistent pain: the NRS is valid but only provides part of the picture. *J Pain* 2010;11(12):1259-66.
- Wood C, Harkess M, Griffiths A, Tamblyn S, Kelly M, Lawrence S, Morey S, Maddicks-Law J, Levvey B.** Long term issues after heart and lung transplantation: an Australian nursing collaborative study. *Transplant J Australas* 2010;19(3):22-25.
- Wood-Baker R, Cochrane B, Naughton MT.** Cardiovascular mortality and morbidity in chronic obstructive pulmonary disease: the impact of bronchodilator treatment. *Intern Med J* 2010;40(2):94-101.
- Woodcock EA, Grubb DR, Iliades P.** Potential treatment of cardiac hypertrophy and heart failure by inhibiting the sarcolemmal binding of phospholipase C β 1b. *Curr Drug Targets* 2010;11(8):1032-40. Review.
- Woollard KJ, Chin-Dusting J.** P-selectin antagonism in inflammatory disease. *Curr Pharm Des* 2010;16(37):4113-8. Review.
- Woollard KJ, de Courten MPJ, Sourris KC, Drew BG, Henstridge DC, Kingwell B, Cooper M, Howlett KF, Forbes JM, de Couten B.** The association between soluble P-selectin and insulin sensitivity in healthy humans. *J Clin Metab Diabetes* 2010;1(1):19-26.
- Workman B, Dickson F, Green S.** Early dementia--optimal management in general practice. *Aust Fam Physician* 2010;39(10):722-6. Review.
- Wright EJ, Grund B, Robertson K, Brew BJ, Roediger M, Bain MP, Drummond F, Vjecha MJ, Hoy J, Miller C, Penalva de Oliveira AC, Pumpradit W, Shlay JC, El-Sadr W, Price RW; INSIGHT SMART Study Group.** Cardiovascular risk factors associated with lower baseline cognitive performance in HIV-positive persons. *Neurology* 2010;75(10):864-73.
- Wycherley TP, Brinkworth GD, Keogh JB, Noakes M, Buckley JD, Clifton PM.** Long-term effects of weight loss with a very low carbohydrate and low fat diet on vascular function in overweight and obese patients. *J Intern Med* 2010;267(5):452-61.
- Xiang SD, Selomulya C, Ho J, Apostolopoulos V, Plebanski M.** Delivery of DNA vaccines: an overview on the use of biodegradable polymeric and magnetic nanoparticles. *Wiley Interdiscip Rev Nanomed Nanobiotechnol* 2010;2(3):205-18. Review.
- Xiao H, Xu J, Zhou X, Stankovich J, Pan F, Zhang Z, Xu S, Lian L, Ding C.** Associations between the genetic polymorphisms of MTHFR and outcomes of methotrexate treatment in rheumatoid arthritis. *Clin Exp Rheumatol* 2010;28(5):728-33.
- Xiao H, Zhang YY, Du XJ, Lu ZZ.** Developmental changes in the geometry, function and responsiveness of the mouse heart to beta-adrenergic stimulation as determined by high-resolution echocardiography. *Clin Exp Pharmacol Physiol* 2010;37(8):826-32.
- Xu C, Jackson M, Scuffham PA, Wootton R, Simpson P, Whitty J, Wolfe R, Wainwright CE.** A randomized controlled trial of an interactive voice response telephone system and specialist nurse support for childhood asthma management. *J Asthma* 2010;47(7):768-73.
- Xu Q, Chakravorty A, Bathgate RA, Dart AM, Du XJ.** Relaxin therapy reverses large artery remodeling and improves arterial compliance in senescent spontaneously hypertensive rats. *Hypertension* 2010;55(5):1260-6.
- Yang AK, Zhou ZW, Wei MQ, Liu JP, Zhou SF.** Modulators of multidrug resistance associated proteins in the management of anticancer and antimicrobial drug resistance and the treatment of inflammatory diseases. *Curr Top Med Chem* 2010;10(17):1732-56. Review.
- Yang KC, Foeger NC, Marionneau C, Jay PY, McMullen JR, Nerbonne JM.** Homeostatic regulation of electrical excitability in physiological cardiac hypertrophy. *J Physiol* 2010;588(Pt 24):5015-32.
- Yang SN, Burch ML, Tannock LR, Evanko S, Osman N, Little PJ.** Transforming growth factor- β regulation of proteoglycan synthesis in vascular smooth muscle: contribution to lipid binding and accelerated atherosclerosis in diabetes. *J Diabetes* 2010;2(4):233-42. Review.
- Yarmo-Roberts D, Freak-Poli RL, Cooper B, Noonan T, Stolewinder J, Reid CM.** The heart of the matter: health status of aged care clients receiving home- and community-based care. *J Aging Res* 2010;2010:275303.
- Yau JW, Kawasaki R, Islam FM, Shaw J, Zimmet P, Wang JJ, Wong TY.** Retinal fractal dimension is increased in persons with diabetes but not impaired glucose metabolism: the Australian Diabetes, Obesity and Lifestyle (AusDiab) study. *Diabetologia* 2010;53(9):2042-5.
- Yeung A, Bush M, Cummings R, Bradshaw CS, Chen M, Williams H, Denham I, Fairley CK.** Use of computerized medical records to determine the feasibility of testing for chlamydia without patients seeing a practitioner. *Int J STD AIDS* 2010;21(11):755-7.
- Ying SQ, Xiang MX, Fang L, Wang JA.** Temporal changes in circulating P-selectin, plasminogen activator inhibitor-1, magnesium, and creatine kinase after percutaneous coronary intervention. *J Zhejiang Univ Sci B* 2010;11(8):575-82.

