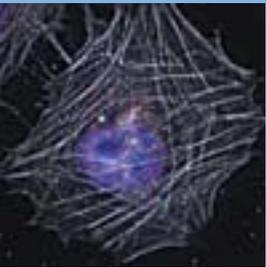




# 2008

**AMREP RESEARCH REPORT**

The Alfred Medical Research & Education Precinct



 **AMREP**

# The Alfred Medical Research and Education Precinct Research Report 2008

*Vision: to be Australia's leading centre for clinical research  
underpinned by excellence in basic research and public health.*

**AlfredHealth**



© Alfred Health 2009

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part of this publication may be reproduced by any process without prior written permission from Alfred Health. Enquiries should be directed to the Manager, Alfred and Baker IDI Research Office.

ISSN 1445-8853

# CONTENTS

*It is my pleasure to introduce the Alfred Medical Research and Education Precinct (AMREP) Research Report for 2008. AMREP is a research and educational partnership between Alfred Health, Baker IDI Heart and Diabetes Institute, Burnet Institute, Monash University, La Trobe University and Deakin University. This report provides a comprehensive overview of the research programs undertaken across all institutions based at AMREP in 2008. Statistics on a selection of indicators of research performance, monitored since 1998, are also provided.*

*Seven years on from its establishment in 2002, AMREP has expanded enormously, largely as a result of the mergers of AMREP's two medical research institutes with smaller institutes. In 2006, the Burnet Institute merged with the Austin Research Institute to become a new larger Burnet Institute, and, in 2008, the Baker Institute merged with the International Diabetes Institute to become Baker IDI Heart and Diabetes Institute. The additional staff of both enlarged institutes will be accommodated in Stage 2 of The Alfred Centre, which is currently under construction and due for completion in early 2010.*

*I would like to acknowledge the substantial contribution made by former Alfred Health Chief Executive Jennifer Williams to the advancement and support of research at AMREP and, in particular, her work (with Steve Wesselingh) in driving the planning of Stage 2 of The Alfred Centre.*

*I also wish to acknowledge the contribution of Peter McDonald, Acting Chief Executive, following Jennifer's departure from Alfred Health in February 2009 until my recent appointment.*

Andrew Way

**Chief Executive, Alfred Health  
Chair, AMREP Council**

Introduction	1
The AMREP Council	2
AMREP in 2008/2009	3
AMREP's Research Performance	4
Human Research Ethics	5
Animal Ethics	7
Ian Potter Library	7
New AMREP Core Facilities	8
Translating Research into Clinical Practice	9
Allergy, Immunology and Respiratory Medicine	11
Anaesthesia and Perioperative Medicine	13
Anatomical Pathology	14
Australian Centre for Blood Diseases	15
Australian Centre for Health Innovation	17
Baker IDI Heart and Diabetes Institute	18
Burnet Institute	21
Burns	26
Cardiothoracic Surgery	27
Cardiovascular Medicine	28
Centre for Obesity Research and Education	30
Clinical Pharmacology	31
Diagnostic and Interventional Radiology	32
Emergency and Trauma	33
Endocrinology and Diabetes	34
Epidemiology and Preventive Medicine	35
Gastroenterology	37
General Surgery	38
Global Health	39
Immunology	40
Infectious Diseases	42
Intensive Care	44
Medical Oncology	45
Medicine	46
Melanoma Service	47
Melbourne Sexual Health Centre	48
National Trauma Research Institute	49
Neurosciences	50
Neurosurgery	51
Nuclear Medicine	52
Nucleus Network	53
Nursing	54
Nutrition	55
Occupational Therapy	56
Pathology	57
Pharmacy	58
Physiotherapy	59
Psychiatry	60
Psychology	62
Radiation Oncology	63
Rehabilitation, Aged and Community Care	64
Renal Medicine	65
Rheumatology	66
Speech Pathology	67
Surgery	67
Women's Health	69
Internal Grants and Awards	70
Major External Grants	73
Postgraduate Students	87
Publications	95



# THE AMREP COUNCIL

Andrew Way  
Chair, AMREP Council

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

The Council comprises two representatives from each of the four original AMREP partners and one from each of the newer partners (Deakin University and La Trobe University). Additional members are the Chief Medical Officer and Chief Nursing Officer, Alfred Health (representing the interface between research and clinical practice), and the chairs of the two campus ethics committees and the AMREP Scientific Advisory Committee.

Following are the major items of business considered by the AMREP Council from July 2008 to June 2009:

- Progress with construction of The Alfred Centre Stage 2
- Bio21 Research Directors Forum
- Redevelopment of AMREP Animal Services
- Proposal for a new AMREP lecture theatre
- Monash Health Sciences Cluster
- Facilities management at AMREP
- Merger of International Diabetes Institute with the Baker Heart Research Institute
- Centralised multi-site ethical review and Streamlined Ethical Review Process (SERP)
- Nucleus Network
- AMREP's research performance
- Annual AMREP Research Report
- Alfred Health education strategy
- AMREP imaging consortium
- Code for Responsible Conduct of Research
- New NHMRC funding commencing in 2009
- Restructure of the Monash University Clinical School
- AMREP Global Health Forum
- Development of Critical Care Network
- Launch of new Burnet Institute logo
- Centre for Health Innovation agreement
- Campus wide internet outages
- Regular reports from The Alfred Human Research Ethics Committee, the AMREP Animal Ethics Committee, the AMREP Scientific Advisory Committee, AMREP operational working groups and Monash University Biosafety Committee (on dealings with genetically modified organisms).

Jennifer Williams, former Alfred Health Chief Executive, was Chair of the AMREP Council until February 2009 when she left to become Chief Executive of the Australian Red Cross Blood Service. Peter McDonald, Acting Chief Executive, chaired the Council from March to June 2009.

## MEMBERSHIP (JULY 2009):

**Andrew Way** (Chair)

Representative, Alfred Health

**Hilary Bolton**

Representative, Baker IDI Heart and Diabetes Institute

**Professor Mari Botti**

Representative, Deakin University

**Professor Brendan Crabb**

Representative, Burnet Institute

**Associate Professor Sharon Donovan**

Chief Nursing Officer, Alfred Health

**Professor Mark Cooper**

Chair, AMREP Scientific Advisory Committee

**Dr Lee Hamley**

Chief Medical Officer, Alfred Health

**Professor Geoff Head / Dr Raffi Gugasyan**

Chair, AMREP Animal Ethics Committee

**Professor Garry Jennings**

Representative, Baker IDI Heart and Diabetes Institute

**Professor John McNeil**

Chair, The Alfred Human Research Ethics Committee

**Professor Mark Hogarth**

Representative, Burnet Institute

**Professor Graeme Ryan**

Representative, Alfred Health

**Professor Karen Dodd**

Representative, La Trobe University

**Professor Napier Thomson / Professor Hatem Salem**

Representative, Monash University

**Professor Steve Wesselingh**

Representative, Monash University

## IN ATTENDANCE

**Heather Gallichio (Secretary)**

Manager, Alfred & Baker IDI Research Office

**Gillian Holley**

Manager, Monash University Central Clinical School

**Bill O'Shea**

Alfred Health Corporate Counsel

**Geoff McDonald**

Director, Capital and Infrastructure, Alfred Health

**Ian Martin**

General Manager, Infrastructure and Facilities Management, Baker IDI

# AMREP IN 2008/2009

Professor Graeme Ryan AC  
Director Research Strategy, Alfred Health



## Research Performance

AMREP's research performance continued to show impressive growth in 2008. Total external research funding increased from \$68 million in 2007 to \$83 million. Of this, almost \$39 million came from the NHMRC and the US National Institutes of Health. The number of masters and doctoral degree completions more than doubled from the level in 2007 to 194. Ninety-one of these were doctoral degree completions. The number of publications rose from 1028 to 1097. Impact factor analysis of published journal articles showed a substantial improvement in quality from the previous year.

AMREP researchers were awarded more than \$40 million in total direct NHMRC grant funding commencing in 2009. Highlights were an Australia Fellowship awarded to Professor Mark Cooper (Baker IDI), \$23.3 million of new Project Grant funding and \$520,000 for H1N1 influenza research announced in July 2009.

## AMREP World Health Day Global Health Forum

Global Health and Global Crises was the theme of the 3rd AMREP World Health Day Global Health Forum held on 7 April, 2009. More than 250 participants attended from South Africa, China, Indonesia, Fiji, New Zealand and Australia to consider how the global financial crisis and its subsequent economic impact will affect the future health and well-being of developing countries. There was also discussion of how the recent dramatic increase in world food prices is impacting on the state of nutrition and health in developing countries.

Keynote speakers included Susan Ivatts (Director of the Health and HIV Thematic Group, AusAID), Professor Dan Ncayiyana (a South African academic physician and editor of the *South African Medical Journal*), Dr Mark McGillivray (Chief Economist, AusAID and former Deputy-Director of the United Nations World Institute for Development Economics Research). The IGNITE group of Monash medical students also conducted a very successful display of photographs.

## Establishment of an Australian and New Zealand Critical Care Network

An innovative collaboration between Monash University, The Alfred hospital and other key health service providers will bring together Australia's leaders in critical care management and research. This alliance will tackle some of the key challenges faced by health professionals in the management of critically ill patients by undertaking research programs that improve both the management and outcomes of patients, and influence systems, policy and practice.

Addressing fundamental issues such as training clinical researchers, consolidating data systems and identifying gaps in research and clinical practice will be high on the group's agenda as it forms a cohesive and dynamic network.

## Australian Centre for Health Innovation

In 2008, the Australian Centre for Health Innovation (CHI) revisited its strategic plan, and engaged external consultants to review its business model and sustainability. As a result, the Board has been restructured to have a more commercial focus, which will ensure that CHI can continue to assist clinicians, health services and technology developers with innovations in health technology and simulation education.

Strong support from the Deans of Medicine and Health Sciences of Monash and La Trobe Universities is shown by their leadership of the newly formed Education and Research Advisory Committee. Simulation education is highly appreciated at all levels of clinical practice, and significant funding is being allocated under a new Federal initiative to expand clinical placement options and to support education for new graduates. CHI is now well positioned to take a strong role in developing and evaluating best practice models of simulation education.

## Appointment of Director, National Trauma Research Institute

Professor Russell Gruen recently commenced as Director of the National Trauma Research Institute. He has also been appointed as Head of Trauma Quality Assurance at The Alfred and a Professor of Surgery and Public Health with Monash University. Professor Gruen is a general surgeon specialising in trauma care. He was Associate Professor of Surgery at the Royal Melbourne Hospital and the University of Melbourne from 2006.

Professor Gruen's research expertise includes organisation and evaluation of systems of care, including trauma systems; audit and clinical governance; monitoring errors in trauma care; medical professionalism and evidence-based clinical practice and policy. He has been the lead investigator on research grants totalling over \$6 million, including a Victorian Neurotrauma Initiative program grant, and holds an NHMRC Clinical Career Development Award. He has over 50 peer-reviewed publications, including articles in leading journals such as *The Lancet*, *New England Journal of Medicine*, *JAMA* and *Annals of Surgery*.

## Alfred Week Research Poster Display and AMREP Research Prize

The Research Poster Display is an annual event held during Alfred Week. In 2008, 203 posters showcased research activities across AMREP. Prizes were awarded for the best posters in several categories. We gratefully acknowledge our prize sponsors as well as the contribution of the many AMREP staff who judged the posters.

The award ceremony featured an entertaining keynote address by Head of the School of Medicine at Auckland University, Professor Des Gorman, on the role of doctors in future health workforces.

Professor Gorman presented the 2008 AMREP Research Prize to Professor Jamie Cooper (Alfred Intensive Care Unit and National Trauma Research Institute). 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. Professor Cooper's article entitled 'Saline or albumin for fluid resuscitation in patients with traumatic brain injury' was published in the *New England Journal of Medicine* (impact factor: 52.589).

## AMREP Honours Scholarships

The AMREP Honours Scholarships scheme was devised to attract outstanding Science and Biomedical Science students to undertake their Honours year at AMREP. Scholarships for study in 2009 were awarded to Li Let Tan and Maria Demaria who are both studying in the Monash Department of Immunology. Photographs of Li Let and Maria are on the inside back cover of this report.

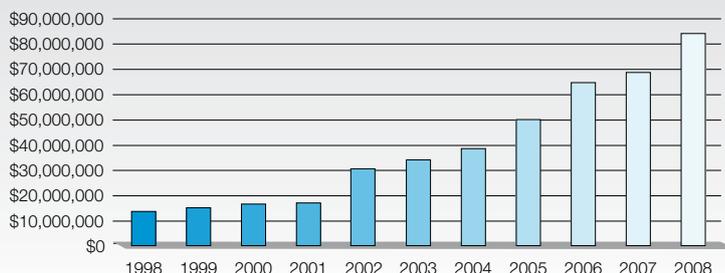
# AMREP's Research Performance

Included in these composite data for 2008 are The Alfred hospital, Baker IDI Heart and Diabetes Institute, Burnet Institute and Monash University departments based at The Alfred campus.

## 1. External research funding

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

Total external research funding received 1998-2008



Research funding received from external sources in 1998-2008.

## 2. Commercially sponsored clinical trials approved by The Alfred Human Research Ethics Committee

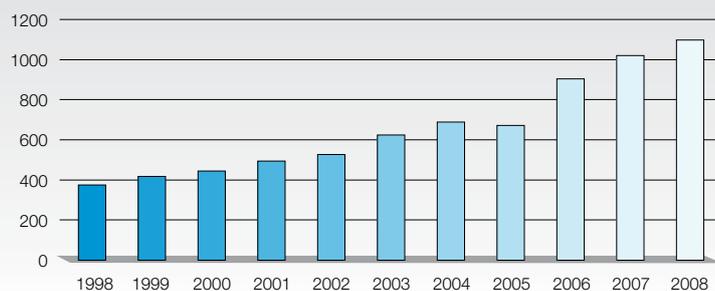
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Approvals (number)	53	40	44	41	56	67	67	95	94	93
Income (millions)	\$1.101	\$2.530	\$2.348	\$2.968	\$3.362	\$4.783	\$5.868	\$11.091	\$17.191	\$18.383

Shown above is the number of commercially sponsored clinical trials approved by The Alfred Human Research Ethics Committee in 1999-2008. Also shown is the amount received for new and ongoing commercially sponsored clinical trials.

## 3. Publications

Publications include refereed journal articles, book chapters, books and electronic publications. Abstracts, conference proceedings and 'in press' articles are not included.

Total publications 1998-2008

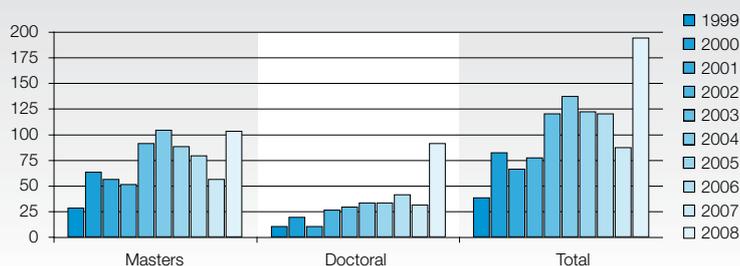


Total number of refereed journal articles, book chapters, books and electronic publications in 1998-2008.

## 4. Higher degrees

Higher degrees include completed and passed masters and doctoral level degrees.

Higher degrees completed and passed 1999-2008



Number of completed and passed higher degrees in 1999-2008.

# HUMAN RESEARCH ETHICS

Professor John McNeil AM  
Chair, The Alfred Ethics Committee



## The Alfred Ethics Committee

The Ethics Committee reviewed 259 new ethics applications in 2008. Of these, 122 were health and social sciences applications and 137 were drugs and interventions applications. A further six applications were given cross-approval; that is, they had been approved by another human research ethics committee and, in line with the *National Statement on Ethical Conduct in Human Research* (2007) (National Statement) guidelines, did not require full Committee review.

In addition, 119 'low risk' applications were considered by a sub-committee of the Ethics Committee, leaving the main Ethics Committee to consider higher risk projects. The National Statement allows institutions to establish alternative methods of ethical review for low risk research, provided the reviews are professional and competent.

The Committee continued to review a number of first-time-in-human (FTIH) applications. Reviews of high risk research involve in-depth scrutiny of the scientific aspects by the Research Review Committee and, in most cases, additional review by an external independent expert. For each such project, the Ethics Committee conducted an interview with the principal researcher about the scientific and ethical aspects of the research. Ten FTIH applications were reviewed over the period and all were approved. One study was stopped subsequently because of adverse effects.

## Research Governance

Stricter requirements for progress reporting and a revised report form have resulted in the improved monitoring of research. In addition, completion of a 'self-audit tool' has helped researchers to reflect on their research conduct and to comply with guidelines for responsible research conduct. Twelve project audits across a range of departments showed a good standard of ethics compliance; most researchers were well prepared for audits, with study files in excellent order. The audits also demonstrated a comprehensive understanding of the Ethics Committee's expectations.



## General Ethical Issues

In 2008, the General Ethical Issues Sub-committee considered issues ranging from topics of general public interest, to matters of relevance to Alfred Health, to procedural issues relating to Ethics Committee review and research governance processes at Alfred Health.

- In consultation with the Victorian Managed Insurance Authority, revised patient information about injury compensation to clinical trial participants was developed. Alfred Health is trialling the resulting wording before it is considered for wider implementation in Victorian public hospitals.
- Lobbying is under way for a 'no fault' insurance scheme for major injury resulting from participation in clinical research, similar to that of the Transport Accident Commission.
- The General Ethical Issues Sub-committee contributed to the development of guidance, by the Offices of the Public Advocate and Health Services Commissioner, on the interaction of the *Guardianship and Administration Act* and the *Health Records Act*. These two sets of legislation come into play where research involves adult participants who lack the capacity to consent to participation in research.
- A detailed submission was made to the NHMRC on the draft Issues Paper *Ethics and the exchange, sale of and profit from products derived from human tissue*, with input from a number of hospital and external experts.
- Internal guidelines and processes were developed, revised or contributed to in the following areas:
  - The enrolment of research participants in concurrent clinical trials: patient recruitment is restricted to one interventional trial at a time, with some scope for exceptions.
  - Adverse event reporting: interim guidelines were developed to appropriately monitor the safety of clinical trials in a manageable and meaningful way, until revised guidelines are issued by the NHMRC's Australian Health Ethics Committee.
  - Archiving of research records: the required period of data retention for non-interventional research projects was revised down from 'indefinitely' to seven years.
  - Access to, and governance of, databases/databanks/registries: departmental or custodian sign-off is an essential prerequisite for ethics approval.
  - Clinical photography: feedback was provided on draft organisational guidelines governing the use of clinical photography for research, educational and clinical purposes.
  - Patient privacy brochure *What happens to information about me?*: revisions were made in consultation with Health Information Services to more accurately portray the handling of patients' health information in relation to Alfred Health's research activities.
  - Hospital-industry conflicts-of-interest: Alfred Health's policies were reviewed and endorsed.
- The General Ethical Issues Sub-committee continues with its ongoing program to develop and periodically review standard risk wording for participant information sheets.
- Guidance and information developed by the General Ethical Issues Sub-committee continues to be disseminated via the Ethics Committee Newsletter, The Alfred Research and Ethics Unit website, Alfred Health weekly information packs, reports and presentations to relevant groups.

# HUMAN RESEARCH ETHICS

## COMMITTEE MEMBERSHIP

### Ethics Committee

**Professor John McNeil** (Chair)  
**Roy Olliff** (layman, Deputy Chair)  
**Dr Stephen Duffy** (Chair, Health and Social Science Group)  
**Professor Mari Botti** (nursing representative; Deputy Chair, Health and Social Science Group)  
**Marta Ago** (lawyer)  
**Emily Bingle** (laywoman – from March 2009)  
**Elizabeth Burns** (laywoman – from March 2009)  
**Tracey Caulfield** (laywoman)  
**Brad Crammond** (member with knowledge of relevant research areas – from March 2009)  
**Fiona Ellis** (lawyer)  
**Dr Judith Frayne** (member with knowledge of professional care and treatment)  
**Peter Gallagher** (layman)  
**Associate Professor Richard Gerraty** (member with knowledge of relevant research areas)  
**Linda Hornsey** (laywoman – from March 2009)  
**Reverend Scott Holmes** (minister of religion – to June 2008)  
**Reverend Marilyn Hope** (minister of religion)  
**Associate Professor David Hunt** (member with knowledge of relevant research areas)  
**Dr Michael Hurley** (member with knowledge of professional care and treatment)  
**Professor Colin Johnston** (member with knowledge of relevant research areas)  
**Associate Professor Victor Kalff** (member with knowledge of professional care and treatment)  
**Magda Karagiannakis** (lawyer – to December 2008)  
**Andrew Kauler** (layman)  
**Professor Paul Komesaroff** (member with knowledge of relevant research areas – to December 2008)  
**Professor Henry Krum** (member with knowledge of relevant research areas)  
**Maria McKenzie** (member with knowledge of relevant research areas)  
**Stephen Moloney** (lawyer)  
**Dr James Shaw** (member with knowledge of relevant research areas)  
**Fran Westmore** (laywoman – to February 2009)  
**Dr Fran Wise** (Caulfield Hospital representative; member with knowledge of professional care and treatment)  
**Robyn Wright** (nursing representative – to August 2008)  
**Rabbi Dr Gershon Zylberman** (minister of religion)  
**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)  
**Tracey Scheller** (Secretary – Health and Social Science Group) (from May 2008)

### General Ethical Issues Sub-committee

**Professor John McNeil** (Chair)  
**Professor Alison Street** (Deputy Chair)  
**Dr Susannah Ahern** (to December 2008)  
**Tracey Caulfield**  
**Brad Crammond** (from May 2008)  
**Professor Frank Dudley** (from March 2009)  
**Reverend Marilyn Hope**  
**Andrew Kauler**  
**Peter Gallagher**  
**Professor Paul Komesaroff**  
**Dr Phoebe Mainland**  
**Kathryn Marshall** (Caulfield Hospital Representative – to May 2008)  
**Elizabeth Mullaly** (Caulfield Hospital Representative – from May 2008)  
**Janine Roney** (from June 2009)  
**Professor Jeffrey Rosenfeld** (to December 2008)  
**Professor Graeme Ryan**  
**Dr Tim Sutton**  
**Professor John Wilson**  
**Michelle Wright**  
**Kordula Dunscombe** (Secretary)  
**Rowan Frew** (Ethics Manager)

### Research Review Committee

**Professor Colin Johnston** (Chair)  
**Professor Henry Krum**  
**Dr Sharon Avery** (from September 2008)  
**Dr Catherine Cherry** (from September 2008)  
**Dr Andrew Davies**  
**Dr Judith Frayne**  
**Associate Professor Richard Gerraty**  
**Dr Andrew Haydon**  
**Professor Jennifer Hoy** (to June 2008)  
**Associate Professor Victor Kalff**  
**Dr William Kemp** (from September 2008)  
**Anne Mak**  
**Dr David McIlroy** (to June 2008)  
**Professor John McNeil**  
**Dr James Shaw**  
**Dr Alan Young**  
**Rowan Frew** (Secretary)  
**Dr Angela Henjak** (Assistant to Secretary)  
**Nicole Rosenow** (Assistant to Secretary)

### Low Risk Sub-committee

**Maria McKenzie** (Chair)  
**Fran Westmore** (to February 2009)  
**Dr Fran Wise** (to January 2009)  
**Dr Phoebe Mainland** (from January 2009)  
**Scott Presnell** (from June 2009)  
**Nicole Rosenow** (Secretary)

# ANIMAL ETHICS

Professor Geoff Head (left)  
Dr Raffi Gugasyan (right)  
Chairs, AMREP Animal Ethics Committees



The AMREP Animal Ethics Committees (AEC) accept responsibility for the care and/or use of animals for scientific purposes for the Baker IDI Heart and Diabetes Institute, Burnet Institute, Monash University Central Clinical School, The Alfred, and onsite biotechnology companies.

The Bureau of Animal Welfare requires that all proposals to use live animals are assessed by a quorum of AEC members, meaning that at least one member from each of the following categories must be present: (A) veterinarian, (B) scientific, (C) animal welfare and (D) lay.

One hundred and three new experimental applications were processed in 2008 and a second committee was formed to deal with the increasing workload of applications from the precinct. Both Chairs meet regularly, and before every meeting, to ensure a consistent level of scrutiny is applied to all the applications. Many applicants, particularly those who are new to AMREP, are routinely interviewed by the AEC. The animals used during the year were principally mice and rats, but a small number of rabbits, ducks and dogs were also used. As a result of the implementation of a two committee system, Chairs now draw on the expertise of three lay people, three veterinarians and three animal welfare representatives. Scientific expertise comes from the AMREP research community.

In 2008, with the relocation of the Austin Research Institute to the precinct following its merger with the Burnet Institute, several new investigators were introduced into the system.

The AMREP Animal Ethics Committees adhere to the *NHMRC Code of Practice for the Care and Use of Animals for Scientific Purposes* and work closely with the Bureau of Animal Welfare to ensure compliance at the highest levels.

## Membership

**Professor Geoff Head** (Chair)  
**Dr Raffi Gugasyan** (Chair)  
**Dr Lynda Bonning** (Veterinarian)  
**Dr Mandy Errington** (Veterinarian)  
**Dr Kay Juliff** (Veterinarian)  
**Dr Robert Andrews** (Scientific)  
**Dr Ashish Banerjee** (Scientific)  
**Professor Jaye Chin-Dusting** (Scientific)  
**Dr Judy de Haan** (Scientific)  
**Dr Charles Hardy** (Scientific)  
**Dr Helen Kiriazis** (Scientific)  
**Nicholas Kanarev** (Animal welfare)  
**Dr Carole Webb** (Animal welfare)  
**Rachel Spiby** (Animal welfare)  
**Noel Ansell** (Lay)  
**Patricia Baitz** (Lay)  
**Mary Klein** (Lay)  
**Debra Ramsey** (Animal Care/Facility Manager)  
**David Spiteri** (Animal Care)  
**Dr Tayfur Tecirlioglu** (Animal Welfare Officer Monash University)  
**Leia Demtschyna** (Secretary)  
**Michaela Lodewyckx** (AEC Administration Support)

# 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.

## Supporting Research

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 library also provides frequent training classes for the use of electronic resources in its computer training room.

## Improving Access to Online Resources: Athens

In 2008 the library signed up to the Athens system, which provides library users with remote authenticated access to institutional resources. The Athens

system allows research staff and students access to key online resources from off-site locations, including when travelling overseas. The full capability of the system needs to be built up over time, and part of the process is registering the large number of potential staff and students on the Alfred campus. Athens will continue to be promoted in 2009.

## Education and Training: EndNote

EndNote is a popular software product which assists researchers to keep track of journal and book citations, and helps format citations during the writing of journal articles, book chapters and thesis reports. The library added EndNote training to the range of information training classes in 2008. Demand for training has been high, with most classes booked out well in advance.

## Inter-library Support

The Ian Potter Library continued to receive strong support from the Monash University Library and the La Trobe University Library in 2008. Both libraries support staffing as well as the purchase of books or journals for the collection. Many specialist texts were provided by the Monash University Library during the year to support research units based at AMREP. Monash and La Trobe students can electronically request materials from university campus libraries to be sent to the Ian Potter Library via a daily courier system.

# NEW AMREP CORE FACILITIES

## Mouse Metabolic Phenotyping Facility

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 recently 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 will enable scientists to identify and study new mouse models of complex metabolic diseases. By manipulating candidate genes in mice, scientists will gain a much better understanding of the genetic origins of obesity and related diseases, and the effects of different environmental factors.

Professor Mark Febbraio (email: [mark.february@bakeridi.edu.au](mailto:mark.february@bakeridi.edu.au)) or Dr Clinton Bruce (email: [clinton.bruce@bakeridi.edu.au](mailto:clinton.bruce@bakeridi.edu.au)) may be contacted for information on services.

## Omics (DNA and Blood Profiling) Facility



*Etan robot workstation.*

With ever evolving new and emerging technologies in the fields of genomics, epigenomics, proteomics, metabolomics and lipidomics, the opportunities to develop comprehensive systematic identification of genes and biomarkers for the study of complex diseases have never held so much promise. The DNA and Blood Profiling Facility (Omics Facility) at Baker IDI integrates these research disciplines so that health problems can be examined from a multifaceted viewpoint. This systems biology approach combines the expertise of Baker IDI scientists and the latest in technological advances, thus enabling a more precise look at complex biological questions. The bioinformatics team is developing new computational tools to analyse data in a more comprehensive manner and is available to assist researchers with their questions.

The facility holds state-of-the-art instruments, including the Illumina Genome Analyzer II (next generation sequencing) with particular research interest in ChIP sequencing, and Illumina iSCAN (gene expression and microRNA arrays), as well as a number of specialised mass spectrometers for peptide mass fingerprinting, biomolecule separation and protein profiling.

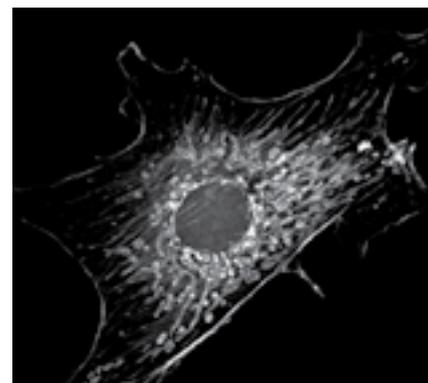
Researchers are encouraged to take full advantage of the Omics Facility. For information on the platforms available, contact Facility Manager Dr Farhad Shafiei ([farhad.shafiei@bakeridi.edu.au](mailto:farhad.shafiei@bakeridi.edu.au)).

## Monash Microimaging at AMREP (MMI@AMREP)

Monash Micro Imaging has established a node at AMREP to manage the core imaging resources of Baker IDI, the Burnet Institute and Monash University Central Clinical School. Stephen Cody has joined MMI to manage and develop the MMI@AMREP facility. Stephen coordinates and facilitates microscopy developments, and is responsible for microscopy training and research support. Training seminars and workshops are also conducted to help broaden understanding of imaging.

Currently MMI@AMREP manages three confocal and several conventional fluorescence microscopes within PC2 laboratories. There is also a dedicated deconvolution microscope within a PC3 facility if required. MMI@AMREP staff are available to assist with experimental design, and techniques such as live and fixed cell imaging, time-lapse, 3D, high resolution of large areas, fluorescence, brightfield, phase, DIC, and ion imaging such as  $\text{Ca}^{2+}$  and pH.

MMI@AMREP has an office in Baker IDI (lower ground floor) and a Monash office on floor six of the Burnet Tower. Contact Stephen Cody ([stephen.cody@med.monash.edu.au](mailto:stephen.cody@med.monash.edu.au)) for further information.



*Bovine pulmonary artery endothelial cell imaged in the MMI@AMREP facility.*

# TRANSLATING RESEARCH INTO CLINICAL PRACTICE

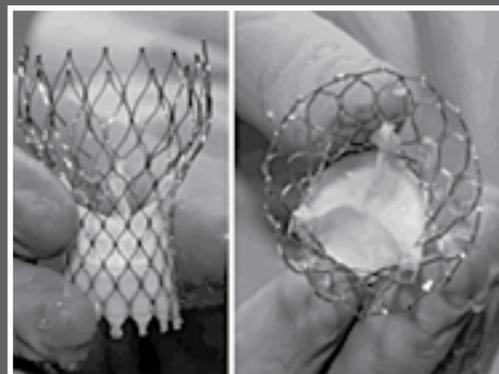
Translation of research findings into sustainable improvements in clinical practice and patient outcomes is the major goal of clinical research. Described here are some examples of changes to clinical practice resulting directly from research conducted recently within the Alfred Medical Research and Education Precinct.

## Cardiovascular medicine

Several of the projects within the Department of Cardiovascular Medicine translate the findings of biomedical research and development into clinical practice. Three studies undertaken during the past year illustrate different aspects of the translational process. Studies from Dr James Shaw and colleagues have demonstrated that the infusion of HDL (good) cholesterol can reduce inflammation in atherosclerotic plaque given several days prior to plaque removal by percutaneous atherectomy. These studies paved the way for future investigations of the effects of such therapy on clinical end-points.

Research by Professor Murray Esler and Dr Tony Walton have demonstrated that interrupting the sympathetic nervous supply of the kidneys in subjects with high blood pressure can be done safely through a percutaneous catheter, and appears to result in worthwhile gains in blood pressure reduction in subjects who are poorly controlled with medical therapy. These studies have been published in *The Lancet* and will form the basis for a definitive clinical trial to establish the place of this novel therapy.

A third example relates to the study within the department of an innovation developed by Professor David Kaye to make it possible to more safely undertake coronary angiography in subjects with renal failure. The research builds on Professor Kaye's extensive experience with similar techniques in both clinical and experimental animal research, and uses a catheter based device to extract radio-opaque dye used in cardiac angiography before it has circulated through the body and potentially caused further kidney damage.



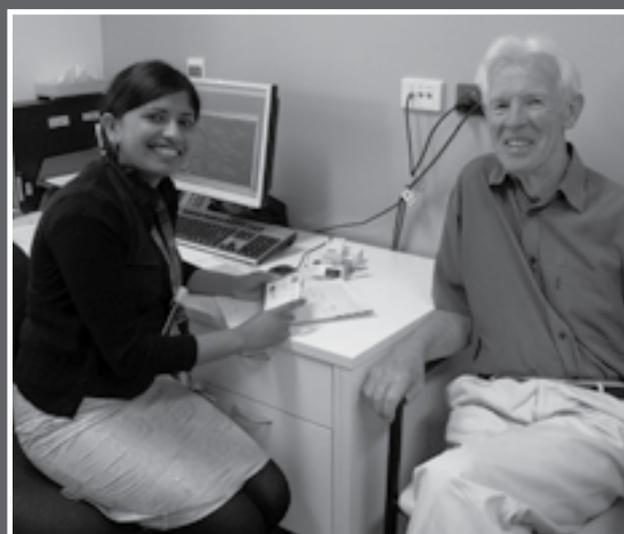
*The CoreValve ReValving System™ is currently under evaluation through research at The Alfred. It consists of a porcine pericardial bioprosthetic valve mounted and sutured in a multi-level self-expanding Nitinol frame. The bioprosthesis is housed in a collapsed position for percutaneous delivery via a catheter-based technique, and implanted within the diseased aortic valve. The procedure is performed utilising local anaesthesia (with or without conscious sedation).*

## The accuracy and completeness of patient reported medication histories compared with those obtained by a pharmacist in a preadmission clinic

The aim of this study was to prospectively evaluate the accuracy and completeness of a patient-completed questionnaire (PAQ) completed by patients attending the preadmission clinic (PAC) compared with a pharmacist's preadmission assessment.

The study was conducted over a three-week period in August 2007 with patients attending a preadmission surgical clinic. Consecutive patients had a preadmission assessment with the PAC pharmacist. Comparison was made regarding the accuracy of medication information between the PAQ and preadmission assessment by the PAC pharmacist. Of the 150 patients enrolled in the study, 33 (22.0%) had a PAQ that was totally correct. There was an average of 3.9 drug discrepancies per PAQ. The discrepancies were related to drug omitted (317), incorrect dose (24), dose omitted (110), frequency incorrect (24) or frequency omitted (63). The patient's adverse drug reaction status was recorded correctly on the PAQ for 84.7% patients.

This study has shown that a PAQ used in the setting of a preadmission surgical assessment is not accurate in four out of five patients. This highlights the positive contribution of a pharmacist working in a PAC in ensuring that an accurate medication history is available.



*Sharon Selvanayakam, Senior Clinical Pharmacist, completes a patient medication history in the preadmission clinic.*

## Pure gold in the prostate ensures our aim is true!

Investigators: J Millar, L Obesekera, M Brown, T Morgan, S Paule, L Lord, S Booth



*From left: Dr Michelle Brown, Associate Professor Jeremy Millar, Dr Bronwyn Matheson and Leah Lord, four of the large team involved in the prostate marker project.*

necessary to place a marker into the prostate. This concept was tested in a pilot study in 2005–6, where tiny gold ‘fiducial markers’ were placed in the prostate prior to treatment of men for prostate cancer. These were looked at with EPI each day before turning on the treatment beam.

This study demonstrated that gold markers could safely be placed in the prostate, visualised on a daily basis during treatment, and the beam aim adjusted correctly using this information. Higher doses of radiation can be more accurately delivered to the prostate, with a decrease in the side-effects of treatment. As a direct result of this research, in 2008 the WBRC introduced a program termed ‘Our Aim is True’, placing gold markers to ensure the most accurate targeting in all men with prostate cancer undergoing radiation treatment.

Radiation treatments to cure cancer are, in theory, simple. All that is required is a large enough dose of radiation to the tumour. This then rapidly gets complicated, since in situations like the curative treatment for prostate cancer, it is necessary to get very high doses precisely to the prostate gland consistently over an eight-week period, while avoiding high doses to the nearby bowel, bladder, nerves and blood vessels.

This problem was addressed by applying new imaging and computing technology. The William Buckland Radiotherapy Centre (WBRC) was among the first radiation departments in Australia to use Electronic Portal Imaging (EPI) to allow visualisation each day, prior to turning on the beam, to ascertain and confirm the radiation field placement. The method allows visualisation of bony landmarks near a tumour, but to see the prostate gland on a standard X-ray, it was

## Factors contributing to bleeding risk in patients receiving warfarin therapy

Investigators: J McNeil, P Cameron, M Dooley, R Wolfe, S Evans, E Maxwell, L Piterman, A Street, B Diug, J Lowthian



*Standing, from left: Basia Diug (PhD student), Judy Lowthian (PhD student) and Dr Sue Evans (Associate Director, Centre of Research Excellence in Patient Safety). Seated: Professor Peter Cameron (Director, Centre of Research Excellence in Patient Safety).*

Warfarin is the mainstay of prophylaxis against stroke in atrial fibrillation and valve replacement. Warfarin’s narrow therapeutic window necessitates close monitoring of the International Normalised Ratio (INR) as numerous factors are recognised to increase or reduce its anticoagulation effect. Despite its efficacy, warfarin remains one of the most common drug-related causes of death and morbidity, with increased bleeding tendency as its major adverse effect.

The aim of this project is to reduce the amount of unnecessary bleeding due to warfarin, by identifying predisposing factors and potential system of care issues amongst patients with significantly elevated INR levels, and to develop a preliminary risk profile of patients being treated with warfarin who record elevated INR levels in the blood. We hypothesise that people with an elevated INR level will have a different profile than those who maintain an INR level within a therapeutic range.

Based in metropolitan Melbourne, this project is being conducted in collaboration with Melbourne Pathology, and consists of two phases. The pilot study was completed in 2007; 40 patients with INRs  $\geq 6$  and their primary treating doctors were interviewed. The current case control study comprises 450 patients: 150 cases and 300 controls. Patients are eligible if they are aged  $\geq 18$  years, reside in the community, provide informed consent and have been on warfarin for a minimum of six months. Additionally, cases have recently developed an INR  $\geq 6.0$ , whilst controls have been well stabilised for a minimum of three months. Patient interviews investigate potential predisposing factors, including demographic and clinical characteristics, comorbidities, diet, medication and warfarin knowledge. Standardised measures evaluate cognition, mood, social support, functional independence, and adherence and medication complexity.

A major outcome of this study will be an improved ability to ‘risk-stratify’ patients given warfarin therapy into those at high and low risk of bleeding. Ultimately, it may reduce the significant burden of harm attributable to warfarin and improve the ratio of benefit to harm achieved with this agent. The project is funded by NHMRC Project Grant ID 436763.



Professor Trevor Williams and Alfred team pioneer the use of the targeted injection of steam into the lungs to improve the health of severe emphysema patients.



The Alfred



MONASH University

## ALLERGY, IMMUNOLOGY AND RESPIRATORY MEDICINE

Director: Professor Robyn O'Hehir BSc, MBBS, PhD, FRACP, FRCP, FRCPATH

Clinical Director: Professor Trevor Williams MBBS, MD, FRACP

The Department of Allergy, Immunology and Respiratory Medicine (AIRmed) has a unique and comprehensive spectrum of expertise in Australia across clinical and basic allergy, clinical immunology and advanced adult lung diseases. Specific disciplines include severe asthma, allergic diseases, non-HIV 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. AIRmed emphasises integration of 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 in allergy and respiratory medicine 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 hospital and in the laboratories of Monash University at AMREP.

The department has a very active clinical and biomedical research focus with considerable success in NHMRC, ARC, Cooperative Research Centre and other competitive research funding. High international and national profiles of senior personnel are reflected in numerous peer-reviewed 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.

### DEPARTMENTAL HIGHLIGHTS

- Academic promotions in the Department of Medicine, Monash University: Honorary Professor Gregory Snell and Honorary Clinical Associate Professors Brenda Button, Bronwyn Levvey and Bruce Thompson
- Dr Glen Westall, Head of Paediatric Lung Transplant Program, was awarded the Norman Shumway Career Development Award from the International Society of Heart and Lung Transplantation, USA, and a research grant from the Sylvia and Charles Viertel Charitable Foundation for lung transplantation experimental research
- Professor Robyn O'Hehir was appointed co-editor and Associate Professor Jo Douglass was appointed associate editor of the international journal *Clinical and Experimental Allergy*
- Associate Professor Bruce Thompson won the 2008 Australian Lung Foundation John Read Prize for Physiological Research

- The Cystic Fibrosis Service was awarded the Alfred Health Board Chairman Award for Patient Safety and Quality Improvement for exemplary health outcomes and safety monitoring using an electronic health record
- Associate Professor Brenda Button won the Australian Physiotherapy Association (Victorian branch) Achievement Award 2008 for her outstanding contribution to the advancement of physiotherapy treatment, education and research in CF
- AIRmed personnel were named chief investigators on six new NHMRC Project Grants and one new ARC Discovery Grant announced in 2008 for funding to commence in 2009
- Professor Robyn O'Hehir was appointed to the Advisory Committee of the World Health Organisation affiliated alliance Allergic Rhinitis and its Impact on Asthma (ARIA)

### 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 and New Zealand. It has strong links to clinical programs in severe interstitial lung disease, pulmonary hypertension and severe chronic obstructive pulmonary disease, and includes a Paediatric Lung Transplant Service.

#### Current Projects

- Mechanisms and predictors of chronic allograft rejection with emphasis on airway remodelling and novel strategies for prevention and reversal
- Immunological and clinical evaluation of viral (cytomegalovirus) and chlamydia infections
- Human donor lung *ex vivo* resuscitation
- *Ex vivo* evaluation of humanised transgenic GAL knockout porcine lungs
- Randomised placebo-controlled drug trials of conventional and novel therapeutics in pulmonary hypertension and interstitial lung disease
- Investigation of bronchoscopic interventional treatment for emphysema by valve decompression airway stents and bronchial thermal ablation techniques
- Evaluation of emphysema using sound wave analysis

### 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

- Stem cell sciences in advanced lung disease: potential role of stem cell therapy in CF
- 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
- Improved care models including palliative care

## AIRMED 3: GENERAL RESPIRATORY AND SLEEP MEDICINE SERVICE

Head: Associate 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 related breathing disorders across a wide cross-section of pulmonary, cardiac and neurological conditions.

### Current Projects

- Sleep disordered breathing in heart failure: a study of pathogenesis
- 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
- Multicentre randomised controlled trials of sleep apnoea treatment in Type 2 diabetes
- Multicentre trial of bariatric surgery on obstructive sleep apnoea
- Impact of brain natriuretic peptide on the emergency management of dyspnoea
- Effect on actigraphy of anaesthetic functional class on recuperation following general anaesthetic
- Multicentre trial of obstructive sleep apnoea management on cardiovascular endpoints in high cardiovascular risk patients (SAVE Trial)

## 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, bronchiolitis obliterans syndrome and CF
- Delivery devices for bronchoprovocation studies
- Predicting lung function in a normal Australian population
- Ventilatory inhomogeneity in the periphery of the lung in premature lambs

## 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.

## AIRMED 4: ALLERGY, ASTHMA AND CLINICAL IMMUNOLOGY SERVICE

Head: Associate Professor Jo Douglass

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

### Current Projects

- Airways disease and lung function in the ageing population
- Needs-based education strategies for older people with asthma
- Transition to adult care in adolescents with primary immunodeficiency disorders
- 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
- Trials of dietary intervention in chronic idiopathic urticaria



Associate Professor Jo Douglass (centre) and Dianne Goeman developed a DVD of a model asthma consultation for use in an educational intervention for GPs, which was successful in improving the delivery of asthma care to people over 55 years of age.

### POSTGRADUATE STUDENTS

10 PhD Students

### PUBLICATIONS

65 Journal Articles

4 Book Chapters



From left: Sophie Wallace,  
Professor Paul Myles,  
Margaret Quayle and  
Kathryn Fraser.



The Alfred



MONASH  
University

# ANAESTHESIA AND PERIOPERATIVE MEDICINE

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

The Department of Anaesthesia and Perioperative Medicine provides anaesthesia, perioperative care, pain management, resuscitation and referral services for Alfred Health. The department is amongst the largest in Australia, with 27 fulltime and over 50 visiting specialist anaesthetists, as well as 40 registrars in training. Each registrar must complete a research project as part of their specialist qualifications, and in 2008, eight projects were completed.

The research unit focuses on patient safety, quality of care, improving pain relief and avoiding serious complications after surgery. The research unit is led by Professor Paul Myles, and funded through a number of large NHMRC grants. Staff members include Senior Lecturers Dr David McIlroy and Dr James Tomlinson, Research Manager Sophie Wallace, Research Assistants Margaret Quayle, Kathryn Fraser, Andrea Ditoro and Secretary Kate Graham.

## DEPARTMENTAL HIGHLIGHTS

Dr David McIlroy won the prestigious Gilbert Brown Prize at the 2009 Australian and New Zealand College of Anaesthetists (ANZCA) annual scientific meeting for the best research from a fellow qualified within eight years. Professor Paul Myles was awarded the Douglas Joseph Professorship by ANZCA for his research into cancer recurrence after major surgery.

Invited international presentations included:

- Professor Paul Myles was the invited plenary lecturer at the Association of Anaesthetists of Great Britain and Ireland annual scientific meeting, and was also an invited speaker at scientific meetings in South Africa, USA, New Zealand, Canada and Portugal
- Dr Alex Konstantatos (Sir Run Run Shaw Hospital, China)
- Dr Premilla Chinnappa (13th Ottawa Conference on Clinical Competence and the 6th Australasian Conference on Quality and Safety on Health Care)

Dr Rishi Mehra won the Tony Charlton Poster Prize for Research in the Field of Cardiac Surgery during Alfred Week.

## CURRENT PROJECTS

The unit currently coordinates four multicentre international trials, and participates in a further six trials consisting of randomised clinical trials to audits. The larger trials include:

**ENIGMA-II Trial** [www.enigma2.org.au](http://www.enigma2.org.au)

Professor Paul Myles

One of the department's largest research initiatives is to investigate the safety of nitrous oxide in 7,000 patients with risk factors for coronary artery disease undergoing major surgery. It is hypothesised that avoidance of nitrous oxide will reduce the incidence of cardiac complications or death when compared

with otherwise identically managed surgical patients. This study received a \$2.8 million NHMRC Project Grant, and is coordinated by the department and the ANZCA Trials Group. The rationale for the study protocol has been accepted for publication in the *American Heart Journal*. This international, multicentre trial has collaborators in Australia, New Zealand, Hong Kong, Canada, USA, India, Saudi Arabia, UK, Malaysia, Switzerland and Singapore.

**The ATACAS Trial** [www.atacas.org.au](http://www.atacas.org.au)

Professor Paul Myles

The Aspirin and Tranexamic Acid for Coronary Artery Surgery (ATACAS) Trial is a large multicentre randomised, controlled trial investigating whether aspirin or tranexamic acid, or both, should be used in people having coronary bypass surgery. This NHMRC and ANZCA funded trial is jointly coordinated by the department and the ANZCA Trials Group, and aims to enrol 4,600 patients. The protocol has been peer reviewed and was published in the *American Heart Journal* in 2008. Collaborating sites include hospitals in Australia, UK, India and Canada.

**Endothelial Function Study**

Dr David McIlroy

Endothelial dysfunction is a recognised predictor of intermediate-term adverse cardiac outcomes in a non-surgical population. This prospective study of 160 patients will investigate the utility of endothelial dysfunction for predicting adverse perioperative cardiac events in high-risk elective surgery, both alone and in addition to currently used risk stratification models. Endothelial dysfunction is measured by brachial artery flow-mediated dilatation, impedance plethysmography and EndoPAT (a newer automated device). The study has received an ANZCA research grant. Recruitment is occurring at The Alfred and Prince of Wales Hospital, Hong Kong.

**Paracetamol Trial**

Dr Alex Konstantatos

This double-blind randomised, controlled trial conducted at The Alfred during 2006 and 2007 aimed to evaluate the effectiveness of intravenous paracetamol in day surgical patients. A total of 145 patients undergoing a variety of surgical procedures were recruited. Analysis of the results showed that injectable paracetamol use did not produce better pain ratings, or make for more rapid discharge from the recovery area or from hospital. The trial is currently awaiting publication.

## POSTGRADUATE STUDENTS

3 Masters Students  
1 PhD Student

## PUBLICATIONS

15 Journal Articles



## ANATOMICAL PATHOLOGY

Head: Professor Catriona McLean BSc, MBBS, FRCPA, MD

### RESEARCH ACTIVITIES

#### HIV neuropathogenesis

Dr Katherine Thompson

This research examines the timing and type of brain cells infected by HIV and the events that lead to the establishment of the virus in the brain.