Yong MK, Beckett CL, Leder K, Biggs BA, Torresi J, O'Brien DP.

Long-term follow-up of schistosomiasis serology post-treatment in Australian travelers and immigrants. *J Travel Med* 2010;17(2):89-93.

Yong MK, Buising KL, Cheng AC, Thursky KA. Improved susceptibility of Gram-negative bacteria in an intensive care unit following implementation of a computerized antibiotic decision support system. *J Antimicrob Chemother* 2010;65(5):1062-9.

Young AC. Non-invasive ventilation-status quo for status asthmaticus? *Respirology* 2010;15(4):585-6. Editorial.

Zalstein S, Danne P, Taylor D, Cameron P, McLellan S, Fitzgerald M, Kossmann T, Patrick I, Walker T, Cramer J, Bailey M, Magilton G. The Victorian major trauma transfer study. *Injury* 2010;41(1):102-9.

Zannad F, McMurray JJ, Drexler H, Krum H, van Veldhuisen DJ, Swedberg K, Shi H, Vincent J, Pitt B. Rationale and design of the Eplerenone in Mild Patients Hospitalization And Survival Study in Heart Failure (EMPHASIS-HF). *Eur J Heart Fail* 2010;12(6):617-22. Proccol.

Zeller KS, Idevall-Hagren O, Stefansson A, Velling T, Jackson SP, Downward J, Tengholm A, Johansson S. PI3-kinase p110 α mediates β 1 integrin-induced Akt activation and membrane protrusion during cell attachment and initial spreading. *Cell Signal* 2010;22(12):1838-48.

Zhang L, Qiao Q, Tuomilehto J, Janus ED, Lam TH, Ramachandran A, Mohan V, Stehouwer CD, Dong Y, Nakagami T, Onat A, Söderberg S; DECODE/DECODA Study Group. Distinct ethnic differences in lipid profiles across glucose categories. *J Clin Endocrinol Metab* 2010;95(4):1793-801.

Zhang P, Zhang X, Brown J, Vistisen D, Sicree R, Shaw J, Nichols G. Global healthcare expenditure on diabetes for 2010 and 2030. *Diabetes Res Clin Pract* 2010;87(3):293-301.

Zhang XT, Alomari AH, Savkin AV, Ayre PJ, Lim E, Salamonsen RF, Rosenfeldt FL, Lovell NH. *In vivo* validation of pulsatile flow and differential pressure estimation models in a left ventricular assist device. *Conf Proc IEEE Eng Med Biol Soc* 2010;2010:2517-20.

Zhang YX, Dong W, Liu H, Cicuttini F, de Courten M, Yang JB. Effects of chondroitin sulfate and glucosamine in adult patients with Kashiwanabe disease. *Clin Rheumatol* 2010;29(4):357-62.

Zhou SF, Wang B, Yang LP, Liu JP. Structure, function, regulation and polymorphism and the clinical significance of human cytochrome P450 1A2. *Drug Metab Rev* 2010;42(2):268-354. Review.

Zhou XH, Qiao Q, Zethelius B, Pyörälä K, Söderberg S, Pajak A, Stehouwer CD, Heine RJ, Jousilahti P, Ruotolo G, Nilsson PM, Calori G, Tuomilehto J; DECODE Study Group. Diabetes, prediabetes and cancer mortality. *Diabetologia* 2010;53(9):1867-76.

Ziebell JM, Morganti-Kossmann MC. Involvement of pro- and anti-inflammatory cytokines and chemokines in the pathophysiology of traumatic brain injury. *Neurotherapeutics* 2010;7(1):22-30.