#### Progressive multifocal leucoencephalopathy neuropathogenesis

Dr Tanja Jankovic-Karasoulos

The frequency and genotype of PML infection in disease and in latent states in the brain and the kidney are examined.

#### Humoral rejection in cardiac transplantation

Julianne Bayliss, PhD student

This research supports the involvement of vascular endothelial growth factor (VEGF) as an important mediator of lymphocyte recruitment and extravasation during ACR. The involvement of VEGF in acute humoral rejection as a marker of endothelial activation is also demonstrated. Julianne's study extrapolates the mechanisms through which VEGF may contribute to the development of cardiac vasculopathy through perpetuation of the immune response and the promotion of collagen and fibrin deposition by cardiac myofibroblasts.

#### Breast cancer sub-typing and epidemiology

Professor Catriona McLean

Collaborating partner: 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.

#### Neurotrauma brain bank

Dr Tony Frugier (NTRI), Professor Catriona McLean

Collaborating partner: NTRI. This study investigates the acute inflammatory response in the two weeks following human brain trauma, including cytokine RNA expression and morphologic change.

#### Psychosis in frontal lobe dementia

Professor Catriona McLean

Collaborating partners: Australian Brain Bank Network and Dr Dennis Velakoulis, Neuropsychiatry Department, Royal Melbourne Hospital. This study highlighted the frequent presentation of young frontal lobe dementia patients with an initial schizophreniform illness.

#### Muscular dystrophy in children

Colleen D'Arcy

Collaborating partners: Murdoch Childrens Research Institute and State Neuropathology Service. This study was part of a BMedSc project highlighting

the potential for misclassification of cases of dystrophy identified as juvenile polymyositis.

#### Pulmonary veno-occlusive disease

Susan Haarchand

Collaborating partner: Department of Allergy, Immunology and Respiratory Medicine. This study was part of a BMedSc project highlighting that failure of Bosentan treatment in pulmonary hypertension may be related to pulmonary venoocclusive disease as a missed diagnosis.

#### Neuroimaging (using novel binders) of neurodegenerative diseases

Professor Catriona McLean

Collaborating partner: National Neuroscience Foundation. This research highlights novel binders and their utility in the neuroimaging diagnosis of Alzheimer's disease.

#### TDP-43 in motor neurone disease

Professor Catriona McLean

Collaborating partner: University of Melbourne. The study highlights a possible novel cerebrospinal fluid marker of disease.

### MAJOR ACHIEVEMENTS

#### Professor Catriona McLean

- Australian Medical Association Victoria Crawford Mollison Prize for 'outstanding contribution to Pathology including service pathology, research and registrar training'
- Noel Callahan Award, Cork, Ireland
- Alfred Week Research Poster Display 2008: two WTMS clinical poster prizes
- Two NHMRC Project Grants commencing in 2008

#### Dr Katherine Thompson

- Travel grant to present at the conference 'Infectious diseases of the nervous system: pathogenesis and worldwide impact' at the Pasteur Institute, Paris

#### Dr Julianne Bayliss

- Finalist 2008 Cardiac Society of Australia and New Zealand Ralph Reader Prize (Clinical Science)
- Finalist 2008 Transplantation Society of Australia and New Zealand (TSANZ) President's Prize
- Finalist 2008 Alfred Postgraduate Research Symposium
- 2008 TSANZ/AMGEN Young Investigator Award

### PUBLICATIONS

12 Journal Articles



# AUSTRALIAN CENTRE FOR BLOOD DISEASES

Head: Professor Hatem Salem MD, FRACP

The Australian Centre for Blood Diseases (ACBD) is a leading national and international 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

The objectives of ACBD are to:

- provide leadership in the advancement of knowledge of blood diseases
- establish an information resource for medical practitioners and the general public
- apply and commercialise discoveries that arise from basic research in blood
- act as an advisory body to State and Federal Governments
- raise the centre's national and international profile by attracting leading clinicians and researchers

## SERPIN BIOLOGY UNIT

Head: Associate Professor Paul Coughlin

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. The laboratory also examines the role serpins play in diseases such as lymphoma.

### Current Projects

- Centerin: a serpin expressed in lymphoma (P Coughlin and A Horvath)
- Antiplasmin: a key regulator of clot dissolution (P Coughlin and A Horvath)

## THROMBOSIS RESEARCH UNIT

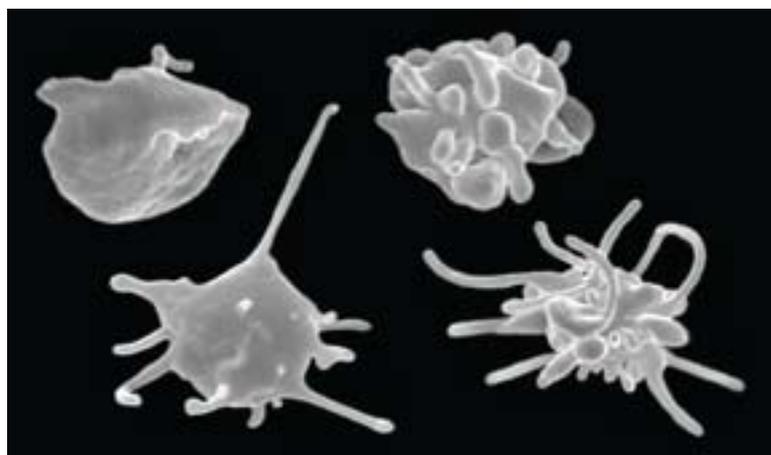
Head: Professor Shaun Jackson

Platelets are small, specialised blood cells that work to stop bleeding following a vascular injury (haemostasis). Haemostasis is initiated by adhesion of platelets to damaged vessel walls, culminating in the formation of a platelet plug. Ironically, when triggered within diseased blood vessels, this normally protective haemostasis 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 has also expanded its research to acknowledge the broadening role of platelets in various pathological processes and disease states. The Thrombosis Research Unit has recently identified a new contractile method used by platelets to stabilise blood clots, a process which holds potential to be manipulated therapeutically to assist in removing unwanted blood clots in patients with cardiovascular disease.

### Current Projects

- Novel insights into platelet function and thrombus formation
  - Identification of a novel thrombus contraction process (S Schoenwaelder and S Jackson)
  - Platelet apoptosis (S Schoenwaelder and S Jackson)
  - Platelets and diabetes (S Jackson and A Calkin)
  - A role for platelets in inflammation (Y Yuan and S Jackson)
- Biochemical and physical factors regulating platelet function
  - PI 3-kinase – a new target for antithrombotic therapy (S Jackson and S Schoenwaelder)
  - A role for Dok2 proteins in regulating haemostasis and thrombosis (S Hughan)
  - The effects of disturbed blood flow on blood clot formation (W Nesbitt and S Jackson)
- Platelet receptors and their roles in haemostasis and thrombosis
  - The von Willebrand factor receptor GPIb/V/IX (S Cranmer and S Jackson)
  - Thrombin and the protease activated receptors (J Hamilton)



Scanning electron micrographs of human platelets at different stages of activation.

## THE FIBRINOLYSIS AND GENE REGULATION UNIT

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 at the transcriptional and post-transcriptional levels, in various cell types. Efforts are also devoted towards understanding the biology and pathophysiology of the plasminogen activator system in the central nervous system, mainly in relation to ischaemic stroke and neurotrauma, and modulation of the blood brain barrier.

### Current Projects

- Regulation of tissue-type plasminogen activator (t-PA) gene expression *in vitro* (R Medcalf)
- t-PA gene regulation *in vivo* (R Medcalf)
- The role of t-PA in the central nervous system (R Medcalf, A Samson and M Sashindranath)
- Regulation of the plasminogen activator inhibitor type 2 (PAI-2) gene (S Stasinopoulos)
- Post-transcriptional regulation of PAI-2 gene expression

## 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 (A Spencer)
- Small molecule development program (A Spencer)
- Cell adhesion mediated drug resistance (A Spencer)
- Tissue array as a predictive tool in multiple myeloma drug response (A Spencer)

### Immunotherapy Research Group

- Generation of cytomegalovirus (CMV)-specific T cells for prevention of CMV disease following stem cell transplantation (SCT)
- Generation of minor histocompatibility antigen specific-T cells for use in immunotherapy as a potential treatment for leukaemia patients
- Role of natural killer cells and HLA-E in the recovery of patients after SCT
- The expression of the calcitonin receptor on leukaemia cells and its role in the disease process
- Modulation of immune function by anti-fungal drugs

### Stem Cell Transplantation Research Group

- Late effects clinic
- Immune reconstitution following novel reduced intensity conditioned SCT
- Longitudinal audit of invasive fungal infections in SCT and acute leukaemia induction

### Clinical Trials Program

- Clinical trial activities remained high during 2008, particularly with an increasing proportion of Phase 1 and first time in human studies being undertaken. 2008 also saw the final analysis of the multicentre ALLG MM6 trial, coordinated by Nola Kennedy, and its acceptance for publication in the *Journal of Clinical Oncology*.

## EASTERN CLINICAL RESEARCH UNIT (ECRU)

Clinical Research Trials Division

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 has consolidated its position as the premier clinical research facility in Australia. ECRU 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, having 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 and better treatments. Active contributors to ECRU Biotech include members of several disciplines from the clinical activity at ECRU, including endocrinology, neurology and oncology.

### Selected ECRU Biotechnology Collaborative Research Projects

- Assessment of novel small molecule treatments in *in vivo* models of abdominal aortic aneurysm, atherosclerosis and neointimal hyperplasia (Associate Professor Robert Widdop, Department of Pharmacology, Monash University)
- Effects of liraglutide on vascular endothelial peptide expression in *in vitro* and *in vivo* models of vascular disease (Dr Lotte Knudsen, Novo Nordisk A/S, Denmark)
- Effects of novel histone deacetylase (HDAC) inhibitors in models of abdominal aortic aneurysm (Professor Alan Daugherty, Department of Medicine and Physiology, University of Kentucky, USA)
- Synthesis of novel HDAC inhibitors for assessment in *in vivo* models of metastatic cancer and vascular disease (Associate Professor Patrick Perlmutter, Department of Chemistry, Monash University)
- *In vivo* characterisation of novel HDAC inhibitors in breast carcinoma (Associate Professor Robin Anderson, Peter MacCallum Cancer Centre, Australia)
- Assessment of novel HDAC inhibitors in the treatment of lymphoma (Associate Professor Ricky Johnstone, Peter MacCallum Cancer Centre, Australia)
- Effects of novel HDAC inhibitors on latent HIV expression (Dr David Rhodes, AVEXA Pty Ltd)
- Effects of novel HDAC inhibitors on HIV latency (Professor Sharon Lewin, Department of Infectious Diseases, The Alfred)
- Effects of novel HDAC inhibitors and azacytidine in the myelodysplastic syndrome (Associate Professor Joe McKendrick, Department of Oncology, Box Hill Hospital)
- Effects of novel HDAC inhibitors in myelodysplastic syndrome (Professor Giuseppe Leone and Dr Maria Teresa Voso, Catholic University, Italy)
- Effects of novel HDAC inhibitors alone and in combination with azacytidine in *in vitro* models of myelodysplasia (Dr Kevin Lynch, Celgene Corporation)
- Effects of thiazolidinediones on severity of acute thromboembolic cerebrovascular accident (Professor Christopher Bladin, Department of Neurology, Box Hill Hospital)

POSTGRADUATE STUDENTS  
5 PhD Students

PUBLICATIONS  
37 Journal Articles



Frank Smolenaers and Tess Vawser assess the use of technology in the simulated clinical environment.



# AUSTRALIAN CENTRE FOR HEALTH INNOVATION

General Manager: Cathie Steele BSc, BAppSc, MPhty, MBus, AFACHSE

Director of Research: Professor Peter Cameron MBBS, MD, FACEM

The Australian Centre for Health Innovation (CHI) provides health technology evaluation, innovation and simulation education services that enhance patient safety and quality of care.

## PROGRAM ACTIVITIES

In 2008, CHI partnered with health services and industry organisations to support research and conduct projects across a wide range of technology developments. CHI plays a key role in providing health services with access to innovative technology and education services. Over 5,000 clinicians, managers and technology developers from across Australia used CHI services in 2008.

## KEY FINDINGS

### Voice activated real time location services

Finding information, people and equipment can take up to 30% of nursing time in a hospital. CHI worked with CISCO and Regni to develop a voice-activated, real time location service. Using this technology, a nurse can use a normal WiFi phone to ring and ask the system for the location of any tagged or WiFi asset. This has the potential to save significant time, and free up nurses for patient care.

### Development of a GS1 barcode translation system for pathology services

Current Australian pathology systems are unable to read GS1 barcodes. Scientists currently hand transcribe barcodes for these products. The barcode translation system allows GS1 codes to be read using a standard barcode reader. Clinical trials are under way.

### Technology for clinical networks

A two day workshop on the application of technology to support integrated clinical care was held for the Cancer, Stroke, Maternity and Newborn, Emergency, and Renal networks in Victoria. Technology to support virtual meetings for multidisciplinary care is now being used across several regions in Victoria.

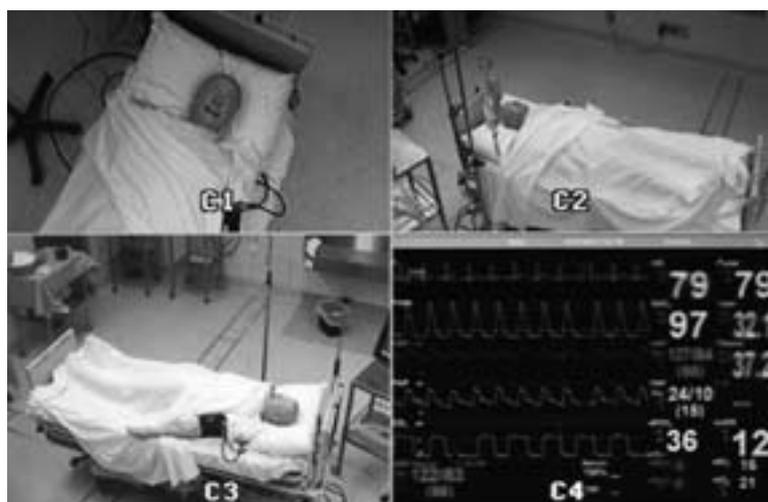
### Simulation education

CHI staff developed and ran new courses on:

- The management of delayed reactions to contrast media, for radiology staff
- Crisis resource management for paediatric intensive care
- Crisis resource management for adult intensive care

## CURRENT PROJECTS

- Best practice in wireless systems for surgical services
- The impact of rapid roaming user sessions on nursing workforce satisfaction and efficiency in aged care



Use of advanced audio visual systems enables immersive simulated clinical education.

## PUBLICATIONS

- 1 Journal Article
- 2 Book Chapters



# BAKER IDI HEART AND DIABETES INSTITUTE

Director: Professor Garry Jennings AM, MBBS, MD, FRCP, FRACP, FAHA

Baker IDI Heart and Diabetes Institute is an international leader in research on obesity, diabetes and heart disease, with work extending from the laboratory to wide-scale community studies. Created in 2008 from the merger of the Baker Heart Research Institute with the International Diabetes Institute, Baker IDI has five broad research themes, each of which supports groups of scientists who work in the community as well as researchers who work in a laboratory setting.

## Population Studies and Profiling

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

## Metabolism and Obesity

The team 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 team 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 team 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 and how better to treat atrial fibrillation are among the research areas for this team. Both 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.

Baker IDI also provides a one-stop shop of complete patient care, diagnosis and advice at its diabetes and heart clinics.

The following provides an overview of some of the health problems we are aiming to address. More information can be found on our website: [www.bakeridi.edu.au](http://www.bakeridi.edu.au)

## DIABETES AND OBESITY

Obesity is a serious and complex health problem, with Type 2 diabetes and cardiovascular disease amongst its major complications. In 2005, 3.2 million Australians were obese, and there were 379,000 new cases of cardiovascular disease and 102,000 new cases of Type 2 diabetes caused by obesity.

The health and economic burden for Australia is alarming: the total financial cost of obesity was estimated at \$3.7 billion in 2005. It is projected that obesity rates in Australia will double by 2025 – translating to 7.2 million obese Australians. In turn, diabetes rates are set to double. The increased rates of obesity and diabetes will heavily impact cardiovascular disease in the community. Conservatively, between 2025 and 2050, obesity will contribute to 900,000 preventable hospitalisations for cardiovascular disease and 240,000, mainly premature, deaths.

The complications of diabetes include kidney, eye and vascular disease. It is a major factor in cardiovascular disease and the most common cause of kidney failure in the Western world. The only way to reduce the current disease burden of obesity and ensure that these projections are not realised is to understand it as a complex disease while investigating its molecular, cellular and physiological precursors and implications. The development of sound preventive strategies that are informed and evaluated by research is imperative. Reflecting this need, investigations into diabetes and metabolic conditions make up about 30 per cent of our research effort.

Scientists at Baker IDI strive to understand why people develop complications from diabetes. Research is directed at the development of new treatments to target the pathways within the body responsible for the development of diabetes and obesity-related disease. The current research is on the development of new techniques for early diagnosis of complications, including gene and proteomic approaches, lifestyle interventions and the development of drug therapies for use in cases where exercise and diet are not a simple answer.

Current research projects include:

- The development of drugs to increase the activity of antioxidant enzymes to reduce the effects of diabetes
- The identification of a master molecular controller, responsible for turning genes 'on' and 'off', and how this master switch underpins diabetic and metabolic disease
- How health and disease in one generation modifies genes and affects the next, predisposing infants to diabetes and obesity
- Community-based research understanding the incidence of symptomless kidney disease in Type 2 diabetes patients

- The comparison of advanced glycation end products (AGEs), formed when sugars in the blood attach to proteins in the body, measurements and markers of inflammation and oxidative stress in diabetic patients to predict the development of cardiovascular disease
- The development of a new drug with the ability to reverse the detrimental effects of AGEs in the body, responsible for many of the diseases caused by diabetes
- The way key regulatory molecules that control cell differentiation are activated
- The role of the anti-proliferative protein CDA1 in diabetic complications
- The effectiveness of drug treatments in diabetic atherosclerosis, as well as the effectiveness of dietary interventions in the prevention of this condition
- The complexity of the metabolic changes that precede diabetes and the development of medications to mimic the effects of exercise in the body
- The importance of breaking up sedentary activity as a way of lowering blood glucose levels and the development of Type 2 diabetes
- Tracking the progress of diabetes with AusDiab, the nation's largest longitudinal study into the disease

## HEART FAILURE

Despite the alarming increase in its prevalence, heart failure is commonly misunderstood as 'heart attack'. In fact, heart failure is a debilitating, progressive condition that often begins as a response to injury of the heart muscle, for example after a heart attack. Heart failure has devastating consequences for patients, representing a host of secondary conditions that result from the failing heart's inability to adequately pump blood around the body. As more people survive heart attacks, the incidence of heart failure is rising. The quality of life for a person with heart failure is dramatically reduced – normal daily activities like walking to the letterbox or making a bed can be an unpleasant, difficult and exhausting experience. In many cases heart failure leads to a slow death.

Understanding why the heart fails and who is at risk of the progression of this disease is crucial given the rates of cardiovascular disease. It is currently estimated that heart failure affects 300,000 Australians, with up to 30,000 new cases developing each year. It represents one of the biggest causes of hospital bed stays.

Baker IDI's research into heart failure is centred on understanding the processes of heart failure in order to identify those who might be at risk of the condition and to halt its progression in those already suffering. In extreme cases, heart failure patients require a heart transplant to survive. Investigations by Baker IDI scientists range from efforts to improve the health of those who must undergo heart surgery to work on the cellular, molecular and genetic underpinnings of the progression from initial heart muscle damage to the condition of heart failure. The ultimate objective is to not only treat heart failure better, but to cure it.

Research projects under way include:

- Studies of cardiac hypertrophy – why it is beneficial to athletes but a harmful development in heart failure?
- Investigations into the effects of diabetes on the heart muscle and how diabetes contributes to heart disease
- Studies of the effects of relaxin on fibrotic heart tissue and how it might improve the ability of a failing heart to pump blood
- Better cardiac surgical techniques, including a novel, non-surgical method for mitral valve repair
- The design of therapies to regenerate hearts that have failed and how the muscle can be rebuilt to make it function better
- The study of mechanisms whereby the heart responds to stimulation and how these processes contribute to heart disease
- Ways to eliminate the risk of rupture of the ventricular wall, a serious complication of heart attack that almost always leads to sudden death. Research focuses on why it occurs and which drug treatments might prevent it

Baker IDI has made internationally renowned contributions to the understanding of heart failure and the treatment of those living with it. Under Baker IDI's Population Studies and Profiling programs, researchers track and map areas in Australia where heart failure is most concentrated and conduct analyses of the availability of health care services.

## ACUTE CORONARY SYNDROME

Acute coronary syndrome, commonly known as heart attack, is an umbrella term referring to a set of signs and symptoms that suggest a reduced blood supply to the heart. The most common cause is the development of atherosclerosis: the accumulation of plaques (fatty deposits) in the blood vessels. It is the rupture or erosion of these plaques that can lead to heart attack, stroke and sudden death. Atherosclerosis is the underlying cause of most cardiovascular disease, and understanding the development and nature of these plaques, and who is at greatest risk of their rupture, is a major research concern across the institute. Advances in this area will have a profound effect on reducing the death and disability caused by cardiovascular disease, as there is currently no way of determining which plaques may cause a heart attack.

The direct cost of coronary heart disease in Australia is the largest of any single cardiovascular condition, costing more than \$1.7 billion. Stroke is the second largest, at more than \$1 billion. Coronary heart disease is the single most common cause of death in Australia and generally manifests as angina, heart attack or sudden death.

Baker IDI focuses on the investigation of cells that play an important role in plaque development, the study of nutritional approaches that might prevent atherosclerosis, and the prevention and reversal of cholesterol accumulation in blood vessels. A new class of 'intelligent' drugs is being designed to prevent clotting, or dissolve clots that have caused a heart attack or stroke, without the excessive bleeding complications caused by currently available drugs. Researchers also work towards the identification of biomarkers which, when added to existing knowledge of family history and lifestyle risk, will help predict coronary plaque rupture.

The effects of stress and psychological illness on heart disease are also an important research focus. Depression is known to be a major cause of heart disease and sudden death and as an isolated risk factor is equal to the risk posed by high blood pressure or high cholesterol. Baker IDI researchers measured neurotransmitters in people newly diagnosed with depressive illness and found that in about 40 per cent the sympathetic nervous system was permanently switched on, placing the heart under unrelieved pressure. These findings have direct implications for future treatment of sufferers of depression.

Research projects under way include:

- Baker IDI scientists have shown that regulatory T cells are important in controlling the development of atherosclerosis. This has significant implications for the treatment of atherosclerosis and has the potential to be used in conjunction with other therapies to prevent the development of life-threatening lesions.
- The effects of ACE inhibitors in the treatment of Marfan syndrome. Standard treatment to date has been beta blocker therapy, which has many side effects.
- Baker IDI research has revealed that selectin is a significant contributor to heart disease in its own right, and is not merely an active biomarker. As such, drug treatments for disease indicated by its presence can focus on switching off the effects of this protein.
- The development of better-targeted treatments for blood pressure regulation through ongoing studies of the renin-angiotensin system
- The development of a drug therapy to halt the formation of atherosclerotic plaques by preventing changes in proteoglycans in blood vessel walls
- New surgical treatments for atrial fibrillation, an increasingly common condition where the chambers of the heart beat out of synchrony

- Understanding the pathway within the body responsible for removing cholesterol from the blood vessel wall (reverse cholesterol transport). Research focuses on the balance between the delivery of cholesterol to the blood and its removal.
- Neural control of the cardiovascular system during the onset of obesity and other metabolic disorders, and the mechanisms that cause cardiovascular diseases through environmental factors influencing the central nervous system
- Investigation of the relationship between different forms of stress and heart disease, including the link between panic disorder and cardiovascular disease, and the effects of two different types of treatment on heart risk: cognitive behavioural therapy and selective serotonin reuptake inhibitor medication.

## FUTURE DIRECTIONS

New research initiatives planned for Baker IDI will enhance diabetes and heart disease research and management. State-of-the-art facilities being established 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 the disease.

### DNA and Blood Profiling

This new facility is a step towards enabling our researchers to personalise 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 the new 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 body weight regulation. However, it is important to understand the specific underlying causes of obesity, which remain unclear. The Healthy Lifestyle Centre will examine how genetic and environmental factors combine to influence body weight. This unique new facility will 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.

### Medicinal Chemistry

This new facility will promote and enhance 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.

### The Centre for Indigenous Vascular and Diabetes Research (Baker IDI@Alice)

This important group at Baker IDI is a sign of the institute's commitment to addressing the health inequalities of disease between indigenous and non-indigenous Australians. In indigenous communities, mortality rates from disease are three times the rate of the rest of the population. Baker IDI has plans for significant expansion of its research and prevention work in Central Australia.

## 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 and provides a powerful presence in countries that can benefit from its research expertise. Part of Baker IDI's mission is to reduce premature ill health and mortality from diabetes and heart disease wherever it occurs; increasingly it is a major threat to the future of many developing nations. 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. Some projects now under way include:

**Mauritius:** A surveillance program in Mauritius is in the final stages of planning prior to its launch. The plan is to follow up on over 10,000 people surveyed by Baker IDI between 1986 and 1997 to determine their medical status now and, in the case of mortality, the cause of death. This is likely to be one of the most important studies of its kind documenting premature ill health and mortality in this multi-ethnic society, as it reflects our global population.

**GIANT study:** The GIANT study (General practice Implementation in Asia of Normoglycaemic Targets) is a randomised controlled trial investigating whether education of local GPs about diabetes guidelines from the International Diabetes Federation – Western Pacific Region (Type 2 diabetes practical targets and treatments) leads to improvement in blood glucose control amongst patients. The study has enrolled 10 GPs in each of 10 countries, and each GP has enrolled four patients with Type 2 diabetes (400 patients in total). Half of the GPs have received training about the guidelines and half have not. Over a 12-month period, the study will determine if there are any differences in control of diabetes between the two groups of patients. This study is funded by GlaxoSmithKline. The countries involved in this trial are Korea, Taiwan, Malaysia, Singapore, Thailand, Philippines, Hong Kong, China, Vietnam and Indonesia.

**Heart of Soweto:** This landmark study is a collaboration between Baker IDI, University of Queensland and University of Witwatersrand, South Africa. The project charts the emergence of heart disease in the most populous residential area in South Africa. The first findings were published in *The Lancet*. The overall challenge is how to increase scarce health resources to people in developing countries who present with advanced heart disease for the first time.

**Rishi Valley, India:** The Rishi Valley study is a collaborative project between Baker IDI, Monash University and the Rishi Valley Rural Health Centre. Although the most common causes of disease burden in countries such as India include malnutrition and infectious disease, vascular disease is being increasingly recognised as an emerging epidemic. In urban Indian populations, changes in lifestyle exposures (resembling those seen in developed nations) may underlie this phenomenon. Even less is known about the burden of vascular disease in those living in rural communities. The aim of this study is to obtain important baseline data on the extent of vascular disease (heart disease and stroke) and its risk factors in a typical rural Indian community.

### Surveillance and Monitoring Function of the National Non-Communicable Disease (NCD) Program of Vietnam:

Baker IDI collaborates with Monash University and relies on the Ministry of Health, Menzies Research Institute and World Health Organization. In developing nations, the burden of cardiovascular disease, stroke, diabetes and cancer is taking over from the traditional problems of infectious diseases, maternal and child illness and death, and disorders due to under-nutrition and deficiency disease. The burden of the NCD epidemic in Vietnam is accelerating in synchrony with economic development. This study aims to establish a sustainable system for NCD surveillance.

### POSTGRADUATE STUDENTS

4 Masters Students  
1 Other Doctoral Student  
58 PhD Students

### PUBLICATIONS

311 Journal Articles  
17 Book Chapters



The Centre for International Health at the Burnet Institute is committed to improving the health of communities in low-income countries.



# BURNET INSTITUTE

Director: Professor Brendan Crabb PhD

In 2008, the Burnet Institute's core mission of addressing the health needs of Australia and the world's most disadvantaged populations through a combination of research and public health programs was reinforced. The most momentous achievement of the past year was the commencement of the new building at AMREP, which will complete the merger with the Austin Research Institute.

Another major event was the restructure of the institute's operations into four Centres of Excellence. These centres consolidate major areas of activity and provide a strong leadership framework to better realise synergies and ways to build capacity. An important part of the restructure was the recognition of four major themes that cut across the specific disciplines of the centres: infectious disease; disease prevention; business development (vaccines, diagnostics and immuno-therapeutics); education and capacity.

In a stellar year for publications, the institute published 118 peer-reviewed papers including publications in some of the world's best scientific journals such as *Nature*, *New England Journal of Medicine* and *The Lancet*. It was also a record year for competitive grants, especially from NHMRC where five Research Fellowships were awarded. There was a continued increase in student enrolments in Burnet's 12 postgraduate courses, with a steadily higher proportion of international students, reaching 33% in 2008.

## CENTRE FOR VIROLOGY

The mission of the Centre for Virology is to achieve innovative solutions for viral diseases of global importance. Strong emphasis is placed on understanding how viruses manipulate their host cells in order to infect them. Burnet's research in this area is vital in understanding how viruses infect cells causing disease and in developing strategies to block infection.

### Highlights

Associate Professor Paul Gorry was a recipient of the Victorian Young Tall Poppy Science Award for 2008, in recognition of excellence in academic achievement in medical research and promotion of science. Paul heads the HIV Molecular Pathogenesis Laboratory.

In a study by PhD candidate Jasminka Sterjovski, the three-dimensional structures of functionally diverse HIV-1 gp120 proteins were elucidated by homology modelling. The results revealed novel structural changes that enhance the interaction between the virus and the cell.

Postdoctoral fellow Dr Martin Jakobsen and research assistant Anne Ellett characterise adaptive changes in the clade C HIV-1 gp120 region that occur during disease progression. These studies will be critical for development of

targeted vaccines and drug therapies for clade C HIV-1, which predominates in Africa and Asia and is the most common HIV-1 subtype worldwide.

PhD candidate Michael Roche characterises mechanisms involved in HIV-1 resistance to maraviroc, a new HIV-1 drug, which acts by preventing HIV-1 binding to cells. This work will be important for development of new laboratory tests for HIV resistance to maraviroc.

A study by PhD candidate Lachlan Gray characterises mechanisms involved in HIV-1 neurotropism, in a collaborative effort with Dr Melissa Churchill's HIV Neuropathogenesis Laboratory. Brain derived HIV-1 strains were shown to undergo adaptive changes to increase the efficiency in the way they use CCR5 for entry into cells, which may increase their ability to replicate in brain microglial cells.

Antiviral drugs are becoming increasingly available in resource constrained countries to treat HIV-infected individuals with a low number of CD4+ T-cells (indicating a failing immune system). However, access to drugs is limited by the need for sophisticated laboratory testing for CD4+ T-cells, typically by flow cytometry. The Burnet Institute was awarded a grant by the CD4 Initiative, funded by the Bill and Melinda Gates Foundation, for the development of a rapid point-of-care CD4+ T-cell test, specifically designed for field use in remote settings. This continues a longstanding collaboration with Alan Landay (Rush University Medical Centre, Chicago) and Tom Denny (Duke University, North Carolina).

Suzanne Crowe, David Anderson and senior scientist Mary Garcia lead a team with expertise in diagnostic test development. The proof-of-concept studies for a novel, rapid detection method for CD4+ T-cells, and the subsequent conversion of the technology into a prototype field test for point-of-care use, were successfully completed. The CD4 rapid test is simple and takes 30 minutes, using a small volume of blood from a finger prick to give a visual readout without the need for instrumentation. The test result indicates whether the patient should commence treatment.

### Snapshots

#### Crowe/Jaworowski Laboratory (HIV Pathogenesis)

Gregor Lichtfuss joined the laboratory as a PhD student in 2008, coming from the Robert Koch-Institut, Berlin. He has started work on an exciting project investigating mechanisms underlying the intense immune activation that is characteristic of HIV infection. His research focuses on the impact of HIV infection on signalling processes in human blood cells. This signalling is a way of communication between the immune cells in blood and is crucial for coordinating the body's defence against pathogens.

#### **Drummer/Poumbourios Laboratory (Viral Fusion)**

High viral mutation rates challenge the development of HCV and HIV vaccines and antivirals. Studies of the HCV and HIV glycoproteins have revealed important sequences that are not subject to rapid change. The laboratory has produced a new HCV vaccine candidate based on a conserved component of glycoprotein E2. Together with CSL, it was demonstrated that this vaccine elicits a more effective antiviral immune response compared to previously available vaccines. A new target in the HIV fusion glycoprotein gp41 has been identified, with funding obtained from Australian Centre for HIV and Hepatitis Virology Research (ACH2) and NHMRC to exploit this target in the development of antivirals.

#### **Gowans Laboratory (Hepatitis C – Molecular Biology)**

Eric Gowans was a Senior Research Fellow at the Burnet Institute from 2002 to 2008, during which time he established a productive HCV research laboratory. Interests of the Gowans Laboratory include studies of HCV replication and approaches to develop novel antiviral agents (in collaboration with colleagues at Avexa Ltd), studies into the mechanism of HCV persistence with particular emphasis on regulatory T cells (with Dr Shuo Li) and HCV immunotherapy and vaccine development (with Associate Professor Bruce Loveland). Although Eric is now the Executive Director of the Women's and Children's Health Research Institute in Adelaide, he remains a co-laboratory head.

#### **Tachedjian Laboratory (Molecular Interactions)**

The aim of the Tachedjian Laboratory is to understand how HIV reproduces in the cell, including the role of host cell factors in HIV-1 replication, and to study drug resistance mutations in HIV. The lab is also involved in the preclinical development of microbicides to prevent the sexual transmission of HIV. In 2008, Dr Jenny Anderson was recruited from the United States to continue her studies in understanding how APOBEC3G, a host cell protein, blocks HIV replication. Jenny has received NHMRC funding for this project, and will be using deconvolution microscopy to visualise whether APOBEC3G confers defects in virus trafficking to the cell nucleus.

#### **Mak Laboratory (HIV Assembly)**

Proteins are often thought to be the prime regulator of biological systems, but it is now appreciated that RNA has a much greater role in the regulation of biological processes than previously thought. It is generally accepted that stable RNA structures can be an important determinant in biological activity. Using HIV as a probe, the Mak Laboratory has provided direct evidence that structurally-poor RNA domains are also utilised by viruses to regulate biological process. This study provides paradigm shift evidence to reveal the broad spectrum of mechanisms used by biological systems to govern the dynamic RNA-based regulation network in cells.

#### **Churchill/Wesselingh Laboratory (HIV Neuropathogenesis)**

Dr Melissa Churchill Heads the HIV Neuropathogenesis Laboratory. One of her major research interests is understanding the importance of astrocytes in the development of HIV-associated dementia, a complication of AIDS. Until now, astrocytes were thought to be rarely infected with HIV-1. In a study accepted for publication in *Annals of Neurology*, Melissa developed highly sensitive new techniques to show that astrocytes in brain tissue can be extensively infected with HIV, and that astrocyte infection has an important role in the development of brain disease.

#### **Cherry Laboratory (HIV Neuropathy and Toxicity)**

The Cherry Laboratory aims to find ways of predicting HIV treatment toxicities, before patients develop irreversible problems like neuropathy. The lab has developed a ligation-mediated PCR assay to quantify apoptosis, and has shown that patients with toxicity have higher results in blood than those without. With ACH2 funding, David Hooker is working to merge ligation-mediated PCR with real-time PCR to provide a rapid-throughput assay more

suitable for clinical use. The laboratory also plans a prospective study of Australian HIV patients using modern therapies to confirm the assay's utility for predicting side effects to improve safety of HIV treatments.

#### **Crowe Laboratory (Clinical Research Laboratory, World Health Organisation Regional HIV Drug Resistance Laboratory)**

The development of resistance to anti-HIV drugs poses a serious threat to effective HIV treatment. The WHO Regional HIV Drug Resistance Laboratory for the Asia and Pacific regions, supervised by Dr Anna Hearps, is responsible for providing technical and logistical support for resistance testing within the region. As part of this role, the laboratory has developed a low-cost resistance test and optimised its use with dried blood spots to enable resistance testing to be performed within remote areas of resource-constrained countries.

## CENTRE FOR IMMUNOLOGY

The Centre for Immunology brings together outstanding research groups with a wide spectrum of skills applicable to the understanding of the immune system and its manipulation to treat disease. Key questions are: why does the immune system attack normal cells that it should ignore, for example in diseases such as rheumatoid arthritis and lupus, but in cancer, ignores the cancerous cells it should eliminate? How is it that infectious agents avoid immune destruction? Answering these questions will lead to a greater understanding of the immune system and the development of new treatments for major diseases.

The Centre for Immunology has a unique combination of researchers in Australian immunology: structural biologists and protein chemists, bio-organic chemists, cellular immunologists and molecular biologists. Centre laboratories have outstanding track records in translating basic research into new treatments. Commercialisation in the centre continues with pre-clinical development of a new intranasal vaccine for respiratory viruses and an injectable cancer vaccine.

### Highlights

#### **Establishment of Immunological Monitoring Facility**

In a major initiative, Associate Professor Rosemary Ffrench and Associate Professor Bruce Loveland have established a central Immunological Monitoring Facility (IMF) which will produce high quality data on the immunogenicity of therapies to Good Laboratory Practice (GLP) standard.

IMF will support the future development of vaccines in influenza, respiratory syncytial virus and cancer, as well as therapeutic monoclonal antibody programs and involvement in the Cooperative Research Centre for Biomarker Translation. The facility has been carefully developed, with highly skilled staff, validated immunoassay protocols and dedicated equipment to undertake tests which assess the immune responses in small animal studies and early phase human clinical trials. The facility is available to the broader research and development community in collaborative partnerships, and 2008 saw the completion of the first phase 1 clinical trial.

IMF is expanding the range of assays that can be performed to GLP standard and is being evaluated for National Association of Testing Authorities (NATA) accreditation.

#### **New vaccine strategies for cancer therapy**

Geoff Pietersz and Vasso Apostolopoulos demonstrated the superior immunogenicity of an immune stimulant based on a carbohydrate modification of a breast cancer target. Development of a breast cancer vaccine has been in progress for many years and the selective stimulation of immune cells using a modified sugar attached to the cancer specific molecule, MUC1, has been shown to be effective in clinical testing on ovarian cancer patients. This has improved capacity to stimulate immune cells and showed superior immunogenicity in preclinical studies.

This is an excellent example of a combination of immunology, chemistry and structural biology, funded by NHMRC and will also be a commercial partnership with 4G Vaccines. The improved stimulation will provide a next generation of potential immunotherapy-based approaches to the treatment of cancer.

## Snapshots

### **Apostolopolous Laboratory** (Immunology and Cancer Vaccine)

Research has shown that the function of dendritic cells (DC) is dependant on their developmental stage, and may form the basis of improved DC-based immunotherapy protocols. In a study focused on multiple sclerosis, a number of mutant peptide antigens were designed and shown to alter DC-driven immune response, resulting in the suppression of MS in mice.

### **Ffrench Laboratory** (Viral Immunology)

A major HCV clinical trial showed clear differences in the nature of the immune response in individuals who could clear the infection compared to those who experienced chronic infection. Importantly, the lab showed that early treatment for HCV infection with interferon restored effective immune responses, indicating that early therapy may aid in the prevention of subsequent re-infection with HCV.

### **Gerondakis Laboratory** (Intracellular Signalling and Gene Expression)

This laboratory has shown that survival of B-cells stimulated through Toll-like receptors is achieved by the NF- $\kappa$ B pathway controlling several mechanisms that collectively neutralise and degrade Bim, a cellular protein which promotes cell death when activated by stress signals such as microbial products. These findings provide new insight into the mechanisms that limit microbial pathogenesis arising from cell death during infections.

### **Hogarth Laboratory** (Helen Macpherson Smith Trust Inflammatory Diseases)

The lab has analysed 34,000 genes in the mouse and identified 18 that are altered during rheumatoid arthritis development in an animal model, with one candidate target identified for generation of future treatments. A key new subset of T-cells (Th17) that drives inflammatory disease is being elucidated. Microbes have evolved ways of avoiding immunity and the lab has used X-ray crystallography to discover how the golden staph hijacks immunity by binding and inactivating IgA.

### **Jackson Laboratory** (Immunoreceptor)

The lab has made the remarkable observation that PECAM (platelet/endothelial cell adhesion molecule), which normally regulates immunity, works against the immune system in salmonella infections. Mice lacking PECAM are better able to resist infection. Understanding the mechanism of this resistance may improve control of salmonella infection in humans.

### **Pietersz Laboratory** (Bio-Organic and Medicinal Chemistry)

A number of novel ligands that bind to dendritic cells have been developed based on dendrimer modified antigens. In addition, these vaccines also incorporate synthetic danger signals to efficiently activate dendritic cells to prime naive T-cells. Similar approaches are used to deliver genetic material to develop DNA vaccines and gene therapy strategies for the treatment of cancer.

### **Power Laboratory** (Kidney)

Renin is the most important controller of blood pressure. The lab has shown that its secretion is controlled, in part, by fatty acid metabolism in the kidney suggesting a new link between obesity, diabetes and blood pressure. The lab also works to understand how leaks occur in the kidney. Recent research has shown that abnormalities in lysosomal function can lead to loss of proteins that can damage the kidney, leading to kidney failure and the need for dialysis.

### **Ramsland Laboratory** (Structural Immunology)

Recent studies have shed new light on the understanding of carbohydrate recognition by antibodies. Dr Ramsland's group, with collaborators, determined the structural basis of antibody interactions with a carbohydrate present on pig cells, but not human cells, Gal $\alpha$ (1,3)Gal. Automated docking studies with a panel of antibodies and Gal $\alpha$ (1,3)Gal carbohydrates determined the major binding mode was end-on insertion where the terminal sugar unit anchors the entire carbohydrate.

### **Xing Laboratory** (Cancer Immunotherapy)

The lab has generated a specific antibody to a proto-oncogene PIM-1, which reacted strongly with prostate cancer. For the first time, it was demonstrated that this antibody induces cancer cell death. It also substantially inhibits growth of human prostate cancer cells in an animal model. This is an exciting step towards the development of new treatment for those with prostate cancer.

## CENTRE FOR POPULATION HEALTH

The Centre for Population Health (CPH) strives to improve the health of the community by conducting high quality, innovative research that addresses the major public health problems associated with infectious diseases and drugs and related behaviours. CPH's areas of specific interest are HIV, hepatitis C, sexually transmitted infections, malaria, tuberculosis, and drug and alcohol misuse. All are serious health concerns in Australia and the Asia and Pacific regions predominantly affecting highly vulnerable populations.

CPH implements novel, multidisciplinary scientific programs that use epidemiology, laboratory science, clinical and social research, and public health principles to address major health problems in the region. Working with highly vulnerable populations, CPH undertakes a broad spectrum of work, ranging from research that helps to better understand the priority diseases and their transmission and ecology, to discovery science with potential for longer term benefits such as therapeutics and vaccines, to health systems oriented research that directly influences health policy.

## Highlights

### **Groundbreaking work on drug-resistant tuberculosis**

In an international collaboration set in Uzbekistan, Dr Helen Cox of Burnet's International Health Research Group and her colleagues followed 87 patients infected with multidrug-resistant tuberculosis, using drug sensitivity testing and molecular typing. During the course of treatment, 18 patients developed resistance to ofloxacin, a marker for the extensively drug resistant strains. The group demonstrated that in 13 patients the molecular type remained constant and the strains had amplified resistance during treatment; one patient had an initial dual infection with a sensitive and a resistant strain. Alarmingly, four patients were shown to have been exogenously reinfected while on treatment with strains similar to those isolated from other patients staying in the hospital. Findings were published in *New England Journal of Medicine* and have major practical implications for the treatment of drug-resistant TB in hospital settings.

### **The networks study – an innovative multidisciplinary investigation of the hepatitis C virus**

Since 2005, Associate Professor Margaret Hellard and Dr Campbell Aitken have collaborated with scientists from the Victorian Infectious Diseases Reference Laboratory and Department of Immunology, University of Melbourne, on a major multidisciplinary HCV study. The networks study focused on HCV transmission within social networks which include several hundred injecting drug users, the population most at risk of HCV. People who were infected with HCV, then cleared their infection, were found to be significantly more likely to be re-infected with the virus than those who had never contracted the disease. These findings suggest that clearance of an HCV infection does not confer immunity against future infection and makes subsequent infection more likely, with obvious implications for vaccine development.

## Snapshots

### A novel protein export machine in malaria parasites

Malaria is one of the most devastating infectious diseases of humankind and is caused by massive infection and destruction of the body's blood cells by *Plasmodium* species parasites. Research is focused on trying to understand how *Plasmodium* parasites recognise and infect blood cells, and how they are able to grow and avoid the human immune system. In a recent breakthrough study, novel parasite protein machines that export parasite proteins into their red blood cell hosts were identified. The exported proteins are essential for parasite survival, and researchers aim to discover drugs that can block the export machines.

### HIV prevalence study – Suck it and See

Suck it and See is an innovative new study that aims to estimate the prevalence of HIV and the extent of unrecognised infections among gay men in Melbourne. 746 men were recruited through community-based sites including bars, clubs, sex-on-premises venues and sexual health clinics. Participants completed a short behavioural survey and provided an oral fluid specimen for HIV antibody testing. As the first of its kind in Australia, this study will be the pilot for a nation-wide system conducted periodically and will inform ongoing epidemiological initiatives.

### New study addresses health outcomes for injecting drug users

In 2008, the Melbourne Injecting Drug User Cohort Study (MIX) commenced as a longitudinal study of the health and social outcomes associated with injecting drug users. MIX will provide new data on the typical trajectories of injecting drug use in Australia and determine risk and protective factors for users for outcomes in the health, social and psychological domains.

### Sexual health and young people

CPH continued its work related to sexual health and young people. Staff again attended the Melbourne Big Day Out music festival in January, recruiting over 2000 young people to complete a short behavioural survey. Participants then received twelve sexual health promotion text messages on their mobile phones over the subsequent four months. The results were very encouraging – there was a significant improvement in sexual health knowledge and uptake of sexual health testing after receiving the messages.

### Justice health research

CPH commenced a study investigating the post-prison release experiences of offenders with a history of injecting drug use. This study will interview participants at one month, three months and six months post-release and examine personal, behavioural and service-related outcomes during this particularly vulnerable period in their lives – a period often characterised by substantially increased risks of mortality and morbidity.

### Development of innovative surveillance systems

CPH worked on the development of several innovative surveillance systems to improve understanding of HIV, hepatitis C, chlamydia and syphilis transmission. These included an HIV/STI sentinel surveillance system for Victoria and the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS). Working with the National Centre in HIV Epidemiology and Clinical Research, the National Reference Laboratory and the National Perinatal Statistics Unit, six separate chlamydia sentinel surveillance networks will be established, each providing unique information on testing uptake and prevalence of chlamydia infection in a range of priority populations: young heterosexuals, men who have sex with men, Indigenous Australians, pregnant women and sex workers.

### Malaria genomics for better interventions

A major obstacle to broadly effective malaria vaccines is the extraordinary genetic diversity of the malaria parasite, *Plasmodium falciparum*. Dr Alyssa Barry and colleagues investigate the distribution and evolution of diversity of

*P. falciparum* surface antigens, including leading vaccine candidates. Patterns of antibody acquisition to the highly variable parasite antigen PfEMP1 are being defined to understand how natural immunity develops. This is a collaboration with the Papua New Guinea Institute of Medical Research, Queensland Institute of Medical Research and University of California, Irvine.

## CENTRE FOR INTERNATIONAL HEALTH

The Centre for International Health (CIH) is committed to improving the health of communities in low-income countries through strengthening primary health care and the control of high-burden health problems. CIH aims to both support evidence-informed health programs and to more broadly influence international health policies and initiatives within the developing world.

CIH designs, implements and evaluates public health programs in Asia, the Pacific region and Africa, predominantly undertaking programs in partnership with local and international organisations. Areas of focus are HIV and AIDS prevention and care, including harm reduction; women's and children's health; and the control of other communicable diseases, including emerging infections. CIH also delivers a highly-regarded training and education program in international public health.

CIH has a strong commitment to comprehensive harm reduction and has expanded its traditional focus on injecting drug use to a broader drugs and society approach that includes research on the impact of amphetamine-type stimulants (ATS), marijuana, and alcohol on behaviours that heighten the risk of sexually transmitted infections. CIH also continues to work closely with law enforcement officials in a number of countries, including Malaysia, Indonesia and China, to enable drug users to access prevention and treatment services.

CIH reached an important milestone in 2008 when our first 'country program' – in the Lao PDR – celebrated its 10th anniversary.

### Country Programs

#### Indonesia

A review of Burnet's Indonesia Country Program resulted in a more focused strategic plan. Burnet staff have been active in several national networks, including HIV counselling and gay, transgender and other men who have sex with men. Burnet's counselling training was acknowledged at the national level as a model of good practice. The Levi Strauss Foundation continues to support capacity building for local responses to HIV among drug users in Bekasi, West Java. In association with GRM, CIH commenced support of the third phase of Australian assistance to the Indonesian response to HIV and AIDS through the HIV Cooperation Program for Indonesia (2008–2012). CIH's program of capacity building in HIV prevention and care continues in NTB province. AusAID commissioned Burnet to assess methods to 'mainstream' HIV in all development programs.