Ziegler-Heitbrock L, Ancuta P, Crowe S, Dalod M, Grau V, Hart DN, Leenen PJ, Liu YJ, MacPherson G, Randolph GJ, Scherberich J, Schmitz J, Shortman K, Sozzani S, Strobl H, Zembala M, Austyn JM, Lutz MB. Nomenclature of monocytes and dendritic cells in blood. *Blood* 2010;116(16):e74-80.

Zion D, Briskman L, Loff B. Returning to history: the ethics of researching asylum seeker health in Australia. *Am J Bioeth* 2010;10(2):48-56.

Zion D, Briskman L, Loff B. Response to open peer commentaries on "Returning to history: the ethics of researching asylum seeker health in Australia." *Am J Bioeth* 2010;10(2):W6-7. Author reply.

Zomer E, Owen A, Magliano DJ, Liew D, Reid C. Validation of two Framingham cardiovascular risk prediction algorithms in an Australian population: the 'old' versus the 'new' Framingham equation. *Eur J Cardiovasc Prev Rehabil* 2010;18(1):115-20.

Zwahlen DR, Andrianopoulos N, Matheson B, Duchesne GM, Millar JL. High-dose-rate brachytherapy in combination with conformal external beam radiotherapy in the treatment of prostate cancer. *Brachytherapy* 2010;9(1):27-35.

Zwahlen DR, Smith R, Andrianopoulos N, Matheson B, Royce P, Millar JL. Prostate-specific antigen bounce after permanent iodine-125 prostate brachytherapy – an Australian analysis. *Int J Radiat Oncol Biol Phys* 2010;79(1):179-87.

Commissioned Reports

Bucello C, Degenhardt L, Calabria B, Nelson P, Roberts A, Medina-Mora ME, Compton W. *What do we know about the extent of cocaine use and dependence? Results of a global systematic review.* National Drug & Alcohol Research Centre Technical Reports, No. 308. 2010.

Calabria B, Degenhardt L, Nelson P, Bucello C, Roberts A, Lynskey M, Hall W, McLaren J. *What do we know about the extent of cannabis use and dependence? Results of a global systematic review.* National Drug & Alcohol Research Centre Technical Reports, No. 307. 2010.

Degenhardt L, Calabria B, Nelson P, Bucello C, Roberts A, Thomas J, Hall W. *What do we know about the extent of illicit meth/ amphetamine use and dependence? Results of a global systematic review.* National Drug & Alcohol Research Centre Technical Reports, No. 310. 2010.

Donovan B, Harcourt C, Egger S, Schneider K, O'Connor J, Marshall L, Chen MY, Fairley CK. *The sex industry in Western Australia: a report to the Western Australian Government.* National Centre in HIV Epidemiology and Clinical Research, University of New South Wales, Sydney. 2010.

Horyniak D, Dietze P, McElwee P. *Victorian drug trends 2009: findings from the Illicit Drug Reporting System (IDRS).* National Drug & Alcohol Research Centre Australian Drug Trends Series, No. 40. 2010.

Jeffcott S, Steele C, Cameron P. *Reducing Harm in Blood Transfusion: Investigating the Human Factors Behind 'Wrong Blood in Tube' (WBIT) Events in the Emergency Department.* Report for the Victorian Managed Insurance Authority. 2010.

Kong F, Dietze P, McElwee P. *Victorian trends in ecstasy and related drug markets 2009: findings from the Ecstasy and related Drugs Reporting System (EDRS).* National Drug & Alcohol Research Centre Australian Drug Trends Series, No. 49. 2010.

Nelson P, McLaren J, Degenhardt L, Bucello C, Calabria B, Roberts A, Briegleb C, Clark N, Wiessing L. *What do we know about the extent of opioid use and dependence? Results of a global systematic review.* National Drug & Alcohol Research Centre Technical Reports, No. 309. 2010.

Books

Braun L, Cohen M. *Herbs and Natural Supplements: An Evidence-Based Guide*, 3rd edition. 2010. ISBN 9780729539104. Churchill Livingstone Elsevier, Sydney.

Davidson P, Driscoll A, Huang N, Aho Z, Atherton J, Krum H, Sindone A, Stewart S. *Multidisciplinary Care for People with Chronic Heart Failure: Principles and Recommendations for Best Practice.* 2010. ISBN 97819211226908. National Heart Foundation of Australia.

Degenhardt L, Hall W (eds). *The Health and Psychological Effects of "Ecstasy" (MDMA) Use.* 2010. National Drug & Alcohol Research Centre Monographs, 62, University of New South Wales, Sydney.

Dietel M, Gagner M, Dixon JB, Himpens J, Madan AK. *Handbook of Obesity Surgery: Current Concepts and Therapy of Morbid Obesity and Related Diseases.* 2010. ISBN 9780968442654. FD-Communications, Toronto, Canada.

Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA. *Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs*, 6th edition. 2010. ISBN 9780340927670. Hodder Arnold, UK.

Holgate ST, Douglass JA. *Fast Facts: Asthma*, 3rd edition. 2010. ISBN 9781905832668. Health Press, Oxford, UK.

Mannan H. *Markov Modelling of Coronary Artery Revascularization Procedures: Development and Use of a Markov Simulator Model in CHD Incidence/Mortality and CARPs.* 2010. ISBN 9783838351704. Lambert Academic Publishing, Saarbrücken, Germany.

Thomas MC, Forbes J. *Maillard Reaction: Interface between Aging, Nutrition and Metabolism*. 2010. ISBN 9781849730792. Royal Society of Chemistry, Cambridge, UK.

Tintinalli JE, Cameron P, Holliman CJ. *EMS: A Practical Global Guidebook*. 2010. ISBN: 9781607950431. People's Medical Publishing House, Shelton, USA.

WHO Working Group on Critical Care in Limited-Resource Settings. *Clinical management of adult patients with complications of pandemic influenza A (H1N1) 2009: emergency guidelines for the management of patients with severe respiratory distress and shock in district hospitals in limited- resource settings*. 2010. ISBN 9789241599610. World Health Organization, Geneva, Switzerland.

Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds). *Infectious Diseases: A Clinical Approach*, 3rd edition. 2010. ISBN 9780980458695. IP Communications, Melbourne.

Book Chapters

Bach LA, Young A, Gallicchio MA, McRobert EA. Glycated proteins bind to ERM proteins and modulate their actions. In: *Thomas MC, Forbes J (eds), Maillard Reaction: Interface between Aging, Nutrition and Metabolism, Royal Society of Chemistry, Cambridge, UK*. 2010. pp31-7.

Boyd MA, Crowe SM. Indinavir. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK*. 2010.

Braun L. Complementary and alternative medicines (CAM). In: *Loke YC, In M, Ismail H, Leung L, Nguyen C, Rogers J, Wong S (eds), Pregnancy and Breastfeeding Medicines Guide, Royal Women's Hospital, Pharmacy Department, Melbourne*. 2010.

Braun L. Herb-drug interactions. In: *Phelps K, Hassed C (eds), General Practice: The Integrative Approach, Churchill Livingstone Elsevier, Sydney*. 2010. Chapter 5.

Braun L. Introduction to clinical nutrition: food and supplements. In: *Phelps K, Hassed C (eds), General Practice: The Integrative Approach, Churchill Livingstone Elsevier, Sydney*. 2010. Chapter 10.

Braun L. Principles of herbal medicine. In: *Phelps K, Hassed C (eds), General Practice: The Integrative Approach, Churchill Livingstone Elsevier, Sydney*. 2010. Chapter 4.

Brown WA, Smith AI. Operationstechnik von Wendy A. Brown und Andrew I. Smith (Australien). In: *Korenkov M (ed), Adipositaschirurgie: Verfahren, Varianten und Komplikationen, Verlag Hans Huber*. 2010. Chapter 2.1, pp59-64.

Buchbinder R. The potential for prevention: can we change a population's perspective on pain? In: *Croft P, Blyth FM, van der Windt D (eds), Chronic Pain: From Aetiology to Public Health, Oxford University Press, Oxford, UK*. 2010. Chapter 25.

Candido R, Cooper M, Jandeleit-Dahm K. The pathophysiology of macrovascular complications, including atherosclerosis in diabetes. In: *Holt RIG, Goldstein B, Flvbjerg A, Cockram C (eds), Textbook of Diabetes, 4th edition, Wiley-Blackwell*. 2010. pp637-56.

Cheng AC, Hajkowicz KM. Quinine and quinidine. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK*. 2010.

Cheng AC, Mijch AM. Darunavir. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK*. 2010.

Cheng AC, Mijch AM. Entecavir. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK*. 2010.

Cherry CL, Crowe SM. Zidovudine. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK*. 2010.

Crowe SM, Mills J. Antiviral agents. In: *Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), Infectious Diseases: A Clinical Approach, 3rd edition, IP Communications, Melbourne*. 2010. Chapter 48, pp623-37.

Crowe SM, Mills J. Delaviridine. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK*. 2010.

Crowe SM, Mills J. Vidarabine. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK*. 2010.