#### Lao People's Democratic Republic

In 2008, the Lao program developed a wide-ranging portfolio of new activities. The mining company LXML funded a maternal and child health and nutrition project in the surrounding district. Burnet is a sub-recipient in a new Global Fund grant to promote safer sex among men who have sex with men in three provinces. CIH successfully tendered for a two-year HIV prevention project, funded by the Asian Development Bank (ADB), in communities along a newly constructed highway in the north. Local staff engaged in a range of consultancies for development partners, including ADB, World Vision and Lux-Development.

#### Mozambique

The fifth year of CIH's program witnessed significant achievements, including increasing proficiency of the Manica core team as trainers and mentors, strengthened capacity of CIH partner MONASO Manica, and increasing institutional and technical capacity of NGOs in Manica and Sofala provinces.



*The Burnet Institute places great emphasis on translational research.*

In October, CIH Youth Ambassador, Collingwood footballer Heritier O'Brien visited Manica and has become a strong advocate for Burnet's HIV work in Mozambique.

#### **Myanmar**

The devastating natural disaster of Cyclone Nargis left over 130,000 people dead or missing, and directly affected another 2 million people. In response to Nargis, the CIH team in Myanmar grew to 58 full-time staff in order to deliver services through the Local Resource Centre and the Integrated Psychosocial Sexual Reproductive Health project (with Marie Stopes International). In the midst of these diverse public health and emergency activities, the Burnet Institute program in Myanmar continued its focus on strengthening the capacity of local partners to build community responses to HIV.

#### **Papua New Guinea**

AusAID extended Burnet's contract to manage the Tingim Laip program, which supports community-based responses to HIV in 35 sites. The East New Britain Sexual Health Improvement Project became fully operational with STI training for health workers and the development of community-based 'stret tokers' who promote prevention, including condoms. There was a successful second measles supplementary immunisation activity, with social mobilisation from Burnet.

#### **China (Tibet), Sri Lanka and Vietnam**

- In Tibet, a two year Cooperation Agreement was endorsed and new support received from the Canada Fund to implement the Duilong Dechen Community HIV Prevention Project. CIH continued to manage the China Australia HIV and Health Facility and, with the Australian Red Cross, jointly implemented the Tibet Health Sector Support Program.
- In this fifth year of the Sri Lanka project to improve the health and well-being of elders in tea estates, there was a focus on advocacy, disseminating lessons learned and building sustainability of activities.
- With a Planet Wheeler Grant, CIH supported the Vietnam Community Mobilisation Centre for HIV/AIDS Control to implement harm reduction activities in Hanoi, including peer education, outreach, and a drop-in centre.

#### **Other highlights**

In 2008, AusAID established four new 'knowledge hubs'. The Women's and Children's Health (WCH) Knowledge Hub (Compass) is a partnership between CIH, the Menzies School of Health Research and the Centre for International Child Health at the University of Melbourne. The purpose of Compass is to establish a central knowledge point for those who work to improve WCH, advocating for greater investment, facilitating partnerships, and influencing policy and practice, with a focus on contributing to equitable progress towards the United Nations' Millennium Development Goals 4 and 5. Research included studies related to Drugs and Society in Asia and the Pacific, such as the AusAID-funded Illicit Drugs Initiative – research and capacity building on ATS in Lao PDR, Cambodia and Thailand.

The Pacific Drug and Alcohol Research Network (ten countries) is in its fourth year, supported by AusAID, UNODC and WHO. Burnet and the Fiji School of Medicine, and with AusAID funding, conducts situation assessments of STI/HIV risks associated with drugs and alcohol in 16 Pacific countries.

CIH contributed to a range of activities commissioned by a number of international partners. For example, a study of HIV epidemiology and surveillance in Pacific countries was commissioned by UNAIDS for the Commission on AIDS in the Pacific. Other activities included the development of the Pacific Regional HIV Strategic Implementation Plan (SPC), evaluation of the national needle and syringe program in Malaysia (WHO), technical direction of the Central Asia Regional HIV/AIDS Program (DFID), development of a national strategy on HIV prevention in mothers and children for Sri Lanka (World Bank), development of an advocacy tool around HIV and men who have sex with men in South East Asia (RTI/USAID), capacity building in essential drugs management in the Pacific (WHO), review of Uzbekistan's harm reduction program (World Vision), and HIV prevention in prisons in China (UNODC).

#### **POSTGRADUATE STUDENTS**

7 Masters Students  
54 PhD Students

#### **PUBLICATIONS**

115 Journal Articles  
3 Book Chapters



## BURNS

Director: Dr Heather Cleland MBBS, FRACS

The Burns Unit at The Alfred provides a state-wide service for adult, burn-injured patients. In addition to providing clinical care for all major burns patients in Victoria, the unit engages in clinical, epidemiological and basic science research designed to improve multidisciplinary care for burns patients, and inform prevention and education programs.

### ACHIEVEMENTS

Funding has been secured for the establishment of a Bi-National (ANZ) Burns Registry. The registry was established in 2003 by The Alfred Burns Unit, which administered the registry until 2008 when funding enabled outsourcing for further development and ongoing management by the Department of Epidemiology and Preventive Medicine, Monash University. The Alfred Burns Unit has ongoing involvement with the registry via the steering and reference committees, as well as various subcommittees. The registry will form the basis for national benchmarking and quality activities in the area of burn care in Australia and New Zealand, and facilitate multicentre research projects.

Funding has been obtained to re-establish the Skin Tissue Culture Laboratory located in the AMREP laboratories. The laboratory is headed by Dr Shiva Akbarzadeh. The focus of this laboratory's work will be on keratinocyte culture and the development of systems for delivery of cultured keratinocytes. Initial projects are established in collaboration with the Epithelial Stem Cell Laboratory at Peter MacCallum Cancer Centre. These include projects on optimising adult keratinocyte growth *in vitro* and identification of adult keratinocyte stem cell populations.

### DEPARTMENTAL HIGHLIGHTS

- Yvonne Singer (Clinical Care Coordinator) was awarded a Churchill Fellowship in 2007 and in 2008 travelled to the USA, where she visited trauma and burns data bank centres, reviewed prevention programs, and benchmarked clinical practices at two major burns centres
- The Alfred Burns Unit organised and hosted the Australian and New Zealand Burns Association (ANZBA) Annual Scientific Congress
- Dr Edwina Moore (Monash Department of Surgery) was equal winner of the DS Rosengarten Surgical Trainee Research Prize with her presentation entitled 'Candida and burns: risk factors and outcomes'

### RESEARCH PROJECTS

- The role of activin and other cytokines in burn wound healing and scar
- Pseudomonas bacteraemias in adult burns patients
- Candida infections in burns patients
- Pentrox (methoxyflurane) for acute procedural pain in ambulant burn patients

- Virtual reality as an adjunct for procedural burn pain management
- Epidemiology of burns injuries in Victoria and Australia
- Alcohol and burn injury
- Intravenous lignocaine in the management of burn procedural pain
- Review of the use of Biobrane skin substitute in the management of burn wounds
- Splinting regimes in axillary burns (Alison Kolmus – Master of Physiotherapy)
- Outcomes in burn injured patients (Jason Wasiak – PhD)
- Prehospital management of burns patients in the state trauma system

### COLLABORATIONS

- Epithelial Stem Cell Laboratory, Peter MacCallum Cancer Centre (Dr Pritinder Kaur) – basic and applied research in keratinocyte stem cells and culture
- Monash Institute of Medical Research – cytokines in burn injury
- Monash Department of Epidemiology and Preventive Medicine – outcomes research and registry
- Victorian Burns Prevention Partnership (VBPP): Royal Children's Hospital, The Alfred, Metropolitan Fire Brigade (MFB) and Country Fire Authority – evidence-based burns prevention programs
- MFB and MUARC (Monash University Accident Research Centre) – alcohol as a contributing factor in burn injury



### POSTGRADUATE STUDENTS

1 Masters Student  
1 PhD Student

### PUBLICATIONS

3 Journal Articles  
1 Cochrane Systematic Review



*Dr Ruchong Ou and Cherry Zhang in the oxidative stress laboratory.*



The Alfred



MONASH  
University

## 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

### RESEARCH AREAS

#### Metabolic Therapy

The department studies the effect of metabolic supplements and antioxidants such as coenzyme Q<sub>10</sub>, omega-3 fatty acids, selenium and orotic acid in the treatment of heart disease and preparation for major surgery including cardiac and orthopaedic surgery.

We have just analysed a three year study of perioperative metabolic supplementation in Alfred Hospital cardiac surgery patients using coenzyme Q10, lipoic acid, fish oils and magnesium orotate. The results showed a 50% reduction in the incidence of atrial fibrillation, a 33% reduction in troponin I release (indicating less cardiac damage) and a 1.3 day shortening in hospital length of stay.

These clinical benefits translated into an average cost saving per patient of \$3,200. We are now giving metabolic supplementation to all Alfred cardiac surgery patients (funded by a vitamin and mineral company) and will review the outcomes after one year.

#### Measurement of Oxidative Stress and Antioxidant Capacity

We have acquired an automated analysis instrument that can rapidly measure oxidative stress and antioxidant capacity on finger prick blood samples and are beginning to correlate these measures with disease severity and response to metabolic therapy. We are in the process of establishing an oxidative stress laboratory where these assays can be made readily available to clinicians and researchers.

#### Mechanical Support of the Circulation

The department has a longstanding interest in assisting with the development of mechanical circulatory support devices and evaluating these in animal studies and clinical trials. In collaboration with the University of New South Wales we are currently evaluating the performance of the Ventrassist heart assist device in greyhound dogs and developing a feedback control system to regulate pump output to the demands of the body in exercise and at rest. We are also studying the effect of non pulsatile flow on vascular function in Ventrassist implant patients.

#### Transplantation

The department has recently studied optimal methods of preserving hearts from DCD (donation after cardiac death) donors. If these hearts can be resuscitated adequately, this would represent a whole new class of heart transplant donors. We are negotiating with a Texas based company and will be pursuing these studies in 2009.

#### Rib Plating for Chest Trauma

Dr Silvana Marasco and associates have been studying the use of absorbable plates to repair fractured ribs. These devices have the potential to reduce pain and accelerate recovery after major trauma.

### MAJOR FINDINGS

We have demonstrated that metabolic preparation for cardiac surgery can reduce troponin release, halve the incidence of atrial fibrillation and reduce hospital stay by one day.

### STAFF ACHIEVEMENTS

The Cardiac Surgical Research Unit has been designated, along with its partner, Swinburne University, as one of three Foundation Centres of the National Institute of Complementary Medicine. This Centre, headed jointly by Professor Franklin Rosenfeldt and Dr Lesley Braun, provides advice and expertise in complementary medicine to cardiac patients and health professionals as part of a Cardiac Wellness Program.

The Cardiac Surgical Research Unit has established an oxidative stress laboratory headed by Dr Ruchong Ou.

### CURRENT PROJECTS

- Metabolic therapy for cardiac and orthopaedic surgery (Franklin Rosenfeldt, Lesley Braun, Ruchong Ou, Catherine Reardon)
- VentrAssist artificial heart and the peripheral effects of non-pulsatile flow (Juliana Van Der Merwe, Franklin Rosenfeldt, Robert Salamonsen, David Kaye)
- Feedback control for cardiac assist devices

#### POSTGRADUATE STUDENTS

2 Masters Students  
2 PhD Students

#### PUBLICATIONS

23 Journal Articles



TheAlfred



*The CoreValve ReValving™  
System team (from left):  
Alison Gostelow, Dr  
Stephen Duffy, Dorothy  
Santos, Dr Tanya Pereira  
and Dr Tony Walton.*



## CARDIOVASCULAR MEDICINE

Director: Professor Anthony Dart BA, DPhil, BM, BCh, FAHA, FRCP, FRACP

Research studies conducted within the Department of Cardiovascular Medicine range from identification of the best strategies for reducing the risk of cardiovascular disease through to the evaluation of the latest technological advances. Some studies involve research into basic mechanisms, whilst others investigate practical therapeutics. Studies within the department commonly rely on collaborations with other Alfred departments or AMREP partners, most notably the Baker IDI Heart and Diabetes Institute. In addition to investigator-led studies, the department participates in a number of multicentre trials. In 2008, a number of major findings from the department were published in *Circulation Research*, *Journal of American College of Cardiology*, *Journal of Cardiac Failure* and *Gene Therapy*.

### CORONARY ARTERY DISEASE

Research includes an investigator-led single centre study into whether the early administration of deferoxamine can reduce the size of a heart attack. Deferrioxamine binds iron and is postulated to limit the size of a heart attack through limiting the damage done by oxidation products. This is the first large single centre study on infarct size to be conducted within the department and is led by Dr Stephen Duffy. Other studies involve the investigation of the pattern of blood flow in diseased and disease free coronary arteries using the new methodologies of wave intensity measurement. These studies build on previous extensive experience on the biomechanical properties of arteries (Professor Anthony Dart and Professor Bronwyn Kingwell). The department is a major contributor to the Melbourne Intervention Group register of outcomes following angioplasty.

### HEART FAILURE AND TRANSPLANTATION

Research includes studies to try to limit cardiac fibrosis in transplant patients. Other studies examine the phenomenon of heart failure with preserved systolic pump function which is widely prevalent but ill understood. Research in heart failure within the department is coordinated by Professor David Kaye. A number of studies involve the evaluation of devices to treat heart failure, hypertension and valvular heart disease. These include the implantation of a device to measure the early onset of heart failure, a percutaneous technique to reduce inappropriate nerve activity to the kidney, which is a cause for high blood pressure, and a new technique to replace diseased aortic valves without an operation. These studies are led within the department by Dr Tony Walton. In addition, a device developed by Professor Kaye to reduce the damage done by contrast dye in patients with impaired kidney function who are undergoing coronary angiography is being evaluated.

### NON-INVASIVE CARDIOVASCULAR IMAGING

Non-invasive cardiovascular imaging has expanded from echocardiography to cardiac magnetic resonance imaging (CMRI), and, in conjunction with the

Department of Radiology, the use of computed tomography (CT) coronary angiography. Studies in CMRI, led by Dr Andrew Taylor, have particularly focused on ways of assessing scar damage within the heart in patients with heart failure and after a heart attack. These studies will help not only to explain the presence of heart failure in some patients, but also guide the appropriate use of therapeutic strategies, such as biventricular pacing and automatic implantable cardiac defibrillators.

### METABOLIC BASIS FOR BLOOD VESSEL DISEASE

A number of studies, particularly in conjunction with colleagues at Baker IDI, probe the metabolic basis for blood vessel disease, predominantly in relation to glucose and lipids. Several studies concentrate on the functions of high-density lipoprotein (HDL), the 'good' cholesterol. A major study led by Dr James Shaw was completed during the year, demonstrating that a single infusion of HDL cholesterol could favourably modify properties of atheroma. This may open the way for such therapeutic measures to be used in the treatment of unstable coronary syndrome. Other studies, led by Professor Kingwell and Dr Duffy, demonstrated major effects of HDL on other metabolic processes such as inflammation and also a role for HDL in glucose metabolism. Several studies that commenced relate to obesity and lipid disorders. These include investigating the effects of obesity and its treatment on endothelial progenitor cells (Professor Jaye Chin-Dusting, Professor Dart), a major mechanism of vascular repair and a novel dietary treatment for elevated cholesterol (Dr Michael Skilton).

### ATRIAL FIBRILLATION

Studies in the field of arrhythmias are concentrated on atrial fibrillation, which continues to grow as a clinical problem. Within this field, the department has a particular emphasis on the relationship between atrial fibrillation and heart failure, and whether restoration of normal rhythm would result in less morbidity from cardiac disease. The introduction of advanced mapping techniques into the department has made possible studies dependent on the ability to undertake (pulmonary vein isolation) ablation therapy for atrial fibrillation. Research in this area is led by Dr Peter Kistler.

### BRAIN-HEART INTERACTION

A number of studies investigate the antecedents of cardiovascular disease, particularly the brain-heart interaction, and are led by Professor Murray Esler. Considerable attention in recent years has been given to the links between illnesses such as depression and panic attacks and cardiac, particularly coronary, events. Researchers seek to unravel some of the mechanisms by which these occur, with a particular focus on the role of the sympathetic nervous system.

## CURRENT STUDIES

- High sensitivity C-reactive protein and its association with vascular events in HIV-positive patients (A Dart)
- Soluble P-selectin levels in peripheral arterial occlusive disease (K Woollard, J Chin-Dusting, A Dart)
- Cardiovascular disease and its genetic correlation with pseudoxanthoma elasticum (A Dart)
- Metabolic regulation of ABCA1 expression in patients with Type 2 diabetes and athletes (B Kingwell)
- *In vivo* microdialysis studies of metabolite and neurotransmitter overflow from the adipose tissue and skeletal (M Esler)
- Clinical follow up of patients undergoing percutaneous revascularisation at Melbourne hospitals (S Duffy)
- Does systemic arterial compliance predict blood pressure responses in patients undergoing percutaneous coronary intervention (J Shaw)
- Effect of fitness on chronic low-grade activation of the immune system and insulin sensitivity in physically fit and healthy sedentary individuals (B Kingwell)
- Effects of polymorphisms in antioxidant genes on the clinical presentation (stable versus unstable coronary syndrome) in a group of patients undergoing coronary angiography (S Duffy)
- A novel mechanism mediating anti-atherosclerotic and metabolic actions of HDL cholesterol (B Kingwell)
- A randomised dose ranging study of hexadecasaccharide including active control in patients with unstable angina or non-ST-segment elevation myocardial infarction scheduled to undergo percutaneous coronary intervention (SHINE) (J Shaw)
- Sex dimorphism in matrix metalloproteinase (MMP) activity in peripheral white blood cells from healthy controls and patients with acute myocardial infarction (A Dart)
- Growth factor secretion by the normal and failing human heart (D Kaye)
- Identifying predictors of progressive mitral regurgitation in heart failure (D Kaye, J Mariani)
- Future revascularisation evaluation in patients with diabetes mellitus: optimal management of multivessel disease (A Dart)
- Heart transplant myocardial fibrosis study: effect of spironolactone on myocardial fibrosis and myocardial function in patients with left ventricular diastolic dysfunction after heart transplantation (A Leet)
- A clinical trial comparing cangrelor to clopidogrel in subjects who require percutaneous coronary intervention (S Duffy)
- Endothelial progenitor cell number and function in congenital vascular malformation (A Dart)
- Mechanisms of the disorders of circulatory control which may cause syncope (M Esler)
- Sympathetic nervous system activation in renal failure: its contribution to pathogenesis and progression (G Lambert)
- Examining cognitive function in patients with the postural orthostatic tachycardia syndrome (G Lambert)
- IMPROVE IT (IMproved Reduction of Outcomes: Vytorin Efficacy International Trial) (J Shaw)
- Role of endothelial progenitor cells in metabolic syndrome and weight loss (A Dart)
- Do high dose tirofiban and ReoPro have similar effects on platelet function and recovery of left ventricular function in patients with acute myocardial infarction? (J Shaw)
- Sympathetic function in the heart, brain and kidney of patients with POTS (M Esler)
- ACE Inhibition: a potential new therapy for peripheral arterial disease (B Kingwell)
- Novel therapies for the treatment of Type 2 diabetes (B Kingwell)
- Mechanisms of sympathetic overactivity in the metabolic syndrome: effects of reversing insulin resistance by drug treatment (N Straznicky)
- The use of single chain antibodies for the detection of monocyte activation in patients with stable and acute coronary syndromes (K Peter)
- A double-blind, randomized, placebo-controlled, single and multiple dose study to evaluate the safety, tolerability, and pharmacokinetics of MK-0974 in healthy male Japanese subjects (K Masuo)
- Lipid profiling: early detection, monitoring and pathogenesis of atherosclerotic heart disease (P Meikle)
- The atrial electrical and structural effects of systemic and pulmonary hypertension in humans (P Kistler)
- Characterisation of electrophysiological and radiological substrates in ischemic and dilated cardiomyopathy patients with and without ventricular tachycardia using three-dimensional electroanatomic mapping and magnetic resonance imaging (D Kaye)
- Randomised controlled pilot trial of n-acetylcysteine in the management of chronic heart failure with coexistent chronic renal failure (D Kaye)
- A randomised crossover trial to assess the impact of the dietary n-6:n-3 polyunsaturated fatty acid ratio on markers of cardiovascular health in patients with dyslipidaemia (J Chin-Dusting)
- Native kidney denervation in patients with end stage renal disease (M Schlaich)
- The influence of heart rate reduction upon central arterial pressure in younger and older healthy individuals (B Kingwell)
- Characterisation of electrophysiological, radiological and histological substrates for ventricular tachycardia in patients undergoing cardiac transplantation for ischemic and non-ischemic cardiomyopathy (D Kaye)
- The influence of heart rate reduction upon coronary blood flow as assessed by coronary wave intensity analysis (B Kingwell)
- Determination of central arterial pressure and left ventricular ejection fraction in humans by analysis of peripheral arterial pressure waveforms (B Kingwell)
- Cardiac magnetic resonance imaging in the evaluation of myocardial fibrosis in advanced heart failure (L Iles)
- Reversibility of chronic atrial remodeling late after curative atrial flutter ablation (P Kistler)
- A randomised study of a Nurse-led Intervention for Less Chronic Heart Failure: the NIL-CHF Study (S Stewart)
- A multicentre, randomised, double-blind, placebo-controlled study to evaluate the safety and efficacy of SCH 530348 in addition to standard of care in subjects with acute coronary syndrome (S Duffy)
- The role of the renin angiotensin aldosterone system activation in myocardial fibrosis, diastolic function and its link to liver fibrosis in morbid obesity (C Wong)
- A single center pilot study evaluating the use of the Osprey Medical CIN System™ (S Duffy)
- Noradrenaline transporter dysfunction in neural circulatory disorders (M Schlaich)
- Understanding the acute effects of prolonged sedentary behaviour (sitting) on post-meal glucose and lipids – a pilot study (B Kingwell)
- Cardiac and liver fibrosis in patients with the metabolic syndrome as detected by magnetic resonance T1 mapping (M Butler)
- Role of the sympathetic nervous system in obesity and associated metabolic abnormalities in the early development of organ damage in young adults (G Lambert)
- Do coronary plaque biomechanical differences between diabetic and non diabetic subjects relate to differences in plaque morphology and measures of neovascularisation? (J Shaw)
- A 76-week, worldwide, multicenter, double-blind, randomized, placebo-controlled study to assess the tolerability and efficacy of anacetrapib when added to ongoing therapy with a statin in patients with hypercholesterolemia or mixed hyperlipidemia (P Nestel)
- Exertional dyspnea in patients with echocardiographic signs of diastolic dysfunction: are symptoms really caused by impaired left ventricular filling? A prospective case-control study (D Kaye)
- Effects of peri-procedural iron chelation on myocardial infarct size and oxidative stress in ST-elevation myocardial infarction (S Duffy)
- Does tricuspid regurgitation contribute to renal dysfunction in patients with heart failure? (D Kaye)
- Utilisation of coronary CT angiography in cardiac risk stratification (A Taylor)
- International ReValving™ Registry (T Walton)
- Cardiac and liver fibrosis in patients with viral hepatitis as detected by magnetic resonance T1 mapping (A Taylor)
- Anaemia and myocardial iron in heart failure (D Kaye)
- Applying novel biomarkers to assess cardiac risk in patients undergoing major vascular surgery (S Duffy)
- Correlation of CMRI findings with subsequent ventricular arrhythmias in subjects with heart failure (A Taylor)
- A quality improvement initiative on the Discharge Management of Acute Coronary Syndromes (DMACS) (A Dart)
- The role of cardiac magnetic resonance imaging and serum biomarkers in the identification and monitoring of myocardial involvement in patients with established non-cardiac sarcoidosis (J Habersberger)
- Effects of a 10 or 15 mg single intravenous bolus of ivabradine versus placebo on heart rate control during a multislice computed tomography coronary angiography for the evaluation of coronary artery disease. A randomised, double-blind, international multicentre study (A Taylor)
- A multi-center, double-blind, randomized, placebo-controlled, parallel-group withdrawal-design study to assess the clinical effect of Droxidopa in subjects with primary autonomic failure, dopamine beta hydroxylase deficiency or non-diabetic neuropathy and symptomatic neurogenic orthostatic hypotension (M Esler)
- Time to transfusion study (M Phillips)
- The influence of dairy on risk and progression of obesity and metabolic syndrome: an AusDiab prospective study (J Shaw, P Meikle)
- Does warfarin alter diastolic function? (D Kaye)

### POSTGRADUATE STUDENTS

16 PhD Students  
2 Other Doctoral Students

### PUBLICATIONS

45 Journal Articles  
2 Book Chapters



# CENTRE FOR OBESITY RESEARCH AND EDUCATION

Director: Professor Paul O'Brien MBBS (Hons), MD, FRACS

The mission of the Centre for Obesity Research and Education (CORE) is to better understand the disease of obesity, obesity-related diseases and psychosocial conditions, and to identify optimal methods for the safe, cost-effective, long-term management of obesity, coupled with preventive strategies that can be implemented in the community leading to improved health.

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.

The patient remains the central focus of all of CORE's activities. We have learned about obesity from studies of patients with the disease. We have evaluated treatments of obesity as we seek to help these patients and, after achieving substantial and durable weight loss for them, we have been able to measure the benefits on health, quality of life and survival.

## RESEARCH PROGRAMS

CORE is, first and foremost, a research centre. Research is central to its mission and its clinical research capability 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

## CURRENT PROJECTS AND RESEARCH AREAS

- Adolescent randomised controlled trial (Professor Paul O'Brien)
- Sleep apnoea randomised controlled trial (Associate Professor John Dixon)
- Survival study (Dr Anna Peeters)
- Intensive care study (Professor Paul O'Brien)
- Knee pain study (Dr Peter Baquie)
- Satiety: brain imaging II study with Howard Florey Institute (Melissa Hayden)
- Psychological assessment study (Melissa Hayden)
- Focus group stigmatisation study (Melissa Hayden)
- Factor analysis of the BDI (Melissa Hayden)
- Change in BD factor scores (Melissa Hayden)
- *In vitro* studies of the band (Mr Paul Burton)
- Nuclear medicine study: gastric emptying (Mr Paul Burton)
- Upper gastrointestinal symptoms study (Mr Paul Burton)
- Video manometry study (Mr Paul Burton)
- In band manometry study (Mr Paul Burton)
- Anaesthesia and the LAP-BAND – a systematic review (Mr Paul Burton)
- Physical activity and weight loss in LAGB patients – systematic review (Kristine Egberts)
- Eating patterns and weight loss in LAGB patients – randomised controlled trial (Kristine Egberts)
- Erosions after LAP-BAND surgery – a systematic review of literature (Kristine Egberts)
- Cardiac study (Dr Ranjana Warrier)
- Liver fibrosis study (Dr Michelle Butler)
- Adipose tissue study (Dr John Wentworth)
- Cost-effectiveness review: BMI 30-35 (Catherine Keating)
- Cost-effectiveness review: diabetic study (Catherine Keating)
- Cost-effectiveness review: OSA (Marjorie Moody)

## AWARDS

Wendy Brown MBBS(Hons), PhD, FRACS

- Academic appointment to Associate Professor (Monash University)
- Awarded FACS by the American College of Surgeons
- Accredited for upper gastrointestinal endoscopy by the Australian Conjoint Committee

## POSTGRADUATE STUDENTS

3 PhD Students



TheAlfred



MONASH  
University

*Research in the Clinical Pharmacology Unit is focused on evaluation of drugs that may affect the cardiovascular system.*

# CLINICAL PHARMACOLOGY

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

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 with regard to 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, statin therapies, 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 multi-centre clinical trials. Current ongoing trials include:

- CHAT (Chronic Heart Failure Assistance by Telephone): This study has recruited over 400 patients and 300 general practitioners and has finished recruitment with results to be presented in 2009. CHAT is asking the question whether an automated telephone support system will reduce hospitalisations in patients with heart failure in rural and remote areas where access to medical services is limited.
- SCREEN-HF (SCReening Evaluation of the Evolution of New Heart Failure): The SCREEN-HF study involves recruiting 3,500 elderly (>60 years) subjects with at least one risk factor for heart failure and determining plasma brain natriuretic peptide (BNP) levels. This is a marker of risk of subject heart failure in populations. Patients in the highest quintile of BNP are then invited to the Caulfield Clinical Trial Centre for echocardiography and other cardiovascular assessments. SCREEN-HF will determine whether this strategy is effective and cost-effective in detecting patients with evidence of cardiac dysfunction early, even before they develop symptoms. Funding has been secured to longitudinally follow-up all 3,500 subjects for five 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.
- 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 will seek to determine mechanisms by which patients improve cardiac function and/or whether certain markers of disease predict non-response.

- INTEGRATE: Evaluation of physician inertia in hypertension management and strategies to improve this problem.

## BASIC RESEARCH

The unit also conducts a number of basic research programs within the Monash Medical School research laboratories at AMREP. Current programs include:

- Role of soluble epoxide hydrolase inhibitors in cardiac disease
- Role of p38 MAP kinase system in heart failure disease progression
- Role of Rho kinase in cardiac fibrosis
- Role of novel agents in cardiac fibrosis and inflammation



*Dr Michele McGrady (left) and Marina Skiba demonstrate a typical interaction between a study coordinator and a trial participant using a Vivid I machine, also used for flow mediated dilatation and echocardiography.*

## POSTGRADUATE STUDENTS

6 PhD Students

## PUBLICATIONS

24 Journal Articles

1 Book Chapter



# DIAGNOSTIC AND INTERVENTIONAL RADIOLOGY

Director: Professor Kenneth Thomson MD, FRANZCR, FRCR

The Alfred Radiology Research Unit is committed to providing improvement and innovation in healthcare through leadership in diagnostic and interventional radiology research and education. The department maintains close links with the clinical units at The Alfred with weekly meetings, and provides imaging support and expertise for over 100 research trials to other departments across the hospital.

## CURRENT PROJECTS

### Tumour ablation and tumour embolisation

- Phase 1 safety study of irreversible electroporation for the ablation of focal tumours in the liver, kidney and lung (Prof. Ken Thomson)
- Postoperative pain management in patients undergoing uterine artery embolisation for symptomatic leiomyomata (Prof. Ken Thomson, Dr Stuart Lyon)
- Multiphase computer tomography in the management of hepatocellular carcinoma (Dr Wa Cheung)

### Trauma – spinal, brain, adrenal injury

- Assessing potential spinal injury in the intubated multi-trauma patient: does MRI add value? (Dr Dinesh Varma, Dr Mark Schoenwaelder)
- Correlation between MRI and operative findings in acute cervical spine injury: a retrospective review (Dr Dinesh Varma)
- Anterior cervical discectomy and fusion in trauma patients (Dr Dinesh Varma)
- Fluid resuscitation of critically ill patients with traumatic brain injury: potential mechanisms behind the detrimental effect of albumin resuscitation (Dr Dinesh Varma; with Prof. Jamie Cooper, ICU)
- Traumatic adrenal gland injury: epidemiology and outcome in a major Australian trauma centre (Dr Dinesh Varma; with NTRI)
- Identifying susceptible critically ill patients who desaturate following hyperbaric treatment: characteristics and outcomes (Dr Dinesh Varma; with Dr Ian Millar, Hyperbaric Unit)

### Vascular intervention

- Cardiovascular Outcomes in Renal Atherosclerotic Lesions – CORAL (Prof. Ken Thomson; with Dr Chris Cooper, University of Toledo, USA)
- Retrievable Günther Tulip inferior vena cava filter – experience in 317 patients (Dr Stuart Lyon)
- Initial experience in 115 patients with the retrievable Cook Celect™ Vena Cava Filter (Dr Stuart Lyon)
- Incidence and timing of pulmonary embolisation following major trauma (Dr Stuart Lyon; with Miss Susan Liew, Orthopaedics, Lachlan Batty)
- The RELEVANT Study: the rate of lower limb deep venous thrombosis in patients with traumatic brain injury – a pilot observational study (Dr Helen Kavnoudias; with Dr Andrew Westbrook, ICU)

- Splenic embolisation in blunt abdominal trauma: is splenic function preserved? (Dr Stuart Lyon)
- PICC line trial: reinsertion of PICC lines (Steffan Bush; with Sue Gonelli, Nursing)

### Neurovascular intervention

- Fluid-structure interaction modelling of patient-specific cerebral aneurysms: influence of hypertension, modulus of elasticity and aneurysm shape (Dr Anoop Madan, Dr Helen Kavnoudias; with CSIRO)
- Cerebral aneurysm coiling study (Dr Anoop Madan)
- Alfred experience with axium coils (Dr Anoop Madan)
- The value of post-operative angiography on clipped intracranial aneurysms (Dr Anoop Madan; with Neurosurgery)
- Adult intracranial dural arteriovenous fistulas: illustrated review of hemodynamic patterns with correlation to clinical outcomes (Dr Anoop Madan)

### Utilisation of digital subtraction angiography

- Retrospective analysis of diagnostic outcomes in lower GI bleeding using angiography and nuclear medicine (Brendan Erskine, Elissa Marshall)
- Reflection of intracerebral aneurysm identification of multislice computer tomography (64 slice) and digital subtraction angiography (Elissa Marshall, Brendan Erskine, Wendy Winslade)

### Magnetic resonance imaging

- Aspirin for the prevention of cognitive decline in the elderly: a neurovascular imaging study (Dr Anthony Kam; with Prof. Elsdon Storey, Neurology)
- Evaluation of cerebral AVMs before and after radiosurgery utilising brain STAT cerebral perfusion with arterial input function (Dr Anthony Kam)

### Cellular physiology

- Arterio-venous malformations (Prof. Ken Thomson; with Dr Rajesh Nair, Baker IDI Heart and Diabetes Institute)

## COMMERCIALY SPONSORED CLINICAL TRIALS

Current commercially sponsored trials are in the areas of tumour embolisation, vascular intervention, MRI, interventional radiology and multi-slice computer tomography coronary angiography.

### POSTGRADUATE STUDENTS

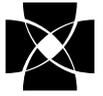
3 Masters Students

### PUBLICATIONS

15 Journal Articles  
11 Book Chapters  
1 Book



*Kylie Chou and  
Dr Gerard O'Reilly head  
the international team.*



**TheAlfred**



**MONASH**  
University

## 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 research programs continued to be active in 2008 and covered a broad spectrum of activity through a number of collaborations.

Trauma resuscitation remains a focus of research activity and results of the Trauma Reception and Resuscitation project, led by Associate Professor Mark Fitzgerald, have confirmed the utility and improved safety resulting from computerised algorithmic prompting during resuscitation. Investigation continues into team performance, communication and handover during resuscitation and improved resuscitation techniques. Related publications have confirmed the utility of video audit as a tool for improving trauma resuscitation tasks.

The management of thoracic trauma has been an ongoing collaboration between Emergency Services, Trauma and Cardiothoracic Surgery. A feature of the clinical impact of this collaboration – describing survival following resuscitative thoracotomy for combined left ventricle and left atrium ruptures secondary to blunt trauma – was published. A review of pleural decompression during trauma resuscitation was published by Mark Fitzgerald and Silvana Marasco, whilst an analysis of failed Emergency Department disposition to the ward of patients with thoracic injury was led by Gaby Blecher.

A research collaboration with Ambulance Victoria, led by Ian Patrick, has shown improved outcomes associated with increased pre-hospital use of intercostal catheters for traumatic pneumothorax.

An ongoing project is examining analgesia in trauma patients as part of Paul Jennings' PhD.

Collaborations involving large registry databases include the Victorian State Trauma Registry, Victorian Orthopaedic Trauma Outcome Registry, Haemostasis Registry and the Victorian Ambulance Cardiac Arrest Registry, which have all resulted in important publications to improve patient outcomes.

There are some exciting clinical trials commencing now that involve multicentre collaborations, as well as multiple specialties, which will extend over the next few years. NHMRC-funded trials include:

- Early goal directed therapy in sepsis (ARISE Study)
- The effect of cooling in head injury (POLAR Study)
- Acupuncture in the emergency department for painful conditions (MEDACT Study)
- Hyperbaric treatment in fractured lower limbs (HOLLT Study)

Various projects have been led by individuals within the department including:

- The role of frusemide in acute pulmonary oedema (Dr Nick Adams)
- Neseritide in heart failure (Louisa Lam)
- Hypothermia in trauma patients (Sharyn Ireland)
- Urethral injuries (Dr Carl Ludhoff)
- Massive transfusion in trauma (Dr Dev Mitra)

In addition, a Nurse Practitioner program has been established, which is generating significant interest as a model of care.

An international program has resulted in a couple of international aid grants enabling ongoing support for development of trauma and emergency systems in Sri Lanka, India, China and a program in the Netherlands. Dr Gerard O'Reilly (who is undertaking a PhD in trauma system development) and Kylie Chou are responsible for coordinating the international program.



*Director, The Alfred Emergency and Trauma Centre, Dr De Villiers Smit.*

### POSTGRADUATE STUDENTS

2 Masters Students  
1 DN Student  
1 MD Student  
1 PhD Student

### PUBLICATIONS

26 Journal Articles



The Alfred



Patricia Nugent prepares blood samples in studies that aim to identify the role of AGEs and protein interaction in mediating diabetes-induced tissue damage.



# ENDOCRINOLOGY AND DIABETES

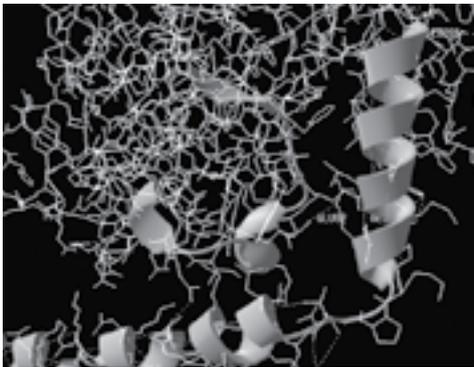
Head: Professor Duncan Topliss MBBS, MD, FRACP

## 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. Leon Bach's laboratory studies 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 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 2008, the group published a paper in the *International Journal of Biochemistry and Cell Biology* describing the precise part of the cell shape molecules that interact with AGEs, which may lead to the development of a new approach for treating diabetic complications.

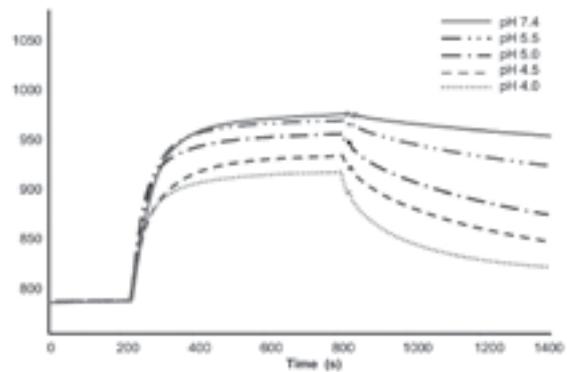


Three-dimensional model of the glycosylated protein binding site in ERM proteins.

### 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 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 previously published an important paper in *Journal of Biological Chemistry* demonstrating that IGFBP-6 promotes migration of cancer cells in an IGF-independent manner. Further work in 2008 helped define other important molecules that are involved in these actions.



Binding of IGF-II to IGFBP-6 is pH-dependent as measured using the state-of-the-art Biacore T100 biosensor.

### Clinical trials in diabetes care

Professor Duncan Topliss

The ADVANCE trial is a large trial in Type 2 diabetes that tests if there is a benefit of tight glycaemic control versus standard control, and of routine perindopril / indapamide therapy versus placebo in macrovascular disease prevention. The results of the blood pressure arm of the study were published in *The Lancet* in 2007. The glycaemic control arm, published in *New England Journal of Medicine* in 2008, showed that tight glycaemic control decreased complications, especially nephropathy.

The ORIGIN study tests the effect of early insulin therapy using the new long-acting analogue glargine insulin to prevent macrovascular disease in Type 2 diabetes.

### Clinical trials in osteoporosis

Professor Duncan Topliss

A paper in *Clinical Endocrinology* demonstrated that zoledronate improved bone density in patients with cystic fibrosis.

## RESEARCH ACHIEVEMENTS

Professor Leon Bach and Dr Anne McRobert were awarded an NHMRC Project Grant entitled 'The role of ezrin-radixin-moesin proteins, novel binding proteins for advanced glycation endproducts, in kidney cells' (\$473,250 over three years).

### POSTGRADUATE STUDENTS

2 PhD Students

### PUBLICATIONS

13 Journal Articles



Research scientist Anne Adikari with SPIRO-GP clinical trial participant.



# EPIDEMIOLOGY AND PREVENTIVE MEDICINE

Head: Professor John McNeil AM, MBBS, MSc, PhD, FRACP, FAFPHM

## RESEARCH ACTIVITIES

The Department of Epidemiology and Preventive Medicine has broad expertise in applied clinical and public health research. Its core skills of epidemiology, biostatistics and data management support extensive research programs aimed at reducing suffering, preventing illness and improving quality of life. The department's research program takes place in settings ranging from remote communities and workplaces to intensive care units.

Special skills in handling large data sets have led to the department's involvement in large-scale clinical trials, disease and procedure registries, drug and device surveillance and the monitoring of large occupational cohorts. Many of these have a high profile and require the highest levels of ethical conduct and quality control.

The main areas of research largely reflect the units, centres and registries listed below, with the greater concentration of research currently in epidemiology, pre-hospital and emergency trauma, including patient safety and intensive care, clinical trials and occupational and environmental health. There is increasing activity in the field of human research ethics, musculoskeletal disorders, and international health.

The Biostatistics Unit leads with epidemiological modelling and, in addition to overseeing and monitoring the high quality of biostatistics in departmental research, it offers a biostatistics consulting service for external clients. During 2008 the Epidemiology Modelling Unit was formed.

The extent of research activity is reflected in funds received from major funding bodies in 2008. These include grants from NHMRC, National Institutes of Health (USA), National Heart Foundation, VicHealth, Commonwealth and State Departments and numerous commercial contracts.

Registries are an increasingly important vehicle for medical research and the department holds many, with more anticipated in the near future. During 2008 the Clinical Informatics and Data Management Centre was formed to oversee and monitor consistent protocols for data management in both projects and registries, with the expectation that the department will become a national source of expertise for others to consult. Several collaborations were established, including the Transfusion Research Outcomes Collaboration with the Australian Red Cross Blood Service.

Through a growing short course program, research and public health updates are offered both internally and to participants from Australia and overseas, as are short courses in clinical research methods, ethics and good research practice and data management.

## RESEARCH UNITS

- Biostatistics Unit (Professor Andrew Forbes)
- Cardiovascular Research Unit (Professor Andrew Tonkin)
- Clinical Epidemiology Unit – Alfred (Professor Michael Abramson)
- Clinical Epidemiology Unit – Cabrini (Professor Rachelle Buchbinder)
- Clinical Pharmacology Unit (Professor Henry Krum)
- Health Services Management & Research Unit (Professor Just Stoelwinder)
- Human Rights and Bioethics Unit (Associate Professor Bebe Loff)
- Infectious Disease Epidemiology Unit (Dr Karin Leder)
- International Public Health Unit (Professor Brian Oldenburg)
- Kidney Disease Prevention Unit (Professor Bob Aitken)
- Musculoskeletal Unit (Professor Flavia Cicuttini)
- Pre-Hospital and Emergency Trauma Group (Professor Peter Cameron)
- Preventive Medicine Unit (Professor John McNeil)



PhD student Lavinia Tran undertakes laboratory analysis for her thesis, 'Therapeutic targeting of signalling pathways in cardiovascular disease'.

## CENTRES

- NHMRC Centre of Clinical Research Excellence in Therapeutics (Associate Professor Chris Reid)
- NHMRC Centre of Research Excellence in Patient Safety (Professor John McNeil)
- NHMRC Centre of Clinical Research Excellence in Circulatory and Associated Conditions in Urban Indigenous Peoples (Professor Brian Oldenburg)
- Cooperative Research Centre for Water Quality and Treatment (Dr Martha Sinclair)
- Monash Centre for Occupational and Environmental Health (Professor Malcolm Sim)
- Australian Centre for Human Health Risk Assessment (Professor Brian Priestly)
- Australian and New Zealand Intensive Care Research Centre (Professor Jamie Cooper)
- Australian Centre for Radiofrequency Bioeffects Research (based at RMIT, Professor Michael Abramson)

## REGISTRIES

- Australasian 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
- Melbourne Vascular Surgeons Association (MVSA) Registry
- REduction of Atherothrombosis for Continued Health (REACH) Registry
- Southern Melbourne Integrated Cancer Service Registry
- Surveillance of workplace Based Respiratory Events (SABRE)
- Victorian Cardiac Arrest Registry
- Victorian Orthopaedic Trauma Registry (VOTOR)
- VSTORM – Monitoring and Evaluation of the Victorian State Trauma System

## AWARDS

- Professor John McNeil – Member of the Order of Australia for service to preventive medicine and to epidemiology as a researcher and educator and as a contributor to the development of public health policy
- Professor David Wells – Medal of the Order of Australia for service to forensic medicine and to the development of educational and training programs
- Helen Walls, PhD student – National Heart Foundation Top Ranked Scholar in Victoria, 2008
- Professor Michael Abramson – Thoracic Society of Australia & New Zealand (TSANZ) annual scientific meeting 2008: TSANZ / Australian Lung Foundation Prize (with co-author) for best presentation on primary care related issues
- Professor Andrew Tonkin – National Heart Foundation John Loewenthal Award
- Miranda Davies, PhD student – Australian Rheumatology Association national conference: best presentation prize
- Dr Fahad Hanna – Australian Rheumatology Association national conference: best clinical poster prize
- Jo O'Toole and Basia Diug, PhD students – Research Matters Month at Monash: Award for Outstanding Contribution to the 2008 Higher Degree by Research Student Poster Exhibition
- Professor Andrew Tonkin – 2008 Research Australia Award for Excellence in Medical Media
- Judy Lowthian, PhD student – Cabrini Institute's 12th Annual Research Day Best Poster Presentation
- Dr Suree Lekawanvijit – American Heart Association conference: poster prize for Basic Science

## KEY PROJECTS

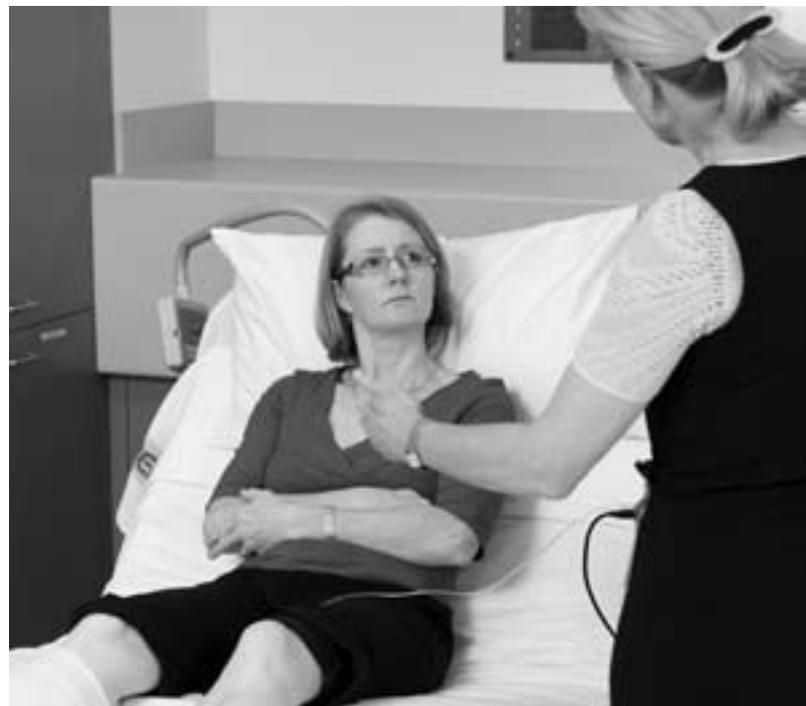
The Department of Epidemiology and Preventive Medicine has scores of projects under way at any one time. The summary below outlines one of these.

### Factors Contributing to Bleeding Risk in Patients Receiving Warfarin

Warfarin is the mainstay of prophylaxis against stroke in atrial fibrillation and valve replacement. Optimal efficacy and patient safety revolve around requisite close monitoring of the international normalised ratio (INR), with dose adjustment as needed. Warfarin is known to interact with many commonly-used medications and other chemicals that may be present in appreciable quantities in food. These interactions may enhance or reduce warfarin's anticoagulation effect. This research aims to identify common predisposing factors and potential system of care issues amongst patients with significantly elevated INR levels, and to develop a preliminary risk profile of patients being treated with warfarin who record elevated INR levels in the blood.

This project has two phases and is based in metropolitan Melbourne, with the pilot study of 40 patients completed in 2007. The case control comprises 450 patients, 150 cases and 300 controls, with recruitment ongoing. Patients are eligible if they are at least 18 years of age, reside in the community, provide informed consent and have been on warfarin for a minimum of six months. Cases must have an INR  $\geq 6.0$ , whilst controls had to be within their target range for a minimum of three months.

Structured interviews were conducted in patients' homes and also at recruitment facilities within their local area. Patient interviews investigate potential predisposing factors including demographic characteristics, comorbidities, diet, medication and warfarin knowledge. Standardised measures evaluated cognition, mood, social support, functional independence, medication complexity and adherence.