Currie BJ, Cheng AC. Infectious diseases in northern and central Australia. In: *Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), Infectious Diseases: A Clinical Approach, 3rd edition, IP Communications, Melbourne*. 2010. Chapter 42, pp527-40.

Davis SR, Jane F. Menopause. In: *Borgelt LM, O'Connell MB, Smith JA, Calis KA (eds), Women's Health Across the Lifespan: A Pharmacotherapeutic Approach, American Society of Health-System Pharmacists, Bethesda, USA*. 2010. Chapter 17, pp249-65.

Deitel M, Field SK, Mehta A, Dixon JB. Obstructive sleep apnea in the obese. In: *Dietel M, Gagner M, Dixon JB, Himpens J, Madan AK (eds), Handbook of Obesity Surgery: Current Concepts and Therapy of Morbid Obesity and Related Diseases, FD-Communications, Toronto, Canada*. 2010.

Deitel M, Dixon JB. Co-morbidities of morbid obesity and determination of optimal weight. In: *Dietel M, Gagner M, Dixon JB, Himpens J, Madan AK (eds), Handbook of Obesity Surgery: Current Concepts and Therapy of Morbid Obesity and Related Diseases, FD-Communications, Toronto, Canada*. 2010.

Duncan A, Crowe SM. Ritonavir. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK*. 2010.

Gibson SJ. Epidémiologie et neurophysiologie de la douleur chez la personne âgée. In: *Pickering G (ed), Douleur et Personne Agée, Institut UPSA Press, Paris, France*. 2010. Chapter 2, pp25-45.

Gottlieb T, Hoy J, McDonald M. Fever: mechanisms and symptomatic treatment. In: *Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), Infectious Diseases: A Clinical Approach, 3rd edition, IP Communications, Melbourne*. 2010. Chapter 3, pp18-26.

Green S, Cumpston M. Facilitating better linkages between evidence and health policy: the role of the Cochrane Collaboration. In: *Strengthening Evidence-based Policy in the Australian Federation, Roundtable Proceedings, Australian Government Productivity Commission, Canberra*. 2010. Chapter 8, pp189-93.

Hadjistavropoulos T, Gibson SJ, Fine PG. Pain in older persons: a brief clinical guide. In: *Lynch ME, Craig KD, Peng, PWH (eds), Clinical Pain Management: A Practical Guide, Wiley-Blackwell, Oxford, UK*. 2010. Chapter 37, pp361-70.

Hoy JF. Nevirapine. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK*. 2010.

Jackson SP, Schoenwaelder SM. PI 3-kinase p110beta regulation of platelet integrin alphaIIb beta3. In: *Rommel C, Vanhaesebroeck B, Vogt PK (eds), Current Topics in Microbiology and Immunology, Vol 346, Phosphoinositide 3-kinase in Health and Disease, Springer-Verlag, Berlin, Germany*. 2010. pp203-24.