*PhD student Carolina Weller with a participant for her study investigating pressure bandages. The research will yield recommendations for the management of chronic wounds such as venous ulcers.*

### POSTGRADUATE STUDENTS

68 Masters Students  
2 Other Doctoral Students  
72 PhD Students

### PUBLICATIONS

217 Journal Articles  
5 Cochrane Systematic Reviews



*Dr William Kemp uses the Fibroscan® device to assess liver fibrosis in patients at risk of liver scarring.*



# GASTROENTEROLOGY

Head: Associate Professor Stuart Roberts MBBS, MD, FRACP

## RESEARCH ACTIVITIES

The Gastroenterology Department continued to focus on research in areas where there is nationally and internationally recognised expertise in chronic viral hepatitis, chronic liver disease and inflammatory bowel disease.

### Chronic viral hepatitis

The two main areas of research interests in 2008 have been to further understand the pathogenesis of liver disease in chronic viral hepatitis C and the exploration of novel treatment strategies to treat chronic hepatitis C and B.

In chronic hepatitis C, evaluated treatment strategies include:

- Completion of a study of induction therapy with peg interferon alpha-2a
- Phase 1 study of a combination of a potent hepatitis C virus (HCV) polymerase and protease inhibitor
- Evaluation of a potent novel protease inhibitor, Telaprevir, in combination with peg interferon alpha-2a plus ribavirin in treatment-naïve patients and those who failed to respond to prior therapy

Clinical studies in chronic hepatitis B examined the combination of entecavir plus tenofovir as well as adefovir in combination with emtricitabine. The department was the lead site in a multicentre national study examining the prevalence and nature of viral mutations in hepatitis B patients receiving oral antiviral therapy.

Researchers evaluated the pathogenesis of hepatitis C-related liver disease by performing studies into the role of the innate immune response and, specifically, Toll-like receptors in the development of hepatitis C-related liver inflammation and fibrosis. In addition, the mechanisms by which GB virus C protects against the development of progressive severe liver disease in subjects with hepatitis C and HIV coinfection was studied at both the gene and protein level. The novel findings of this latter study may have implications for new therapies in the future.

### Chronic liver disease and its complications

Research focused on determining the factors associated with improved outcomes in patients with hepatocellular carcinoma receiving transarterial chemoembolisation, as well as examining novel therapies (such as sunitinib) for patients with advanced disease. Studies are currently under way to explore the role of PET scanning as a predictor of outcomes in patients with advanced hepatocellular carcinoma receiving sorafenib therapy.

There is also an extensive research program evaluating the role of Fibroscan, a non-invasive device that evaluates liver fibrosis, in a range of patient groups with chronic liver disease. These include viral hepatitis B, diabetes, cystic

fibrosis, haemophilia and patients with congestive heart failure. Research has also commenced to evaluate Fibroscan as a predictor of clinically significant portal hypertension in patients with cirrhosis.

### Inflammatory bowel disease

Alternative treatment strategies to the standard of care are being evaluated in patients with both Crohn's disease and ulcerative colitis. In addition, the role of measuring both azathioprine and methotrexate metabolites is being assessed to determine whether these compounds improve the management of patients with inflammatory bowel disease. A national study coordinated by The Alfred is under way to review the role of pharmacological studies of novel treatment strategies, including biological therapies, in patients with both Crohn's disease and ulcerative colitis. Ongoing investigator-initiated research projects are examining the role of measuring the metabolites of both azathioprine and methotrexate, in an effort to optimise these treatment options.

## RESEARCH ACHIEVEMENTS

Associate Professor Stuart Roberts, with Professor Eric Gowans and Dr Bruce Loveland of the Burnet Institute, was awarded an NHMRC Project Grant commencing in 2009 for a project entitled 'A novel immunotherapy to treat hepatitis C virus infection'.

Dr Mark Berzsenyi's studies identified differential intra-hepatic T-cell signalling associated with GBV-C RNA in HCV/HIV co-infected individuals, findings which were not seen in the periphery. The genes identified have critical importance to the intra-hepatic immune response and may have a role in the pathogenesis of HCV related liver disease in HCV/HIV co-infection. Furthermore, studies performed into the genomics of both HCV and HCV/HIV infection identified an association with grade of inflammation and aspects of the innate immune system.

Dr William Kemp finalised projects towards his PhD thesis by publication. He examined the role of a novel vasoactive peptide, urotensin II, in the chronic liver disease population and the role it might play in the development of portal hypertension. It was confirmed that urotensin II can contribute to the development of hepatic fibrosis and concurrently results in the development of portal hypertension in animals. These findings are compatible with the group's previous demonstration of a relationship between circulating urotensin II levels in humans and the severity of their liver disease.

### POSTGRADUATE STUDENTS

3 PhD Students

### PUBLICATIONS

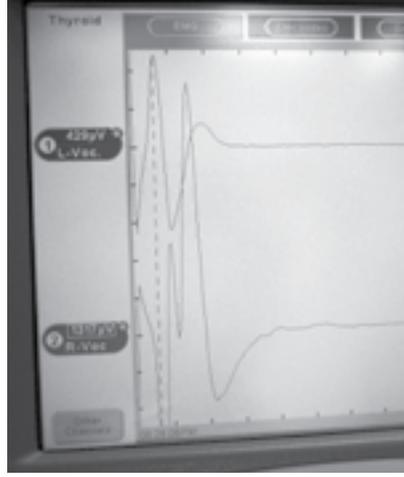
2 Journal Articles



The Alfred



*Nerve stimulator applied to the recurrent laryngeal nerve to visually monitor its integrity during thyroidectomy.*



## GENERAL SURGERY

Director: Professor Jonathan Serpell MBBS, MD, FRACS, FACS

The Alfred Department of General Surgery has undergone significant consolidation during 2008 and has built on its research program. The department remains committed to clinical research, some areas of basic science research, databases, clinical trials and audit and quality assurance processes. Those entering into surgical training are well supported in research projects, and of the ten surgical trainee research presentations at the DS Rosengarten Prize in December 2008, seven were from the General Surgery Department.

### BREAST, ENDOCRINE AND GENERAL SURGERY

Established databases in thyroid surgery, parathyroid surgery, adrenal surgery, parotid surgery, and soft tissue tumour surgery have contributed to clinical research projects. A dedicated thyroid cancer database has also been established.

#### Current Projects

- Anatomical studies on the recurrent laryngeal nerve (Prof. J Serpell). This study has identified that the motor fibres supplying both the abductors and adductors of the intrinsic muscles of the larynx are located in the anterior extra-laryngeal branch of the recurrent laryngeal nerve. This has important implications for thyroid surgery.
- Ongoing study of the rate of bifurcation of recurrent laryngeal nerves (Prof. J Serpell)
- Changes in the diameter of the recurrent laryngeal nerve during thyroid surgery and its relationship to recurrent laryngeal nerve palsy (Prof. J Serpell)
- Hypothyroidism following hemithyroidectomy (Dr S Su, Prof. J Serpell)
- Incidence of thyroid tumours in thyroid nodules greater than 4cm in diameter (Dr M Raj, Prof. J Serpell)
- The role of fine needle aspiration cytology in the management of thyroid cancer (Dr M Raj, Prof. J Serpell)
- Follicular thyroid cancer presenting as bone metastases without a demonstrable primary thyroid tumour. (Dr A Andrabi, Prof. J Serpell)
- Preoperative investigation of brachial cysts facilitates surgical management (Dr J Slater, Prof. J Serpell)
- Preoperative fine needle cytology and imaging facilitates the management of submandibular gland lesions (Dr M Taylor, Prof. J Serpell)
- Contribution to a tissue bank for follicular tumours (Prof. J Serpell)
- The investigation and management of thyroglossal duct cyst (Dr J Eteuati, Prof. J Serpell)
- Heuristics of thyroidectomy (Prof. J Serpell)
- The anatomy of the final 2cm course of the extra-laryngeal recurrent laryngeal nerve: a new operative surgery concept of two facial layers enveloping the recurrent laryngeal nerve (Prof. J Serpell)

### COLORECTAL AND GENERAL SURGERY

#### Current Projects

- Deficiencies in pathological reporting of colorectal cancer in Victoria (Dr S Bell, Dr K Farmer)
- Clinical and endorectal ultrasound staging of circumferential rectal cancers (Dr A Smith, Dr K Farmer)

### UPPER GASTROINTESTINAL AND GENERAL SURGERY

The Upper Gastrointestinal Unit has several databases in hepatectomy, pancreatic surgery, oesophagectomy, gastrectomy and bariatric surgery.

#### Current Projects

- Randomised trial of VLCD post FOLFOX chemotherapy prior to liver resection for colorectal metastases (Dr C Pilgrim, Dr A Smith, A/Prof. W Brown)
- The use of VLCD prior to liver resection for colorectal metastases (Dr C Pilgrim, Dr P Evans, Dr V Usatoff, A/Prof. W Brown)
- Vascular preconditioning of the gastric tube prior to oesophagectomy (Dr P Burton, Dr A Smith, A/Prof. W Brown)
- Traumatic bile duct injuries/leaks (Dr C Pilgrim, Dr V Usatoff, Dr M Smith, Dr P Evans)
- Outcome of patients with liver trauma (Dr P Evans, Dr V Usatoff, Dr P Burton)
- Follow-up of patients following traumatic diaphragmatic hernia repair (Dr P Burton, A/Prof. W Brown, Dr S Kemp)
- Follow-up of respiratory patients following laparoscopic fundoplication (Dr P Burton, A/Prof. W Brown, Dr A Smith, Dr S Hassen, A/Prof. P Nottle)
- Assessment of improvement of laparoscopic skills using a basic trainer (Dr J Choi, Dr P Evans, Dr V Usatoff, Dr A Smith, A/Prof. W Brown, A/Prof. P Nottle)
- Follow-up of patients treated surgically for achalasia (Dr K Heggie, Dr C Pilgrim, Dr A Smith, Dr S Hassen, A/Prof. W Brown, A/Prof. P Nottle)
- Laparoscopic hernia repair – tackler versus glue (Dr E Kaplan, Dr V Usatoff, Dr A Smith, Dr P Evans, A/Prof. P Nottle)
- 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)
- Laparoscopic liver resection (Dr C Pilgrim, Dr V Usatoff, Dr M Smith, Dr P Evans)
- Motility disorders and LAGB surgery (Dr P Burton, A/Prof. W Brown, Dr A Smith, A/Prof. P Nottle)

#### PUBLICATIONS

12 Journal Articles

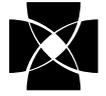


**Burnet Institute**  
Medical Research. Practical Action.

 **MONASH**  
University

 **Baker IDI**  
HEART & DIABETES INSTITUTE

*International and global health collaborative research and capacity building projects are an integral part of AMREP activities.*



**TheAlfred**

## GLOBAL HEALTH

AMREP's Research Strategic Plan for 2007-2011 identified global health as a field that would benefit from further collaboration among partners at AMREP. During its inaugural year (2008), senior staff from The Alfred, Baker IDI Heart and Diabetes Institute, Burnet Institute (Centre for International Health) and Monash University (Monash Initiative for Global Health Improvement) have been involved in further developing the AMREP Global Health Research Consortium. A steering group has been established to further develop the consortium's work program and activities.

### AMREP GLOBAL HEALTH FORUM

The 2nd AMREP Global Health Forum was held on 7 April 2008 (World Health Day) with the overarching theme: 'Research supporting policy and practice in low- and middle-income countries'.

The forum involved almost 200 students, academics, health practitioners, researchers and policy-makers to discuss and exchange ideas on how to improve links between research, health program effectiveness and health policy. Speakers and participants from government agencies such as AusAID, and NGOs including Oxfam, World Vision and Save the Children (Australia) attended the event.

Professor David Karoly from the University of Melbourne delivered the keynote presentation on the theme for World Health Day 2008: 'Protecting health from climate change'. The Hon. Bob McMullan MP, Parliamentary Secretary for International Development Assistance, presented on 'Health in Australia's Aid Program'. The Make Poverty History campaign, Burnet Institute, Monash University and World Vision released a joint statement urging the Australian Government to strengthen its efforts in health aid.

Other international speakers included Dr Clement Malau (Secretary for Health, Papua New Guinea), Dr Thandi Puoane (a senior academic from University of Western Cape, South Africa) and Professor KR Thankappan (Director, Achutha Menon Centre for Health Science Studies, Sri Chitra Tirunal Institute for Medical Sciences and Technology, India).

### RESEARCH PROJECTS

There are many research and capacity building projects being undertaken by staff from the AMREP partner institutions, particularly the Burnet Institute and Monash University. Below are some examples, some new and others ongoing.

#### Mpumalanga Project

A new collaborative research group has been established to investigate water, HIV and diarrhoea in South Africa with a seeding grant from the Monash University Deputy Vice-Chancellor (International) Office. The project involves researchers from Monash University (Australia and South Africa), The Alfred, Burnet Institute and the University of Witwatersrand (South Africa).

#### Rishi Valley, India

This collaborative project between Baker IDI Heart and Diabetes Institute, Monash University and the Rishi Valley Rural Health Centre aims to obtain baseline data on the extent of vascular disease and its risk factors in a typical rural Indian community. It will then become part of the process to plan effective public health interventions to treat or prevent vascular disease in a disadvantaged Indian community.

#### National Surveillance Non-communicable Disease Program, Vietnam

This study aims to establish a sustainable system for non-communicable disease surveillance in Vietnam. Baker IDI Heart and Diabetes Institute and Monash University work together with the World Health Organization, Menzies Research Institute and the Ministry of Health, Vietnam.

#### The Mauritius Diabetes Surveillance Project

Mortality and morbidity are being evaluated among participants who attended a series of longitudinal non-communicable disease surveys in 1987, 1992, 1998 (all conducted by the International Diabetes Institute). This project examines risk factors for all cause and cardiovascular mortality with a focus on diabetes as a risk factor for death (Baker IDI Heart and Diabetes Institute).

#### International Diabetes Federation Diabetes Atlas

The *Diabetes Atlas*, now in its third edition, reports on the global, regional and country specific prevalence of diabetes (adult and in the young), impaired glucose tolerance ('pre-diabetes') and diabetes complications (including mortality). Diabetes prevalence projections to 2025 are also provided, with the *Diabetes Atlas* being a key tool to track the progress of the diabetes epidemic, particularly in developing countries (Baker IDI Heart and Diabetes Institute).

#### The Heart of Soweto Study Cohort

This study increases the understanding of the characteristics and burden imposed by heart disease in an urban African community in probable epidemiological transition (Baker IDI Heart and Diabetes Institute).

A vaccine for peanut allergy (Ilhan Food Allergy Foundation funding). From left: Astrid Voskamp, Dr Sara Prickett and April Dacumos check cultures of peanut-allergic patients' blood samples to identify suitable peptides for a specific treatment for peanut allergy.



## IMMUNOLOGY

Head: Professor Fabienne Mackay BBiomedEng, PhD

### RESEARCH ACTIVITIES

The Monash University 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 hay fever and asthma, autoimmunity, diabetes, cancer and malaria. Researchers are funded by NHMRC, ARC, Cooperative Research Centre and other research grants, and have a strong publication output and patent portfolio.

Early in 2008, the Head of Department, Professor Michael Berndt, accepted the position of Head, College of Medicine and Health, University College, Cork, Ireland. The Department of Immunology is poised for another exciting chapter with the recent appointment of Professor Fabienne Mackay as Head, commencing in March 2009. Professor Mackay was previously Head of the Autoimmunity Research Unit at the Garvan Institute of Medical Research, Sydney, and has a stellar track record in cutting-edge research into the molecular characterisation of inflammatory and autoimmune diseases.

### HIGHLIGHTS

- Professor Robyn O'Hehir was appointed co-editor of *Clinical and Experimental Allergy*. She also was appointed to the Advisory Committee of the World Health Organisation affiliated alliance Allergic Rhinitis and its Impact on Asthma (ARIA), and chaired the NHMRC Program Grants Committee 2008.
- Professor Jennifer Rolland was appointed associate editor of *Clinical and Experimental Allergy*.
- The result for the DIRECT trial, of which Associate Professor Jennifer Wilkinson-Berka is an advisory member, was announced in 2008. This clinical trial was to a large extent based on her laboratory work. A five-year trial in over 5,000 patients, DIRECT reported a reduction in the incidence and an increase in the regression of diabetic retinopathy in Type 1 and Type 2 diabetic patients treated with the angiotensin type 1 receptor blocker, candesartan.
- Professor Magdalena Plebanski was appointed to the Faculty of Medicine, Nursing and Health Sciences Research Committee, and Chair of the Central Clinical School Research Committee, Monash University.
- Associate Professor Jennifer Wilkinson-Berka (and Dr Erica Fletcher, University of Melbourne) secured a major commercial contract with BioDiem and another with Geropharm, St Petersburg, Russia.
- Dr Sue Xiang and Professor Magdalena Plebanski were invited to speak at the BIT Life Sciences 1st Annual World Vaccine Congress 2008, Foshan, China. Professor Plebanski chaired a session at this conference.

- Dr Elizabeth Gardiner was awarded the Australasian Society of Thrombosis and Haemostasis Scientific Medal for 2008.
- Dr Sara Prickett and Dr Diana Mittag both received Junior Member Association poster prizes at the Annual Congress for the European Academy of Allergy, Asthma and Clinical Immunology, Barcelona 2008.
- Dr Sara Prickett received an Oral Presentation Prize, Immunology Group of Victoria (IgV), 2008.
- Dr Diana Mittag received the Professor Daniel Czarny poster award, Alfred Week 2008.
- PhD student Craig Nicholls was awarded a travel award for the American Society of Biochemistry and Molecular Biology 2009 meeting and invited to present an oral presentation.
- PhD student Hyun-Ja Ko was awarded a poster prize for basic research at the Alfred Research week 2008.
- PhD student Julie Dwyer was invited to present posters at the 11th International Union of Biochemistry and Molecular Biology conference and 33rd FEBS congress in Athens, Greece and in Leon, France.
- PhD students Lucy Cassar and Julie Dwyer were featured in *The Age* for their research achievements in studies on cancer.

### CURRENT PROJECTS

#### Allergic Diseases

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

Both clinical trials and *in vitro* studies are used to investigate mechanisms of allergen immunotherapy and optimal strategies for downregulation of the adverse T-cell response to allergen in allergic individuals.

- Identification of T-cell epitopes of peanut allergens and investigation of cross-reactivity with tree nuts
- Characterisation of major Bahia grass pollen allergens and identification of T-cell-reactive sites
- Modulation of the allergen-specific T-cell response and investigation of optimal strategies for inducing regulatory T-cell responses to allergens
- Effect of co-exposure to microbial inflammatory stimuli on T-cell cytokine response to allergen
- Role of natural killer cells in regulating allergen-specific T-cell responses
- Role of activin A in driving inflammation and remodelling in chronic airways disease
- Nanoparticle induction of lung resistance to development of allergen-induced lung inflammation in a mouse model; role for local dendritic cells

## 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

Associate 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?

## Diabetes

Associate Professor Robyn Slattery

Elucidation of the role of  $\beta$ 2M and MHC in directing the autoimmune response in diabetes is crucial to learn how to regulate the disease in predisposed individuals. Early identification of patients through genetic markers will provide a therapeutic window in which to immunomodulate at-risk individuals before the onset of diabetes.

- The role of  $\beta$ 2 microglobulin in susceptibility and resistance to Type 1 diabetes
- The role of the human insulin promoter in the genetic predisposition to developing anti-insulin autoreactivity
- The role of antigen presenting cells in the pathogenesis of Type 1 diabetes

## Inflammation and Vascular Biology

Dr Rob Andrews

Studies focus on ligand binding, signalling and proteolytic regulation of platelet receptors, and are relevant to thrombotic abnormalities associated with autoimmune disease or immunodysfunction.

- Platelet membrane glycoproteins, structure and function
- Mechanisms of cellular adhesion
- Structure-function of endothelial cell membrane proteins
- Inflammatory responses of white cells
- Receptor signalling

## Microbial Immunopathology

Dr John Emmins

The molecular basis for infectious disease pathology and role of cytokines in disease protection are investigated.

- Immunopathogenesis of gas-gangrene (with Professor Julian Rood, Department of Microbiology, Monash University, and Professor Richard Boyd, Monash Immunology and Stem Cell Laboratories)

- Immune system of the chicken particularly as it relates to the threat of avian influenza pandemics (with Dr Andrew Bean, Animal Health Laboratories, CSIRO)
- Efficacy of porcine cytokines as protection against the intestinal roundworm *Ascaris suum* (with Dr Andrew Bean)
- Factors affecting the differentiation of mesenchymal stem cells (with Professor Richard Boyd)

## Molecular Signalling

Associate Professor Jun-Ping Liu

Cytokine regulation of cancer cell proliferation by mechanisms of telomerase maintenance of telomeres, and roles of a novel ATPase in neurodegenerative disease are studied.

- Cancer inhibition by targeting telomerase using a peptide
- Targeting telomerase as a tumour-associated antigen for immunotherapy
- Regulation of chromosome end (telomere) remodelling by hormones and cytokines
- Novel mechanisms of telomere maintenance and remodelling in cancer and stem cells
- Studies of a neural ATPase in neurodegenerative diseases

## Leucocyte Membrane Proteins

Associate Professor Mark Wright

Investigations probe molecules expressed on the surface of white blood cells which serve as molecular antennae and thus play a critical role in the biology of white blood cells.

- Investigation of tetraspanin function *in vivo* using a gene targeting technology approach, in particular CD37 and CD151
- Identification and characterisation of novel molecules including FIRE and CIRE expressed at the surface of dendritic cells

## Vaccine and Infectious Diseases

Professor Magdalena Plebanski

Research involves the development of novel vaccines against cancer and parasitic diseases.

- 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 cell and regulatory T-cells (Tregs)
- Study of altered peptide ligand-mediated regulation of T-cell activity and 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

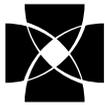


## POSTGRADUATE STUDENTS

1 Masters Student  
30 PhD Students

## PUBLICATIONS

38 Journal Articles  
1 Book Chapter



TheAlfred

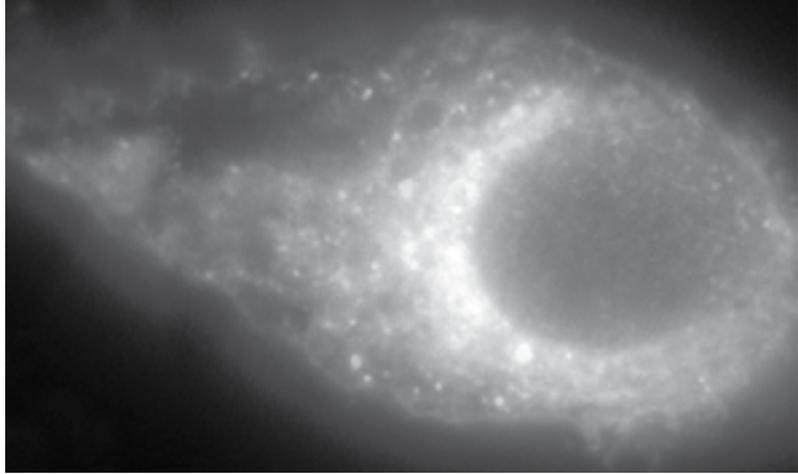


MONASH  
University



Burnet Institute  
Medical Research. Practical Action.

*Confocal fluorescent  
microscopy image of a liver  
cell (AD38 hepatoma cell  
line) infected with HIV and  
hepatitis B virus.*



# INFECTIOUS DISEASES

Head: Professor Sharon Lewin MBBS, PhD, FRACP

The Alfred Infectious Diseases Unit (IDU) incorporates a large clinical service with active research programs in the fields of human immunodeficiency virus (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.

## HIV

Research in HIV ranges from basic laboratory studies through to clinical and public health programs. How the immune system recovers from HIV infection, where HIV 'hides' in patients on treatment and how HIV interacts with dendritic cells (unique infection-fighting cells) is being investigated. Novel tests to measure which particular co-receptor is used by a patient's virus are being developed. This is essential in order to use a new class of anti-HIV drugs called CCR5 antagonists.

The Clinical Research Unit is actively involved in multiple international studies to evaluate new antiretroviral agents, in particular for the treatment of drug-resistant HIV. In addition, research is focused on how HIV treatment causes side effects such as cardiovascular and bone disease and neuropathy (nerve damage in the feet). More than 40 per cent of HIV patients attending the IDU clinic are affected by neuropathy. This causes pain and numbness in the feet and reduces quality of life and ability to work. The unit has also established a network of researchers within the Asia Pacific region to better understand the prevalence of dementia, peripheral neuropathy and depression in resource-poor countries.

## Viral Hepatitis

Research in viral hepatitis combines basic laboratory and clinical work. Researchers are currently determining how immune cells, specifically T-cells, react to hepatitis B virus (HBV) and how HIV and HBV may potentially interact in the same liver cell. IDU has established a large cohort to determine the relationship between the sequence of HBV and the patient's genetic make-up. This will indicate what parts of the virus are most 'susceptible' to the immune system. On the clinical side, we are collaborating in a multicentre international study on 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.

## Fungal Infections

Deep tissue infections caused by the fungus *Aspergillus* (known as invasive aspergillosis) are a major cause of death in patients with leukaemia or after bone marrow transplantation. The overall goals of research in this area are to improve the treatment of invasive aspergillosis by optimising the use of new and established antifungal agents and developing new diagnostics to accurately identify the infection.

## Spleen Registry

The Spleen Registry commenced in late 2003 with the aim of improving the health of patients who have undergone splenectomy or have a poorly functioning spleen. Such patients are at increased risk of severe infections but the risk of these events can be minimised by patient education, vaccination and use of antibiotics. The objective of the registry is to improve adherence with these recommendations through education of patients and their health care providers, and facilitating access to these interventions.

## MAJOR FINDINGS

- Identified that multiple chemokines can condition resting T-cells to establish latent HIV infection.
- Lodged an international patent to develop a test to rapidly identify patient virus from plasma. It is now planned to use this approach to develop a test to determine which strain of HIV a patient is infected with. This test is critical in order to determine which patients will respond to the new CCR5 antagonist class of anti-HIV drugs.
- Identified novel genetic risk factors that determine how effectively the immune system will recover following treatment for HIV.
- Identified that naïve T-cells are important long term reservoirs for virus in HIV-infected patients on treatment.
- Showed that genes associated with inflammation may influence the risk of antiretroviral drug-associated neuropathy in HIV patients from several ethnic groups.
- Developed a new assay for quantifying apoptosis. Cell death is increased when patients are on particular drug therapies and also when they experience lipodystrophy (fat wasting) as a side effect from HIV treatments.
- By combining results from cohorts in Australia, Malaysia and Indonesia, it was shown that patient age and height are associated with the risk for neuropathy among people with HIV. Prioritising older and taller patients for access to drugs least likely to cause neuropathy could reduced rates of this problem in resource-limited settings (where some use of potentially neurotoxic drugs remains an economic necessity).

## CURRENT PROJECTS

### Basic HIV research

- The role of naïve T-cells in HIV viral persistence (Prof. S Lewin)
- The role of chemokines in establishing latent infection in resting T-cells (Prof. S Lewin)
- Role of histone deacetylase inhibitors in the elimination of HIV from the latent reservoir (Prof. S Lewin)
- Identification of the cellular defect that leads to long term HBV infection and how this is altered in the setting of HIV-HBV co-infection (Prof. S Lewin)
- Relationship between genetic polymorphisms and immune restoration in individuals receiving HAART (Prof. S Lewin)

- The role of thymic dendritic cells in CD4+ T-cell depletion in HIV infection (Dr P Cameron)
- Development of a rapid high throughput test to assess HIV co-receptor usage and fitness (Prof. S Lewin)
- Characterisation of the role of the male genital tract in HIV persistence and pathogenesis (Dr M Xhilaga)
- Lineage and functional relationship of dendritic cells and monocytes (Dr P Cameron)

### HIV–hepatitis B co-infection

- The interaction of HIV and HBV in the cells of the liver, specifically the hepatocyte (Prof. S Lewin)
- The natural history of HIV and HBV infection and the role of HBV drug resistance in liver disease progression (Prof. S Lewin)
- Identification and characterisation of HBV mutations that lead to resistance to tenofovir in Australia and Thailand (Dr J Sasadeusz)
- The change in the immune system in HIV-HBV co-infected patients who develop hepatitis after starting HIV and HBV treatment (Prof. S Lewin)

### Hepatitis B virus research

- Defining the relationship between HLA type and HBV evolution (Prof. S Lewin)

### NeuroAIDS research

- The Asia Pacific NeuroAIDS Consortium NIH Study (Dr E Wright)
- Rates and risk factors for sensory neuropathy in HIV/AIDS patients in Australia and around the world (Dr K Cherry)
- Genetic risk factors for antiretroviral toxic neuropathy (Dr K Cherry)
- Establishing the use and interpretation of an LM-PCR-based phenotypic assay for antiretroviral toxicity (Dr K Cherry)
- Study to examine a novel, soluble formulation of coenzyme Q<sub>10</sub> for the prevention of neuropathy in an *in vitro* model (Dr K Cherry)

### HIV clinical research

- Exercise and HIV (Dr K Cherry)
- Studies investigating the effectiveness of flupirtine (a novel analgesic) for treating pain from HIV-neuropathy that is not adequately controlled by opioids (Dr K Cherry)
- Prospective cohort study of women in Victoria infected with HIV assessing reproductive history and future reproductive intentions (Dr M Giles)
- Retrospective analysis of clinical management and disease outcomes of women infected with HIV who have delivered a live birth in Australia between 1982-2005 (Dr M Giles)
- Cross sectional study of 3100 general practitioners across Victoria and New South Wales assessing infectious diseases screening practice during pregnancy (Dr M Giles)

### HIV prevention

- Risk behaviour for sexually transmitted infections in men who have sex with men (MSM) – ongoing study aiming to compare the associations of risk taking behaviours for HIV/STI transmission with mental illness and drug and/or alcohol use, in HIV infected and uninfected MSM (Dr A Mijch)

### HIV clinical trials

- A randomised open-label study comparing the safety and efficacy of three different combination antiretroviral regimens as initial therapy for HIV infection (ALTAIR Study) (Prof. J Hoy)
- A placebo controlled multiple dose study of flupirtine in the treatment of painful HIV-associated NRTI neuropathy (Dr K Cherry)
- A Phase 3 randomised, double-blinded, placebo-controlled trial to investigate efficacy, safety and tolerability of TMC125 as part of an antiretroviral therapy including TMC114/RTV and an investigator-selected OBR in HIV-1 infected subjects with limited to no treatment options: TMC125 C225 DUET Study (Prof. J Hoy)
- A multicenter, double-blind, randomized, placebo-controlled study to evaluate the safety and anti-retroviral activity of MK-0518 in combination with an optimized background therapy, versus optimized background therapy alone, in HIV-infected patients with documented resistance to at least 1 drug in each of the 3 classes of licensed oral anti-retroviral therapies. Integrase Inhibitor MK518.018 (Prof. J Hoy)
- A Phase 3, randomized, open-label, study of lopinavir/ritonavir tablets versus soft gel capsules and once daily versus twice daily administration, when co-administered with NRTIs in antiretroviral naïve HIV-1 infected subjects (Prof. J Hoy)
- A case-control toxicogenomics study to identify unique genetic polymorphisms in patients who have experienced symptomatic hepatotoxicity or severe cutaneous toxicity within the first 8 weeks of nevirapine therapy (Prof. J Hoy)
- A study to evaluate three different delivery mechanisms for Enfuvirtide®, a 27 gauge needle, 31 gauge needle and a needle-free device (OPTIONS Study) (Prof. J Hoy)
- AVX-301 A Phase 2b/3, randomized, double blind dose confirming study of the safety, efficacy and tolerability of apricitabine versus lamivudine in treatment-experienced HIV-1 infected patients with the M184V/I mutation in reverse transcriptase (Prof. J Hoy)

- Impact of HIV infection and treatment with highly active antiretroviral therapy on reverse cholesterol transport (Prof. J Hoy)
- A multicenter, randomized, double-blind, placebo-controlled trial of a novel CCR5 antagonist, UK-427,857, in combination with optimized background therapy versus optimized background therapy alone for the treatment of antiretroviral-experienced HIV-1 infected subjects (Prof. J Hoy)
- A randomised, controlled, open-label trial to compare the efficacy, safety and tolerability of TMC114/RTV versus lopinavir/ritonavir in treatment-experienced HIV-1 infected subjects (Prof. J Hoy)
- Study of subcutaneous recombinant IL-2 in patients with HIV-1 infection and CD4 cell counts >300ul. Evaluation of subcutaneous proleukin (ESPRIT) (Prof. J Hoy)
- The Australian HIV observational database and data on adverse events of anti-HIV drugs (AHOD and DAD) (Prof. J Hoy)
- A multicenter, randomized, double-blind, comparative trial of a novel CCR5 antagonist, UK-427,857, in combination with zidovudine/lamivudine versus efavirenz in combination with zidovudine/lamivudine for the treatment of antiretroviral-naïve HIV-1 infected subjects (Prof. J Hoy)
- A prospective cohort study of individuals recently infected with HIV, to determine immunological, virological and therapeutic factors related to disease progression (PHAEDRA) (Prof. J Hoy)
- Clinical and laboratory investigation of undiagnosed encephalitis (CLUE) study (Dr E Wright)

### Infections in the immunosuppressed

- Strategies to improve adherence to current best practice guidelines for the prevention of overwhelming post splenectomy sepsis (OPSI) (A/Prof. D Spelman)
- Quantification of the risk of OPSI by using outcome data in specific patient sub-groups e.g. those patients who have undergone removal of their spleen or have damaged their spleen following trauma (A/Prof. D Spelman)
- The role of quantification of IgM specific immune memory B-cells as a marker of immune function in patients post-splenectomy (Dr P Cameron)
- A multicentre randomised, controlled trial comparing two strategies for the diagnosis of invasive aspergillosis in high-risk haematology patients – the ASPID Study (Dr M Slavin)
- Caspofungin as salvage monotherapy for invasive aspergillosis in patients with haematological malignancies or following allogeneic stem cell transplantation: efficacy and concomitant cyclosporin A (Dr O Morrissey)
- A randomised, stratified, open label, Phase 2 pilot study on the safety of a daily, intermittent, or weekly administration of 1, 3 or 10mg/kg of AmBisome® in antifungal primary prophylaxis of high-risk patients with acute myeloid leukaemia (Dr O Morrissey)
- An economic evaluation of invasive fungal infections among patients undergoing stem cell transplantation or chemotherapy for acute leukaemia (Dr O Morrissey)
- Prospective use of genes containing coding tandem repeats as markers for genotyping *Aspergillus fumigatus* clinical isolates and investigation of the relationship of genotype with the spectrum of clinical infection (Dr O Morrissey)

### Antibiotic and antibiotic-resistance studies

- Development of *in vitro* and *in vivo* pharmacodynamic models to better understand dosing and toxicity of new antibiotic linezolid (A/Prof. D Spelman)
- Study of the usefulness of antimicrobial susceptibility testing in patients with cystic fibrosis (A/Prof. D Spelman)
- Case control study to identify risk factors for vancomycin-resistant enterococci (VRE) bacteremia (A/Prof. D Spelman)
- Case control study to identify risk factors for the development of metallo-β-lactamases (A/Prof. D Spelman)
- Investigation into optimal methods of typing VRE (A/Prof. D Spelman)
- Multi-national study of *Acinetobacter* bloodstream infection: clinical outcomes and global epidemiology (A/Prof. D Spelman)

### General infectious diseases

- International Collaboration on Endocarditis (ICE) (A/Prof. D Spelman)
- The Australian Group on Antibiotic Resistance (AGAR) annual and bi-annual studies on resistance patterns for *Staphylococcus aureus*, both community and hospital acquired, gram negative bacilli, and *Streptococcus pneumoniae* (A/Prof. D Spelman)
- The Australian and New Zealand Collaboration on outcomes of staphylococcal sepsis (A/Prof. D Spelman)
- Study of infections in ventricular assist devices (A/Prof. D Spelman)
- Study of the changing clinical patterns and microbiology of necrotising fasciitis and myonecrosis (A/Prof. D Spelman)

POSTGRADUATE STUDENTS  
11 PhD Students

PUBLICATIONS  
68 Journal Articles  
1 Book



TheAlfred



Website: [www.alfredicu.org.au](http://www.alfredicu.org.au)

*Associate Professor  
Carlos Scheinkestel  
in the new state-of-  
the-art 45 bed ICU at  
The Alfred, opened in  
November 2008.*



## INTENSIVE CARE

Director: Associate Professor Carlos Scheinkestel MBBS, FRACP, FJFICM

Deputy Director & Head of Research: Professor Jamie Cooper BMBS, MD, FRACP, FJFICM

In 2008, the Intensive Care Unit continued its strong research program. The Alfred ICU is now regarded as one of the most successful research departments in critical care research in Australia. Research has continued on a number of themes built up over many years in collaboration with several important research organisations, including the Australian and New Zealand Intensive Care Society Clinical Trials Group (ANZICS CTG), the National Trauma Research Institute (NTRI) and the Australian and New Zealand Intensive Care Research Centre (ANZIC-RC).

In 2008, Intensive Care Unit researchers were awarded NHMRC funding for two new studies in traumatic brain injury (POLAR and EPO) for \$1.96 million and \$1.85 million respectively. The POLAR study (led by Professor Cooper and Associate Professor Bernard in association with Dr Nichol and Professor Peter Cameron) will investigate the early use of induced hypothermia to improve outcomes, and the EPO study (led by Professor Cooper and Dr Nichol) will investigate the use of erythropoietin to improve outcomes in traumatic brain injury patients.

The enthusiastic and hard-working ICU research coordination team continued to successfully enrol patients into several clinical trials. This team included Lynne Murray, Shirley Vallance, Cindy Weatherburn, Siouzy Morrison, Rachael Nevill and is supported by Lucinda Gabriel.

### RESEARCH ACTIVITIES

Professor Jamie Cooper continued to lead (with Professor Jeffrey Rosenfeld) the DECRA trial, an international randomised trial of decompressive surgery for severe traumatic brain injury, which is within 12 months of completion. He also leads the SAFE-TBI II study, searching for mechanisms behind improved mortality with saline compared to albumin for resuscitation in traumatic brain injury (TBI) patients, and the Australian effort on the PROTECT study, which is comparing unfractionated and low molecular weight heparins in a large Canadian-led international study of critically ill patients.

With Ruwan Wijemunige, Professor Cooper is investigating BIS monitoring in TBI patients, and testing CO<sub>2</sub> titration to improve brain oxygen concentrations. He is also principal investigator on the national STATINS (investigation of statin therapy) and ARISE (investigation of early goal-directed therapy) randomised trials in patients with severe sepsis.

Associate Professor Carlos Scheinkestel was a Steering and Management Committee member of the highly successful RENAL study (completed in late 2008), which randomised over 1,500 patients.

Dr Andrew Davies continued to lead the multicentre ENTERIC randomised trial, testing small bowel feeding versus gastric feeding in ICU patients. He

also ran a nationwide observational study on feeding strategies in patients with pancreatitis and is gradually developing a critical care nutrition research program in collaboration with the ANZIC-RC.

Associate Professor David Tuxen, Dr Alistair Nichol and Carol Hodgson have continued their randomised, controlled trial of an improved method of lung recruitment in patients with acute respiratory distress syndrome (ARDS), the PHARLAP study.

Associate Professor Stephen Bernard has continued his pre-hospital research program. Recently he completed studies on pre-hospital intubation in severe head injury (RSI trial) and on improved methods of cooling post-cardiac arrest patients pre-hospital (RICH trial) and has moved on to co-lead (with Professor Cooper) a significant study into hypothermia (both pre- and then in-hospital) for patients with traumatic brain injury.

Associate Professor Warwick Butt has continued to lead a prolific and diverse research program in both paediatric and adult critical care.

Dr Vincent Pellegrino has been analysing results of the multicentre NAVIGATOR trial testing an improved monitoring and haemodynamic management system for acute cardiothoracic ICU patients. He has continued to further establish the growing clinical extracorporeal membrane oxygenation (ECMO) program, which has included the establishment of an international symposium on the use of the ventricular assist device (VAD) and ECMO therapies.

Dr David Pilcher has continued to study ICU outcomes using the bi-national ICU database, particularly in regard to ICU discharge patterns and survival.

Dr Megan Robertson ran a pilot study in understanding whether heparin has an effect as an intervention in patients with septic shock, and has contributed to several other department research projects.

Dr Andrew Hilton has expanded the ICU echocardiography program and has continued investigating cardiac abnormalities in patients with brain injury and lecturing at meetings on echocardiography. Dr Tim Leong has continued his work in infection control and central line associated blood stream infections and Dr Deirdre Murphy has taken over from Associate Professor Bob Salamonsen in developing skills in artificial heart technology.

Dr Silvana Marasco (cardiothoracic surgeon) continues to lead a randomised trial of surgical rib fixation patients with Professor Cooper and Dr Davies.

*Continued on page 45*



Medical Oncology research nurse Marisa Cikos conducts an interview with a trial patient.



## MEDICAL ONCOLOGY

Head: Professor Max Schwarz MBBS(Hons), FRACP, FACP, FACHPM

The Medical Oncology Unit provides coordinated multidisciplinary management for adult patients with malignancies. An important component of this care is the clinical trial and research activities, which enable the unit to offer forthcoming investigational treatments to patients.

The unit's research activities include Phase 1, 2 and 3 trials across a wide range of tumour types, incorporating both pharmaceutical industry sponsored and investigator-driven studies, with active participation in both national and international clinical trials.

A highlight of 2008 was the mandatory regulatory inspection by the US Food and Drug Administration (FDA) of a Phase 1 international clinical trial conducted by the unit, in collaboration with Nucleus Network. This was a rigorous, formal, five-day audit. No reportable findings were made by the senior FDA auditor, who highly commended the study conduct at The Alfred.

The unit was an active participant in an important international colorectal study. The results, which were published in the *New England Journal of Medicine* in October 2008, translate into a major paradigm shift in the prognosis and management of metastatic colorectal cancer. The veracity of the results has been verified by other worldwide research groups. Dr Jeremy Shapiro was the principal investigator of the study at The Alfred.

The unit plans to join the Cancer Trials Australia (CTA) group in early 2009, which will allow access to clinical trials and enhance research capabilities. It is expected that a central ethics committee review process, acceptable to all the major teaching hospitals ethics committees, will be introduced in 2009. Its

implementation will be a major development for all researchers, with significant benefits in enhancing research capacity as well as streamlining governance.

### CURRENT PROJECTS

- Suppression of ovarian function trial: a Phase 3 trial evaluating the role of ovarian function suppression and the role of exemestane as adjuvant therapies for premenopausal women with endocrine responsive breast cancer (Professor Max Schwarz)
- A Phase 3 randomized trial of chemotherapy with or without panitumumab in patients with metastatic and/or recurrent squamous cell carcinoma of the head and neck (Dr Andrew Haydon)
- Multicentre international study of capecitabine +/- bevacizumab as adjuvant treatment of colorectal cancer (Dr Andrew Haydon)
- A Phase 3 randomized study of brivanib alaninate (BMS-582664) in combination with cetuximab (Erbix, C225) versus placebo in combination with cetuximab (Erbix, C225) in patients previously treated with combination chemotherapy for metastatic colorectal carcinoma (Dr Andrew Haydon)
- A multinational, randomized, double-blind study comparing aflibercept versus placebo in patients treated with second-line docetaxel after failure of one platinum based therapy for locally advanced or metastatic non-small-cell lung cancer (Dr Andrew Haydon)
- Adjuvant immunotherapy with anti-CTLA-4 monoclonal antibody (ipilimumab) versus placebo after complete resection of high-risk stage III melanoma: a randomized, double-blind Phase 3 trial of the EORTC Melanoma Group (Dr Andrew Haydon)

### PUBLICATIONS

9 Journal Articles

### *Intensive Care continued from page 44*

Fourteen of the 15 consultant intensivists were invited to speak at international or national meetings in 2008. Of note, Professor Cooper gave a plenary lecture on traumatic brain injury at the Society of Critical Care Medicine (the largest annual American critical care meeting) and Dr Davies gave seven invited presentations at the Brussels ISICEM (the largest annual European critical care meeting). Several ICU registrars presented their work at the Australian and New Zealand Intensive Care Society Annual Scientific Meeting in 2008.

The end of 2008 saw the retirement from clinical service of Associate Professor Bob Salamonsen, who has pioneered many aspects of cardiothoracic intensive care in Australia, mostly through the use of life support machines such as VADs and ECMO. Bob's remarkable knowledge of cardiovascular physiology is legendary and assisted him to teach and guide generations of trainees and consultants in anaesthesia and intensive care.

### MAJOR RESEARCH FINDINGS

- The VASST study found that low dose vasopressin improved survival in selected patients with septic shock (published in *New England Journal of Medicine*). The Alfred coordinated the Australian sites in a Canadian-Australian non-industry research collaboration.
- The LOVS study (also a Canadian-Australian research collaboration) reported that higher levels of PEEP did not improve outcomes in patients with ARDS (published in the *Journal of the American Medical Association*).
- The RENAL study found that high-flow continuous renal replacement therapy (CRRT) did not improve major clinical outcomes in ICU patients with renal failure compared to standard flow CRRT.

### POSTGRADUATE STUDENTS

2 PhD Students

### PUBLICATIONS

24 Journal Articles

4 Book Chapters



# MEDICINE

Head: Professor Napier Thomson AM, MBBS, MD, FRACP

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 (refer to separate reports) integrated with the Department of Medicine.

In addition, 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

Research undertaken by physicians of the Department of Allergy, Immunology and Respiratory Medicine, and scientists in the Monash University Departments of Medicine and Immunology, is largely centred on the immunobiology of asthma (particularly atopic asthma), immunological and molecular characterisation of peanut allergens, chronic lung disease, cystic fibrosis and lung transplantation. A program of study of lung regeneration using stem cell technology has been established in association with Monash Immunology and Stem Cell Laboratories.

## Renal Disease

Clinical research projects in Renal Medicine are predominantly 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 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, established at The Alfred in 1996, 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.

## 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

The Women's Health Program undertakes research pertaining to the main conditions that affect the health of women at midlife and beyond. Major current 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

Clinical and laboratory research is conducted, especially in the area of diabetes. Specific research programs include mechanisms in the development of diabetic complications, insulin-like growth factor dysregulation in diabetes and heart failure, and clinical trials in diabetes care and osteoporosis.

## Experimental Anatomical Pathology

The laboratory of Experimental Anatomical Pathology 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 veno-occlusive disease and pulmonary hypertension. The 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.

## POSTGRADUATE STUDENTS

1 Masters Student  
1 MD Student  
73 PhD Students

## PUBLICATIONS

84 Journal Articles  
4 Book Chapters



From left: (front row) Research nurse Brigit Willder, Dr Lena Ly, Associate Professor John Kelly, Dr Alex Chamberlain, (back row) Dr Yan Pan, Dr Hussain Hilmy, Dr Benjamin Wallis, clinical assistant Renate Hodgson and Dr Desmond Gan.



## MELANOMA SERVICE

Head: Associate Professor John Kelly MDBS, FACD

Research conducted by the Victorian Melanoma Service is primarily clinical and aimed at facilitating earlier detection of melanoma. Early detection of melanoma remains the primary method to prevent mortality as there is still no therapy, other than complete removal of the primary tumour, with a clear survival benefit.

In 2008 Dr Hugh Roberts completed his review of the epidemiology of melanoma in Victoria over the past 20 years, working with the Victorian Cancer Registry. He studied pathology reports for more than 10,000 melanomas. His work shows that melanoma rates have doubled over the past 15 years and that this includes an increase in rates of advanced melanomas. The most important contributor by far to deaths from melanoma proved to be nodular melanoma, an uncommon, aggressive and under-recognised form of melanoma, which has been an important focus of our research. Dr Roberts showed that this form of melanoma comprises only 8% of melanomas but causes half of deaths from melanoma. In recent years Dr Alex Chamberlain and Dr Wendy Liu have pioneered understanding of this form of melanoma, describing its distinctive appearances, its risk factor profile and rapid growth.

Dr Yan Pan studied 117 patients who presented with melanoma that had spread to other parts of the skin through vessels. His is the first study to show that, contrary to assumptions made in the current melanoma staging system, these patients have a much better outlook than those with other forms of spread from melanoma. The current staging system for melanoma mistakenly indicates that patients with spread of melanoma to the skin are similar to patients with spread to internal organs and have a poor outlook, with only 19% expected to survive for five years. Dr Pan showed that these patients have a much better outlook, with half surviving for five years. This information will allow revision of the staging system and a different and more accurate prognosis that can be given to patients with spread to the skin.

Dr Lena Ly identified a new precursor for melanoma. She worked with a group of six patients who have large numbers of moles that are focused in a well-defined but large area of abnormal skin. All had developed between one and four melanomas in the affected skin. Patients with this characteristic but rare problem will be followed in future to detect their melanomas early.

Dr Victoria Pearce completed the development of a predictive model for risk of developing melanoma. She is producing an online tool to enable people to assess their own five year risk to develop melanoma. This will enable doctors and patients to more effectively target early detection strategies.

The Melbourne Melanoma Project commenced in 2008 and involves tissue banking for melanoma. This is a collaborative project between Peter MacCallum Cancer Centre, The Alfred and the Austin Hospital. The project will enable identification of the molecular pathways involved in each patient's melanoma, opening the opportunity for targeted chemotherapy.

Dr Cate Scarff joined the staff of the Victorian Melanoma Service to perform research using the new confocal microscope purchased in 2008 with support from the Muriel and Les Batten Foundation.

### CURRENT PROJECTS

- The effectiveness of different biopsy types in detecting melanoma (Dr Jonathan Ng)
- Multicentre sentinel lymphadenectomy trial II (Mr Richard Bloom)
- Trial of ipilimumab for stage II melanoma (Dr Andrew Haydon)
- Prognosis for patients with regional cutaneous metastases (Dr Yan Pan)
- Changes in the epidemiology of melanoma in Victoria over 20 years (Dr Hugh Roberts)
- The features and associations of isolated dermal melanoma (Dr Sarah Brennan)
- The efficacy of imiquimod and the treatment of lentigo maligna (Dr Martin Haskett)
- Mathematical model to predict five year risk for the development of melanoma (Dr Victoria Pearce)
- Comparative study of the epidemiology of nodular melanoma, lentigo maligna melanoma and superficial spreading melanoma (Dr Wendy Liu)
- Efficacy of confocal microscopy in the non-invasive diagnosis of melanoma (Dr Cate Scarff)

#### POSTGRADUATE STUDENTS

1 Masters Student

#### PUBLICATIONS

2 Journal Articles

#### Melbourne Sexual Health Centre continued from page 48

A structured telephone questionnaire was administered to men and women recently diagnosed with chlamydia to identify areas where assistance with PN would be useful. The Let Them Know website [www.letthemknow.org.au](http://www.letthemknow.org.au) was developed as a result of this study to assist heterosexual people diagnosed with chlamydial infections in informing their partner who may be at risk of infection (J Bilardi, C Hopkins, C Fairley, F Bowden, M Pitts, M Chen).

#### HIV research

The centre participated in a multinational clinical trial (STEAL) comparing two commonly used anti-HIV combination pills, truvada and kivexa. The most important finding was that drug combinations were equivalent in their ability to control HIV. Other ongoing studies include a trial of a nutritional supplement, safety data collection for maraviroc and continuous participation in a national observational database.



## MELBOURNE SEXUAL HEALTH CENTRE

Director: Professor Christopher Fairley MBBS, PhD, FRACP, FAFPHM, FACSHP, FACHSHM

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

### Chlamydia trachomatis

MSHC research is designed to improve case finding of chlamydia among asymptomatic groups at high risk of infection, for example, in men who have sex with men (MSM), pregnant women and young women under the age of 25 years attending general practitioner clinics.

A study of pregnant women aged 16-25 years attending antenatal services in Melbourne was carried out to determine the associated risk factors for chlamydial infection and whether risk factors identified could be used for selective screening. Screening based on the selective criteria would have detected 72% of infections, and 27% of women would have been screened (*M Chen, C Fairley, S Tabrizi, M Pirota, S Garland*).

The attitudes of young women to the introduction of chlamydial screening in general practice (GP) in Australia were examined. Young women reported that they would accept age-based screening in general practice, during both sexual health and non-sexual health related consultations (*N Pavlin, C Fairley, J Gunn, J Hocking*).

### Sexually transmitted infections in MSM

The duration between onset of symptoms of primary and secondary syphilis, and diagnosis and treatment were determined among MSM. A considerable delay between the onset of symptoms of early syphilis and its diagnosis was found, creating a period where further transmission could occur. Greater awareness of symptoms and signs of syphilis is required among GPs and MSM, together with the need for early testing and treatment (*M Bissessor, C Fairley, C Bradshaw, M Chen*).

A study was conducted to ascertain the knowledge and attitudes of MSM about the human papilloma virus (HPV) vaccine and to determine the age at which MSM would ask for the HPV vaccine. MSM were strongly in favour of having HPV vaccine when advised of the risk of HPV-related anal cancer (*D Simatherai, M Bush, C Fairley, S Heley, M Chen*).

The clinical value of a questionnaire and clinically reported anorectal symptoms as reliable indicators of infection with *N. gonorrhoeae* and *C. trachomatis* in MSM was investigated. The absence of an association between symptoms and the presence of gonorrhoea or chlamydia infection highlights the importance

of annual screening of MSM for sexually transmitted infections independent of symptoms (*N Lister, C Pang, C Fairley*).

### Bacterial vaginosis (BV)

The Bacterial Vaginosis Antibiotic and Probiotic Study (BVAPS) is an NHMRC-funded randomized, 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 enrolled 230 women (*C Bradshaw, M Pirota, C Fairley, S Garland*).

A meta-analysis of the behavioural risk factors associated with BV was conducted. BV was associated with new and multiple sexual partners, lack of condom use and findings that illustrate BV has the epidemiology of an STI (*K Fethers, C Bradshaw, C Fairley*).

The Female University Student Study (FUSS) examines the association between sexual practices and BV (*K Fethers, C Bradshaw, C Fairley*).

### Mycoplasma genitalium

An audit of *M. genitalium* infections at MSHC from 2005-2007 was conducted and showed *M. genitalium* was detected in 10% of cases of nongonococcal urethritis and 11% of cervical infections/pelvic inflammatory disease in women. Azithromycin failure occurred in 16% of cases and all cases were successfully eradicated with moxifloxacin (*C Bradshaw, M Chen, C Fairley*).

A retrospective analysis of samples collected in 2002 during a study of *M. genitalium* in MSM attending sex on premises venues was conducted. There was found to be a 2% prevalence of *M. genitalium*, largely detected as an asymptomatic rectal infection (*C Bradshaw, C Fairley, N Lister, M Chen, S Garland, S Tabrizi*).

### Partner notification of chlamydia

A study is exploring how Australian GPs undertake partner notification (PN) for chlamydia, their views on PN, and what supports GPs would find most useful to assist with PN.

*Continued on page 47*

### POSTGRADUATE STUDENTS

8 Masters Students  
5 PhD Students  
1 Other Doctoral Student

### PUBLICATIONS

27 Journal Articles



# NATIONAL TRAUMA RESEARCH INSTITUTE

Director: Professor Russell Gruen MBBS, PhD, FRACS

Fully operational since mid-2004, the National Trauma Research Institute (NTRI) has brought together an expert group of researchers and collaborators from various disciplines that includes scientists, clinicians, nurses, allied health staff and other health professionals. NTRI's state-of-the-art facility is located in close proximity to The Alfred Trauma Service, the largest and busiest trauma service in Australia.

NTRI has a wide range of collaborative partnerships with centres and groups such as:

- Trauma services – The Alfred, Royal Melbourne, Royal Children's and Austin hospitals
- Interstate Trauma Services – Liverpool and Westmead hospitals
- Universities – Monash, Melbourne, Deakin, La Trobe and RMIT
- Ambulance Services – Metropolitan Ambulance Service and Rural Ambulance Victoria
- International centres.

NTRI's research and education programs are funded through grants received mainly from the Transport Accident Commission, Victorian Neurotrauma Initiative (VNI) and NHMRC, and supported by philanthropic organisations and AAMI.

NTRI's main focus is on improving trauma patient care and outcomes through research, and by effectively translating research outcomes into clinical practice through education programs. The institute's areas of research extend along a continuum of pre-clinical animal based research, pre-hospital (paramedic), emergency presentation, intensive care management, definitive surgical care and rehabilitation medicine.

## HIGHLIGHTS

### Trauma Melbourne Conference 2008

The inaugural Trauma Melbourne Conference (TM2008), held in November 2008, was a multidisciplinary forum that focused on the two pressing issues in trauma resuscitation: interventions for brain and spinal cord injury, and the management of hypovolaemic shock. Trauma Melbourne 2008 was an initiative of the NTRI and VNI, and was supported by Alfred Health's Emergency and Trauma Centre, AAMI and Ambulance Victoria. Trauma Melbourne 2008 was attended by 261 delegates: 74% Victorian, 21% interstate and 5% overseas.

### Trauma Melbourne Conference 2008 Workshop

NTRI, in collaboration with Professor Russell Gruen, managed a pre-conference workshop on trauma research, which was held at the University of Melbourne and attended by 70 registrants.

### Trauma Research Education Day for Paramedic Students

NTRI hosted a Trauma Research Education Day for paramedic students to promote research and bridge the gap between trauma research and service delivery.

### Corporate Fellowships

The NTRI Corporate Fellowship program continued and expanded in 2008. This program includes sponsorship by company partners of research and clinical fellows to support trauma research activities at NTRI.

### NTRI Honorary Fellowships

2008 has seen the continuation and expansion of honorary research positions; there are now over 45 researchers from other organisations working at NTRI as honorary researchers.

### New Funding

Associate Professor Cristina Morganti-Kossmann was awarded the inaugural Victorian Neurotrauma Initiative Senior Research Fellowship. Her team studies the role of brain inflammation in mediating the production of new neuronal cells, brain cell death and the accumulation of blood cells within brain tissue. Their aim is to identify the molecular targets responsible for the inflammatory cascade that is triggered by injury to the brain.

Dr Alistair Nichol was awarded a Tattersalls Foundation Trauma Research Fellowship to study the role of erythropoietin in head injury. When administered in high doses, erythropoietin (EPO) has been demonstrated in some animal studies and in early human trials to improve outcomes following head injury. However, there is a risk that it may increase the rate of clot formation. It is aimed to conduct a trial to determine if EPO improves neurological outcomes and whether it increases the rate of clot formation.

Dr Edwin Yan was awarded a grant from ANZ Trustees for the project entitled 'Post traumatic hypoxia increases tryptophan metabolite production and exacerbates secondary brain damage'. Tryptophan is an essential amino acid for cellular function and survival, and plays a pivotal role in regulating the immune/inflammatory response. Studies on neurodegenerative diseases, as well as preliminary data on traumatic brain injury (TBI) patients, demonstrate that the brain increases the rate of tryptophan metabolism, including the production of its intermediate and end-products. This project will validate evidence on the increase of tryptophan metabolism in the injured brain possibly contributing to secondary brain damage that evolves after TBI.

## POSTGRADUATE STUDENTS

2 Masters Students  
1 DClinNeuropsych Student  
8 PhD Students

## PUBLICATIONS

43 Journal Articles  
2 Book Chapters

*Joni Kirk measures tremor frequencies using an accelerometer to detect the presence of ataxic symptoms.*



## NEUROSCIENCES

Head: Professor Elsdon Storey MBBS, DPhil, FRACP

### 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. Associate Professor Richard Gerraty addresses the difficult management issues raised by cervical arterial dissection, a common consequence of trauma in The Alfred's large trauma patient base.

### Alzheimer's Disease and Other Dementias

Optimally, treatment for Alzheimer's disease 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), patients have been studied to ascertain whether teaching memory strategies at an early stage may improve everyday memory function. Carmela Germano and Sarah Ong, La Trobe University Masters students in Psychology co-supervised by Professor Storey, continued their studies on memory mechanisms and motor skills in Alzheimer's disease. Dr Louise Kelly's studies on the functions of APP, the nerve cell protein that is broken down to form the toxic amyloid protein of Alzheimer's disease, continue, and in 2008 she was joined by PhD student Judy Allen-Graham.

Professor Storey is on the steering committee of the ASPREE trial of aspirin in the healthy elderly, for which dementia is a primary endpoint. He is also a chief investigator 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 from 2008.

### Inherited and Sporadic Ataxias

Spinocerebellar ataxias (SCAs) affect those parts of the brain concerned with coordination. Many cases have a genetic cause. The department's clinical work in the inherited ataxias involves finding and describing new varieties of ataxic illness.

Gluten sensitivity (which underlies coeliac disease) has been proposed as a common cause of sporadic (non-genetic) ataxias, although this is contentious. NHMRC is funding the department to study this problem, both in a mouse model and in subjects with newly diagnosed coeliac disease, using clinical scales, an internally-developed electronic measure of coordination, and quantitative MRI scanning. Neurophysiology Scientist Kate Tuck has continued validation and standardisation work on our battery of upper limb coordination measures, and a collaboration has been established with Monash University Gippsland campus to produce portable apparatus with which to conduct these tests. The department undertakes the clinical and neurophysiological assessment of tremor and ataxia, and neuropsychological assessment, of male patients with possible fragile X tremor/ataxia syndrome and of female fragile X carriers, funded by NHMRC.

### Movement Disorders

Associate Professor David Williams heads a research team through the Van Cleef Roet Centre, which now includes a laboratory scientist who has begun work on brain tissue archived at the Australian Brain Bank Network (ABBN). She is developing protocols for immunohistochemistry and Western blot analysis for routine use in the ABBN tissue with a view to developing the research potential of this resource.

In collaboration with the team from the UCL Institute of Neurology, London, pathological tau protein deposition in progressive supranuclear palsy (PSP) via anatomical region will be assessed. The department is also involved in commercial studies and the ongoing cerebrospinal fluid (CSF) study, which began in 2008. A PhD student at the University of Rome is also performing longitudinal CSF studies and transcranial magnetic stimulation in patients with PSP.

Associate Professor Williams coordinates a regional collaboration looking at the outcomes of deep brain stimulation (DBS), and has started the DBS clinic at Monash Medical Centre as part of this broader collaboration. The Alfred Movement Disorders Clinic continues to attract new patients who are routinely offered participation in ongoing studies assessing nuclear medicine (cardiac MIBG) and olfaction testing in the diagnosis of Parkinsonism. Together with the scientists in The Alfred Movement Analysis Laboratory, researchers test diagnostic and electrophysiological measures of tremor (dystonic tremor, orthostatic tremor and essential tremor).

The team has submitted seven abstracts for the International Movement Disorders Society meeting in Paris in 2009. Associate Professor Williams has been invited to talk at a number of international meetings, including the World Federation of Neurology Parkinson's Disease and Related Disorders meeting in Florida in December.

### Cognition in Cerebellar Stroke and Hepatitis C

General medical illnesses can affect brain function and therefore thinking. La Trobe neuropsychology Masters student Chris O'Halloran has commenced studies on localisation of cognition and effective function in the cerebellum. Neuropsychologist Dr Rubina Alptsis is studying the effects of hepatitis C infection on cognition.

#### POSTGRADUATE STUDENTS

1 Masters Student  
2 DClInNeuropsych Students

#### PUBLICATIONS

19 Journal Articles  
1 Book Chapter



Image of 3D virtual neurosurgery, performed using a system developed in collaboration with neurosurgical centres in Singapore and Germany.



The Alfred



MONASH University

## NEUROSURGERY

Head: Professor Jeffrey Rosenfeld MBBS, MD, MS, FRACS, FRCSEd, FACS, FRCS Hon, FACTM, MRACMA, RAAMC

Clinical Director: Mr Peter Hwang MBBS, FRACS, FRCSEd, FRCSEd, FCSS, FAMS

The Alfred Department of Neurosurgery continues to develop an active and multidisciplinary research program. It has expanded collaborations with the departments of Intensive Care, Trauma Surgery, Stroke, Radiology, Radiotherapy and Pathology. Neurosurgery staff also actively work on projects with Monash University, La Trobe University and University of Melbourne. The primary focus of collaborations is on the improvement of patient care and outcomes, although some projects may also result in the development of intellectual property assets.

The US National Institutes of Health-funded familial intracranial aneurysm study has recommenced recruitment after additional funds were obtained by the chief investigators. This second phase will examine genetic factors predisposing to aneurysm development in those patients without a documented family history.

A number of epidemiological studies are under way, utilising the large amount of data entered into the department's audit system over the last five years. The audit database, developed in-house, continues to prove its value as a tool for managing the day-to-day workload and also for facilitating a wide variety of neurosurgical research projects.

The department is also actively involved in developing minimally invasive neurosurgical techniques, and collaborates with major neurosurgical centres in Singapore and Germany on the development of new technologies. Manuscripts arising from this work have been accepted for publication in the foremost journal *Neurosurgery*.

An active student research program, with international and local junior and senior medical staff undertaking research projects under the direction of neurosurgery staff, will continue into the future, reinforcing the department's commitment to teaching and research.

### SUCCESSFUL GRANTS

- Victorian Cancer Agency Project Grant awarded to Professor Jeffrey Rosenfeld, Professor Gavin Fabinyi (Austin Health), Professor Michael Saling (University of Melbourne) and Dr Jacqueline Anderson for the project 'Intentional forgetting in frontal lobe tumour patients' 2008-2009: \$80,000.
- Henry O'Hara Surgical Research Trust Grant for 2009 awarded to Dr Marc Seifman for the project 'Identification of risk factors for the development of postoperative bleeding after cranial neurosurgery'.

### CURRENT PROJECTS

- DECRA: a multicentre randomised trial of early decompressive craniectomy in patients with severe traumatic brain injury (Professor Jeffrey Rosenfeld)
- FIA: Familial Intracranial Aneurysm Study (Professor Jeffrey Rosenfeld)

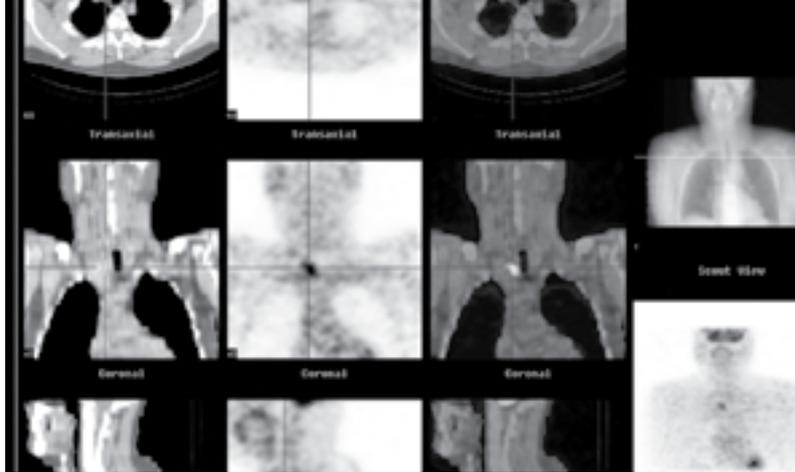
- CONSCIOUS-2: a prospective multicentre, double blind, randomised, placebo controlled, parallel group study to assess the efficacy and safety of clazosentan in reducing vasospasm-related morbidity and all-cause mortality in adult patients with aneurysmal subarachnoid haemorrhage treated by surgical clipping (Mr Peter Hwang)
- The correlation of clinical and radiographic findings with long term outcomes in road trauma patients with acute cervical discoligamentous injury (Professor Jeffrey Rosenfeld)
- Establishment of a neurotrauma tissue/fluid bank within the National Neural Tissue Resource Centre (Professor Catriona McLean, Professor Jeffrey Rosenfeld)
- Identification of risk factors for the development of postoperative bleeding after cranial neurosurgery (Mr Peter Hwang)
- An investigation into the cognitive outcome of patients undergoing stereotactic radiotherapy for the treatment of arteriovenous malformations (Mr Peter Hwang)
- Intentional forgetting in frontal lobe tumour patients (Dr Jacqueline Anderson, Professor Jeffrey Rosenfeld)
- The determination of the expression of calcitonin receptor (CTR) and the characterisation of CTR-positive cell types in human brain tumours (Mr Peter Hwang)
- Cerebral autoregulation monitoring in paediatric traumatic brain injury (Philip Lewis, Associate Professor Warwick Butt, Professor Jeffrey Rosenfeld)
- A study of the assessment and management of blunt cerebrovascular injury in patients presenting with trauma: a study of 90 patients treated between 2004 and 2006 (Professor Jeffrey Rosenfeld, Mr Peter Hwang)
- Trauma reception and resuscitation – time for a new approach (Associate Professor Mark Fitzgerald, Professor Jeffrey Rosenfeld)
- The development of a neurosurgical audit system (Philip Lewis)
- Novel applications of ultrasonic intracranial distance measurements (Philip Lewis)

### POSTGRADUATE STUDENTS

1 Masters Student  
2 MD Students  
3 PhD Students

### PUBLICATIONS

18 Journal Articles  
1 Book Chapter



## NUCLEAR MEDICINE

Head: Associate Professor Michael Kelly MBBS, FRACP

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 this 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, it is increasingly focused on improving the assessment of cancer patients treated in the William Buckland Radiotherapy Centre and other Alfred Health centres. PET/CT is the focus of research projects to determine its impact on patient management in several oncologic and non-oncologic conditions. 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 Martin Cherk and colleagues, including Professor Duncan Topliss, on the incidence of radiation thyroiditis and ablation success rates following 1110 MBq and 3700 MBq post surgical I-131 ablation therapy for patients with differentiated thyroid carcinoma.

Dr Cherk and others, in a combined project with the Peter MacCallum PET Centre, also published an evaluation of pulmonary nodules and lung cancer with a one inch crystal gamma coincidence PET/CT, showing it is only mildly less sensitive than a dedicated PET/CT. However, the one inch crystal gamma coincidence PET/CT takes three times longer to image individual patients and consumes significant gamma camera resources. It therefore now acts as a backup device if the new dedicated camera has a breakdown. Dr Thomas Barber, Nuclear Medicine Fellow, demonstrated that PET/CT impacts on the treatment strategy in approximately 45% of patients with pancreatic cancer.

### CURRENT PROJECTS

- Mechanisms of the disorders of circulatory control which may cause syncope: chronic low blood pressure (Dr Kenneth Yap with the Department of Cardiovascular Medicine)
- Mechanisms of the disorders of circulatory control which may cause syncope: pure autonomic failure, multiple systems atrophy and Parkinson's disease with autonomic failure (Dr Kenneth Yap with the Department of Cardiovascular Medicine)

- Nuclear medicine studies of gastric and oesophageal emptying in lap-band patients (Dr Kenneth Yap with the Centre for Obesity Research and Education and the Monash Department of Surgery)
- Using I-123-MIBG to assess neuroendocrine function in patients with hypertension, postural orthostatic tachycardia syndrome and syncope (Dr Victor Kalff with the Department of Cardiovascular Medicine)
- Role of PET/CT in management of hepatocellular carcinoma (Dr Kenneth Yap and Associate Professor Stuart Roberts, Gastroenterology 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)
- Pilot study using PET/CT to assess mechanisms of tumour cell death following controversial IRE therapy (Dr Martin Cherk and Professor Ken Thomson with the Radiology Department)



*The Nuclear Medicine Department's PET/CT scanner.*

### PUBLICATIONS

3 Journal Articles



*Clinical trial participant is monitored during a diabetes study.*



## NUCLEUS NETWORK

Chief Executive Officer: Dr Andrew Giddy BVetSc, GradDipBioeth, CCRA

Medical Director: Professor Peter Hodsman MB ChB, MD, FRACP, FRCP

Nucleus Network is a not-for-profit clinical research and education company wholly owned by Baker IDI Heart and Diabetes Institute. The organisation is a centre for excellence in clinical research and one of Australia's leading Phase 1 clinical research facilities.

Nucleus Network operates a 30-bed early phase clinical research unit on the AMREP site as well as a 16-bed facility run at the Austin Hospital, Heidelberg. New drugs and compounds are administered to healthy volunteers in a strictly controlled environment, attended to 24 hours a day by Nucleus Network's specially trained medical support staff. Participants in trials are watched closely for any reactions and have blood samples, blood pressure and other vital signs taken and carefully recorded at regular intervals. The information is collected to monitor and protect the participants' health and also provides vital information about the therapy under trial. These participant profiles inform the pharmaceutical company's understanding of the drug and are a crucial part of the development of the therapy.

The clinical trials performed at Nucleus Network involve either healthy volunteers or sometimes patients with specific medical conditions. Nucleus Network relies heavily on community involvement in this process, and is grateful for the time and effort offered by volunteers, without whom new medicines would not reach the people who need them most.

As well as the clinical research activities, Nucleus Network provides a broad range of expertise on clinical research and product development to the global pharmaceutical, biotechnology and medical device industries. The company's three core business activities are:

- Conduct of Phase 1–4 studies, with a particular emphasis on early phase studies
- Education and training in Good Clinical Practice (GCP)
- Clinical trial consulting services

### Highlights of activities in 2008 include:

- Over 50 Phase 1 clinical trials conducted
- Staff growth to over 80 full-time and part-time staff
- Two Japanese–Caucasian metabolism studies completed
- Collaboration with specialist principal investigators in dermatology, oncology, rheumatology, gastroenterology, endocrinology and respiratory medicine
- In 2008 Nucleus Network was winner of the Governor of Victoria Export Awards in the category of Emerging Exporter and winner of the Victorian Export Award for Innovation Excellence.

Steady growth continues with strong repeat business from local and international sponsors. In fact, at the new site in Heidelberg, all companies using Nucleus Network for the first time returned with further business.

Nucleus Network is a unique and important AMREP participant with strong relationships with other groups. Altogether last year Nucleus Network brought more than \$2.6 million in revenue to AMREP in the form of services, donations, education subsidies, contract work and scholarships.



*Healthy male volunteer with Nucleus Network unit staff member.*



*From left: Judy Currey (Senior Research Fellow) and Kylie Jones (VAD Coordinator) undertake a project exploring models for managing patients with a ventricular assist device.*



## NURSING

Director: Associate Professor Sharon Donovan, BN, MidCert, MBA

### LA TROBE/ALFRED CLINICAL SCHOOL

#### Current Projects

##### Emergency Nurse Practitioner Research

Collaborative research between the clinical school and the emergency department nurse practitioners (NPs) was the focus of three publications and presentations at the Australian Nurse Practitioner Association Conference and the National Conference for Emergency Nurses. The presentations were about expanding the NP role in emergency, the sustainability of the NP role in Victoria and the mentorship program as part of the NP Masters program. A patient satisfaction survey of NP patients and patients seen by emergency physicians was completed in 2008 and the results will be published in 2009. The model demonstrated consistent levels of patient satisfaction, with patients reporting more favourable satisfaction with NPs compared to emergency physicians.

##### Evaluation of a Fasting Protocol for Trauma Patients (Tarryn McConnell)

An evaluation of a protocol for fasting trauma patients was undertaken. The study showed that elderly patients are particularly prone to complications if fasted for long periods of time.

##### Diabetes Research (Geraldine Lee)

A multidisciplinary study has commenced for patients with diabetes involving the Department of Endocrinology and Diabetes, Nutrition Department and Baker IDI Heart and Diabetes Institute. The study, which received an Alfred Research Trusts Small Project Grant, is a randomised controlled study of a pre-operative intervention in patients with diabetes undergoing cardiac surgery.

##### The Placement of Pelvic Binders in Trauma Patients (Nicholas Santeloudi)

In the emergency department, a study examining the placement of pelvic binders on trauma patients with suspected pelvic fractures was undertaken. The study evaluated pelvic binder placement on X-ray in 50 trauma patients followed by extensive staff education about the importance of correct binder placement. A follow-up of 50 X-rays after the education sessions to examine if there is an improvement in binder placement is near completion.

#### Awards

Geraldine Lee was awarded a professional development grant for national conference presentations at the College of Emergency Nursing Australasia and the Australian Nurse Practitioner Association from La Trobe School of Nursing & Midwifery in November 2008. Geraldine was appointed a Nurse Fellow to the European Society of Cardiology in June 2008 for her education contributions and clinical experience in cardiac nursing.

### THE ALFRED/DEAKIN NURSING RESEARCH CENTRE

The core research activities of the Alfred/Deakin Nursing Research Centre have focused on the evaluation of quality and safety of care delivery and the development and implementation of interventions to improve patient outcomes. PhD projects in progress involve investigations of 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.

#### 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)
- Interprofessional communication and team climate in complex clinical handover situations: issues for patient safety in the private sector (Professor Mari Botti)
- Implementing evidence-based practice for the nursing management of central venous catheters (Gabrielle Burdeu)
- Predictors of hospital admission of patients with chronic obstructive pulmonary disease in the Emergency Department (Julie Considine)
- Living with an artificial heart: experiences of patients and carers (Dr Judy Currey)
- Managing patients with a ventricular assist device: an exploration of international models for community-based care (Dr Judy Currey)
- Enhancing medication safety in hospitals: development of a core dataset and an exploration of factors influencing nurses' decisions (Dr Judy Currey)
- Correlation between ETCO<sub>2</sub> and PaCO<sub>2</sub> in spontaneously breathing emergency department patients (Elaine Killeen)
- Presentation to emergency departments due to chemotherapy-induced complications: opportunities for improving service delivery (Dr Trish Livingston)
- A nurse-assisted screening and referral program for depression among survivors of cancer: a pilot study (Dr Trish Livingston).

#### POSTGRADUATE STUDENTS

12 Masters Students  
1 DN Student  
4 PhD Students

#### PUBLICATIONS

11 Journal Articles  
1 Book Chapter



*Dietitian Kate Connell counsels a patient on the potential role of diet in the treatment of hives.*



The Alfred



MONASH  
University

## NUTRITION

Head: Associate Professor Ibolya Nyulasi BSc Nut & Diet, MSc, GradDipBusMgt

In 2008, the Nutrition Department maintained a research focus in the areas of nutritional assessment and dietary intervention for patients with chronic idiopathic urticaria, diabetes, cystic fibrosis, heart failure and geriatrics.

Kate Connell continued the randomised controlled trial investigating the efficacy of a pseudoallergen-free diet in chronic idiopathic urticaria, in conjunction with Associate Professor Jo Douglass (Department of Allergy, Immunology and Respiratory Medicine).

Suzannah Jackson continued a dietary intervention study in patients with chronic heart failure. She investigated the effect of two different dietary approaches – a conventional low fat, high carbohydrate diet and a Mediterranean style diet – on weight control, insulin sensitivity, inflammatory mediators and lipid status.

Rachel Stoney is a co-investigator on an Alfred Research Trusts Small Project Grant (with principal investigator Sue Wyatt, Diabetes Clinical Nurse Consultant) entitled 'A randomised controlled study of a pre-operative intervention in patients with diabetes undergoing cardiac surgery'.

As part of the Council of Australian Governments long stay older patients (LSOP) initiative focusing on improving care for older people, Kathryn Marshall and Anne Gordon developed and tested an interdisciplinary framework aimed at preventing functional decline due to undernutrition in the sub-acute setting.

### MAJOR FINDINGS

Dr Susannah King's research into cystic fibrosis (CF) found that renal impairment was common, and was not confined to those with diabetes. Her research discovered that chronic renal impairment did not appear to be associated with usage of intravenous tobramycin, which is contrary to observations in acute renal failure. Ongoing work aims to understand the aetiology of renal impairment in CF, and in particular the role of advanced glycation end products (AGEs) and the potential for dietary modification of AGEs.

Suzannah Jackson's study in heart failure patients found that the Mediterranean style diet produced favourable changes in lipid parameters, with no adverse outcomes on body weight. Analyses of the results of this study are ongoing, as is evaluation of the impact of this study on clinical practice in heart failure patients.

The LSOP project, conducted by Kathryn Marshall and Anne Gordon, found that a comprehensive interdisciplinary framework focused on nutrition care in elderly sub-acute care patients resulted in a shorter length of stay and improved nutritional outcomes compared with similar patients receiving standard care. The results of this project helped establish an approach to improving nutrition care and outcomes in older patients.

### ACHIEVEMENTS

Kate Connell received the Lucy Battistel Prize for Allied Health Research at Alfred Week 2008 for her poster entitled 'The efficacy of a pseudoallergen-free diet in the treatment of chronic idiopathic urticaria and/or angioedema: a randomised controlled study'.

Alison Spence was awarded a Deakin University research scholarship for her doctoral studies in childhood nutrition.

Emma Ridley was appointed Nutrition Research Fellow in a joint position with AuSPEN (Australasian Society for Parenteral and Enteral Nutrition) and ANZICS (Australian and New Zealand Intensive Care Society) in November 2008. Her projects include a study of pancreatitis, the International Nutrition Survey and nutritional requirements in traumatic brain injury.

### CURRENT PROJECTS

- 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)
- The efficacy of a pseudoallergen-free diet in the treatment of chronic idiopathic urticaria and/or angioedema: a randomised controlled study (Kate Connell)
- Prevalence and predictors of malnutrition and reduced bone density in an adult cystic fibrosis population (Dr Susannah King)
- Reducing functional decline due to undernutrition in older patients in a subacute care environment (Kathryn Marshall, Anne Gordon)
- A randomised controlled study of a pre-operative intervention in patients with diabetes undergoing cardiac surgery (Rachel Stoney)

#### POSTGRADUATE STUDENTS

5 Masters Students  
1 PhD Student

#### PUBLICATIONS

1 Journal Article



## OCCUPATIONAL THERAPY

Managers: Lisa Somerville BSc(OT), MPH  
Allison Cox BAppSc(OT), MCPP

The Occupational Therapy Service at The Alfred provides clinical services across the speciality areas of medicine, surgery and psychiatry. The service strives to enhance people's quality of life by enabling them to participate in their chosen life roles and personal occupations. Occupations include all of the activities that occupy people's time across the course of a normal day such as self-care tasks, household duties, community involvement, work or study, and leisure pursuits.

Occupational Therapy at The Alfred is committed to excellence in practice, teaching and research. Research in occupational therapy examines the relationship of disease or injury to the occupational performance of the individual, and the effectiveness of occupational therapy interventions in maximising individuals' abilities to overcome task limitations and participate in daily activities post-injury or illness. Research output for 2008 has included publications in peer-reviewed journals, as well as more than twelve free papers at national and international conferences.

Allison Cox, co-manager of the Occupational Therapy Department, is joint senior researcher on a project entitled 'Seclusion reduction in acute psychiatry' which has received a grant from The Alfred Foundation. This research aims to evaluate the introduction of sensory modulation techniques as a novel intervention within Alfred Psychiatry as a means to improve client and staff satisfaction as well as reduce rates of seclusion and aggressive incidents within the inpatient unit.

Allison is also undertaking a Clinical Doctorate (Occupational Therapy) and researches the use of a school-based social skills program for primary school children experiencing significant and longstanding social difficulties in the schoolyard. Taking place within school environments and addressing social participation, this intervention will aim to directly influence the social and emotional wellbeing of primary school-aged children.

Michelle Farquhar and Annabel Bond, in collaboration with their colleagues in Speech Pathology, received more than \$20,000 in funding from the Sir Edmund Herring Memorial Scholarship to investigate optimal strategies for the effective assessment of high level cognition-based communication disorders in traumatic brain injury.

Lisa O'Brien continues her research into the comparative effectiveness of different splinting techniques in the management of mallet finger injury. She is supported in this research through a grant received through The Alfred Research Trusts. Preliminary results from this study have been reported nationally and internationally.

Sarah Li-En Cheah, an undergraduate Occupational Therapy student at La Trobe University, completed her Honours research examining the experiences of older adults hospitalised in the acute care setting.

Andrew Trahair, Masters of Art Therapy student, is in the recruitment phase of his investigation into the use of 'safe-place' imagery in the rehabilitation of burns patients.

Dr Rob Stirling, Jenny-Maree Marshall, Fiona Hore-Lacy and Scott Presnell continued their research into adult accomplishment in individuals with cystic fibrosis. This research is being jointly conducted by Occupational Therapy and The Alfred Department of Allergy, Immunology and Respiratory Medicine, and will generate important insights into how people with chronic illness maximise their life opportunities whilst managing the demands of their illness.

### CURRENT PROJECTS

- Alfred CAMHS (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)
- Randomised controlled trial of splinting interventions in the treatment of mallet finger injuries (Lisa O'Brien)
- The effective assessment of high level cognition based communication disorders in traumatic brain injury (Tania Blyth, Amanda Scott, Michelle Farquhar, Annabel Bond)
- A qualitative analysis of older adults' experiences of acute hospitalisation (Sarah Li-En Cheah, La Trobe University; Scott Presnell)
- The use of safe place imagery in burns injury rehabilitation (Andrew Trahair, La Trobe University; Hannah Menehemi, La Trobe University; Scott Presnell)
- Adult Accomplishment in Cystic Fibrosis (Rob Stirling, Fiona Hore-Lacy, Jenny-Maree Marshall, Scott Presnell)

### POSTGRADUATE STUDENTS

4 Masters Students  
1 Other Doctoral Student  
1 PhD Student

### PUBLICATIONS

1 Journal Article



Demonstration of an extended-spectrum  $\beta$ -lactamase in *Escherichia coli* by the 'keyhole effect'.



# PATHOLOGY

Director: Associate Professor Hans Schneider MD, FRACP, FRCPA, FACB

## CLINICAL BIOCHEMISTRY

Head: Associate Professor Hans Schneider

The large randomised trial of B-type natriuretic peptide (BNP) testing was published. Further analysis of diagnostic accuracy showed similar performance of the test to the Emergency Department doctor but no obviously improved diagnosis in patients with the BNP test. A meta-analysis of published studies in the area is under way and research will continue to look at sub-groups where BNP testing might add to the diagnostic process.

Procalcitonin was measured in a cohort of the patients of the BNP and shortness of breath group. Further investigation will establish how well the assay identifies patients with bacterial infection that form a subgroup of patients presenting with shortness of breath.

Supported by an Alfred Research Trusts Small Project Grant, Dr Nilika Wijeratne is investigating the usefulness of heart type fatty acid binding protein as an outcome marker in patients with traumatic brain injury.

In a large collaboration with the Geelong Osteoporosis study, the department is investigating markers of bone resorption and bone formation as well as Vitamin D3 and Vitamin B12 levels. These data will allow the establishment of reference ranges in males and define better normal levels. Further investigations are looking at Vitamin D3 levels and seasonal variability.

## HAEMATOLOGY

Acting Head: Dr Susan Whitehead

In 2008, the focus of the Laboratory Haematology Unit continues to be primarily a consultative, educational and diagnostic service. Accordingly, research activities conducted by staff are predominantly developmental and are aimed at improving the quality of service offered to users.

### Blood Bank

Medical, scientific and nursing staff from the Blood Bank have been involved in several studies designed to either collect data to ensure quality activities are correctly undertaken and which may be used as a basis for future research projects (Time to Transfusion Study), or to document blood component usage (Prospective Utilisation of Platelets and Plasma Study). These studies were undertaken in partnership with the Australian Red Cross Blood Service and Monash University Department of Epidemiology and Preventive Medicine, now formalised as the Transfusion Outcomes Research Collaborative.

### General Haematology Laboratory

- In collaboration with the Monash University Department of Immunology, an assay to measure memory B cells is ongoing. It is postulated that patients

with low levels of memory B cells (e.g. following splenectomy) are at greater risk of developing overwhelming septicaemia.

- A study to evaluate the use of immunohistochemistry in detecting NPM1 mutations on bone marrow trephine biopsies
- Correlation of different laboratory methods with clinical features in the diagnosis of heparin induced thrombocytopenia
- A study on thrombin generation and Vitamin K-dependent procoagulant factors in patients on warfarin therapy and the effect of three-factor prothrombin complex concentrate (Prothrombinex-VF) is nearing completion.

## MICROBIOLOGY

Head: Associate Professor Denis Spelman

### Main Research Areas

- The detection and monitoring of antimicrobial resistance, both in hospitals and in the community
- Studies of the outcomes of specific diseases, including staphylococcal bacteraemia, endocarditis, *Acinetobacter* blood stream infections and necrotising fasciitis
- The determination of risk factors for the acquisition of specific acquired infections e.g. vancomycin-resistant enterococci (VRE) and organisms producing metallo- $\beta$ -lactamases
- The description and determination of rates of infections complicating ventricular assist devices
- A hospital-wide VRE prevalence survey
- Optimisation of the clinical use of specific antibiotics e.g. colistin
- Studies concerning the effectiveness of a Spleen Registry in the prevention of overwhelming post splenectomy sepsis

### Major Findings

- The collation and publication of two large case series of *Candida* endocarditis and endocarditis in the elderly
- The description for the first time of seasonal variation of *Klebsiella* blood stream infections at The Alfred and collaboration with four other centres across four continents to report this finding
- The development of an *in vitro* model to optimise clinical use of the antibiotic colistin
- The determination of the daily hazard of MRSA acquisition in the ICU

### POSTGRADUATE STUDENTS

1 Masters Student

### PUBLICATIONS

10 Journal Articles



## PHARMACY

Director: Professor Michael Dooley BPharm, GradDipHospPharm, FSHPA

### RESEARCH ACTIVITIES

The development of the Centre for Medication Use and Safety (CMUS) as an approved research centre within Monash University is advancing. The governance process and business case have been completed, with formal support received from both the Faculty of Pharmacy and Pharmaceutical Sciences and the Faculty of Medicine, Nursing and Health Sciences. Final endorsement from the Deputy Vice-Chancellor (Research), Monash University is soon to be sought.

The infrastructure development of the CMUS facility has also been completed, with the generous financial support of the Ian Potter Foundation and Alfred Health. Building work was completed and staff commenced work within the new facility in October 2008, which provides significantly improved accommodation for private offices, drug information service, a conference room and several work stations for researchers.

The research activities of the Pharmacy Department fall under the broad banner of evaluating the quality use of medicines, and may be classified under the following themes:

- Medication safety
- Therapeutics
- Practice research
- Outcomes research

### CURRENT PROJECTS

A collaboration between the Pharmacy Department, Monash University Department of Epidemiology and Preventive Medicine, The Alfred Department of Allergy, Immunology and Respiratory Medicine and Roche Pharmaceuticals resulted in a successful three-year Australian Research Council (ARC) Linkage Grant. Funding provided by the ARC is in excess of \$387,000 and will enable the investigation of the economic impact of improved adherence to treatment plans in chronic disease.

Two collaborations between the Pharmacy Department, Monash University Faculty of Pharmacy and Pharmaceutical Sciences, Curtin University, Griffith University and Charles Sturt University resulted in two successful grants from the Commonwealth Department of Health and Ageing via the Pharmacy Guild Fourth Community Pharmacy Agreement Research and Development Program. The first was the successful tender to conduct research into palliative care in community pharmacy. The second, an investigator-initiated grant, is entitled 'The integration of complementary medicines in community pharmacy practice'.

Another significant project is in collaboration the Monash University Department of Epidemiology and Preventive Medicine and the NHMRC Centre of Research Excellence in Patient Safety. This project is a case control study investigating factors contributing to the risk of bleeding in patients receiving warfarin therapy and is well advanced, with a number of conference presentations and publications arising so far.

Research collaboration with Rehabilitation, Aged and Community Care at Caulfield Hospital is investigating patients' ability to self-administer medications when they are discharged home. Through this collaboration, a \$49,000 research grant was obtained from the Collier Charitable Fund.

A collaboration with the The Alfred Gastroenterology Department investigates the role of thiopurine methyl transferase (TPMT) genotype and thiopurine metabolite monitoring for optimising thiopurine drug therapy in inflammatory bowel disease patients. The study is recruiting well and interim results have been presented at an international genetics conference, with a manuscript submitted for publication.

### OTHER PROJECTS

- Validation of the modification of diet in renal disease (MDRD) equation and applicability for electronic reporting of glomerular filtration rate estimates by pathology departments (Professor Michael Dooley)
- The frequency of initiation of newly marketed medications in the acute hospital setting (Gavin Flett)
- Pharmacokinetics of oral and sublingual tacrolimus in patients receiving lung transplantation (Steven Ivulich, Bianca Levkovich)
- Prescribing and safety issues of molecular therapies and oral chemotherapy: a survey of medical oncologists (Maria Larizza)
- Assessing the incidence of nephropathy in HIV-positive patients: comparison of the Cockcroft and Gault and MDRD formulas (Kate Mackie)
- The impact of barcode scanning on dispensing accuracy and workflow in dispensing medication (Susan Poole)
- The impact of a vancomycin loading dose on time to achieve therapeutic levels (Jackson Truong)
- Quantification of the use of error-prone abbreviations in prescribing in the acute hospital setting (Meredith Wiseman)
- Initiation of medication in an acute hospital: implications for pharmacogenetic testing (David Zhu)

### POSTGRADUATE STUDENTS

9 Masters Students  
1 PhD Student

### PUBLICATIONS

25 Journal Articles  
1 Book Chapter



PhD student Annemarie Lee's research examines the impact of exercise on gastro-oesophageal reflux in patients with chronic lung disease.



The Alfred



## PHYSIOTHERAPY

Manager: Jim Sayer BAppSc(Physiotherapy), GradDip(Exercise & Sports Sc), MHthSc(Manipulative Physiotherapy)

### RESEARCH ACTIVITIES

The Alfred Physiotherapy Department's research focus is on physical activity and mobilisation in hospitalised and chronically ill populations. It has active research programs investigating physiotherapy interventions for respiratory disorders, early mobilisation following surgery, physical activity in chronic disease and physiotherapy in intensive care.

Lara Kimmel received funding from the National Trauma Research Institute in 2008 to conduct a randomised, controlled trial of early mobilisation in patients with ankle fracture. This trial, currently under way in The Alfred's Trauma Unit, is due for completion in 2009. Physiotherapists Leonie Oldmeadow, Melissa Dixon and Associate Professor Anne Holland are also investigators for this trial.

Burns physiotherapist Alison Kolmus received funding from the Physiotherapy Research Foundation and the Alfred Research Trusts to conduct a randomised controlled trial of splinting for axillary burns. The trial is a multidisciplinary collaboration between the Burns Service, Prosthetics and Orthotics Department, and Physiotherapy Department. This study builds on previous research conducted in the Physiotherapy Department that examined best practice management of patients with axillary burns.

This year has seen the publication of the first randomised, controlled trial of pulmonary rehabilitation for interstitial lung disease, a study conducted by a multisite team led by Associate Professor Anne Holland and including physiotherapist Prue Munro. The study is the first of its kind and showed that exercise rehabilitation is beneficial and improves exercise capacity at least as much as common pharmaceutical options. Associate Professor Holland also published a Cochrane Review of exercise training for interstitial lung disease in 2008, which showed beneficial effects of exercise even in patients with the most progressive form of interstitial lung disease.

Transplant physiotherapists Prue Munro and Kate Hayes published a book chapter detailing the physiotherapy management of thoracic organ transplantation this year. The chapter formed part of the new edition of the classic physiotherapy text *Physiotherapy for Respiratory and Cardiac Problems* by Pryor and Prasad and will be a valuable reference for physiotherapists across the world. Prue Munro also published the first randomized, controlled trial of airway clearance techniques in lung transplant recipients in 2008, showing that routine airway clearance is not required following a lung transplant.

In 2008 Brenda Button was appointed Honorary Associate Professor, Faculty of Medicine, Nursing and Health Sciences, Monash University. This appointment acknowledges the significance of Brenda's research, which identified the deleterious effects of gastro-oesophageal reflux during physiotherapy in cystic

fibrosis (CF) and led to the modification of physiotherapy techniques around the world. Brenda's appointment is the first of its kind for a physiotherapist.

### CURRENT PROJECTS

- Gastro-oesophageal reflux in chronic obstructive pulmonary disease (COPD) and bronchiectasis (Annemarie Lee)
- Prevalence and significance of gastro-oesophageal reflux in adults with CF before and after lung transplantation, together with the effects of physiotherapy techniques on gastro-oesophageal function (Associate Professor Brenda Button)
- Validation of the PAL2 physical activity monitor in people with COPD (Associate Professor Anne Holland)
- What is the minimum clinically important difference for the 6-minute walk test in people with COPD? (Associate Professor Anne Holland)
- Development of normal values for the modified shuttle walk test in adults (Associate Professor Anne Holland)
- Prevalence of musculoskeletal pain in people with CF (Associate Professor Anne Holland)
- Does the 3-minute step test predict clinical outcome in adults with CF (Associate Professor Brenda Button)
- Exercise training following bone marrow transplantation (Catherine Walsh)
- A pilot study of exercise training for pulmonary arterial hypertension (Prue Munro)
- The effect of inhaled hypertonic saline (6%) in people with bronchiectasis (Caroline Nicolson)
- Physical activity in people living with HIV/AIDS (Soula Fillipas)
- Validation of a physical activity questionnaire in people living with HIV/AIDS (Soula Fillipas)
- Characteristics of responders and non-responders to recruitment manoeuvres in ventilated patients with acute respiratory distress syndrome (Carol Hodgson)
- Three day stay following hip and knee arthroplasty – who should be selected? (Lara Kimmel)
- Measurement of ankle swelling post fracture (Lara Kimmel)
- Why don't people with COPD attend pulmonary rehabilitation? (Associate Professor Anne Holland)
- Cross-sectional study of physical activity following lung transplantation (Associate Professor Anne Holland)
- Early mobilisation for elbow fracture in adults (Paula Harding)

### POSTGRADUATE STUDENTS PUBLICATIONS

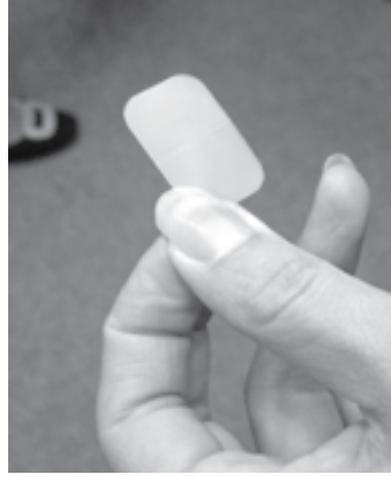
4 PhD Students

5 Journal Articles

2 Book Chapters

1 Book

1 Cochrane Systematic Review



## PSYCHIATRY

Director: Professor Jayashri Kulkarni MBBS, MPM, PhD, FRANZCP

Severe mental illnesses such as schizophrenia, bipolar affective disorder, major depression and major anxiety disorders are crippling disorders. These illnesses destroy the quality of the sufferer's life, and may even shorten life. The individual's family suffer greatly as a result and there is a huge cost to the community through both the burden of care of the sufferer and the loss of that individual's contribution.

The broad vision for the Monash Alfred Psychiatry Research Centre (MAP-RC) is to develop new treatments, foster new understanding and provide new service approaches for people with mental illnesses to improve their quality of life and enhance the lives of their carers and their community.