- Jacques J, Dixon JB.** Prevention of vitamin, mineral and nutritional deficiencies. In: *Dietel M, Gagner M, Dixon JB, Himpens J, Madan AK (eds), Handbook of Obesity Surgery: Current Concepts and Therapy of Morbid Obesity and Related Diseases, FD-Communications, Toronto, Canada.* 2010.
- Jandeleit-Dahm KAM, Thomas MC, Giunti S.** Can biomarkers predict cardiovascular disease in diabetes? In: *Yagil Y (ed), International Conference on Early Disease Detection and Prevention – EDDP, Medimond International Proceedings, Bologna, Italy.* 2010. pp9-14.
- Jenney A, Steer A, Richards M.** Skin and soft tissue infections. In: *Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), Infectious Diseases: A Clinical Approach, 3rd edition, IP Communications, Melbourne.* 2010. Chapter 22, pp261-76.
- Jensen-Fangel S, Crowe SM, Ostergaard L.** Nelfinavir. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK.* 2010.
- Johnson RD, Leach JCD, Liebenberg WA, Maartens N, Cudlip SA.** Spinal surgery. In: *Johnson RD, Green AL (eds), Landmark Papers in Neurosurgery, Oxford University Press, Oxford, UK.* 2010. Chapter 4, pp165-204.
- le Roux CW, Dixon JB.** Metabolic syndrome and Type 2 diabetes: GLP-1 and other incretins. In: *Dietel M, Gagner M, Dixon JB, Himpens J, Madan AK (eds), Handbook of Obesity Surgery: Current Concepts and Therapy of Morbid Obesity and Related Diseases, FD-Communications, Toronto, Canada.* 2010.
- Leder K, O'Brien D.** Infections in returned travellers and immigrants. In: *Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), Infectious Diseases: A Clinical Approach, 3rd edition, IP Communications, Melbourne.* 2010. Chapter 39, pp487-504.
- Lewin S, Blackmore T.** Urinary tract infections. In: *Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), Infectious Diseases: A Clinical Approach, 3rd edition, IP Communications, Melbourne.* 2010. Chapter 23, pp277-87.
- Maartens NF, Kaye AH.** Transsphenoidal resection of craniopharyngiomas. In: *Laws E, Lanzino G (eds), Transsphenoidal Surgery, Saunders Elsevier, Philadelphia, USA.* 2010. Chapter 18, pp200-17.
- Mastwyk M, Williams B.** The role of nursing in the management of dementia. In: *Ames D, Burns A, O'Brien J (eds), Dementia, 4th edition, Hodder Arnold, London, UK.* 2010. Chapter 19, pp171-9.
- Masuo K, Lambert GW, Esler MD.** The role of sympathetic nerve activity in renal injury. In: *Fuchs S, Auer M (eds), Biochemistry and Histochemistry Research Developments, Nova Science Publishers, New York, USA.* 2010. Chapter 4, pp100-17.
- Mills J.** Amantadine and rimantadine. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK.* 2010.
- Mills J.** Rilpivirine. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK.* 2010.
- Mills J, Crowe S.** Fosfarnet. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK.* 2010.
- Mills J, Crowe SM.** Zalcitabine. In: *Grayson ML, Crowe SM, McCarthy JS, Mills J, Mouton JW, Norrby SR, Paterson DL, Pfaller MA (eds), Kucers' the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal and Antiviral Drugs, 6th edition, Hodder Arnold, UK.* 2010.
- Morganti-Kossmann MC, Semple B, Ziebell J, Yan E, Bye N, Kossmann T.** Modulation of immune response by head injury. In: *Berczi I (ed), New Insights to Neuroimmune Biology, Elsevier, London, UK.* 2010. Chapter 10, pp193-210.
- Naik SH, O'Keeffe M, Proietto A, Shortman HH, Wu L.** CD8+, CD8-, and plasmacytoid dendritic cell generation *in vitro* using flt3 ligand. In: *Naik S (ed), Methods in Molecular Biology, Volume 595 Part 3, Humana Press, New York, USA.* 2010. Chapter 10, pp167-76.
- Naughton MT.** Assisted ventilation in chronic congestive heart failure. In: *Elliott MW, Nava S, Schonhofer B (eds), Non-Invasive Ventilation and Weaning Principles and Practice, Hodder Arnold, London, UK.* 2010. Chapter 31, pp307-18.