Effective treatments that are able to restore the person as well as treat symptoms are not yet available. Treatments need to be specifically tailored, unlike current treatments that assume uniformity in the patient population. There are treatments that create side effects that are more troubling than the illness itself.

MAP-RC researchers are encouraged to work across the bench, bedside and public health domains, to foster translation of discoveries into new treatments. Being based at The Alfred enables specific clinical problems or symptoms to be identified and new treatments to be considered. The immediacy of the clinical problems is an important stimulus to the transition of clinical observations into hypotheses and, ultimately, new treatments. Adopting a broad biopsychosocial approach, with no biases against any discipline of medicine, neuroscience or the arts, allows MAP-RC researchers to utilise all available modalities to develop new treatments.

New modes of delivery of treatments or services are important in the advancement of the treatment of mental illness as a whole. Services such as home-based treatments, rapid and accurate diagnoses plus delivery of treatments in the emergency departments of hospitals or via primary care systems have great impacts on the individual and their health care systems. Preventative approaches, such as ensuring good physical health for people with mental illness, add greatly to their quality of life and diminish the burden of care for their carers. MAP-RC is ideally positioned to contribute to this area of developing and testing new services, by working in a network of health services and having the expertise to model and test health outcomes – including the economic and key performance indicator areas.

The overall vision for MAP-RC is to continue to develop into a world-class clinical psychiatry research institute that develops new treatments, new understandings and new services for mental illness. This vision is underpinned by the need for MAP-RC to continue to build on its excellent, broad clinical focus, backed by

state-of-the-art neuroscience innovations and with important contributions from the arts or humanities domains. The MAP-RC mission is 'to conduct world class psychiatric research with respect, equality and understanding'.

### CURRENT RESEARCH PROGRAMS AND PROJECTS

#### Psychopharmacology

Team leader: Anthony de Castella

- Quality of life, functioning and adherence of patients receiving injectable Risperdal Consta
- Open label oral paliperidone trial
- Retrospective audit of clinical files for all patients receiving Risperdal Consta to learn more about usage patterns and outcomes
- STAI Study: investigating the risk of medication non-adherence in schizophrenia patients and whether there is a change to treatment as a result of this risk
- RUBY: 6-week study investigating the use of Seroquel XR alone, or with SSRI or venlafaxine, or lithium with SSRI or venlafaxine, in treatment resistant depression
- Risk of Relapse Observational Study (B033): visits at 1, 3, 12 months with monthly phone calls to better understand medication non-compliance in psychiatric patients
- PLATINUM Study: a multicentre double blind randomised withdrawal parallel group placebo controlled Phase 3 study of the efficacy and safety of quetiapine fumarate sustained release (Seroquel SR) as monotherapy in the maintenance treatment of patients with generalised anxiety disorder following an open-label stabilisation period
- ONYX Study: to investigate if quetiapine fumarate sustained release (Seroquel SR) together with the current antidepressant is effective in treating major depressive disorder
- Efficacy and safety of the treatment of bipolar depression with agomelatine, in addition to a mood stabiliser

#### Service Related Research

Team leader: Dr Yitzchak Hollander

- Seclusion reduction: a pilot project designed to improve the ability of the service to manage behavioural disturbances without the use of seclusion; involves patient discussion and sensory treatments
- Clozapine transitioning project: an investigation of barriers to transitioning clients on clozapine to private care
- Suicide and problem gambling study
- Problem gambling and mental health treatment service
- Problem gambling/mental illness education and training project

- Bipolar Comprehensive Outcomes Study (BCOS): the treatment and outcome of bipolar and schizoaffective disorder over a two year period: an observational study
- Identification of factors contributing to the relapse of continuing care team patients
- Interactions between crisis assessment and treatment teams, police and ambulance services
- Evaluation of risk in inpatient setting
- Homelessness and its impact on length of hospital stay and relapse
- The impact of introducing acute sedation practice guidelines on patient outcomes and hospital staff incidents in a high dependency psychiatry facility
- HOPS/Sacred Heart/Hanover complex needs team evaluation

### Women's Mental Health

Team leader: Professor Jayashri Kulkarni

- A Definitive Estrogen Patch Trial (ADEPT): 8-week add-on randomised controlled trial in women of childbearing age with schizophrenia or schizoaffective disorder
- Selective Estrogen Receptor Modulator (SERM): 12-week add-on randomised controlled (raloxifene 120mg/day vs placebo), double-blind study of menopausal women with a diagnosis of schizophrenia or schizoaffective disorder
- National Register of Antipsychotics in Pregnancy (NRAMP)
- Mood and the oral contraceptive: is there a relationship?
- Randomised controlled trial investigating the association of depression and the oral contraceptive pill
- Factors affecting cognitive function in a community sample of Victorian women: the role of hypertension and inflammatory markers
- The effects of estradiol on cognitive function in healthy pre- and post-menopausal women and the role of the cholinergic system

### Brain Stimulation and Neuroimaging

Team leader: Professor Paul Fitzgerald

- Transcranial magnetic stimulation (TMS) for depression
- TMS for depression following a mild to moderate traumatic brain injury (TBI)
- TMS for bipolar depression
- Deep TMS for autism and Asperger's disorder
- Transcranial direct current stimulation (tDCS) for depression
- tDCS for schizophrenia
- Deep brain stimulation for treatment resistant depression
- Magnetic seizure therapy for treatment resistant depression
- Combining TMS and electroencephalography (EEG) to explore prefrontal cortical inhibition in depression and schizophrenia
- Diffusion tensor imaging in depression following TBI
- Using TMS, EEG and functional MRI to explore cortical function in autism spectrum disorders
- Can repetitive TMS improve motor function in autism and Asperger's disorder?
- Mirror neurons and empathy for pain in schizophrenia
- Near infrared spectroscopy and prefrontal response to TMS
- Electrophysiological correlates of major depression
- Investigating the relationship between alpha activity and major depressive disorder
- Multimodal studies of cortical plasticity in schizophrenia
- The role of the dorsal stream in early visual processing – feedforward and feedback from V1 to V5/MT+ in human perception
- Stop signal after-effects – episodic memory or selective inhibition?
- Pilot study of the potential therapeutic effects of caloric vestibular stimulation in mood disorders

### Cognitive Neuropsychiatry

Team leader: Associate Professor Susan Rossell

- Semantic memory in psychosis
- Understanding the cognitive problems and neurobiological features of body dysmorphic disorder and other body image disorders
- Social cognition in psychosis
- Hormones and cognition
- The Voices Clinic – established for individuals with treatment resistant auditory hallucinations
- Investigating psychosis following traumatic brain injury
- Understanding auditory hallucinations

### Healthy Lifestyles and Outcomes

Team leader: Professor Jayashri Kulkarni

- Healthy lifestyle intervention for cardiovascular disease risk reduction among people with psychotic disorders
- Becoming a smoke-free inpatient psychiatry ward – the staff and client experience
- Evaluation of the Smokefree Support Group on the inpatient psychiatric ward

### Neurodiagnostics

Team leader: Dr Brian Lithgow

- The diagnosis, biomarker identification and measurement of drug efficacy for neurological and mental disorders

### Consultation Liaison Psychiatry

Team leader: Associate Professor Steve Ellen

- Letter intervention to improve patient outcomes
- An investigation of family members' experiences of the psychiatric patient's diagnosis and treatment
- Psychopathology following traumatic injury – screening for high risk
- Explicit and implicit memory functioning in post-traumatic stress disorder – an event-related potential investigation
- Promoting recovery following traumatic injury

### Participatory Action Research

Team leader: Jon Kroschel

- Recovery group – testing and evaluation of effectiveness (by consumer criteria) of the Boston Centre for Psychiatric Rehabilitation model of recovery groups within a Melbourne metropolitan adult mental health service (Alfred Psychiatry) and psychiatric disability support service (Pahran Mission)
- Consumer evaluation of Alfred Psychiatry Community Care Unit
- Review and audit of Alfred Psychiatry Consumer Participation Program
- Consumer participation in Caulfield Aged Care Psychiatry

### Child and Adolescent Mental Health

Team leader: Dr Paul Denborough

- Evaluation and stability of the impact of single session family based intervention
- Evaluation of a team based family therapy intervention at the Child and Adolescent Mental Health Service

## POSTGRADUATE STUDENTS

25 PhD Students  
14 Other Doctoral Students  
6 Masters Students

## PUBLICATIONS

44 Journal Articles



## PSYCHOLOGY

Manager: Lynda Katona BA(Hons), MA (Clin Psych), MAPS

The Psychology Department provides clinical psychology and clinical neuropsychology services to patients of The Alfred. The department is committed to providing best practice evidence-based psychological services to improve the quality of life of patients and their carers. 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), offering clinical placements to both 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 in the Hospital Admission Risk Program.

The department also runs The Alfred Psychology Clinic, an outpatient service that accepts referrals from all units at The Alfred. Neuropsychology assessment and treatment services are provided to patients of all psychiatry programs and all medical and surgical units of the hospital.

### CURRENT PROJECTS

The department is involved in a number of research projects. The following areas exemplify the applied research taking place.

#### Victorian HIV Service

Dr Michelle Earle received an Alfred Research Trusts Small Project Grant to explore information about the psychological correlates of sexual risk behaviour among men who have sex with men (MSM) at risk of HIV infection, and conducted a controlled trial of a psychological skills group for MSM to help address the identified psychological risk factors placing them at risk of HIV infection. The results indicated that there is a high prevalence of wide-ranging, clinical-level psychological problems among MSM. These include Axis I conditions such as state-based depressive or anxiety symptoms or substance abuse, and Axis II conditions such as trait-based mistrust of others, difficulties in relationships and self-harm behaviour.

#### Cystic Fibrosis

Dr Maxine Braithwaite received an Alfred Research Trusts Small Project Grant and funding from the Cystic Fibrosis Trust of Australia to conduct both qualitative and quantitative research exploring end of life care in cystic fibrosis (CF). Face-to-face interviews and focus groups with patients, families and staff identified themes that were explored through the development of a survey.

Those completing the survey included 82 patients, 18 people who had a family member die of CF in the last four years and 39 current CF staff from a range of disciplines.

The results indicated that families and staff providing care for patients with CF have unmet end of life care needs of both a unique and shared nature. There is a tension between providing maximum comfort to the patient versus pursuing active treatment in the hope of transplantation. Patients and families used denial as a coping mechanism which hindered knowledge and, at times, preparation for death.

A parallel rather than a sequential model to end of life care in CF was supported, whereby if someone's health declines and a referral to the transplant team is made, then end of life options are also discussed. Patients and families strongly endorsed the value of psychological support during end of life discussions and during end of life care.

#### Mental Health Literacy Project

Dr Rachel Cousins (Senior Clinical Psychologist, Primary Mental Health Team) received an Alfred Research Trusts Small Project Grant to assess mental health literacy, stigma associated with mental illness and willingness to seek help from a health professional of new mothers utilising maternal and child health services.

#### Illness Effect

Dr Maxine Braithwaite (Senior Psychologist, Cystic Fibrosis Service) aims to determine if patients are less adherent and respond differently to a range of psychological variables when unwell, to establish psychological and dosing factors impacting upon adherence and to perform motivational interviewing to increase treatment adherence.

### RESEARCH ACHIEVEMENTS

- Dr Michelle Earle presented at the 2008 Australasian Society of HIV Medicine Conference in Perth.
- Dr Maxine Braithwaite was keynote speaker at the 2008 Cystic Fibrosis Victoria Conference, presented oral and poster presentations at the 31st European Cystic Fibrosis Conference, and was keynote speaker at the 2008 Quality of Life Issues PAH 3rd Asia Pacific Pulmonary Arterial Hypertension Conference, Sydney.

#### POSTGRADUATE STUDENTS

1 DPsych Student

#### PUBLICATIONS

2 Journal Articles



*Cutting-edge precision image-guided radiation treatments for nearly 2,000 cancer patients a year are provided by WBRC staff using sophisticated, modern linear accelerators.*



## RADIATION ONCOLOGY

Director: Associate Professor Jeremy Millar BMedSc, MB, ChB, FRANZCR, FChPM, CertHlthEc, CertBiostat

The William Buckland Radiotherapy Centre (WBRC) has a research program focused on improving technologies for radiation treatments for cancer patients, looking at both fundamental radiation physics, and clinical studies in breast, prostate, head-and-neck, and central nervous system (CNS) tumours. WBRC members are active collaborators in a number of national and international studies, while the prostate brachytherapy (Associate Professor Jeremy Millar) and the stereotactic radiotherapy/radiosurgery (Dr Mike Dally) programs are leading efforts in Australia.

Dr Karen Taylor travelled to Europe in 2008 to look at new techniques for the treatment of breast cancer, using modulated beams and respiratory 'gating'. Dr Ian Porter and Dr Jeremy Ruben attended training courses in Germany on stereotactic radiotherapy employing sophisticated computer and robot-assisted radiotherapy equipment that WBRC has or plans to acquire. Dr Daniel Zwahlen continued as WBRC's Clinical Fellow supported by the Peter Grant Hay Trust and the Melbourne Prostate Institute.

### CURRENT PROJECTS

#### Basic Radiation Physics Research

- Enhancement of radiation effects by gold nanoparticles for superficial radiotherapy (Trevor Ackerly)
- Scatter measurements with intensity modulated radiotherapy (IMRT) treatments (Dr Jeremy Ruben)
- Factors to be used with IAEA TRS398 for low kilovoltage X-rays (Trevor Ackerly)
- Characterisation and improvement of radiation beams used for radiotherapy of small lesions (Trevor Ackerly)
- Synchrotron microbeam radiation therapy (Jeff Crosbie)

#### CNS Tumours

- Quality of life outcomes among acoustic neuroma patients (Dr Michael Dally)
- Neuropsychology study of patients having fractionated stereotactic radiotherapy for large arteriovenous malformations (Dr Michael Dally)
- Glioblastoma multiforme patient treatments and outcomes (Dr Amy Shorthouse)
- Primary chemotherapy with temozolomide vs radiotherapy in patients with low grade gliomas after stratification for genetic 1p loss: a Phase 3 study (Dr Jeremy Ruben)

#### Breast Cancer

- PRIME phase 2 – Scottish Breast Cancer Trials Group: post-operative radiotherapy in minimum-risk elderly (Dr Karen Taylor)
- A randomised Phase 3 study of radiation doses and fractionation schedules in non-low risk ductal carcinoma in situ of the breast (Dr Karen Taylor)
- APBI – a multicentre feasibility study of accelerated partial breast irradiation using three-dimensional conformal radiation therapy for early breast cancer (Dr Ian Porter)

#### Head and Neck Cancers

- POST – post-operative concurrent chemo-radiotherapy versus post-operative radiotherapy in high-risk cutaneous squamous cell carcinoma of the head and neck (Associate Professor Sidney Davis)

#### Prostate Cancer

- TOAD – a collaborative randomised Phase 3 trial: the timing of intervention with androgen deprivation in prostate cancer patients with a rising prostate specific antigen (PSA) (Associate Professor Jeremy Millar)
- Variation in prostate volume marking in CT scans post seed implant (Associate Professor Jeremy Millar)
- Characterisation of 'PSA bounces' after seed brachytherapy for prostate cancer (Dr Daniel Zwahlen)
- Long term disease control of prostate cancer after high dose rate brachytherapy and external beam radiation (Dr Daniel Zwahlen)
- Improving treatment with permanent <sup>125</sup>Iodine seed implants for prostate cancer using dosimetry with either fused CT/MR images or fused CT/US images (Ryan Smith)
- Relationship of radiation dose to vascular and nerve structures during prostate seed brachytherapy, and subsequent erectile function (Associate Professor Jeremy Millar)
- Relationship of rectal volume at planning for radiation treatment for prostate cancer, and subsequent disease control (Associate Professor Jeremy Millar)
- Pilot work for a randomised comparative trial of postoperative radiotherapy for men with high risk prostate cancer after radical prostatectomy (Dr Bronwyn Matheson)

#### Bone Metastases

- A Phase 3 international randomised trial of single versus multiple fractions for re-irradiation of painful bone metastases (Dr Bronwyn Matheson)

#### Projects with Active Follow-up

- Tumour volume as an independent prognostic factor in patients with non-small cell lung cancer: a protocol for a prospective database (Associate Professor Sidney Davis)
- A randomised clinical trial of surgery versus surgery plus adjuvant radiotherapy for regional control in patients with completely resected macroscopic nodal metastatic melanoma (Dr Ian Porter)
- A randomised trial of pre-operative radiotherapy for stage T3 adenocarcinoma of the rectum (Associate Professor Jeremy Millar)
- GOFURTGO – Phase 2 study of fixed dose rate gemcitabine-oxaliplatin integrated with concomitant fluorouracil and 3D conformal radiotherapy for the treatment of localised pancreatic cancer (Dr Jeremy Shapiro, Dr Ian Porter, in collaboration with the The Alfred Medical Oncology Unit)

#### POSTGRADUATE STUDENTS

7 Masters Students  
1 PhD Student

#### PUBLICATIONS

15 Journal Articles



## REHABILITATION, AGED AND COMMUNITY CARE

Chair, Research Committee: Associate Professor Peter Hunter MBBS, FRACP, MBL

Caulfield Hospital's new Research Strategy 2007-2011 has seen research activity grow steadily across the campus and within the Division of Rehabilitation, Aged and Community Care. In 2008 the implementation of the strategy has been a major focus for the Caulfield Hospital Research Committee, and significant progress has been made. Caulfield Hospital launched its inaugural Research Grants Program in 2008, with one major grant and four small project grants being awarded during the year. Monthly Research Interest Group meetings have been established to foster research activity and provide support and mentoring to experienced and novice researchers. A monthly campus-wide research newsletter has been established and is distributed to update staff about research activities and opportunities at Caulfield.

### SIGNIFICANT GRANTS AND AWARDS

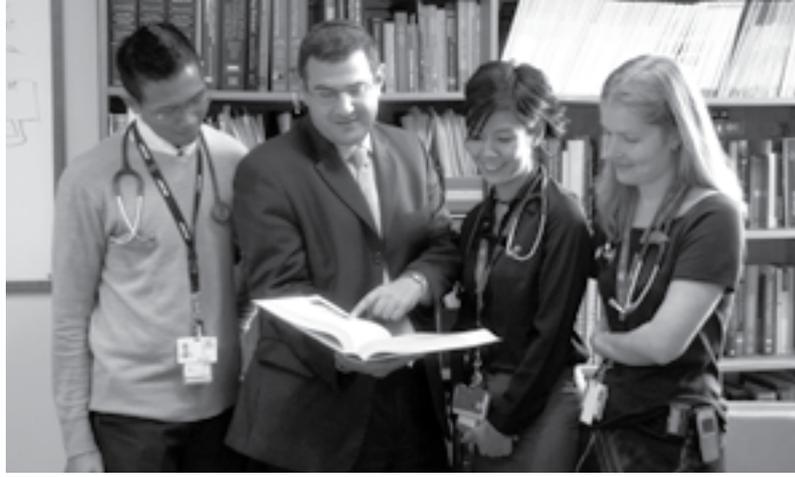
- Joyce Chan, A/Prof. Anne Holland, Adele Winter and Dr Mithu Palit: National Stroke Foundation Grant: 'Are physical outcome measures sensitive to change following botulinum toxin injection in adults with lower limb spasticity?' 2008-2009: \$7,500.
- Dr Michael Chou, Prof. Lenore Manderson, Dr Narelle Warren and Sophie Driver: Department of Planning and Community Development in Victoria Project Grant: 'Computer based social and health support program', 2008-2010: \$35,020.
- Veronica Delafosse: YBP/Lindsay & Croft Research Award for Collection Services 2008 from the Australian Library and Information Association: \$4,000.
- Dr Michael Farrell and Prof. Stephen Gibson: a Fred P Archer Charitable Trust Project Grant: 'Age related differences in pain perception, central pain processing and endogenous pain modulation', 2008: \$20,000.
- Prof. Kenneth Greenwood, Prof. Charlie Xue, Dr Zhen Zheng, Prof. Paul Martin and Prof. Stephen Gibson: NHMRC Project Grant: 'Acupuncture and psychological treatment for tension headache', 2009-2011: \$292,025.
- Dr Fary Khan: a Vincent Fairfax Foundation Fellowship, 2008-2009.
- Prof. Andrew McLachlan, Dr Vasi Naganathan, Prof. David Le Couteur, Dr Sarah Hilmer and Prof. Stephen Gibson: NHMRC Project Grant: 'Optimising pain management in frail older people', 2009-2011: \$393,750.
- Dr Steven Miller: Victorian Neurotrauma Initiative Early Career Practitioner Fellowship: 'Investigating a novel therapeutic intervention for chronic pain following traumatic head injury', 2008-2010: \$40,200.
- Dr Peter New, Karen Roberts and Valeria Finarelli: Department of Human Services Project Grant: 'Non-traumatic spinal cord injury discharge equipment, home modifications and carer requirement', 2008-2009: \$7,980.
- Dr Trung Ngo: NHMRC Training Fellowship 'The effectiveness of caloric vestibular simulation as a therapeutic intervention in neuropathic pain and mood disorders', 2008-2011.
- Melissa Raymond, Emma Hicks, A/Prof. Peter Hunter and A/Prof. Anne Holland: Caulfield Hospital Research Grant: 'Does a high intensity functional exercise group improve clinical outcomes for older patients in the subacute setting?' 2008-2009: \$7,500.
- Dr Amanda Scott and Dr Mithu Palit: Caulfield Hospital Research Grant: 'Comparison of communication and language assessment parameters in pre- and post-cranioplasty patients', 2008-2009: \$7,500.
- Dr Frances Wise, Lynn O'Neill, Jennie Patrick and Kirstan Corben: Caulfield Hospital Research Grant: 'Phase 3 cardiac rehabilitation – a collaborative pilot project between the Cardiac Rehabilitation Unit and Caulfield Community Health Service', 2008-2009: \$20,000.
- Prof. Charlie Xue, Dr Zhen Zheng, Prof. Stephen Gibson and Prof. Robert Helme: NHMRC Project Grant: 'Electroacupuncture on opioid consumption by patients with chronic musculoskeletal pain: a randomised controlled trial', 2009-2011: \$353,650.
- Prof. Stephen Gibson received the best poster award at the Australian Pain Society meeting 2008: 'Relative influence of uncertainty and harm components of anxiety on pain perception'.
- Fiona Harding, Lauren Dircks, Ronald Leong and A/Prof. Anne Holland won the best poster presentation at the 3rd Australian and New Zealand Falls Prevention Conference 2008: 'Does written feedback improve client recall of risks and falls prevention strategies?'
- Dr Fary Khan received the Excellence in Academic and Research Mentoring Award from the Royal Australasian College of Physicians.
- A/Prof. Glynda Kinsella received the Dean's Award for Excellence in Teaching from the Faculty of Science, Technology and Engineering, La Trobe University.
- Kathryn Marshall, A/Prof. Peter Hunter, Lisa Gill and Anne Gordon won the Caulfield Hospital Research Poster Award: 'Reducing functional decline due to under-nutrition in older patients in a subacute care environment'.
- Natalie McGregor, Anne Clarke, Edwina McLachlan, Heather Curtis and Ronald Leong won the Caulfield Hospital Quality Improvement Poster Award: 'Falls take two – better the second time round?'
- Anna McMeekin, Kristy Probert and Patrick Alewood won the best presentation award in the Innovation in Service Delivery category at the Department of Human Services Leading the Way in Continuing Care Conference: 'Safe travel on public transport'.
- Jennie Patrick and Helen McBurney won the best physical activity paper award at 18th Annual Scientific Meeting and Exhibition of the Australian Cardiovascular Health and Rehabilitation Association: 'When is one six minute walk test enough?'
- Karen Roberts was awarded a Churchill Fellowship.

### POSTGRADUATE STUDENTS

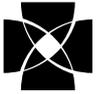
1 Masters Student  
2 MD Students  
1 PhD Student

### PUBLICATIONS

15 Journal Articles



Members of the Renal Medicine Department, from left: Ian Loh, Dr Solomon Menahem, Dr Annie Fung and Dr Natalie Crowther.



The Alfred



MONASH University

## RENAL MEDICINE

Director: Professor Napier Thomson AM, MBBS, FRACP, MD

The Department of Renal Medicine provides comprehensive services, which include general nephrology, acute and chronic dialysis and renal transplantation. It has satellite services in the Peninsula Health network, Caulfield Hospital and Sandringham Hospital, and strong links with satellite services in the Latrobe Valley and the Peter James Centre. The clinical research program reflects the nature of the clinical services provided by the department and the service links with other major clinical services at The Alfred.

### CLINICAL RESEARCH

Research projects are predominantly in the area of glomerulonephritis, vasculitis, progression of renal disease, diabetic renal disease, 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. Recently, a program of study of renal disease in HIV/AIDS has commenced. The department is also engaged in several national and international programs studying the various drug therapies for renal disease and its complications.

### LABORATORY RESEARCH

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 particular focus on the role of the fibrogenic growth factors and apoptosis in progression of injury. The techniques of immunohistochemistry and molecular biology (particularly real time RT-PCR) are widely applied to these studies and these have been highly refined.

*Rheumatology continued from page 66*

#### The effect of body composition on knee structure in an HIV population

Davies M, Fillipas S, Cherry C, Wluka AE, Cicuttini F

It is well recognised that lipodystrophy syndrome, a condition suffered by many HIV-positive individuals, is characterised by a range of symptoms, including abdominal fat deposition. Fat may have an adverse effect on knee structures. This project will examine the relationship between body composition and knee cartilage and bone in an HIV-positive population.

#### Investigating the mechanism of action of obesity on knee structure

Cicuttini F, Wluka AE, Davies M, Dixon J, Bennell K, Jones G, Strauss B, Forbes A

Obesity is the strongest modifiable risk factor for OA and there is some evidence to suggest that obesity may lead to the increased risk of OA via biomechanical mechanisms. This study involves examining the relationship between obesity, body composition and knee alignment and changes in knee structure indicative of OA development.

#### The role of bone marrow lesions in the pathogenesis of knee OA

Davies M, Wluka A, Berry P, Hanna F, Cicuttini F

Bone marrow lesions (BMLs) detected by MRI have been implicated in the pathogenesis of knee OA and have been shown to be present in symptomatic and asymptomatic populations. The aim of this study is to examine the natural history of BMLs in a healthy population, and to identify factors associated with incidence and progression of BMLs over two years and whether these changes are associated with changes in knee structures and development of pain.



Model of a normal knee joint.



TheAlfred



PhD student Stephanie Tanamas and Honours student Jephthah Tobing, from the Musculoskeletal Unit, Department of Rheumatology.



# RHEUMATOLOGY

Head: Professor Flavia Cicuttini MBBS(Hons), MSc, PhD, DLSHTM, FRACP, FAFPHM

The main focus of research activity in the Department of Rheumatology is in understanding factors that influence joint structure in health and disease and the outcome of this. In a very successful year, the team has published extensively in international peer-reviewed journals, and holds six NHMRC Project Grants.

## CURRENT PROJECTS

**The effect of sociodemographic and lifestyle factors on the risk of primary and revision joint replacement**

Wang Y, Simpson J, Wluka A, English D, Giles G, Graves S, Cicuttini F

Knee and hip osteoarthritis (OA) are a major cause of disability. End stage OA frequently needs treatment with joint replacement, which results in a significant economic burden on the community, and is likely to increase as the population ages. Understanding the impact of sociodemographic and lifestyle factors such as obesity and diet on the risk and outcome of joint replacement will help identify potential socioeconomic inequalities and potential strategies for improving outcomes of joint replacement.

**The role of lifestyle factors on knee cartilage volume and rate of cartilage loss in a normal community-based population: a longitudinal study**

Wang Y, Simpson J, Wluka A, English D, Giles G, Cicuttini F  
This study aims to identify lifestyle factors that affect knee cartilage volume in healthy subjects, thereby identifying potential targets for prevention of OA. This is being done by utilising an existing cohort, the Melbourne Collaborative Cohort Study, and recently developed methodology for measuring articular cartilage volume pioneered by our group.

**Role of musculoskeletal biomechanical factors in cartilage loss in those who undergo partial medial meniscectomy**

Cicuttini F, Lloyd D, Bennell K, Stachowiak G, Forbes A

This project aims to determine whether musculoskeletal-biomechanical factors are associated with the rate of knee cartilage loss in people who have recently undergone an arthroscopic partial meniscectomy.

**The predictors of knee cartilage loss: a five year natural history based on an existing cohort**

Wang Y, Wluka A, Forbes A, Jones G, Cicuttini F

The natural history and factors influencing knee OA are poorly understood. The existing cohort is being followed at five years to determine the rate of change of joint cartilage in early knee OA and the factors that influence this.

**The relationship between body composition and hip cartilage**

Wluka A, Berry P, Hanna F, English D, Giles G, Cicuttini F  
Factors increasing the risk of hip OA, including obesity, are poorly understood. The group has developed a method of measuring structural change in the hip using MRI. A cohort of healthy middle aged adults is being studied to determine how body composition relates to hip OA.

**Low back pain (LBP) and urinary incontinence (UI): what are the risk factors and are these conditions associated?**

Urquhart D, Cicuttini F, Bell R, Davis S

LBP and UI can have a profound effect on an individual's function and wellbeing, and result in substantial socioeconomic burden. This study aims to investigate risk factors for the development of LBP and UI, their association with physical, psychological and social factors, and the relationship between these conditions.

**Identification of serum and urinary biomarkers associated with OA disease progression in a well established cohort of subjects with knee OA**

Berry P, Maciewicz R, Cicuttini F, Downey-Jones M, Mills E, Oakley C, Wluka A

There has been increasing interest in different biomarkers that may be useful in identifying subjects most likely to lose joint cartilage. In 1997, the group began a longitudinal study of subjects with knee OA. A novel method was used that enabled measurement of knee cartilage volume and presence of cartilage defects using MRI. In collaboration with AstraZeneca, biomarkers of cartilage and bone metabolism and a panel of known mediators in the serum and urine of subjects were tested. The plan is to examine how this relates to the rate of cartilage loss, defect progression and risk of joint replacement.

**Factors affecting knee structure in healthy women**

Wluka A, Pasco J, Kotowicz M, Henry M

OA has the largest impact of any chronic disease on burden of disease borne in later life, affecting women more frequently than men. The aim of this study is to examine how modifiable factors such as obesity affect change in knee structure in an established healthy cohort of community based women.

*Continued on page 65*

## POSTGRADUATE STUDENTS

9 PhD Students

## PUBLICATIONS

25 Journal Articles

1 Book Chapter



From left: Michelle Farquar, Amanda Scott, Tanya Blyth and Annabelle Bond. Tanya received the 2008 RACV Sir Edmund Herring Memorial Scholarship.



## SPEECH PATHOLOGY

Manager: Rachel McGrath BAppSci(Speech Pathology)

### CURRENT PROJECTS

#### The effective assessment of high level cognition based communication disorders in traumatic brain injury (TBI)

Funded by the RACV Sir Edmund Herring Memorial Scholarship, this study commenced in February 2009 and aims to determine the best way to assess whether there are any mild cognitive communication difficulties in people who have had a mild TBI. Patients who have had a TBI will be recruited from the Trauma and Neurosurgery Units at The Alfred to participate in this study. Two different tests of high level cognitive function will be given: one by a speech pathologist and the other by an occupational therapist.

The study will look at whether there is a relationship between any cognitive communication problems and the location of the brain injury and the immediate symptoms after the injury. The results of this research have the potential to change the way in which patients with TBI are assessed and improve the identification of problems. Recommendations of the project will be discussed with key stakeholders of the Trauma and Neurosurgery Units. A policy will then be developed and rolled out, with education sessions outlining how patients with TBI will be assessed.

#### Ongoing review of swallowing and nutrition of head and neck cancer patients

In 2005, the Speech Pathology Department received a Southern Melbourne Integrated Cancer Service research grant to develop a database to follow the swallowing and nutritional outcomes after treatment for head and neck cancer. This project addressed a gap in the data for Australian head and neck clinical populations concerning the swallowing and nutritional outcomes following surgery, radiotherapy, chemotherapy or combined modality treatments.

The database now includes data from over 150 patients and specifically examines the implications of site and severity of tumour, the impact of treatment modalities on outcomes and the patterns of side effects. These data have already influenced the type and timing of speech pathology intervention and have provided information regarding enteral nutrition requirements.

The project has developed to become a collaborative multisite project involving speech pathology and nutrition departments across three Melbourne metropolitan sites: The Alfred, Monash Medical Centre and Peter MacCallum Cancer Centre. This will enable services and outcomes to be benchmarked and the outcomes of new and current practice to be evaluated.

#### Review of speech pathology requirements post-anterior cervical discectomy and fusion (ACDF)

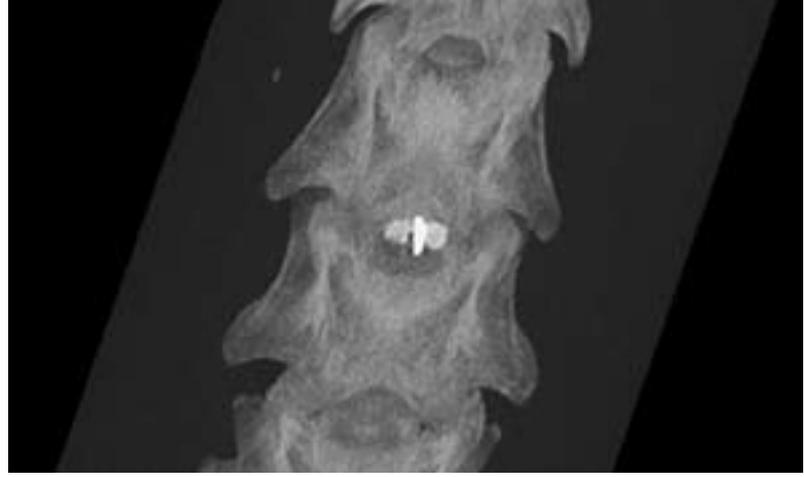
Swallowing and voice problems post-ACDF have been documented in the literature. ACDF procedures are frequently performed by the Neurosurgery and Trauma Units; however, the Speech Pathology Department had no guidelines for their involvement with this patient group.

This project aimed to identify the percentage of patients requiring speech pathology intervention and to describe the type and extent of problems found. The voice and swallowing functions of patients were assessed post-ACDF and, in some cases, pre-ACDF. It was found that 90% of patients had either a swallowing or voice problem immediately post-surgery that required speech pathology services. Of these patients, 50% had not been recognised by nursing or medical staff as requiring speech pathology intervention. Whilst most of the problems were transient, 28% still required speech pathology intervention at the time of discharge.

In response to these findings the Speech Pathology Department developed management guidelines. All ACDF patients are to be reviewed post-surgery and all patients will be provided with appropriate intervention, an information brochure and contact details for speech pathology services should their problems persist.



Speech pathologist Gulsen Pasa wears a protective lead gown and thyroid protector while conducting a videofluoroscopy swallowing assessment.



## SURGERY

Head: Professor Jeffrey Rosenfeld MBBS, MD, MS, FRACS, FRCSEd, FACS, FRCSGlasg ad eundem, FACTM, MRACMA, RAAMC

The Monash Department of Surgery at The Alfred is a department of the Monash University Central Clinical School, one of three schools created by the restructure in 2008 of the Central and Eastern Clinical School. The Department of Surgery now encompasses the hospitals of Alfred Health and Cabrini Health. This new structure provides an excellent opportunity for increased integration with Alfred Health.

The department continues to contribute significantly to postgraduate research, training, audit and quality assurance processes. The past year has seen the department continue to grow, with the restructuring of the Department of General Surgery, including the consolidation of endocrine surgery and the establishment of a Monash-wide endocrine surgery database.

The Department of Surgery has research interests in a number of areas:

- Cardiothoracic Surgery (refer to Cardiothoracic Surgery report)
- General Surgery (refer to General Surgery report)
- Neurosurgery (refer to Neurosurgery report)
- Trauma (refer to National Trauma Research Institute report)
- Orthopaedic Surgery

### CURRENT RESEARCH PROGRAMS

#### Cardiothoracic Surgical Research

- Metabolic, physical and mental preparation for major surgery
- Antioxidant therapy for the treatment of iron overload cardiomyopathy
- The evaluation of hearts obtained after cardiac arrest for use as heart transplant donors
- Mechanical and biological properties of absorbable polylactide plates for use in operative fixation of fractured ribs
- Cardiac mitochondrial metabolism in health and disease states
- Epidemiology-based projects
- Thoracic/pulmonary surgery related projects

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

- Endocrine surgery
- Thyroid surgery
- Parathyroid surgery
- Adrenal surgery
- Parotid surgery
- Soft tissue tumour surgery
- Colorectal cancer
- Management of faecal incontinence
- Transanal endoscopic microsurgery
- Laparoscopic colorectal surgery
- Endorectal ultrasound

- Pancreatic surgery
- Oesophagectomy
- Gastrectomy and bariatric practices

#### Neurosurgical Research

- DECRA: a multicentre randomised trial of early decompressive craniectomy in patients with severe traumatic brain injury (TBI)
- Intensive monitoring of severe TBI, including brain oxygen and microdialysis
- Traumatic spine and spinal cord injury
- Familial intracranial aneurysm study
- Arteriovenous malformations
- Skull base fractures
- Outcome of subdural haematoma in the elderly
- Blunt vertebral and carotid artery injuries
- Bispectral index monitoring in severe TBI

#### Orthopaedic Research

- International collaborative multicentre randomised trials
- Femoral fracture fixation in multi-trauma patients
- Posterior pelvic fixation
- Vacuum assisted closure device
- Use of retrievable inferior vena cava filters
- Non-operative treatment of type II dens fractures
- Use of Gamma nail for the fixation of proximal femur fractures in the elderly

#### Trauma Research

- Laboratory studies in the NTRI
- Traumatic brain injury models in rodents
- Inflammation post-trauma
- Neural precursor cells
- Cytokine response
- Effect of hypoxia
- Neurosurgical ethics including organ donations issues

### HIGHLIGHTS

- Dr Tony Goldschlager and Dr Edwina Moore were equal winners of the DS Rosengarten Surgical Trainee Research Prize
- Dr Marc Seifman was awarded the Henry O'Hara Surgical Research Award for 2009
- Professor Rosenfeld became a Section Editor on neurotrauma research for the *Journal of Emergencies, Trauma and Shock* (the official publication of INDO-US Emergency and Trauma Collaborative)

#### POSTGRADUATE STUDENTS

3 Masters Students  
1 MD Student  
6 PhD Students

#### PUBLICATIONS

47 Journal Articles  
1 Book Chapter



Research coordinator  
Jenny Adams takes  
blood from a patient  
during screening for a  
clinical trial.

# WOMEN'S HEALTH

Director: Professor Susan Davis MBBS, PhD, FRACP

## RESEARCH ACTIVITIES

The Women's Health Program undertakes research to advance knowledge pertaining to the main conditions that affect the health of women at midlife and beyond.

Major current 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.

In 2008 the Women's Health Program team published over 20 papers in international journals, reporting findings from original studies. A series of papers reported on female sexual function, including the validation of a new approach to the assessment of female sexual function, the effectiveness and safety of testosterone therapy for postmenopausal women not using any HRT (published in *New England Journal of Medicine*) and for pre-menopausal women (published in *Annals of Internal Medicine*), and the finding of no significant change in risk of breast cancer for Australian women ever treated with testosterone therapy.

We reported the first findings from the MBF Foundation 'After Breast Cancer Study'. We found that women with a first degree relative with breast cancer had smaller, earlier stage cancers at diagnosis, possibly reflecting more diligent use of breast screening amongst women who considered themselves at increased risk of developing the disease.

We also reported that that self-knowledge of hormone receptor status amongst the 1,684 women with breast cancer in our study was independently associated with likelihood of receiving endocrine therapy, suggesting that the methods of helping women understand the nature of their breast cancer are worthy of review.

Nearing the completion of her PhD, Mary Panjari presented the findings of the randomised, placebo controlled trial of the efficacy and safety of DHEA therapy in postmenopausal women at the Annual Meeting of the North American Menopause Society in Orlando, Florida. She presented her research in a symposium for the three best research free communications submitted for the meeting. The fundamental finding was that the treatment of postmenopausal women with low sexual desire with 50 mg/day DHEA resulted in no significant major improvements in sexual function over placebo therapy over 26 weeks.

As part of her PhD studies, Dr Sonal Shah reported that higher blood levels of DHEA sulphate are associated with more favourable cognitive function in women (*Journal of Clinical Endocrinology and Metabolism*). She also found favourable independent associations between living with other people, doing crosswords, playing a musical instrument and cognitive performance

## TRANSLATING RESEARCH INTO CLINICAL PRACTICE

The Women's Health Program website continues to provide updates in women's health information for health care professionals and the community. In November 2008 the Women's Health Program held its first Women's Health Education Update for general practitioners. It was an outstanding success, with guest speakers sharing the latest health information and providing up-to-date clinical guidance in the management of menopausal symptoms, osteoporosis, incontinence, heart disease and prevention of the metabolic syndrome.

## DEPARTMENTAL HIGHLIGHTS

- Dr Fahad Hanna and Associate Professor Robin Bell (joint first authors), Professor Flavia Cicuttini, Sonia L Davison, Dr Anita Wluka and Professor Susan Davis won the Best Clinical Poster Award at the Australian Rheumatology Association Annual Scientific Meeting for their poster entitled 'High sensitivity C-reactive protein is associated with lower tibial cartilage volume but not lower patella cartilage volume in healthy women at midlife'.
- Dr Sonia Davison, Associate Professor Robin Bell, Maria LaChina, Samantha Holden and Professor Susan Davis were awarded the Australasian Menopause Society Annual Scientific Award for the most meritorious contribution to the field of menopause based on a published or accepted paper in the previous 12 months for their article 'Assessing sexual function in well women: validity and reliability of the female sexual satisfaction questionnaire' published in the *Journal of Sexual Medicine*.
- Professor Susan Davis was also awarded an NHMRC Principal Research Fellowship.

### POSTGRADUATE STUDENTS

3 PhD Students

### PUBLICATIONS

23 Journal Articles

1 Book Chapter

# INTERNAL GRANTS AND AWARDS

## 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**, Emergency Medicine (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 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 Radiotherapy Centre (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 Jennifer Rolland**, Department of Immunology, Monash University (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

**Annemarie Lee**, Physiotherapy: 'Exercise training in non-cystic fibrosis bronchiectasis – a multi-centre randomised controlled trial' (Marian & Edwin Harold Flack Trust)

## ALFRED RESEARCH TRUSTS SMALL PROJECT GRANTS

**Dr Nicole Bye**, National Trauma Research Institute: 'Enhancing endogenous neurogenesis with anti-inflammatory treatment as a potential therapy following traumatic brain injury'

**Dr Anthony Camuglia**, Department of Cardiovascular Medicine: 'Randomised controlled pilot trial of n-acetylcysteine in the treatment of chronic heart failure with coexistent chronic renal failure'

**Dr Kate Carol**, Department of Allergy, Immunology and Respiratory Medicine: 'The clinical consequences of mannose-binding lectin deficiency in lung transplantation'

**Dr Rachel Cousins**, Primary Mental Health and Early Intervention Team: 'Assessing the mental health literacy and willingness to seek help of new mothers utilising maternal and child health services'

**Dr Michelle Earle**, Infectious Diseases Unit: 'A randomised controlled trial of a skills training group intervention to reduce psychological risk factors associated with sexual risk behaviour, and to increase safer sex behaviour, in men who have sex with men'

**Dr Lachlan Miles**, Intensive Care Unit: 'Relevance of P<sub>a</sub>O<sub>2</sub>/F<sub>I</sub>O<sub>2</sub> ratio in ICU management of immunosuppressed patients'

**Dr Charles Pilgrim**, Upper Gastrointestinal Surgery: 'A randomised trial of a very low calorie diet after FOLFOX chemotherapy prior to liver resection for colorectal metastases'

**Dr Donal Ryan**, Intensive Care Unit: 'Permissive Hypercapnia and Alveolar Recruitment with Limited Airway Pressures (PHARLAP): a Phase 2 randomised trial in ARDS patients'

**Dr Andrew Westbrook**, Department of Epidemiology and Preventive Medicine, Monash University: 'Heparin in severe sepsis: IL-6 as a marker of efficacy'

**Sue Wyatt**, Department of Endocrinology and Diabetes: 'A randomised controlled study of a pre-operative intervention in patients with diabetes undergoing cardiac surgery'

## HENRY O'HARA SURGICAL RESEARCH AWARD

**Dr Marc Seifman**, Neurosurgery Department: 'Incidence and risk factors for postoperative intracranial haemorrhage requiring repeat craniotomy'

## AMREP RESEARCH PRIZE 2008

For article describing original research published in the journal with the highest impact factor in 2007

**Professor Jamie Cooper** (Intensive Care Unit/National Trauma Research Institute, The Alfred)  
SAFE Study Investigators; Australian and New Zealand Intensive Care Society Clinical Trials Group; Australian Red Cross Blood Service; George Institute for International Health, Myburgh J, Cooper DJ, Finfer S, Bellomo R, Norton R, Bishop N, Kai Lo S, Vallance S. Saline or albumin for fluid resuscitation in patients with traumatic brain injury. *N Engl J Med* 2007; 357(9):874-84. [Impact factor: 52.589]

## GLAXOSMITHKLINE PRIZE FOR ADVANCED TRAINEE PHYSICIANS

**Dr Jonathon Habersberger** (Baker IDI Heart and Diabetes Institute)  
'A conformational change in C-reactive protein induces platelet activation *in vitro*'

## DS ROSENGARTEN SURGICAL TRAINEE RESEARCH PRIZE

**Dr Edwina Moore** (Monash Department of Surgery/Burns Unit, The Alfred)  
'Candida and thermal injury: 10 years experience from a specialist burns centre'

**Dr Tony Goldschlager** (Monash Department of Surgery)  
'Allogeneic mesenchymal precursor cells safely and effectively increase the rate and robustness of cervical interbody fusion'

## THE KATHLEEN AB SMITH MEMORIAL PRIZE IN NURSING

For best publication in Nursing in 2007/2008

**Gordon Bingham** (The Alfred)  
Bingham G, Koch B, Lee G, Millar I. Ventilator performance under hyperbaric conditions: a study of the Servo 900C ventilator. *South Pacific Underwater Medicine Society Journal* 2007; 37(4):199-203.

## ALFRED WEEK RESEARCH POSTER PRIZES

Alfred Week Psychiatry Research Prize

**Jayashri Kulkarni** (Monash Alfred Psychiatry Research Centre)  
ESTROGEN – A POTENTIAL NEW TREATMENT APPROACH FOR SCHIZOPHRENIA  
Kulkarni J, Gurvich C, Mu L, Mehmedbegovic F, de Castella A, Fitzgerald P, Burger H

Henrietta Law Memorial Prize for Allied Health Research

**Jacqueline Salway** (Occupational Therapy Department, The Alfred)  
FACTORS ASSOCIATED WITH NON-ADHERENCE TO AHDN SPLINTING REGIMES IN AN ACUTE INPATIENT BURNS POPULATION  
Salway J, O'Brien L

Noel and Imelda Foster Prize for Cardiovascular Research

**Michelle Butler** (Heart Centre, The Alfred)  
COMPARISON OF PERCUTANEOUS CORONARY INTERVENTION AND CORONARY ARTERY BYPASS GRAFTING FOR REVASCULARISATION OF PATIENTS WITH DIABETES MELLITUS  
Butler M, Duffy S, Dinh D, Smith JA, Ajani AE, Andrianopoulos NE, Shardey GE, Clark DJ, Brennan A, New G, Dart AM, Reid CE, on behalf of the Melbourne Interventional Group and Australasian Society of Cardiac and Thoracic Surgeons registries

Lucy Battistel Prize for Allied Health Research

**Kate Connell** (Nutrition Department, The Alfred)  
THE EFFICACY OF A PSEUDOALLEGEN FREE DIET IN THE TREATMENT OF CHRONIC IDIOPATHIC URTICARIA: A SINGLE BLINDED RANDOMISED CONTROLLED STUDY  
Connell K, Hore-Lacy F, Douglass J, White S, Nyulasi IB

Michael J Hall Memorial Prize for Research in Respiratory Disease/Physiology

**Sally Ho** (Department of Allergy, Immunology and Respiratory Medicine, The Alfred)  
HOME SLEEP APNOEA MONITORING WITH OXIMETRY AUDIT: HIT OR MISS?  
Ho S, Roebuck T, Van Braak E, Naughton MT

Tony Charlton Prize for Research in Cardiac Surgery

**Rishi Mehra** (Anaesthesia and Perioperative Medicine, The Alfred)  
EVALUATION OF ACTIVATED PARTIAL THROMBOPLASTIN TIME FOLLOWING CARDIOPULMONARY BYPASS  
Taneja R, Mehra R, Marwaha G, Subramainum S, Kumbharathi R, Quantz M

Professor Daniel Czarny Prize for Allergy and Asthma Research

**Neeru Varese** (Department of Immunology, Monash University)  
T CELL RESPONSE TO RYE GRASS POLLEN ALLERGEN IS COUNTER-REGULATED BY INDUCTION OF ALLERGEN-SPECIFIC REGULATORY T CELLS  
Mittag D, Varese N, Baxter L, Paukovics G, Rolland JM, O'Hehir RE

Phillips Ormonde & Fitzpatrick Prize for Research in Infectious Diseases (Basic Science)

**Reena Rajasuriar** (Department of Medicine, Monash University)  
BIOLOGICAL DETERMINANTS OF LONG-TERM IMMUNE RECONSTITUTION FOLLOWING HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART)  
Rajasuriar R, Jones G, Solomon A, Chua K, Cornall A, Crane M, Spelman T, Crowe S, Fairley C, Booth D, Stewart G, Cameron P, Lewin S

The Janet A Secatore Nursing Research Award (sponsored by Nurses First Credit Union)

**Anne Kenneally** (Ward 4 East, The Alfred)  
SLIDING DOWN SNAKES AND CLIMBING LADDERS – CREATIVE LEARNING OPPORTUNITIES, HIGH SUPPORT AND HIGH CHALLENGE INSPIRES LEADERSHIP IN OTHERS  
Kenneally A, Atkins R, Cairns J, Dyer K, Winter R

The Nursing Research and Access Committee Award  
(sponsored by Nurses First Credit Union)

**Emma Cohen** (Alfred/Deakin Nursing Research Centre)

A MODEL FOR ENHANCING QUALITY SYMPTOM MANAGEMENT IN AN  
ONCOLOGY SETTING

Cohen E, Botti M, Duke M

Baker IDI Heart and Diabetes Institute Prize for Cardiovascular  
Research

**Kate Owen** (Baker IDI Heart and Diabetes Institute)

THE PROTECTIVE EFFECTS OF EXERCISE AND PHOSPHOINOSITIDE 3-KINASE  
(P110 $\alpha$ ) ACTIVATION IN A SETTING OF HEART FAILURE

Owen KL, Gao XM, Kiriazis H, Ming Z, Cemerlang N, Tan JW, Du XJ, Woodcock  
EA, McMullen JR

Baker IDI Heart and Diabetes Institute Prize for Diabetes  
Research

**Adeline Tan** (Baker IDI Heart and Diabetes Institute)

COMPARISON OF OXIDATIVE PARAMETERS FOLLOWING RAGE DELETION,  
AGE ACCUMULATION INHIBITION OR DIETARY AGE CONTROL IN DIABETIC  
NEPHROPATHY

Tan AL, Coughlan MT, Harcourt BE, Thallas-Bonke V, Sourris K, Wong N,  
Andrikopoulos S, Thomas MC, Bierhaus A, O'Brien RC, Cooper ME, Forbes JM

Burnet Prize for Infectious Diseases Research (First Prize)

**Megan Lim** (Burnet Institute)

COMMUNITY-BASED SURVEILLANCE OF SEXUAL BEHAVIOUR, 2005–2008

Lim M, Hocking JS, Aitken CK, Hellard ME

Burnet Prize for Infectious Diseases Research (Second Prize)

**Lachlan Gray** (Burnet Institute)

TISSUE-SPECIFIC ADAPTIVE CHANGES IN R5X4 HIV-1 ENV VARIANTS  
COMPARTMENTALISED IN BRAIN AND LYMPHOID TISSUES OF INDIVIDUALS  
WITH AIDS

Gray L, Churchill M, Cowley D, Sterjovski J, Ellett A, Roche M, Chiavaroli L,  
Sherrief S, Wang B, Saksena N, Poumbourios P, Wesselingh S, Gabuzda D,  
Gorry PR

Burnet Prize for Infectious Diseases Research (Third Prize)

**Mike Toole** (Burnet Institute)

HIV INFECTION AND RISK BEHAVIOURS AMONG MEN WHO HAVE SEX WITH  
MEN IN VIENTIANE, LAOS

Sheridan S, Phimphachanh C, Chanlivong N, Toole M, van Griensven F

Whole Time Medical Specialists Private Practice Scheme  
Prizes for Clinical Research

**Susan Harch** (Anatomical Pathology, The Alfred)

FAILURE OF BOSENTAN THERAPY IN PULMONARY ARTERIAL HYPERTENSION.  
IS THERE AN ALTERNATIVE DIAGNOSIS?

Harch S, Whitford H, McLean C

**Colleen D'Arcy** (Anatomical Pathology, The Alfred)

A CLINICOPATHOLOGICAL STUDY OF 'JUVENILE POLYMYOSITIS'

D'Arcy CE, Ryan MM, McLean CA

Senior Medical Staff Prize for Clinical Research

**Amy McRae** (Pharmacy Department, The Alfred)

THE 50/25 RULE: IMPLEMENTATION OF A STRATEGY TO VALIDATE HIGH  
INSULIN DOSES TO PREVENT ERRORS

McRae A, Murray D, Van De Vreede M, Topliss D, McGuinness J, Wyatt S, Dooley  
MJ, Wright R, Newnham H, Sobey A, Wiseman M

Senior Medical Staff Prize for Basic Science/Laboratory  
Research

**Hyun-Ja Ko** (Department of Immunology, Monash University)

ECTOPIC EXPRESSION OF AIRE REGULATES THE EXPRESSION OF TISSUE  
SPECIFIC ANTIGENS AND MODULATES THE DEVELOPMENT OF EAE IN MICE

Ko HJ, Kinkel SA, Nasa Z, Chan J, Siatskas C, Scott HS, Toh BH, Hubert FX,  
Alderuccio F

# MAJOR EXTERNAL GRANTS

Listed are the major national competitive, peer-reviewed research grants held by AMREP staff in 2008; 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.

CRC for Water Quality and Treatment. Bursill D, McNeil J, Deere D, Priestley T, Drikas M. 2001-2008. CRC Program funding: \$16,800,000. Total funding: \$84,400,000.

### 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.

Brew B, Crowe S, Lewin S, Slobedman B, Wesselingh S, Cunningham A. Pathogenesis of persistent human virus infections of global significance. 2005-2009: \$6,180,170. Administering institution: University of New South Wales.

Coppel R, Cooke B, Plebanski M, von Itzstein M. Malaria: from target identification to therapeutics. 2005-2009: \$4,962,360. Administering institution: Monash University.

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.

Doherty P, Cooper DA, Kent SJ, Ramshaw IA. Understanding HIV infection and the development of new vaccines. 2004-2008: \$6,967,000. Administering institution: University of Melbourne.

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.

Krum H, Gilbert R, Itescu S. Novel therapeutic strategies to reduce the burden of chronic heart failure. 2005-2009: \$4,634,965. Administering institution: Monash University.

O'Dea K, Hoy W, Rowley K, Best J, Wang Z. Health outcomes monitoring and evaluation: learning about activity, nutrition, diet and social factors. 2005-2009: \$7,070,585. Administering institution: University of Melbourne.

O'Hehir RE, Anderson G, Hamilton J, Rolland J. The interface between innate and adaptive immunity in allergy and asthma. 2005-2009: \$4,308,220. Administering institution: Monash University.

#### Capacity Building Grants

Eades S. Making a difference: building research capacity for health interventions to improve Aboriginal health. 2007-2011: \$2,317,125. Administering institution: University of Sydney.

#### 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.

#### Centre of Research Excellence in Patient Safety

McNeil J, Cameron P, Campbell D, Duckett S, Myles P, Sanderson P, Stoelwinder J. 2005-2009: \$2,000,000. Administering institution: Monash University.

#### Centre of Research Excellence in Radiofrequency Electromagnetic Energy

Cosic I, Abramson M, Croft R, Finnie J, McKenzie R, Wood A. Australian Centre for Radiofrequency Bioeffects Research. 2004-2008: \$2,500,000. Administering institution: Royal Melbourne Institute of Technology.

#### 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.

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 Grant**

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.

### **Dementia Research Grant**

Kinsella G. Early intervention for amnesic mild cognitive impairment. 2008-2010: \$551,452. Administering institution: La Trobe University.

### **Development Grants**

Head G, Alewood P. Development of oral natriuretic-like peptides for chronic treatment of congestive heart failure. 2007-2009: \$376,750. Administering institution: Baker IDI.

Kaye D. Development of guanylate cyclase activators for the treatment of pulmonary arterial hypertension. 2008: \$133,500. Administering institution: Baker IDI.

Kaye D, Power J. Development of non-surgical approach to treating tricuspid regurgitation. 2007-2009: \$200,000. Administering institution: Baker IDI.

Little P. Development of a protein tyrosine kinase inhibitor for modification of GAG chains and prevention of atherosclerosis. 2007-2009: \$378,900. Administering institution: Baker IDI.

Myles P, Burton D, Fuchs M, Zilberg E. Development and clinical evaluation of a depth of anaesthesia monitor. 2007-2008: \$413,000. Administering institution: Monash University.

Peter K. Novel single-chain antibody-targeted nanoparticles for diagnosis of vascular diseases in magnetic resonance imaging. 2007-2009: \$327,500. Administering institution: Baker IDI.

Pietersz G. Development of a novel mannan-based avian influenza vaccine. 2008-2009: \$195,567. Administering institution: Burnet Institute.

Wang B, Scammellis P, Krum H. Development of novel anti-inflammatory compounds. 2008-2009: \$196,250. Administering institution: Monash University.

### **Enabling Grants**

Bellomo R, Cooper DJ, Myburgh J, Finfer S. National Centre for Intensive Care Research. 2005-2010: \$1,290,000. 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 CA, Harper C. National Network of Brain Tissue Banks. 2004-2008: \$2,000,000. 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**

Alderuccio F, Scott H, Hubert F-X. The role of Aire in immunological tolerance and immunity. 2008-2010: \$416,625. Administering institution: Monash University.

Anderson J, Hope T, Tachedjian G. Mechanisms underlying APOBEC3G restriction of HIV-1. 2008-2010: \$536,654. Administering institution: Burnet Institute.

Andrews R. Ligand interactions of platelet glycoprotein Ib-IX-V in thrombosis. 2007-2009: \$355,575. 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.

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.

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.

Bennell K, Hinman R, Cicuttini F, Payne C, Harris A. Effects of lateral wedged insoles on symptoms and disease progression in knee osteoarthritis. 2005-2008: \$476,575. Administering institution: University of Melbourne.

Berndt M, Salem H, Cranmer S. Regulation of platelet adhesion by the GPIIb/IIIa cytoplasmic tail. 2006-2008: \$506,000. Administering institution: Monash University.

Bertoncello I, Simmons P, Wilson J. Lung stem cells. 2006-2008: \$275,250. Administering institution: University of Melbourne.

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.

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.

Cicuttini F, Dixon J, Wluka A, Bennell K, Jones G, Strauss B. The effect of weight loss on the risk of knee osteoarthritis and potential modification of biomechanical factors. 2006-2008: \$464,000. Administering institution: Monash University.

Cicuttini F, Lloyd D, Bennell K, Stachowiak G, Forbes A. Role of musculoskeletal biomechanical factors in cartilage loss in those who undergo partial medial meniscectomy. 2005-2008: \$644,330. Administering institution: Monash University.

Cooper DJ, Rosenfeld JV, Reilly P, Wolfe R. Multi-centre randomised trial of early decompressive craniectomy in patients with severe traumatic brain injury (DECRA). 2005-2008: \$485,535. 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. Role of epigenetic mechanisms in diabetic vascular complications. 2006-2008: \$429,750. Administering institution: Baker IDI.

Cooper M, Jandeleit-Dahm K, Bierhaus A. Role of advanced glycation end products and their receptors in diabetes accelerated atherosclerosis. 2007-2009: \$375,000. Administering institution: Baker IDI.

- Cooper M, Kantharidis P, Twigg S, Cao Z. Role of growth and transcription factors in tubulointerstitial injury in diabetes. 2006-2008: \$444,750. Administering institution: Baker IDI.
- Ding C-H, Jones G, Venn A, Cicuttini F, Dwyer T. Does childhood physical activity, fitness and fatness impact on knee structural change 20 years later? 2008-2009: \$301,977. Administering institution: Menzies Research Institute.
- Dixon J, O'Brien P, Naughton M, Schachter L. A randomised controlled trial of the effect of substantial weight loss on obstructive sleep apnoea. 2007-2009: \$350,125. Administering institution: Monash University.
- Dixon J, O'Brien P, Sawyer S. Adolescent obesity: non-surgical management versus surgical management. 2006-2008: \$473,100. Administering institution: Monash University.
- Doig G, Cooper DJ, Finfer S, Simpson F. Early parenteral nutrition in the ICU. 2006-2008: \$1,812,750. Administering institution: University of Sydney.
- Drummer H, Poubourios P, Dore G, Hellard M, Torresi J. Neutralizing antibody responses in HCV infected individuals. 2006-2008: \$467,750. Administering institution: Burnet Institute.
- Drummer H, Poubourios P, Elhassen D. Structure and function of the hepatitis C virus glycoproteins E1 and E2. 2007-2009: \$513,000. Administering institution: Burnet Institute.
- Dunstan D, Ball K, Salmon J, Crawford D, Daly R. A behavioural intervention for the adoption and maintenance of physical activity in Type 2 diabetes. 2007-2009: \$321,875. Administering institution: Baker IDI.
- El-Osta A, Du X-J. Transcriptional regulatory complexes associated with cardiac hypertrophy. 2006-2008: \$465,000. Administering institution: Baker IDI.
- Esler M, Richards J, Lambert E, Soreq H. Panic disorder: neurobiology and mechanisms of cardiac risk. 2006-2008: \$445,875. Administering institution: Baker IDI.
- Fairley C, Bradshaw C, Pirota M, Garland S, Hocking J. Treatment of bacterial vaginosis: a randomised controlled trial. 2007-2009: \$255,425. Administering institution: University of Melbourne
- Febbraio MA. Ciliary neurotrophic factor can prevent muscle insulin resistance. 2006-2008: \$578,625. Administering institution: Baker IDI.
- Febbraio MA, Hevener A. Activation of HSP70: a therapeutic target to treat obesity-induced insulin resistance. 2008-2010: \$449,250. Administering institution: Baker IDI.
- Febbraio MA, Unterman TG. Role of FoxO proteins in the regulation of skeletal muscle anabolism, catabolism and insulin sensitivity. 2007-2009: \$443,250. Administering institution: Baker IDI.
- Finfer S, Cross A, Scheinkestel C, Norton R, Myburgh J, Cole C. The RENAL (Randomised Evaluation of Normal vs Augmented Level) replacement therapy in ICU study. 2005-2008: \$1,868,475. Administering institution: University of Sydney.
- Fitzgerald P, Kulkarni J. A double-blind sham controlled trial of rTMS in treatment resistant major depression. 2007-2009: \$357,400. Administering institution: Monash University.
- Forbes A, Peeters A, de Courten M. Fitness versus fatness disentangling their effects on disease outcomes and estimating the population burden of disease. 2007-2009: \$183,313. Administering institution: Monash University.
- Forbes J, Bierhaus A. Mediation pathways for the receptor for advanced glycation end products in diabetic nephropathy. 2006-2008: \$328,125. Administering institution: Baker IDI.
- Gao XM. Macrophage migration inhibitory factor (MIF): pathological and therapeutic significance in post-infarct inflammation. 2008-2010: \$525,500. Administering institution: Baker IDI.
- Gerondakis S, Gonda T. Determining the role of Rel/NF- $\kappa$ B transcription factors in myeloid differentiation. 2006-2008: \$447,750. 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.
- 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 P, Poubourios P, Center R, Churchill M. Pathogenesis of CCR5-restricted HIV-1. 2007-2009: \$361,875. Administering institution: Burnet Institute.
- Gowans E, Li S, Loveland B. Understanding hepatitis C virus-specific T cell tolerance. 2007-2009: \$412,875. Administering institution: Burnet Institute.
- Grgacic E. A new insight into hepatitis B infection: the HBV fusion peptide. 2007-2009: \$276,750. 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.
- 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 $\gamma$ 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.
- Hughan S, Nesbitt W. Investigation of Dok2 and Dok1 adapter proteins in the negative regulation of integrin  $\alpha$ IIb $\beta$ 3 platelet signalling. 2008-2010: \$437,615. Administering institution: Monash University.
- Jackson DE. The biology of immunoreceptors in platelets. 2006-2008: \$511,500. Administering institution: Burnet Institute.
- Jackson S. Investigation of the role of PAF and CD40 ligand in regulating the proinflammatory properties of platelets. 2006-2008: \$496,500. 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. Investigate novel functional roles for PI 3-kinases in platelets. 2008-2010: \$515,500. Administering institution: Monash University.
- Jandeleit-Dahm K, Kumar A. The role of specific Nox isoforms in diabetic renal disease and atherosclerosis. 2007-2009: \$443,250. Administering institution: Baker IDI.

- Jones G, Cicuttini F, Garner P. An approach to understanding osteoarthritis of the knee using magnetic resonance imaging. 2004-2008: \$843,000. Administering institution: University of Tasmania.
- Jowett J, Zimmet P. Identification of novel genes influencing development of Type 2 diabetes. 2007-2009: \$537,000. Administering institution: Baker IDI.
- Kaye D, Chin-Dusting J, Head G. Manipulation of intracellular arginine content in endothelial cells. 2006-2008: \$466,500. Administering institution: Baker IDI.
- Kent S, Davenport M, Batten J. Escape and reversion of critical immune responses: insights into effective immunity to HIV. 2007-2009: \$369,864. Administering institution: University of Melbourne.
- Kile B, Jackson S, Roberts A. The molecular regulation of platelet life span. 2008-2010: \$531,440. Administering institution: Walter and Eliza Hall Institute.
- Kingwell B, de Courten B. Novel metabolic actions of HDL with potential therapeutic implications for Type 2 diabetes and the metabolic syndrome. 2007-2009: \$336,750. Administering institution: Baker IDI.
- Kotsimbos T, Snell G. Elucidating sub-clinical pathways to chronic rejection in lung transplantation and therapeutic implications. 2006-2008: \$277,500. Administering institution: Monash University.
- Kruger P, Venkatesh B, Bellomo R, Kostner K, Cooper DJ, Roberts M. A phase II randomised controlled trial of atorvastatin therapy in intensive care patients with severe sepsis. 2007-2009: \$603,825. Administering institution: Monash University.
- Lambert G, Schlaich M. Sympathetic nervous system activation in renal failure: its contribution to pathogenesis and progression. 2006-2008: \$478,500. Administering institution: Baker IDI.
- Leder K, Sinclair M, Forbes A, Cunliffe D. Health effects of drinking rainwater. 2006-2008: \$844,313. Administering institution: Monash University.
- Leslie K, Myles P, Paech M. The perioperative ischaemic evaluation study (POISE). 2007-2008: \$374,500. Administering institution: Melbourne Health.
- Lewin SR, Cameron PU, Jaworwski A. Modulation of HIV-1 latency in primary CD4 T cells by chemokines and dendritic cells. 2008-2010: \$372,330. 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.
- Liu J-P. Signalling to telomeres: mechanisms of action of TGF $\beta$ . 2006-2008: \$429,750. Administering institution: Monash University.
- 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.
- Mak J, Tachedjian G. Retroviral recombination. 2006-2008: \$396,375. Administering institution: Burnet Institute.
- May C, Bellomo R, Gobe G, Thomson N. Understanding how sepsis causes kidney dysfunction. 2007-2009: \$453,750. Administering institution: University of Melbourne.
- 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.
- McMullen J. Differences between physiological and pathological cardiac hypertrophy offer new strategies for treating heart failure. 2006-2008: \$327,500. Administering institution: Baker IDI.
- McNeil J, Cameron P, Wolfe R, Dooley M. A case control study investigating factors contributing to the risk of bleeding in patients receiving warfarin therapy. 2007-2009: \$553,550. Administering institution: Monash University.
- McNeil J, Harrap S, Welborn T, Wong T, Liew D, Magliano D. Risk and determinants of fatal and non-fatal coronary heart disease in the Melbourne Collaborative Cohort Study (MCCS). 2005-2009: \$422,500. Administering institution: Monash University.
- McNeil J, Tonkin A, Reid C, Krum H, Beilin L, Nelson M. Randomised double-blind placebo-controlled trial of aspirin in primary prevention of CVD events or dementia in the aged (ASPREE). 2005-2009: \$3,503,500. Administering institution: Monash University.
- 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, 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.
- Morganti-Kossmann MC, Cooper DJ. Role of post-traumatic hypoxia in the exacerbation of cerebral inflammatory response elicited by brain injury. 2007-2009: \$381,750. Administering institution: Monash University.
- 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.
- Oldenburg B, Courtney M, Friedman R, Wootton R, Ash S. Using conversational computer technology to improve diabetes management: a randomised controlled trial. 2007-2009: \$604,464. Administering institution: Monash University.
- Oldenburg B, Hawkes A, Taylor B, Atherton J. An implementation trial of a telephone-based care management program for patients following myocardial infarction. 2007-2009: \$569,875. Administering institution: Monash University.
- Pepe S, Rosenfeldt F, Delbridge L, McLennan P, Smith J. Clinical feasibility study of omega-3 PUFA therapy for the reduction of post-cardiac surgery atrial arrhythmias 2006-2008: \$433,500. Administering institution: Monash University.
- Peter K. Novel selective anti-platelet and clot-specific anticoagulant strategies targeting conformational states of GPIIb/IIIa. 2006-2008: \$487,000. 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.

- Plebanski M, O'Hehir R, Hardy C, Rolland J. Inhibition of allergic airway inflammation by nanoparticles. 2008-2010: \$529,020. 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.
- Power D. AMP-activated protein kinase in acute renal failure. 2006-2008: \$392,625. Administering institution: Burnet Institute.
- Power D. Protein kinases regulate salt reabsorption in the kidney. 2007-2009: \$511,500. Administering institution: Burnet Institute.
- Reeder J, Barry A. Population genomics of *Plasmodium falciparum* surface antigen genes. 2008-2010: \$383,072. Administering institution: Burnet Institute.
- Ritchie R, Horowitz JD. Novel cGMP-based therapies prevent left ventricular remodelling. 2008-2010: \$512,025. Administering institution: Baker IDI.
- Rice G, Lappas M, Kniss D, Talbo G, Young I. The mechanisms that regulate the onset of human labour and delivery. 2006-2008: \$517,500. Administering institution: Baker IDI.
- Robertson C, Wilson J. Outcome of childhood asthma in adult life and the interaction with COPD. 2007-2009: \$484,100. Administering institution: Murdoch Childrens Research Institute
- Rogerson S, Jaworowski A. HIV and immunity to malaria. 2006-2008: \$363,750. Administering institution: Burnet Institute.
- Schlaich 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.
- Sim M, Benke G, Fritschi L. Occupational exposure to lead compounds and human cancer. 2006-2008: \$220,850. Administering institution: Monash University.
- Slavin M, Bradstock K, Sorrell T, Schwarer A, Szer J, Chen S. A multicentre randomised controlled trial comparing two strategies for the diagnosis of invasive aspergillosis in high-risk haematology patients (the ASPID Study). 2005-2008: \$1,084,500. Administering institution: Burnet Institute.
- Srikanth V, Forbes J, Phan T, Munch G, Pearson S, Venn A. A study of mechanisms of cognitive decline in Type 2 diabetes mellitus. 2007-2009: \$492,575. Administering institution: Monash University.
- 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.
- Storey E, Anderson R, Cook M, Kinsella G. Does coeliac disease cause ataxia or cognitive impairment? 2007-2009: \$583,098. Administering institution: Monash University.
- Storey E, Loesch D, Cook M, Tassone F, Huggins R. Prevalence and genetic mechanisms of neurological and gynaecological changes in women carrying small FMR1 expansions. 2007-2009: \$395,963. Administering institution: Monash University.
- 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.
- Tabrizi S, Fairley C, Donovan B. Surveillance of LGV *Chlamydia trachomatis* types among men who have sex with men (MSM). 2007-2009: \$186,875. Administering institution: University of Melbourne.
- Tachedjian G, Harrigan R, Sluis-Cremer N. Drug resistance mutations in the connection subdomain of the HIV-1 reverse transcriptase. 2007-2009: \$361,875. Administering institution: Burnet Institute.
- Tachedjian G, Mak J. The role of the HIV-1 reverse transcriptase domain in correct processing of viral proteins to form infectious virus. 2006-2008: \$277,500. Administering institution: Burnet Institute.
- Thomas M. Circulating low-molecular weight AGEs in the development and progression of diabetic complications. 2006-2008: \$290,250. Administering institution: Baker IDI.
- Thompson B, Kotsimbos T, Snell G. Why does peripheral airway dysfunction lead to bronchiolitis obliterans syndrome in lung transplantation? 2008-2010: \$248,250. Administering institution: The Alfred.
- Thrift A, Dewey H, Macdonell R. Long-term outcome after stroke: survival, stroke recurrence, functional ability and costs. 2004-2008: \$582,750. Administering institution: Baker IDI.
- Tindle R, Gowans E. HBsAg as a generic vaccine vector. 2006-2008: \$430,500. Administering institution: University of Queensland.
- Toh B-H, Agrotis A, Tipping P. Atherosclerosis: molecular action and suppression of NKT cell subsets. 2007-2009: \$441,375. Administering institution: Monash University.
- 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.
- 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.
- Walton S, Currie B. An immunodiagnostic assay for scabies. 2007-2009: \$364,500. Administering institution: Menzies School of Health Research.
- Werther G, Russo V, Bach L, Price J, Newgreen D. Functional analysis of IGF-binding protein-2 molecular interactions in early development and disease. 2007-2009: \$529,500. Administering institution: Murdoch Childrens Research Institute.
- Wesselingh S, Churchill M, Gorry P. Molecular studies of the astrocyte reservoir of HIV-1 in the central nervous system. 2007-2009: \$513,000. Administering institution: Burnet Institute.
- 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.
- Wluka A, Pasco J, Kotowicz M, Henry M. Factors that affect knee structure in healthy women. 2007-2009: \$190,950. Administering institution: Monash University.
- Woodcock E. Signalling pathways activated by atrial dilatation and their relationship to atrial fibrillation. 2007-2009: \$433,250. Administering institution: Baker IDI.

## Research Fellowships

Allen T. 2008-2012. Administering institution: Baker IDI.  
Anderson D. 2007-2011. Administering institution: Burnet Institute.  
Andrews R. 2004-2008. Administering institution: Monash University.  
Berndt M. 2004-2008. Administering institution: Monash University.  
Bobik A. 2006-2010. Administering institution: Baker IDI.  
Chin-Dusting J. 2006-2010. Administering institution: Baker IDI.  
Cooper M. 2004-2008. Administering institution: Baker IDI.  
Crowe S. 2008-2012. Administering institution: Burnet Institute.  
Dart A. 2005-2009. Administering institution: Baker IDI.  
Davis S. 2008-2012. Administering institution: Monash University.  
Du X-J. 2005-2009. Administering institution: Baker IDI.  
Esler M. 2005-2009. Administering institution: Baker IDI.  
Febbraio MA. 2007-2011. Administering institution: Baker IDI.  
Gerondakis S. 2006-2010. Administering institution: Burnet Institute.  
Gowans E. 2004-2008 Administering institution: Burnet Institute.  
Head G. 2006-2010. Administering institution: Baker IDI.  
Hogarth M. 2007-2011. Administering institution: Burnet Institute.  
Jackson DE. 2004-2008. Administering institution: Burnet Institute.  
Jackson SP. 2004-2008. Administering institution: Monash University.  
Kaye D. 2008-2012. Administering institution: Baker IDI.  
Kent S. 2008-2012. Administering institution: University of Melbourne.  
Kingwell B. 2006-2010. Administering institution: Baker IDI.  
Lambert G. 2007-2011. Administering institution: Baker IDI.  
Little P. 2006-2010. Administering institution: Baker IDI.  
Medcalf RL. 2008-2012. Administering institution: Monash University.  
Meikle P. 2008-2012. Administering institution: Baker IDI.  
Plebanski M. 2008-2012. Administering institution: Monash University.  
Reid C. 2008-2012. Administering institution: Monash University.  
Rice GE. 2005-2009. Administering institution: Baker IDI.  
Ritchie R. 2008-2012. Administering institution: Baker IDI.  
Steward S. 2008-2012: Administering institution: Baker IDI.  
Sviridov D. 2005-2009. Administering institution: Baker IDI.  
Thrift A. 2007-2011. Administering institution: Baker IDI.  
Wilkinson-Berka J. 2006-2010. Administering institution: Monash University.  
Woodcock E. 2005-2009. Administering institution: Baker IDI.

## Practitioner Fellowships

Buchbinder R. 2005-2009. Administering institution: Monash University.  
Cooper DJ. 2007-2011. Administering institution: Monash University.  
Fitzgerald P. 2005-2009. Administering institution: The Alfred.  
Lewin SR. 2008-2012. Administering institution: The Alfred.  
Myles P. 2007-2011. Administering institution: Monash University.

## Industry Fellowship

Ffrench R. 2006-2009. Administering institution: Burnet Institute.

## INSERM Exchange Fellowship

Pirola L. 2008-2009. Administering institution: Baker IDI.

## Career Development Awards

Benke G. 2007-2011. Administering institution: Monash University.  
de Courten B. 2006-2010. Administering institution: Baker IDI.  
Dietze P. 2006-2010. Administering institution: Monash University.  
Drummer H. 2007-2011. Administering institution: Burnet Institute.  
El-Osta A. 2006-2010. Administering institution: Baker IDI.  
Fitzgerald S. 2005-2009. Administering institution: Baker IDI.  
Gabbe B. 2007-2011. Administering institution: Monash University.  
Gicquel C. 2008-2011. Administering institution: Baker IDI.  
Gorry PR. 2005-2009. Administering institution: Burnet Institute.  
Hagemeyer C. 2008-2011: Administering institution: Baker IDI.  
Hellard M. 2004-2008. Administering institution: Burnet Institute.  
Jandeleit-Dahm KA. 2006-2010. Administering institution: Baker IDI.  
Lambert EA. 2006-2010. Administering institution: Baker IDI.  
McMullen JR. NHMRC/NHF Biomedical. 2005-2009. Administering institution: Baker IDI  
Ramsland PA. 2006-2010. Administering institution: Burnet Institute.  
Schlaich MP. 2006-2010. Administering institution: Baker IDI.  
Thomas MC. NHMRC/DART Clinical. 2006-2010. Administering institution: Baker IDI.

## Training (Postdoctoral) Fellowships

Abbot A. 2008-2011. Administering institution: Baker IDI.  
Ahimastos A. 2007-2010. Administering institution: Monash University.  
Andrews K. 2003-2008. Administering institution: Baker IDI.  
Ashton E. 2003-2008. Administering institution: Monash University.  
Baker E. 2007-2010. Administering institution: Baker IDI.  
Barry A. 2007-2008. Administering institution: Burnet Institute.  
Bradshaw C. 2007-2010. Administering institution: Monash University.  
Bruce C. 2005-2009. Administering institution: Baker IDI.  
Calkin AC. 2006-2009. Administering institution: Baker IDI.  
Carrington M. 2008-2011. Administering institution: Baker IDI.  
Cox H. 2007-2010. Administering institution: Burnet Institute.  
Elhassen D. 2007-2010. Administering institution: Burnet Institute.  
Evans SM. 2008-2011. Administering institution: Monash University.  
Fredericks B. 2007-2010. Administering institution: Monash University.  
Hanna F. 2007-2011. Administering institution: Baker IDI.  
Ingless S. 2008-2011. Administering institution: Baker IDI.  
Joyce C. 2006-2010. Administering institution: Monash University.  
Kelsall H. 2006-2009. Administering institution: Monash University.  
Kent P. 2006-2009. Administering institution: Monash University.  
Kistler P. 2005-2008. Administering institution: Baker IDI.  
Medley TL. 2005-2008. Administering institution: Baker IDI.  
Ngo T. 2008-2010. Administering institution: Monash University  
O'Donnell M. 2004-2008. Administering institution: University of Melbourne.  
Peters MA. 2006-2008. Administering institution: Burnet Institute.  
Skilton M. 2007-2010. Administering institution: Baker IDI.  
Stratov I. 2007-2010. Administering institution: Burnet Institute.  
Tapp R. 2005-2008. Administering institution: Monash University.  
Wang Y. 2007-2010. Administering institution: Monash University.  
Watson A. 2008-2011. Administering institution: Baker IDI.  
White A. 2008-2011. Administering institution: Baker IDI.  
Wluka A. 2005-2008. Administering institution: Baker IDI.  
Wong C. 2008-2011. Administering institution: Baker IDI.  
Zatta A. 2007-2010. Administering institution: Baker IDI.

## Other Australian Grants

### AusAID – Bilateral Program Grants

Holmes W, Dorning K, Narayan P. Prevention and care of HIV/AIDS in Indonesia. 2003-2008: \$3,500,000. Administering institution: Burnet Institute.

Malau C. Pacific regional HIV/AIDS project. 2004-2008: \$1,500,000. Administering institution: Burnet Institute.

Morgan C. China–Australia health facility. 2007-2012: \$31,800,000. Administering institution: Burnet Institute.

Morgan C. Tibet health sector support project. 2004-2008: \$1,200,000. Administering institution: Burnet Institute.

Toole M. AusAID training on HIV. 2006-2008: \$300,000. Administering institution: Burnet Institute.

Toole M. Tingim Laip project, Papua New Guinea. 2007-2008: \$7,000,000. Administering institution: Burnet Institute.

### AusAID – Development Research Award

Toole M. Modelling sexual and social networks of urban men who have sex with men and women in Vietnam and the Lao PDR. 2008: \$379,730. Administering institution: Burnet Institute.

### AusAID – NGO Project Grants

Drenkhan G, Asproloupos D. Cyclone Nargis relief – local resource centre for community based responses, Myanmar (Burma). 2008-2009: \$1,040,000. Administering institution: Burnet Institute.

Gray N. Women's and Children's Health Knowledge Hub. 2008-2011: \$2,400,000. 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; SHARP. 2005-2008: \$3,300,000. Administering institution: Burnet Institute.

Whitney R. Australian partnerships with African communities. 2005-2008: \$2,210,000. 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. 2001-2008: \$1,520,000. Administering institution: Burnet Institute.

#### **Australia and New Zealand Burns Association – Project Grants**

Gabbe B. National burns registry upgrade. 2008-2010: \$132,050. Administering institution: Monash University.

#### **Australian and New Zealand College of Anaesthetists – Research Grants**

Burnett W, Smart J, Rosenfeld JV. IMASH Trial – does intravenous magnesium sulfate improve clinical outcome? 2006-2009: \$40,000. Administering institution: Chinese University of Hong Kong.

Leslie K, Myles P. iPEGASUS – International Perioperative Genetics and Safety Outcomes Study in Cardiac Surgery. 2008: \$64,500. Administering institution: The Alfred.

McIlroy D, Myles P. Can endothelial dysfunction predict perioperative cardiac morbidity? 2008: \$25,000. Administering institution: The Alfred.

Santamaria J, Duke G, Pilcher D, Cooper DJ. Impact of the intensive care discharge process on patient outcomes. 2008: \$25,000. Administering institution: The Alfred.

#### **Australian and New Zealand Intensive Care Society – Project Grants**

Cooper DJ, Pelligrino V, Davies A. ENTERIC: a multicentre randomised controlled trial comparing early jejunal feeding (using a frictional nasojejunal tube) and standard feeding in critical illness. 2006-2008: \$154,000. Administering institution: The Alfred.

Nichol A, Cooper DJ, Hodgson C, Tuxen D, Davies A. Permissive hypercapnia and alveolar recruitment with limited airway pressures (PHARLAP). 2008: \$30,700. Administering institution: The Alfred.

Robertson M, Cooper DJ, Presneill J, Webb S, Higgins A. Heparin in severe sepsis. 2007-2008: \$25,000. Administering institution: The Alfred.

#### **Australian Centre for Health Research – Project Grant**

Cameron P, Stoelwinder J, Evans S, Sprivulis P, McNeil J. Measuring quality in private hospitals. 2007-2008: \$77,050. Administering institution: Monash University.

#### **Australian Centre for HIV and Hepatitis Virology – Project Grants**

Crowe S. Markers of monocyte activation as correlates of cardiovascular disease in HIV patients. 2008-2009: \$143,350. Administering institution: Burnet Institute.

Cherry CL, Hooker D, Wesselingh S, McLean C. Establishing the use and interpretation of an LM-PCR-based phenotypic assay for antiretroviral toxicity. 2007-2009: \$172,500. Administering institution: Burnet Institute.

Crowe S. HIV monitoring in resource constrained countries. 2008: \$40,000. Administering institution: Burnet Institute.

#### **Australian Health Minister's Advisory Council (AHMAC) Priority Driven Research Program – Project Grant**

Hellard M, Fairley C, Aitken C, Hocking JS. The impact of text and email messaging on the risk behaviour of young men and women: a randomised controlled trial. 2005-2008: \$192,735. Administering institution: Burnet Institute.

#### **Australian Research Council – Discovery Grants**

Febbraio M, Southgate R. Autophagic vacuole formation in mammalian skeletal muscle; role of FOXO proteins. 2007-2009: \$285,000. Administering institution: Monash University.

Fry TR, Farrell L, Aitken CK. An investigation of illicit tobacco use – its prevalence, economic impact and the motivations and perceptions of consumers. 2006-2008: \$165,000. Administering institution: RMIT University.

Jackson S. Examination of the calcium signalling dynamics linked to integrin adhesion utilising a novel micro-imaging system. 2006-2008: \$294,000. Administering institution: Monash University.

Liu J-P, Toh B-H, McLean CA. Characterisation of a novel neural-specific ATPase in cholesterol transport. 2006-2008: \$256,000. Administering institution: Monash University.

Zion D, Loff B, Briskman L. Caring for asylum seekers in Australia: bioethics and human rights. 2007-2009: \$170,000. Administering institution: Monash University.

#### **Australian Research Council – Linkage Grants**

Liew D, Reid C, Owen A, Shaw J, Magliano D. Epidemiological modelling of cardiovascular disease and diabetes in Australia. 2007-2009: \$212,000. Administering institution: Monash University.

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.

Lithgow BJ, Kulkarni J, Senyard AL, Edwards RO. Quantitative measurement of schizophrenia using electrovestibulography. 2006-2009: \$147,900. Administering institution: Monash University.

Strugnell RA, Brown LE, Browning GF, Wesselingh SL, Walmsley AM, Webb SR, Gahan ME. Using transgenic plant-based production and delivery systems to develop an avian influenza vaccine. 2006-2008: \$150,000. Administering institution: University of Melbourne.

#### **Australian Rotary Health Research Fund – Research Grants**

de Castella A, Lee S, Kulkarni J. Evaluation of the complex needs team: How effective are improved linkages between community and psychiatric services at addressing needs of people who are homeless? 2008: \$39,770. Administering institution: The Alfred.

Stewart S, Carrington M, Clark R, Jennings G. Healthy hearts – beyond city limits. 2007-2008: \$79,850. Administering institution: Baker IDI.

#### **Bethlehem Griffiths Foundation – Research Grants**

Li Q-X, McLean CA, Culvenor JG. Cu/Zn superoxide dismutase aggregation and neurodegeneration in sporadic motor neuron disease. 2006-2009: \$83,348. Administering institution: University of Melbourne.

Ziebell J, Morganti-Kossmann MC. Cell apoptosis and inflammation in a mouse model of focal closed head injury. 2007-2008: \$42,923. Administering institution: The Alfred.

#### **beyondblue Victorian Centre of Excellence in Depression and Related Disorders – Research Grants**

Livingston T, Jefford M, White V, Horden A, Botti M, Lethborg C, Oldroyd J. A nurse-assisted screening and referral program for depression among survivors of cancer: a pilot study. 2008-2009: \$90,000. Administering institution: Deakin University.

McGartland M, Selzer R, Ellen S, Blaski G, Fitzgerald P, Ozols I, Day J. From practice to research: effect of sending assessment letters to primary care patients with depression and anxiety disorders. 2006-2008: \$99,000. Administering institution: The Alfred.

Pier C, Piterman L, Burstein F, Fisher J, Tonkin A, Klein B, Murphy A. Evaluation of Heart Health Online: A program to assist GPs to manage depression and related illness in patients with coronary heart disease. 2008-2009: \$150,000. Administering institution: Monash University.

#### **Cancer Council Victoria – Project Grants**

Bach L, Rice G. IGF-dependent and independent actions of IGF1R. 2007-2009: \$210,000. Administering institution: Monash University.

Pietersz G. Vaccine for Breast Cancer. 2008-2010: \$277,038. Administering institution: Burnet Institute.

#### **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. 2007-2009. Administering institution: Baker IDI.

#### **Department of Health and Ageing (Federal Government)**

Hellard M, Donovan B, Guy R, Kaldor J, Sullivan E, Dimech W. Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS). 2007-2008: \$1,083,843. Administering institution: Burnet Institute.

Mills J, Crowe S, Deacon N, McPhee D. National Centre in HIV Virology Research. 1999-2008: \$5,000,000. Administering institution: University of Melbourne.

Reid C. Testing and validating draft 'Operating Principles and Technical Standards for Australian Clinical Quality Registries'. 2008-2009: \$931,686. Administering institution: Monash University.

Wilson J. On-line clinical information solution to support the treatment of cystic fibrosis patients. 2007-2008: \$660,000. Administering institution: The Alfred.

Lift for Life Program. 2005-2008: \$2,017,680. Administering institution: Baker IDI.

#### **Department of Human Services (Victorian Government)**

Cameron P. Victorian State Trauma Registry (VSTORM). 2000-2008: \$2,579,102. Administering institution: Monash University.

Crowe S. HIV susceptibility testing using genotyping. 2005-2008: \$2,052,000. Administering institution: Burnet Institute.

Fairley C, Bourke S, McNamee K, Gurrin L, Gunn J, Guy R, Hellard M, Sanci L, Hocking J. Chlamydia prevalence and testing. 2005-2009: \$341,493. Administering institution: Burnet Institute.

Hellard M, Guy R. Renewal of HIV surveillance in Victoria. 2006-2009: \$520,000. Administering institution: Burnet Institute.

Hellard M, Guy R, White B, Minge A. Evaluation of the Victorian Public Health Prisoner Initiative. 2006-2008: \$94,232. Administering institution: Burnet Institute.

Oldenburg B, Keleher H, Hollingsworth B. Comprehensive evaluation framework to assess health promotion action plans. 2008: \$96,862. Administering institution: Monash University.

Priestly B. Review of the environmental health risk assessment guidelines for assessing human health risks from environmental hazards. 2008-2009: \$265,000. Administering institution: Monash University.

Stoové M, Crofts N, Lintzeris N, Walsh N. Exploring the health and support service experiences of prisoners post-release: prisoners, family and service providers' perspectives. 2008-2009: \$186,559. Administering institution: Burnet Institute.

#### **Department of Innovation, Industry and Regional Development (Victorian Government) – Science, Technology and Innovation Grant**

Australian Centre for Health Care Innovation (joint venture between Bayside Health, Monash University, La Trobe University, Baker IDI). 2005-2008: \$4,950,000.

#### **Diabetes Australia Research Trust – Type 1 Millennium Awards**

Forbes J, Thorburn D, Coughlan M, Penfold S. Cytosolic oxidative disturbances as a source of mitochondrial dysfunction in diabetic nephropathy. 2007-2008: \$150,000. Administering institution: Baker IDI.

Slattery R. The development of a mouse model to study how novel DNA sites in the human insulin promoter (HIP) control autoimmunity and tolerance. 2008-2009: \$150,000. Administering institution: Monash University.

#### **Diabetes Australia Research Trust – Type 2 Millennium Award**

de Courten B, Soldatos G, Walker K, Riley M, Forbes J, Coughlan M, O'Dea K. Will reduction of dietary advanced glycation end-products reduce chronic low-grade inflammation and improve insulin sensitivity in obese humans? 2007-2008: \$147,000. Administering institution: Baker IDI.

#### **Diabetes Australia Research Trust – Research Grants**

Bach LA, McRobert EA. Defining the ezrin binding site for glycosylated proteins and development of peptide antagonists for use in studying diabetic complications. 2008: \$50,000. Administering institution: Monash University.

Bruce C, Meikle P. Lipidomics and lipid profiling: identifying novel lipid species involved in the development of skeletal muscle insulin resistance. 2008: \$50,000. Administering institution: Baker IDI.

Calkin A, Jackson S, Cooper M. Diabetes associated atherothrombosis: role of advanced glycation. 2008: \$49,789. Administering institution: Baker IDI.

El-Osta A, Kaippanickal H, Okabe J, George P. Persistent changes in vascular gene activity stimulated by hyperglycemia. 2008: \$41,550.

Jandeleit-Dahm K, Barit A, Bierhaus A. Does deletion of the receptor for advanced glycation end products (RAGE) protect from development and progression of diabetic nephropathy? 2008: \$50,325. Administering institution: Baker IDI.

Kingwell B, Febbraio M, Duffy S. The hydroxylamine derivative BGP-15 as a novel hypoglycemic agent in patients with Type 2 diabetes. 2008: \$57,340. Administering institution: Baker IDI.

Lancaster G. The role of macrophage lipid accumulation in obesity-induced inflammation and insulin resistance. 2008: \$49,550. Administering institution: Baker IDI.

Matthews V, Febbraio M, Pedersen B, Steinberg G. The potential of brain derived neurotrophic factor as a therapy to treat obesity-induced insulin resistance. 2008: \$50,000. Administering institution: Baker IDI.

Osman N, Little P, Dilley RJ, Marasco S. PPARgamma and PPARgamma ligands (glitazones) in the aetiology and prevention of calcific aortic disease in diabetes. 2008: \$49,840. Administering institution: Baker IDI.

Ritchie R, McMullen J, Kaye D. Cardiac-specific IGF1 receptor overexpression rescues diabetic cardiomyopathy. 2008: \$50,034. Administering institution: Baker IDI.

Straznicky N, Lambert E, Schlaich M, Lambert G. Interrelationships between sympathetic nervous system activity and renal function in the metabolic syndrome: benefits of weight loss and aerobic exercise. 2008: \$50,000. Administering institution: Baker IDI.

Sviridov D, Nestel P, Chin-Dusting J. The effect of obesity and weight loss in metabolic syndrome patients on HDL functionality. 2008: \$49,972. Administering institution: Baker IDI.

**Diary 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.

**Helen MacPherson Smith Trust – Research Grant**

McLean CA. The study of post-mortem human brain tissue. 2008: \$74,000. Administering institution: Mental Health Research Institute.

**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. 2007-2009: \$300,000. Administering institution: The Alfred.

**Juvenile Diabetes Research Foundation (Australia) – Research Grants**

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. 2008-2009: \$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**

Brown A, McGrady M, Zeitz C, Stewart S. The prevalence of heart failure in Aboriginal communities in Central Australia: the Heart of the Heart Study (Stage I). 2008-2009: \$129,000. Administering institution: Baker IDI.

Chai ZL, Cooper M, Toh BH, Cao Z. Role of cell division autoantigen 1 (CDA1) in atherosclerosis. 2008-2009: \$125,787. Administering institution: Baker IDI.

Chin-Dusting J, Sviridov D, Remaley A. Designing novel apolipoprotein A-I mimetic peptides as therapeutic agents for the treatment of atherosclerosis. 2008-2009: \$127,524. Administering institution: Baker IDI.

Cooper M, El-Osta A. Role of epigenetic mechanisms in diabetic vascular complications: *in vivo* studies. 2008-2009: \$127,850. Administering institution: Baker IDI.

Jackson D. Defining mechanisms of stabilisation of platelet aggregates. 2007-2008: \$125,333. Administering institution: Burnet Institute.

Jackson SP. Novel mechanisms underlying shear-dependent platelet activation and arterial thrombosis formation. 2007-2008: \$123,000. Administering institution: Monash University.

Kingwell B, Reid C. ACE inhibition; a potential new therapy for peripheral arterial disease. 2008-2009: \$126,898. Administering institution: Baker IDI.

Kistler P, Kalman J. The atrial electrical and structural effects of systemic hypertension in humans. 2008-2009: \$113,880. Administering institution: Baker IDI.

Krum H, Campbell DJ, Reid C, Stewart S. Randomised, placebo-controlled clinical trial of pharmacological intervention in high risk subjects with elevated BNP to prevent new heart failure. 2008-2009: \$126,671. Administering institution: Monash University.

Krum H, Komp A, Wang B, Drummond G. Is Rho kinase an important mediator of the pathophysiological effects of cardiac hypertrophy and failure? 2007-2008: \$125,575. Administering institution: Monash University.

Little P, Osman N, Ballinger M. Protein tyrosine kinase regulation of enzymes determining chondroitin sulfate/dermatan sulfate glycosaminoglycan fine structure on vascular smooth muscle cell proteoglycans: implications for lipid binding and atherosclerosis. 2007-2008: \$122,820. Administering institution: Baker IDI.

Medcalf R. To determine the means by which fibrinolytic enzymes compromise endothelial cell integrity. 2008-2009: \$129,000. Administering institution: Monash University.

Meikle P. Lipid profiling: early detection, monitoring and pathogenesis of atherosclerotic heart disease. 2007-2008: \$126,000. Administering institution: Baker IDI.

Peter K. Does the binding of distinct conformations of C-reactive protein regulate the pro-inflammatory property of low-density lipoproteins and thus define a novel anti-atherosclerotic target? 2008-2009: \$126,000. Administering institution: Baker IDI.

Reid C, Cameron J, Kingwell B, Dart A. Independent and combined effects of blood pressure lowering and lipid lowering on arterial stiffness – a sub-study of HOPE-3. 2008-2009: \$120,126. Administering institution: Monash University.

Schoenwaelder SM, Salem HH. Investigate the mechanisms by which type 1 phosphoinositide 3-kinase isoforms p110 $\beta$  and p110 $\gamma$  promote arterial thrombosis. 2007-2008: \$123,000. Administering institution: Monash University.