- Naughton MT, Arzt M.** Treatment of obstructive and central sleep apnea in patients with heart failure. In: *Bradley TD, Floras JS (eds), Sleep Apnea: Implications in Cardiovascular and Cerebrovascular Disease, 2nd edition, Lung Biology in Health and Disease, Volume 231, Informa Healthcare, New York, USA.* 2010. Chapter 19, pp351-81.
- Nichol AD, Pettila V, Cooper DJ.** What is the optimal method for weaning and liberation from mechanical ventilation? In: *Deutschman C, Neligan P (eds), Evidence-based Practice of Critical Care, Saunders Elsevier, Philadelphia.* 2010. Chapter 7, pp37-44.
- O'Brien PE.** Role of physical activity in surgical weight loss. In: *Bouchard C, Katzmarzyk PT (eds), Physical Activity and Obesity, 2nd edition, Human Kinetics.* 2010. Chapter 56, pp229-32.
- O'Keeffe M, Fancke B, Hochrein H.** The generation of plasmacytoid and conventional dendritic cells with M-CSF. In: *Naik S (ed), Methods in Molecular Biology, Volume 595, Part 3, Humana Press, New York, USA.* 2010. Chapter 12, pp187-93.
- Oldenburg B, Absetz P, Chan CKY.** Behavioral interventions for prevention and management of chronic disease. In: *Steptoe A (ed), Handbook of Behavioural Medicine: Methods and Applications, Springer, New York, USA.* 2010. Chapter 62, pp969-88.
- Oldenburg B, de Courten M, Freen E.** The contribution to health psychology to the advancement of global health. In: *Suls JM, Davidson KW, Kaplan RM (eds), Handbook of Health Psychology and Behavioral Medicine, The Guilford Press, New York, USA.* 2010. Chapter 27, pp397-410.
- O'Leary M, Laiying F, Tunon C, Galea G, Oldenburg B.** Public health achievements and lessons for the future. In: *Dapeng J, Ljungqvist A, Troedsson H (eds), The Health Legacy of the 2008 Beijing Olympic Games: Successes and Recommendations, World Health Organization, Geneva, Switzerland.* 2010. Chapter 21, pp186-91.
- O'Reilly G, Fitzgerald M.** Structures of different national EMS systems. In: *Tintinalli JE, Cameron P, Holliman CJ (eds), EMS: A Practical Global Guidebook, People's Medical Publishing House, Shelton, USA.* 2010. Chapter 4, pp39-50.
- Padiglione A, McDonald M, Yung A.** Infections in the elderly. In: *Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), Infectious Diseases: A Clinical Approach, 3rd edition, IP Communications, Melbourne.* 2010. Chapter 34, pp433-44.
- Penfold SA, Sourris KC, Coughlan MT, Tan AL, Kaye DM, Cooper ME, Forbes JM.** The pathogenic potential of different sized AGE modified molecules via RAGE signalling pathways. In: *Thomas MC, Forbes J (eds), Maillard Reaction: Interface between Aging, Nutrition and Metabolism, Royal Society of Chemistry, Cambridge, UK.* 2010. pp21-30.
- Ritchie C, McLean C, Beyreuther K, Masters CL.** The central role of Abeta amyloid in the pathogenesis of Alzheimer's disease. In: *Burns A, Ames D, O'Brien P (eds), Dementia, 4th edition, Hodder Arnold, London, UK.* 2010. Chapter 51, pp438-50.
- Rosenfeld JV.** The military trauma system in Iraq and the in-hospital management of blast injuries and mass casualties: lessons for civilian hospitals. In: *Richman A, Shapira SC, Sharan Y (eds), Medical Response to Terror Threats, NATO Science for Peace and Security Series – E: Human and Societal Dynamics, Volume 65.* 2010. Chapter 7, pp49-55.
- Rosenfeld JV, Harvey AS.** Hypothalamic hamartoma. In: *Tonn J-C, Westphal M, Rutka JT, Oncology of CNS Tumors, 2nd edition, Springer-Verlag, Berlin, Germany.* 2010. Chapter 34, pp491-502.
- Sasadeusz J, Yung A.** Fever and acute neurological symptoms. In: *Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), Infectious Diseases: A Clinical Approach, 3rd edition, IP Communications, Melbourne.* 2010. Chapter 12, pp142-54.

- Schneider HG.** Vitamins. In: Kaplan LA, Pesce AJ (eds), *Clinical Chemistry: Theory, Analysis, Correlation, 5th edition*, Mosby Elsevier. 2010. Chapter 43, pp822-53.
- Scott A, Benjamin L.** Implementation of a free fluid protocol in an aged care facility. In: Roddam H, Skeat J (eds), *Embedding Evidence-Based Practice in Speech and Language Therapy: International Examples*, Wiley-Blackwell, Chichester, UK. 2010. Chapter 27, pp184-8.
- Siebel AL, Fernandez AZ, El-Osta A.** Glycemic memory and epigenetic changes. In: Maulik N, Maulik G (eds), *Nutrition, Epigenetic Mechanisms, and Human Disease*, Taylor & Francis Group-CRC Press, Boca Raton, USA. 2010. Chapter 9, pp215-28.
- Sim M.** Antimony. In: Baxter PJ, Aw T-C, Cockcroft A, Durrington P, Harrington JM (eds), *Hunter's Diseases of Occupations, 10th edition*, Oxford University Press, Oxford, UK. 2010. pp159.
- Sim M.** Arsenic. In: Baxter PJ, Aw T-C, Cockcroft A, Durrington P, Harrington JM (eds), *Hunter's Diseases of Occupations, 10th edition*, Oxford University Press, Oxford, UK. 2010. pp160.
- Sim M.** Molybdenum. In: Baxter PJ, Aw T-C, Cockcroft A, Durrington P, Harrington JM (eds), *Hunter's Diseases of Occupations, 10th edition*, Oxford University Press, Oxford, UK. 2010. pp221-2.
- Sim M.** Phosphorus. In: Baxter PJ, Aw T-C, Cockcroft A, Durrington P, Harrington JM (eds), *Hunter's Diseases of Occupations, 10th edition*, Oxford University Press, Oxford, UK. 2010. pp225.
- Slavin M, Chen S, Morrissey O.** Systemic fungal infections. In: Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), *Infectious Diseases: A Clinical Approach, 3rd edition*, IP Communications, Melbourne. 2010. Chapter 32, pp399-411.
- Sourris KC, Forbes JM.** The renin-angiotensin system and advanced glycation end-products in diabetic nephropathy. How important are these pathways as therapeutic targets? In: Thomas MC, Forbes J (eds), *Maillard Reaction: Interface between Aging, Nutrition and Metabolism*, Royal Society of Chemistry, Cambridge, UK. 2010. pp133-6.
- Spelman D, McDonald M.** Bone and joint infections. In: Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), *Infectious Diseases: A Clinical Approach, 3rd edition*, IP Communications, Melbourne. 2010. Chapter 18, pp215-24.
- Spelman D, McDonald M, Collignon P.** Infective endocarditis, intravascular infections and pericarditis. In: Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), *Infectious Diseases: A Clinical Approach, 3rd edition*, IP Communications, Melbourne. 2010. Chapter 19, pp225-38.
- Tao Z, Xinghuo P, Ting G, Huiyan L, Xiuying L, Xinyu L, Oldenburg B.** Risk assessment. In: Dapeng J, Ljungqvist A, Troedsson H (eds), *The Health Legacy of the 2008 Beijing Olympic Games: Successes and Recommendations*, World Health Organization, Geneva, Switzerland. 2010. Chapter 15, pp126-34.
- Thomas M, Sasadeusz J.** Neurological infections. In: Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), *Infectious Diseases: A Clinical Approach, 3rd edition*, IP Communications, Melbourne. 2010. Chapter 21, pp246-60.
- Thrift AG, Gall SL, Brown AD.** Burden of cardiovascular diseases among Aboriginal and Torres Strait Islander peoples: mortality, hospitalization and risk factors. In: Preedy VR, Watson RR (eds), *Handbook of Disease Burdens and Quality of Life Measures*, Springer, New York, USA. 2010. Chapter 264, pp919-31.
- Thrift AG, Srikanth VK.** Stroke: epidemiology and pathology. In: Fillit HM, Rockwood K, Woodhouse K (eds), *Brocklehurst's Textbook of Geriatric Medicine and Gerontology, 7th edition*, Elsevier-Saunders, Philadelphia, USA. 2010. Chapter 61, pp478-83.
- Velakoulis D, Walterfang M, Mocellin R, Pantellis C, McLean C.** Schizophrenia-like psychoses in frontotemporal dementia. In: Salzberg M, Castle D (eds), *Physical and Mental Illness: The Interface*, Australian Postgraduate Medicine, Melbourne, Australia. 2010. pp23-39.
- Vujovic O, Hoy J, Mijch A.** HIV infection and AIDS. In: Yung A, Spelman D, Street A, McCormack J, Sorrell T, Johnson P (eds), *Infectious Diseases: A Clinical Approach, 3rd edition*, IP Communications, Melbourne. 2010. Chapter 26, pp319-41.
- Wannian L, Bowen C, Feng X, Dong Z, Min L, Yiping L, Oldenburg B.** Health behaviour in the Olympic communities. In: Dapeng J, Ljungqvist A, Troedsson H (eds), *The Health Legacy of the 2008 Beijing Olympic Games: Successes and Recommendations*, World Health Organization, Geneva, Switzerland. 2010. Chapter 17, pp144-52.
- Wannian L, Min L, Dong Z, Hongpeng F, Bowen C, Oldenburg B, Galea G, Xiaozhen Z.** Assessing the public health impact of the Olympic Games. In: Dapeng J, Ljungqvist A, Troedsson H (eds), *The Health Legacy of the 2008 Beijing Olympic Games: Successes and Recommendations*, World Health Organization, Geneva, Switzerland. 2010. Chapter 3, pp15-21.
- Watson A, Thomas MC, Koh P, Figorala JL, Rahbar S, Jandeleit-Dahm K.** Attenuation of diabetes-associated atherosclerosis with LR-90, a novel inhibitor of AGE formation. In: Thomas MC, Forbes J (eds), *Maillard Reaction: Interface between Aging, Nutrition and Metabolism*, Royal Society of Chemistry, Cambridge, UK. 2010. pp137-43.
- Watson AMD, Soro-Paavonen A, Jandeleit-Dahm KA.** AGE-RAGE signalling in endothelial dysfunction and atherosclerosis in diabetes. In: Dauphinee SM, Karsan A (eds), *Endothelial Dysfunction and Inflammation*, Progress in Inflammation Research series, Springer-Birkhauser Publishing, Basel, Switzerland. 2010. pp161-74.
- Winbanks CE, Gregorevic P.** Combinatorial gene therapy strategies for treating muscular dystrophies. In: Duan D (ed), *Muscle Gene Therapy*, Springer, New York, USA. 2010. Chapter 8, pp117-40.
- Wise F.** Exercise based cardiac rehabilitation. In: Blake H (ed), *Physical Activity in Rehabilitation and Recovery: Public Health in the 21st Century*. Nova Science Publishers, New York, USA. 2010. Chapter 7, pp183-210.

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