Straznicki N, Lambert E, Lambert G, Esler M, Kazuko M. Mechanisms of sympathetic overactivity in the metabolic syndrome: effects of reversing insulin resistance by drug treatment. 2007-2008: \$120,048. Administering institution: Baker IDI.

Sviridov D, Chimini G. A new strategy to elevate ABCA1 abundance for treatment of experimental atherosclerosis. 2008-2009: \$116,696. Administering institution: Baker IDI.

Taylor A, Power J, Wong C. Cardiac magnetic resonance imaging in the evaluation of myocardial fibrosis in advanced heart failure. 2008-2009: \$123,500. Administering institution: Baker IDI.

Thomas M, Cooper M, Tikellis C. Atherosclerosis and novel regulators of the renin angiotensin system in diabetic apolipoprotein E knockout mice. 2008-2009: 122,828. Administering institution: Baker IDI.

Woollard K, Chin-Dusting J, Dart A. The role of soluble P-selectin in mediating leukocyte-endothelial adhesion in peripheral arterial occlusive disease. 2008-2009: \$126,000. Administering institution: Baker IDI.

Venardos K, Kaye D. Modification of L-arginine transport to improve the ischemic heart. 2008-2009: \$113,488. Administering institution: Baker IDI.

**National Heart Foundation of Australia – Overseas Research Fellowship**

Paravicini T. A role for reactive oxygen species in remodelling of resistance vessels during hypertension. 2005-2008. Administering institution: Baker IDI.

**National Heart Foundation of Australia – Postdoctoral Fellowships**

Byrne M. Alternative therapies for atrial fibrillation: gene therapy and atrial unloading. 2008-2009. Administering institution: Baker IDI.

Dawood T. The brain and the heart: understanding the neurobiology of major depressive disorder and how this generates increased cardiac risk. 2008-2009. Administering institution: Baker IDI.

Liew D. Predicting future patterns of heart disease and diabetes in Australia. 2007-2009. Administering institution: Monash University.

Woollard K. The role of P-selectin in the pathophysiology of peripheral arterial occlusive disease, diabetes and hypertension. 2007-2008. Administering institution: Baker IDI.

Venardos K. Modification of L-arginine transport to improve the ischemic heart. 2008-2009. Administering institution: Baker IDI.

#### **National Heart Foundation of Australia – World Congress of Cardiology/ NHF Clinical Fellowship**

Peter KH. Thrombosis and myocardial infarction. 2005-2008. Administering institution: Baker IDI.

#### **Pfizer – Cardiovascular Lipid Research Grant**

Wong C. The role of the renin angiotensin aldosterone system activation in myocardial fibrosis, diastolic function and its link to liver fibrosis in morbid obesity. 2008: \$50,000. Administering institution: Baker IDI.

#### **Pfizer – Neuroscience Research Grant**

Williams DR. CSF studies in PSP and dementia. 2008: \$50,000. 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.

#### **Pfizer – Research Grant**

Slavin M, Bradstock K, Sorrell T, Schwarzer A, Szer J, Chen S, Morrissey CO. A multicentre randomised controlled trial comparing two strategies for the diagnosis of invasive aspergillosis in high-risk haematology patients (the ASPID Study). 2005-2008: \$340,000. Administering institution: Burnet Institute.

#### **Pharmacy Guild of Australia – Investigator Initiated Grants**

Dooley MJ, Poole SG, Braun L, Bailey M, Wilkinson J, Tiralongo E. The integration of complementary medicines in community pharmacy practice. 2008-2009: \$199,580. Administering institution: Monash University.

McNamara K, Peterson G, George J, Howarth H, Dunbar J, Jackson S, Janus E, Duncan G, O'Reilly S, Oldenburg R, Bunker S, Emery J. Pharmacist assessment of adherence, risk and treatment in cardiovascular disease (PAART CVD). 2007-2008: \$198,601. Administering institution: Monash University.

Jackson S, Peterson G, Bereznicki B, Gee P, Fitzmaurice K, Walters EH, George J, Stewart K, March M. Pharmacy dispensing records to identify and educate patients with suboptimal asthma management. 2008-2009: \$192,986. Administering institution: University of Tasmania.

#### **Prostate Cancer Foundation – Project Grant**

Xing PX. Treating prostate cancer with human anti-Cripto antibodies. 2008: \$140,375. Administering institution: Burnet Institute.

#### **Royal Australasian College of Physicians – Research Initiative Grant**

Ierino F, Isabel 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.

#### **Royal Australasian College of Physicians – GSK Australia Fellowship in Neurology**

Abbot A. 2008. Administering institution: Baker IDI.

#### **Sylvia and Charles Viertel Charitable Foundation – Project Grant**

Williams DR. A therapeutic trial of amantadine in progressive supranuclear palsy (PSP). 2007-2008: \$60,000. Administering institution: Monash University.

#### **Transport Accident Commission and Department of Human Services (Victorian Government) – Outcomes Grant**

Cameron P, Gabbe B, McNeil J. Continuation of the monitoring and evaluation of the Victorian state trauma system. 2005-2008: \$1,500,000. Administering institution: Monash University.

#### **Transport Accident Commission – Fellowship**

Dowrick A. Optimal timing of definitive fracture fixation in multi-trauma patients. 2007-2008. Administering institution: The Alfred.

#### **Transport Accident Commission – Grants**

Ackland H, Cameron P, Cooper J. Correlation of clinical and radiographic findings with long term outcomes in road trauma patients with acute cervical discoligamentous injury. 2006-2008: \$207,000. Administering institution: Monash University.

Butt W, Rosenfeld J, Maixner W, Adamides A. Cerebral autoregulation monitoring in paediatric traumatic brain injury. 2006-2009: \$24,000. Administering institution: Royal Children's Hospital.

Cameron P, Gabbe B, Edwards E, Richardson M, Williamson O, Graves S. Victorian Orthopaedic Trauma Outcomes Registry (VOTOR): Evaluation and monitoring of treatment effectiveness across Victorian hospitals. 2007-2009: \$300,000. Administering institution: Monash University.

Cameron P, Jeffcott S, Fitzgerald M, Farrow N. Optimising trauma team performance in the Emergency Department. 2007-2008: \$80,950. Administering institution: Monash University.

Cleland H, Wasiak J. Lignocaine for burn pain. 2007-2008. \$44,700. Administering institution: The Alfred.

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. 2006-2008: \$380,000. Administering institution: Monash University.

Gabbe B, Cameron P, Williamson O. Improving the measurement of function and quality of life outcomes in paediatric trauma. 2007-2008: \$156,000. Administering institution: Monash University.

Gabbe B, Cameron P, Sutherland A, Hannaford A. Outcomes following major trauma in Victoria: inclusion of a 12 month follow-up and quality of life measure (VSTORM). 2007-2009: \$92,400. Administering institution: Monash University.

Marasco S, Cooper DJ. Phase II pilot randomised trial of operative fixation of fractured ribs in patients with flail chest. 2007-2009: \$318,254. Administering institution: The Alfred.

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.

O'Donnell ML, Creamer M, Bryant R, Ellen S, Holmes A, Judson R. Towards effectiveness: piloting a stepped mental health care model of service delivery. 2006-2008: \$429,377. Administering institution: Australian Centre for Posttraumatic Mental Health.

O'Donnell ML, Creamer M, Bryant R, McFarlane A. A comparison of service use and recovery outcomes for compensable and non-compensable trauma patients. 2006-2008: \$83,184. Administering institution: Australian Centre for Posttraumatic Mental Health.

Patrick I, Evans S, Fitzgerald M, Cameron P, McCabe N. Enhancing communication transfer between the ambulance service and the emergency department. 2008: \$59,478. Administering institution: Monash University.

#### **Victorian Endowment for Science, Knowledge and Innovation (VESKI) – Innovation Fellowship**

Barry A. Population genomics of major surface antigen genes of the malaria parasite. 2007-2008. Administering institution: Burnet Institute.

#### **VicHealth – Discovery Grants**

Aitken C, Dixon H, Lim M, Wakefield M, Ferrari G, Hope J, Hellard M. Using text messaging (SMS) to promote health issues to young people: a randomised controlled trial. 2008-2009: \$68,593. Administering institution: Burnet Institute.

Oldenburg B, Eagar C, Tonkin A, Meredith I, Fitzgerald P, Topliss D, Wolfe R. Citizens' views on chronic disease prevention and health promotion. 2008-2009: \$74,436. Administering institution: Monash University.

#### **VicHealth – Fellowships**

Dunstan D. 2006-2010. Administering institution: Baker IDI.  
Hellard M. 2004-2008. Administering institution: Burnet Institute.  
Loff B. 2006-2010. Administering institution: Monash University.  
Peeters A. 2004-2008. Administering institution: Monash University.

#### **Victorian Cancer Agency – Early Career Seed Grant**

Scalzo K, Plebanski M. The effects of chemotherapy on peripheral levels of conventional and non-conventional regulatory T cells in patients with ovarian cancer. 2008: \$41,500. Administering institution: Monash University.

#### **Victorian Cancer Agency – Supportive Care Infrastructure Grants**

Anderson J, Rosenfeld JV, Saling M, Fabinyi G. The efficacy of targeting international forgetting strategies in memory rehabilitation for individuals with frontal lobe tumours. 2008: \$82,000. Administering institution: University of Melbourne.

Livingston P, Considine J, O'Connell B, Botti M. Developing supportive care measures across day oncology settings, and in ED, to assist cancer patient's care during chemotherapy treatment. 2008: \$78,000. Administering institution: Deakin University.

Livingston P, Jefford M, White V, Horden A, Botti M, Lethborg C, Oldroyd J. A nurse-assisted screening and referral program for depression among survivors of cancer: a pilot study. 2008: \$41,000. Administering institution: Deakin University.

#### **Victorian Cancer Agency – Clinical Trials Infrastructure Grant**

Millar JL. Development of a complete, reliable, accessible Register of active cancer trials in Southern Melbourne. 2008: \$40,000. Administering institution: Monash University.

#### **Victorian Neurotrauma Initiative – Neurotrauma Fellowships**

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.

#### **Victorian Neurotrauma Initiative – Traumatic Brain Injury Project Grants**

Cooper DJ, Myburgh J, Finfer S, Bellomo R, Norton R. Fluid resuscitation for patients with traumatic brain injury – potential mechanisms behind the detrimental effect of albumin resuscitation. 2007-2008: \$227,700. Administering institution: The Alfred.

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. 2007-2009: \$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.

Kinsella G, Olver J, Ong B. Traumatic brain injury in older adults – does age matter? 2007-2009: \$303,188. Administering institution: La Trobe 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.

Morganti-Kossmann C. Enhancing endogenous neurogenesis as a potential therapy following traumatic brain injury (pilot study). 2007-2008: \$162,910. Administering institution: The Alfred.

Morganti-Kossmann C, Cooper DJ, Rosenfeld J. Role of post-traumatic hypoxia in the exacerbation of cerebral inflammation elicited by brain injury. 2007-2009: \$232,794. Administering institution: The Alfred.

Olver J, Ponsford J. Longitudinal head injury outcomes study. 2007-2010: \$940,574. Administering institution: Monash University.

Ponsford J, Cameron P, Fitzgerald M. Assessment and intervention for patients with mild traumatic brain injury. 2007-2009: \$229,955. Administering institution: Monash University.

Saunders N, Morganti-Kossmann C, Howells D, Crack P, Tan S-S, McIntyre P, Dziegielewska K, Callaway J. Traumatic injury to brain and spinal cord: secondary injury, development and evaluation of new treatments. 2007-2009: \$4,186,012. Administering institution: University of Melbourne.

## **INTERNATIONAL GRANTS**

#### **American Foundation for AIDS Research (amFAR) – Fellowships**

Webster N. 2006-2008. Administering institution: Burnet Institute.  
Xhilaga M. 2007-2009. Administering institution: Monash University.

#### **American Foundation for AIDS Research (amFAR) – Project Grant**

Kent S, Davenport M. Establishment of the HIV reservoir during acute infection. 2007-2008: US\$130,593. Administering institution: University of Melbourne.

#### **Bill and Melinda Gates Foundation – Global Health Development Program**

Crowe SM, Anderson D, Landay A, Denny T. A point-of-care test for examining CD4 in remote areas. 2008: \$1,076,226. Administering institution: Burnet Institute.

#### **Canadian Institutes of Health Research – RCT Grant**

Cook DJ, Meade MO, Cooper DJ. PROTECT: Canadian Critical Care Trials Group. 2005-2008: \$4,900,000. Administering institution: The Alfred.

#### **Ford Foundation – Asset Building and Community Development Grant**

Morgan A. Promoting men's involvement in ante natal care services, Indonesia. 2008-2009: US\$100,000. Administering institution: Burnet Institute.

#### **Heart and Stroke Foundation (Canada) – Grant-in-Aid**

Warkentin TE, Cook DJ, Cooper DJ. Evaluating the incidence and clinical importance of heparin induced thrombocytopenia in the critically ill. 2007-2009: \$164,218. Administering institution: The Alfred.

#### **Juvenile Diabetes Research Foundation International – Career Development Award**

Forbes JM. Designing more effective treatment strategies for diabetic nephropathy. 2005-2009: US\$625,000. Administering institution: Baker IDI.

#### **Juvenile Diabetes Research Foundation International – Clinical Investigations Research Grant**

Cooper M. Role of alagebrium in diabetic nephropathy. 2006-2009: US\$1,635,840. Administering institution: Baker IDI.

#### **Juvenile Diabetes Research Foundation International – High Priority, Short Term Grant**

Allen T. The role of urotensin II in Type 2 diabetes. 2008: US\$55,000. Administering institution: Baker IDI.

**Juvenile Diabetes Research Foundation International – Project Grants**  
Allen T, Jandeleit-Dahm K, Koh P, Miljavec S, Langmaid G. Vascular NADPH oxidases in diabetic atherosclerosis. 2007-2009: US\$476,200. Administering institution: Baker IDI.

Cooper M, Thomas M, Tikellis C, Burrell L, Koitka A, Prestinenzi A. Novel regulators of the renin angiotensin system in the diabetic kidney. 2007-2009: US\$493,870. Administering institution: Baker IDI.

Cooper M. Set 7: a novel target for diabetic vascular complications. 2008-2013: US\$1,250,000. Administering institution: Baker IDI.

El-Osta A, Cooper M, Kaipananickal H, Balcerczyk A, Brasacchio D, Chin Fu Wen K. Epigenetic modifications in hyperglycemic memory and cell differentiation. 2008: US\$110,000. Administering institution: Baker IDI.

El-Osta A. Role of chromatin remodeling in diabetic vascular complications. 2005-2008: US\$494,175. Administering institution: Baker IDI.

Thomas M. Large scale production of the soluble receptor for advanced glycation end-products (sRAGE). 2008: US\$153,882. Administering institution: Baker IDI.

**Juvenile Diabetes Research Foundation International – Sub Grant to Albert Einstein Center Australian Arm Core B**

Allen T, Bobik A, Forbes J, Kantharides P, Tikellis C. Renal/Atherosclerosis Core. 2004-2009: US\$301,845. Administering institution: Baker IDI.

**Juvenile Diabetes Research Foundation International – Albert Einstein Center Australian Arm Project 4**

Forbes J, Thomas M, Cooper M, Bach L. Optimising preventative therapy for diabetic complications: identifying tissue specific mechanisms of reactive oxygen species. 2004-2009: US\$762,060. Administering institution: Baker IDI.

**Juvenile Diabetes Research Foundation International – Training Grant**

Tikellis C. The role of angiotensin converting enzyme in diabetic complications. 2006-2009. Administering institution: Baker IDI.

**Levi Strauss Foundation – Strategic Grant**

Fischer A. Capacity building for local responses to HIV/AIDS amongst injecting drug users in Indonesia. 2005-2008: US\$70,000. Administering institution: Burnet Institute.

**Leukaemia and Lymphoma Society (USA) – Specialised Centre 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.

**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.

**NARSAD (USA) – Young Investigator Award**

Enticott P. 2008-2010. Administering institution: Monash University.

**National Institutes of Health (USA)**

Benke G. Chemical exposure and brain tumours. 2008: US\$50,000. Administering institution: Monash 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.

Kaldor J, Crofts N, Dore G, Hellard M, Lloyd A, Rawlinson W, MacCaughan G, Haber P, van Beek I, Dolan K. Longitudinal cohort study of newly acquired hepatitis C virus infection among injecting drug users. 2003-2008: \$1,800,000. Administering institution: University of NSW.

Loff B. International bioethics education and career development. 2004-2008: \$1,000,000. Administering institution: Monash University.

McCarthy T, Wesselingh S. VivaGel microbicide development consortium. 2005-2010: \$26,000,000. Administering institution: Starpharma.

McCarthy T, Wesselingh S, Crowe S. Development of dendrimer and combination microbicides. 2004-2009: US\$5,646,466. Administering institution: Starpharma.

Thio C, Locarnini SA, Thomas D, Lewin SR, Saszdeusz J, Dore G, Cooper D, Seeger E, Goodman Z. The natural history and virology of HIV-HBV co-infection. 2004-2009: US\$2,500,000. Administering institution: Melbourne Health.

Thomson KR, Lyon SM. Cardiovascular Outcomes in Renal Atherosclerosis Lesions (CORAL) trial. 2007-2008: US\$67,000. Administering institution: The Alfred.

**Society for Progressive Supranuclear Palsy – Research Grant**

Williams DR. Mapping progressive neurodegeneration in PSP using transcranial magnetic stimulation and CSF-TAU. 2008-2009: US\$60,000. Administering institution: Monash University.

**Stanley Medical Research Institute (USA)**

Kulkarni J. A multi-site adjunctive estradiol treatment in women with schizophrenia. 2006-2008: US\$1,223,533. Administering institution: Monash University.

**Susan G Komen Breast Cancer Foundation – Research Grants**

Apostolopoulos V. Development of a DNA breast cancer vaccine. 2006-2008: US\$249,750. Administering institution: Burnet Institute.

Pietersz G. Penetratin-based vaccines for the treatment of breast cancer. 2006-2008: US\$242,040. Administering institution: Burnet Institute

**The International Society of Heart and Lung Transplantation – Career Development Award**

Westall G. 2008-2009. Administering institution: The Alfred.

**United Nations Development Program – Fund for HIV/AIDS in Myanmar Grant**

Fischer A. Reducing burden of CD morbidity/mortality in Myanmar. 2007-2009: \$2,073,034. Administering institution: Burnet Institute.

**NHMRC GRANTS COMMENCING IN 2009**

**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.

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.

Bach LA, Rice GE, Fu P. How do proteins regulate cell behaviour? 2009-2011: \$528,750. 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.

Chin-Dusting J, Dusting G. Targeting arginase in peripheral arterial occlusive disease. 2009-2011: \$234,250. Administering institution: Baker IDI.

Cooper DJ, Bernard SA, Nichol A, Presneill JJ, Cameron P, Myburgh JA. The POLAR RCT. 2009-2013: \$1,958,075. Administering institution: Monash University.

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.
- 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.
- Drummer HE, Poubourios P. How variable regions in HCV E2 modulate glycoprotein function. 2009-2011: \$521,250. 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.
- 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.
- Enticott PG. Examining the brain basis of social cognitive impairment in autism spectrum disorders. 2009-2011: \$144,500. Administering institution: Monash University.
- 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, 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.
- 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.
- Gardiner EE, Andrews RK. Regulation of platelet surface proteins. 2009-2011: \$531,500. Administering institution: Monash University.
- 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. A novel HCV vaccine. 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.
- 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.
- 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.
- Jackson SP, Nesbitt WS. Examination of the mechanical effects of blood flow on clot formation. 2009-2011: \$488,750. Administering institution: Monash University.
- Jaworowski A, Crowe SM. How HIV causes disease. 2009-2011: \$438,000. Administering institution: Burnet Institute.
- 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.
- 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.
- 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.
- Mak J, Hijnen M. Virus-host interplay during HIV-1 assembly. 2009-2011: \$324,250. Administering institution: Burnet Institute.
- 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.
- 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.
- Peter K. Platelet-activating and proinflammatory effects of proteins secreted by *Staphylococcus aureus*. 2009-2011: \$496,000. Administering institution: Baker IDI.
- Poubourios 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 DA. Waste control in kidney disease. 2009-2011: \$438,000. Administering institution: Burnet Institute.
- Ramslund PA, Wines BD. Bacterial evasion of IgA immunity. 2009-2011: \$462,750. Administering institution: Burnet Institute.
- Rice G, Lappas M, Permezel M. Molecular mechanisms regulating spontaneous onset of human labour. 2009-2011: \$426,600. 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.
- Schoenwaelder SM, Salem HH. Investigation of new approaches to dissolve blood clots. 2009-2011: \$479,375. Administering institution: Monash University.
- 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.
- Sviridov D, Bukrinsky M. Atherosclerosis and HIV. 2009-2011: \$349,500. Administering institution: Baker IDI.
- 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.
- Thrift A, Dewey H, Macdonell R. 10-year outcome after stroke: final follow-up for survival, stroke recurrence, functional ability and costs. 2009: \$50,325. Administering institution: Baker IDI.

Tonkin A, Dennekamp M, Erbas B, Sim MR, Glass DC. Cardiac effects of 2006/2007 bushfire air pollution in Melbourne. 2009: \$57,675. Administering institution: Monash University.

Wilkinson-Berka JL, Miller AG. Aldosterone and diabetic retinopathy. 2009-2011: \$491,250. Administering institution: Monash University.

Wolfe R, Forbes A. Missing data and risk prediction. 2009-2011: \$435,125. Administering institution: Monash University.

Woodcock E, Iismaa S. A novel cardiac inotropic mechanism that provides functional benefit 2009-2011: \$397,750. Administering institution: Baker IDI.

Woodcock E. Cardiac-specific therapy targeting hypertrophy and apoptosis. 2009-2011: \$526,500. 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.

#### **Development Grants**

Anderson D. Development and prototype manufacture of a high-throughput CD4 T-cell test for management of HIV/AIDS infections. 2009: \$163,150. Administering institution: Burnet Institute.

Krum H. Development of novel anti-inflammatory agents. 2009: \$200,600. Administering institution: Monash University.

Kulkarni J. The diagnosis, biomarker identification and measurement of drug efficacy in mental illness and neurological conditions. 2009: \$116,500. Administering institution: Monash University.

Pietersz G. Novel vaccine formulation for immunotherapy of adenocarcinomas. 2009: \$178,400. Administering institution: Burnet Institute.

#### **Urgent Research – H1N1 Influenza Research Grants**

Crowe S. Immune responses to 2009 H1N1 to assist public health response. 2009: \$184,712. Administering institution: Burnet Institute.

Ffrench R. A centralised facility for immunological monitoring of human H1N1 immunity post infection or vaccination. 2009: \$184,395. Administering institution: Burnet Institute.

Hellard M. The epidemiology, transmission and impact of new influenza a (H1N1) on the Victorian community in 2009 \$152,335. Administering institution: Burnet Institute.

#### **Australia Fellowship**

Cooper M. 2009-2013. Administering institution: Baker IDI.

#### **Research Fellowships**

El-Osta A. 2009-2013. Administering institution: Baker IDI.

Gowans E. 2009-2013. Administering institution: Burnet Institute.

Hellard M. 2009-2013. Administering institution: Burnet Institute.

Jackson D. 2009-2013. Administering institution: Burnet Institute.

Jackson S. 2009-2013. Administering institution: Monash University.

Jandeleit-Dahm K. 2009-2013. Administering institution: Baker IDI.

Kingwell B. 2009-2013. Administering institution: Baker IDI.

Reeder J. 2009-2013. Administering institution: Burnet Institute.

Tachedjian G. 2009-2013. Administering institution: Burnet Institute.

#### **Practitioner Fellowship**

Cameron P. 2009-2013. Administering institution: Monash University.

#### **Career Development Awards**

Cherry C. 2009-2012. Administering institution: Burnet Institute.

Gorry P. 2009-2012. Administering institution: Burnet Institute.

Hughan S. 2009-2012. Administering institution: Monash University.

Matthews V. 2009-2012. Administering institution: Baker IDI.

Wluka A. 2009-2012. Administering institution: Monash University.

#### **Training (Postdoctoral) Fellowships**

Drew B. 2009-2012. Administering institution: Baker IDI.

Driscoll A. 2009-2012. Administering institution: Monash University.

Enticott P. 2009-2012. Administering institution: Monash University.

Fletcher A. 2009-2012. Administering institution: Monash University.

Giles M. 2009-2012. Administering institution: The Alfred.

Gurvich C. 2009-2012. Administering institution: Monash University.

Hoare H. 2009-2012. Administering institution: Burnet Institute.

Hoy K. 2009-2012. Administering institution: Monash University.

Keegel T. 2009-2012. Administering institution: Baker IDI.

Lim M. 2009-2012. Administering institution: Burnet Institute.

McKenzie D. 2009-2012. Administering institution: Monash University.

Tonna S. 2009-2012. Administering institution: Baker IDI.

# POSTGRADUATE STUDENTS

## PhD

**Abdullah A.** The duration of obesity and its impact on estimating risk, burden of chronic diseases, costing and health policy. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*

**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.*

**Ademi A.** Efficacy & 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-Tamimi M.** Platelet receptor shedding - platelet specific collagen receptor glycoprotein VI. Monash University. Anticipated completion: 2012. *Department of Immunology, Monash.*

**Alexander B.** Transient processing in visual perception: the role of lateral intraparietal cortex. La Trobe University. Anticipated completion: 2010. *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.*

**Andrew N.** Epidemiology and outcomes of serious sport and leisure injuries. Monash University. Anticipated completion: 2015. *Department of Epidemiology and Preventive Medicine, Monash.*

**Ansari M.** Proposal to develop a system to monitor aspects of the quality and performance of the Victorian healthcare system using routine data sources. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred.*

**Audsley J.** Alternative approaches in the preparation and growth of influenza B vaccine viruses. RMIT University. Completed 2008. *Burnet.*

**Ball O.** A handbook of human rights analysis. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*

**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.*

**Barr E.** The contribution of impaired glucose metabolism to cardiovascular disease and to mortality in Australians. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash / Baker IDI.*

**Bartholomeusz C.** The effects of estrogen on cognitive performance in healthy pre and post-menopausal women: are estrogen's effects on cognition mediated by the cholinergic system? Swinburne University. Completed 2008. *Monash Alfred Psychiatry Research Centre.*

**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: 2009. *Department of Cardiovascular Medicine, Alfred / Baker IDI.*

**Bayliss J.** Mechanisms of cardiac allograft rejection. Monash University. Completed 2008. *Department of Medicine, Monash / Anatomical Pathology, Alfred.*

**Bayne S.** Estrogen regulation of telomere. Monash University. Completed 2008. *Department of Immunology, Monash.*

**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: 2009. *Nursing, Alfred.*

**Bellamy-McIntyre A.** Receptor activated conformation of the gp120-gp41 glycoprotein complex of HIV-1. Monash University. *Burnet.*

**Ben-Shabat E.** Central processing of proprioception: functional neuro imaging and psychophysical studies in healthy and stroke participants. La Trobe University. Completed 2008. *Rehab, Aged and Community Care, Caulfield Hospital.*

**Bennett C.** The impact of environmental exposures to particulate air pollution on respiratory health. Monash University. Anticipated completion: 2009. *Department of Epidemiology and Preventive Medicine, Monash.*

**Benton K.** Emotionality and sexual scripting. Deakin University. *Burnet.*

**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.*

**Berzsenyi M.** Chronic hepatitis C virus infection: aspects of genomics, coinfection and treatment. Monash University. Completed 2008. *Department of Gastroenterology, Alfred / Department of Medicine, Monash.*

**Bilardi J.** Screening and control of chlamydia. University of Melbourne. *Melbourne Sexual Health Centre.*

**Bingham G.** Identifying susceptible critically ill patients who desaturate following hyperbaric treatment: their characteristics and outcomes. La Trobe University. Anticipated completion: 2010. *Nursing, Alfred / Hyperbaric Service, Alfred.*

**Bohenski 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.*

**Botlero R.** Investigating women's health issues: urinary incontinence and lower back pain. Monash University. Anticipated completion: 2010. *Women's Health Program, Monash / Department of Rheumatology, Alfred / Department of Medicine, Monash.*

- Brasacchio D.** Role of epigenetic mechanisms in diabetic vascular complications. Monash University. Completed 2008. *Baker IDI / Department of Medicine, Monash.*
- Brennan S.** How does bone metabolism affect knee cartilage in healthy women? Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred.*
- Brooks N.** Membrane permeable multiple antigen peptides for the immunotherapy of cancer. RMIT University. *Burnet.*
- Bruce E.** Comprehensive models of HIV/STI prevention among sex workers and their clients in Papua New Guinea. University of Melbourne. *Melbourne Sexual Health Centre.*
- Buchanan F.** The influence of gender on recovery from general anaesthesia. Monash University. Completed 2008. *Anaesthesia and Perioperative Medicine, Alfred / Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred.*
- Bull T.** Clara cell secretory protein as a biomarker of inadequate repair in lung transplantation. Monash University. Anticipated completion: 2013. *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: 2013. *Department of Medicine, Monash / Baker IDI.*
- Burton P.** Physiological studies of the oesophago-gastric junction relating to satiety. Monash University. Anticipated completion: 2011. *Centre for Obesity Research and Education, Monash / Department of Surgery, 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.*
- Cameron A.** The metabolic syndrome in Australia. Monash University. Anticipated completion: 2010. *Department of Epidemiology and Preventive Medicine, Monash / Baker IDI.*
- Cassar L.** Cardiac stem cells: roles of telomerase. Monash University. Anticipated completion: 2009. *Department of Immunology, Monash.*
- Chan F.** The role of the insulin gene in Type 1 diabetes. Monash University. Anticipated completion: 2009. *Department of Immunology, Monash.*
- Chan H-W.** Angiotensin II: stimulated EGFR transactivation: the role of HER 1, HER 2 and HER 4. Monash University. Completed 2008. *Baker IDI.*
- Chan J.** 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: 2010. *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.*
- 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.*
- Chellappah J.** Surveillance and modification cardiovascular risk factors in children and young adults. Monash University. Anticipated completion: 2009. *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: 2010. *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 YC.** Targeting stem cell to the sites of endothelial damage and atherosclerotic lesions. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*
- Chew C.** Antiretroviral toxic neuropathy in HIV patients: genetic and other risk factors. University of Western Australia. *Burnet.*
- Chin G.** The study, observation and improvements in Obstetric Clinical Handover to improve the efficacy and patient safety in this practice. Monash University. Anticipated completion: 2010. *Department of Epidemiology and Preventive Medicine, Monash.*
- Chung J.** Biological role of stress proteins in Type 2 diabetes. Monash University. Completed 2008. *Baker IDI.*
- 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.*
- Coghlan J.** The efficacy and safety of different peri-operative modalities of pain control in subacromial decompression and/or rotator cuff repair surgery for rotator cuff disease. Monash University. Anticipated completion: 2009. *Department of Epidemiology and Preventive Medicine, Monash.*
- Cohen E.** Evaluating quality of care in an oncology setting: symptom management and practices. Deakin University. Anticipated completion: 2009. *Nursing, Alfred.*
- Colles SL.** Impact of dietary and behavioural factors on obesity and response to treatment. Monash University. Completed 2008. *Centre for Obesity Research and Education, Monash / Department of Surgery, Monash.*
- Cook N.** Regulation of the renal sodium co-transporter NKCC2 by the AMP-activated protein kinase. University of Melbourne. Completed 2008. *Burnet.*
- Counihan N.** Interactions of hepatitis A virus with polarised epithelia. Monash University. Completed 2008. *Burnet.*
- Cowie B.** Epidemiology of hepatitis B virus infection in Victoria. University of Melbourne. Anticipated completion: 2009. *Infectious Diseases Unit, Alfred / Burnet.*
- Cowley D.** Molecular studies of the astrocyte reservoir of HIV-1 in the central nervous system. Monash University. Anticipated completion: 2009. *Department of Medicine, Monash / Burnet.*
- David C.** Development of a rotavirus vaccine. University of Melbourne. Completed 2008. *Department of Immunology, Monash.*
- Davies-Tuck M.** The effect of obesity and weight loss on OA of the knee. Monash University. Anticipated completion: 2010. *Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred.*
- Dean J.** Thiol disulfide exchange in HCV glycoproteins E1 and E2. Monash University. *Burnet.*
- Desmond C.** Interaction of hepatitis B virus and the adaptive immune system. Monash University. Anticipated completion: 2009. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash / Burnet.*
- Ditiatkowski M.** Macrophage migratory inhibitory factor and atherosclerosis. Monash University. Completed 2008. *Baker IDI.*
- Diug B.** How do social risk factors effect warfarin therapy? What are the social responsibilities and strategies in place to deal with these risk factors. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Dorning K.** Children as beneficiaries and participants in development programs: a case study in Burma (Myanmar). Victoria University. Completed 2008. *Burnet.*
- Dowrick A.** Development of an orthopaedic trauma registry to evaluate and monitor treatment effectiveness. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute, Alfred.*
- Drew B.** The role of HDL and dyslipidaemia in NO mediated glucose uptake in Type 2 diabetes. Monash University. Completed 2008. *Baker IDI / Department of Medicine, Monash / Department of Cardiovascular Medicine, Alfred.*

- 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*.
- Dunstan K.** Understanding the early interactions between vaccinia virus and dendritic cells – towards an enhanced vaccine vector. University of New South Wales. Completed 2008. *Burnet*.
- Dwyer J.** The role(s) of molecular signalling in the regulation of telomerase. Monash University. Anticipated completion: 2009. *Department of Immunology, Monash*.
- Egberts KJ.** The role of lifestyle factors in surgically induced weight loss. Monash University. Anticipated completion: 2012. *Centre for Obesity Research and Education, Monash / Department of Surgery, Monash*.
- Elsik M.** Effect of biventricular pacing on fibrosis markers in heart failure. Monash University. Anticipated completion: 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: 2010. *Department of Immunology, Monash / 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. *Melbourne Sexual Health Centre*.
- Filia S.** Monitoring and improving the outcomes and quality of life of people with psychosis – a biopsychosocial approach. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre*.
- Fillipas S.** Physical activity in people living with HIV/AIDS. Monash University. Anticipated completion: 2010. *Physiotherapy Department, Alfred / Department of Epidemiology and Preventive Medicine, Monash / Department of Rheumatology, Alfred / Burnet*.
- Flynn J.** Stimulation and maintenance of T cell responses in acute HCV infection. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash / Burnet*.
- Fradkin R.** Sports injury epidemiology. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash*.
- Freak-Poli R.** Global corporate challenge evaluation: The evaluation of a low-cost, low-impact physical-activity workplace intervention. Monash University. Anticipated completion: 2016. *Department of Epidemiology and Preventive Medicine, Monash*.
- Gani F.** Epigenetics in human health and disease lab. Monash University. Anticipated completion: 2010. *Department of Medicine, Monash*.
- Garrett A.** EVestG: responses in depressed patients. Monash University. Anticipated completion: 2009. *Alfred Psychiatry Research Centre*.
- Gartan K.** A complementary role for the tetraspanins Cd37 and TSSC6 in the immune system. Victoria University. Completed 2008. *Department of Immunology, Monash*.
- Ghasemzadeh M.** Examining the signalling mechanisms regulating platelet activation and in particular the role of PI3-kinases in this process. Monash University. Anticipated completion: 2009. *Australian Centre for Blood Diseases, Monash*.
- 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: 2010. *Monash Alfred Psychiatry Research Centre*.
- Giles M.** HIV, reproduction and women in Australia. Monash University. Completed 2008. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash / Burnet*.
- Goeman D.** Improving the quality and content of General Practice consultations for people with asthma, Monash University (part-time). 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*.
- Goldschlager T.** The biology and regeneration of traumatic versus degenerative cervical intervertebral discs. Monash University. Completed 2008. *Department of Neurosurgery, Alfred*.
- Gosling C.** Incidence, risk factors and outcomes of injuries in triathletes. Monash University. Anticipated completion: 2014. *Department of Epidemiology and Preventive Medicine, Monash*.
- Gouklahni H.** Functional interactions of the structural and non-structural proteins of HCV. Monash University. *Burnet*.
- Gray L.** Viral determinants in HIV-1 neurotropism and neurovirulence. University of Melbourne. *Burnet*.
- Groot C.** Examining auditory processing and affective prosody in schizophrenia patients and their relatives: a behavioural and neuroimaging study. University of Melbourne. Anticipated completion: 2010. *Monash Alfred Psychiatry Research Centre*.
- Haas S.** The pharmaco-epidemiology and cost-effectiveness of drugs indicated and contra-indicated in chronic heart failure. Monash University. Completed 2008. *Clinical Pharmacology Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash*.
- Habersberger J.** Proinflammatory effects of monomeric C reactive protein in vascular endothelium. Monash University. Anticipated completion: 2010. *Department of Medicine, Monash / Baker IDI*.
- Haghoie S.** EVestG: a diagnostic measure for schizophrenia. Monash University. Anticipated completion: 2009. *Monash Alfred Psychiatry Research Centre*.
- Hamlet 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: 2010. *Department of Immunology, Monash / Department of Medicine, Monash / Baker IDI*.
- Harriss L.** Dietary risks and alcohol as determinants of cardiovascular disease in the Melbourne Collaborative Cohort Study. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash*.
- Hawkes D.** Rearrangement of the virion plasma membrane in HIV-1. Monash University. *Burnet*.
- Hayes R.** An investigation of interventions aimed at enhancing sexual satisfaction in women. University of Melbourne. Completed 2008. *Melbourne Sexual Health Centre*.
- Hellewell S.** Pathophysiology and therapeutic strategies for the treatment of traumatic brain injury. Monash University. Anticipated completion: 2013. *Department of Medicine, Monash*.
- Herbert D.** The social and ethical dimensions of genetic testing a longitudinal of the haemophilia community. Monash University. Anticipated completion: 2010. *Department of Medicine, Monash*.
- Hodgson C.** Recruitment manoeuvres in adult ventilated patients. Monash University. Anticipated completion: 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. Anticipated completion: 2010. *Department of Immunology, Monash*.
- Huynh K.** The casual role of ROS induced damage in the development of LV dysfunction in the diabetic heart *in vitro*. 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*.
- Inkin-Blackman J.** War exposure and its health outcomes in service personnel. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash*.

- Inyang I.** Assessment of exposure to radiofrequency energy in an epidemiological cohort. Monash University. Anticipated completion: 2009. *Department of Epidemiology and Preventive Medicine, Monash.*
- Iser D.** Interactions between HIV and hepatitis B virus. University of Melbourne. Anticipated completion: 2009. *Infectious Diseases Unit, Alfred / Burnet.*
- Ivey M.** Regulation of proteoglycan synthesis in human vascular smooth muscle by agonists of G protein coupled receptors. Monash University. Completed 2008. *Baker IDI.*
- Iyngkaran P.** The renovascular axis in cardiovascular diseases: clinicopathophysiological approach into diagnostics and therapeutics in reference to cardiac failure. Monash University. Anticipated completion: 2011. *Clinical Pharmacology Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- Jackobson A.** The effect of transcranial direct current stimulation on dreaming. Monash University. Anticipated completion: 2010. *Alfred Psychiatry Research Centre.*
- Jennings P.** Analgesia in the Victorian pre-hospital setting. Monash University. Anticipated completion: 2015. *Department of Epidemiology and Preventive Medicine, Monash.*
- Jones B.** Role of cognitive emotional regulation in adjustment following traumatic injury. University of Melbourne. Completed 2008. *National Trauma Research Institute, Alfred.*
- Jones K.** Early stage of HIV infections. Monash University. Completed 2008. *Burnet.*
- Joshua N.** Holistic processing and face perception in schizophrenia. University of Melbourne. Anticipated completion: 2009. *Monash Alfred Psychiatry Research Centre.*
- Karipidis K.** War stressors, mental health and well-being outcomes in Australian veterans and service personnel. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash.*
- Karunaratne A.** Ethical aspects of human subject research. Monash University. Completed 2008. *Department of Medicine, Monash.*
- Katsara M.** Immune responses to myelin peptide analogues conjugated to mannan in animal models of MS. University of Patras, Greece. Completed 2008. *Burnet.*
- 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.*
- Kelly V.** The effects of heterogeneity and airway closure on airway distensibility measurements in asthma. Monash University. Anticipated completion: 2009. *Department of Allergy, Immunology and Respiratory Medicine, Alfred.*
- Kemp W.** Vascular mediators of portal hypertension and the role of urotensin II. Monash University. Completed 2008. *Clinical Pharmacology Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash / Department of Gastroenterology, 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: 2010. *Department of Cardiovascular Medicine, Alfred / Baker IDI / Department of Medicine, Monash.*
- Khoury G.** Viral reservoirs: role of naïve T-cells in pathogenesis of T-cell decline and longterm persistence of HIV infection. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash.*
- Ko H.** Induction of immune tolerance for the treatment of autoimmunity. Monash University. Anticipated completion: 2009. *Department of Immunology, Monash.*
- Kowalski G.** The role of IL-10 in macrophages in obese insulin resistance mouse models. Monash University. Anticipated completion: 2011. *Baker IDI.*
- La J.** Small molecule inhibitors targeting HIV-1 reverse transcriptase dimerisation. Monash University. *Burnet.*
- Lai Z.** Characterisation of ectodomain shedding of angiotensin-converting enzyme 2. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash.*
- Lam L.** The diagnosis and treatment of patients with acute decompensated heart failure. Monash University. Anticipated completion: 2010. *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.*
- Laslett A.** The role of alcohol in child protection notifications, investigations and interventions. Monash University. *Burnet.*
- Latour P.** The optimization of an immunotherapy to treat persistent HCV infection. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash / Burnet.*
- Lawson M.** Safety and quality in surgical and anaesthetic skills: an investigation of the role of insight in the performance of surgeons and anaesthetists in training. Monash University. Anticipated completion: 2014. *Monash Alfred Psychiatry Research Centre.*
- Laycock R.** Transient processing in reading: is the magnocellular advantage essential for fluid reading? La Trobe University. Completed 2008. *Monash Alfred Psychiatry Research Centre.*
- Leder K.** Infections in travellers. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash.*
- Lee A.** Gastro-oesophageal reflux in bronchiectasis and chronic obstructive pulmonary disease. University of Melbourne. Completed 2008. *Department of Allergy, Immunology and Respiratory Medicine / Physiotherapy Department, Alfred.*
- Lee G.** 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 PS.** 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.*
- Lee S.** Omega-3 fatty acids and recovery from cardiovascular risk. Monash University. Anticipated completion: 2010. *Department of Cardiovascular Medicine, Alfred.*
- Leeansyah E.** The effect of HIV-1 infection on Fc-gamma receptor signalling and function. Monash University. Completed 2008. *Burnet.*
- Lekawanvijit S.** Interaction between stem cell and antifibrotic drug therapy in heart failure. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- LeMasurier J.** The effect of particles on acute allergic airway inflammation. Monash University. Anticipated completion: 2011. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Immunology, Monash.*
- Lewis M.** Methodological considerations in cerebral autoregulation assessment. Monash University (part-time). Anticipated completion: 2014. *Department of Neurosurgery, Alfred / Department of Surgery, Monash.*
- Lewis S.** Public health interventions for obesity: understanding the perspectives of overweight individuals. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash.*
- Lichtfuss G.** Quantification of HIV viral fitness and the relationship to treatment outcomes. Monash University. Anticipated completion: 2012. *Department of Medicine, Monash / Burnet.*
- Lim M.** Sexually transmitted infections and risk behaviours: novel surveillance and health promotion approaches. Monash University. Anticipated completion: 2009. *Department of Epidemiology and Preventive Medicine, Monash / Burnet.*
- Lim R.** Candidate based and proteomic based approaches for detection of early stage biomarkers of ovarian cancer. University of Melbourne. Completed 2008. *Baker IDI.*
- Liu Y.** Macrophage migration inhibitory factor (MIF): pathological and therapeutic significance in cardiac ischemic injury. Monash University. Anticipated completion: 2010. *Department of Medicine, Monash.*

- Livingston M.** Alcohol outlets and their relationship to harm. University of Melbourne. *Burnet*.
- Loughnan M.** The heart of the matter: geographical insights into the environmental and social epidemiology of acute myocardial infarction in Melbourne, Australia. Monash University. Completed 2008. *National Trauma Research Institute, Alfred*.
- 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*.
- Lunke S.** Epigenetic regulation of the human survival of motor neuron gene in spinal muscular atrophy. Monash University. Anticipated completion: 2012. *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. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash*.
- Malakooti N.** The role of neuroprotectants in secondary tissue damage after traumatic brain injury. Monash University (part-time). Anticipated completion: 2015. *National Trauma Research Institute, Alfred / Department of Medicine, Monash*.
- Mariani J.** Gene therapy in heart failure. Monash University. Completed 2008. *Department of Cardiovascular Medicine, Alfred / Baker IDI / Department of Medicine, Monash*.
- Markowski J.** Chronic depression – an investigation of personality development experiences and responses to TMS. Australian Catholic University. Anticipated completion: 2009. *Monash Alfred Psychiatry Research Centre*.
- Maslin C.** Effect of HIV-1 infection on the capacity of monocyte subsets to traffic into and out of tissues. Monash University. Completed 2008. *Department of Medicine, Monash*.
- Mathiylagan M.** Epigenetics in human health and disease lab. Monash University. Anticipated completion: 2010. *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*.
- McCauley K.** Management of psychosis in pregnancy. Monash University. Completed 2008. *Monash Alfred Psychiatry Research Centre*.
- 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*.
- McKay F.** HIV positive refugee resettlement in Australia. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash*.
- McKenzie D.** The development, comparison and application of brief psychological diagnostic and screening tests by statistical and machine learning methods. Monash University. Anticipated completion: 2010. *Department of Epidemiology and Preventive Medicine, Monash*.
- McTier L.** Defining patient participation in treatment in acute care context. Deakin University. Anticipated completion: 2010. *Nursing, Alfred*.
- McWilliams T.** Lung post airway transplant remodelling. Monash University. Completed 2008. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Medicine, Monash*.
- Medi C.** Atrial remodelling in pulmonary and systemic hypertension. University of Melbourne. Anticipated completion: 2009. *Department of Cardiovascular Medicine, Alfred*.
- Merati TM.** Molecular epidemiology of HIV infection in Indonesia. Udayana University, Bali. Completed 2008. *Burnet*.
- Mijch A.** Measuring and managing viral breakthrough in HIV disease. Monash University (part time). Anticipated completion: 2009. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash*.
- Missen M.** Molecular characterisation of centerin, a germinal centre cell serpin. Monash University. Completed 2008. *Australian Centre for Blood Diseases, Monash*.
- Mitra B.** Transfusion practice in trauma resuscitation. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash*.
- 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*.
- Moje C.** Infection surveillance – evaluation and comparative analysis using routinely collected data sets. 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. *Department of Medicine, Monash*.
- Morrissey O.** Invasive aspergillosis in patients post haematopoietic stem cell transplantation and in patients with acute leukaemia: Current epidemiology and methods of improving survival. Monash University. Completed 2008. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash*.
- Mukherjee S.** Nitric oxide and oxidative stress in human hypertension. Monash University. Completed 2008. *Department of Cardiovascular Medicine, Alfred / Department of Medicine, Monash / Baker IDI*.
- Murphy A.** Soluble mediators of monocyte activation. Monash University. Completed 2008. *Department of Cardiovascular Medicine, Alfred / Department of Medicine, Monash / Baker IDI*.
- Nair R.** Role of angiogenesis in the pathogenesis of atherosclerosis. Monash University (part time). Anticipated completion: 2012. *Department of Medicine, Monash / Department of Cardiovascular Medicine, Alfred / Baker IDI*.
- Nataraj S.** Bioethics and HIV interventions. Monash University. Anticipated completion: 2010. *Department of Epidemiology and Preventive Medicine, Monash*.
- Neill B.** The role of interleukin-6 family cytokines in the regulation of PGC-1 $\alpha$  expression and activity in skeletal muscle cells. RMIT University. Completed 2008. *Baker IDI*.
- Neill E.** Investigating the neural basis of memory impairments in schizophrenia. Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre*.
- Neilson S.** The impact of benzodiazepines on opioid substitution treatment. Monash University. Completed 2008. *Burnet*.
- Newton E.** Social cognition, perception and temperament: associations with social adjustment in adolescents and young adults. Monash University. Anticipated completion: 2010. *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: 2009. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Immunology, Monash*.
- Nguyen T.** Prevention of cytomegalovirus disease after stem cell transplantation. Monash University. Anticipated completion: 2009. *Department of Immunology, Monash*.
- Nicholls C.** Regulation and inhibition of telomerase in cancer cells. Monash University. Anticipated completion: 2011. *Department of Immunology, Monash*.
- Nicholls H.** Inflammation in insulin signalling. RMIT University. Anticipated completion: 2009. *Baker IDI*.
- O'Brien L.** Determining readiness of people with acute brain injury to engage in hand therapy treatment. Monash University. Anticipated completion: 2010. *Occupational Therapy Service, Alfred*.
- O'Connor D.** Understanding delusions in Alzheimer's disease. University of Melbourne. Anticipated completion: 2009. *Monash Alfred Psychiatry Research Centre*.
- Ono A.** Investigation of mechanisms underlying thrombus stability. Monash University. Anticipated completion: 2009. *Australian Centre for Blood Diseases, Monash*.

- Ooi J.** Epigenetic modification and the role of chromatin modifying determinants in the hypertrophied heart. Monash University. Anticipated completion: 2012. *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. *Department of Epidemiology and Preventive Medicine, Monash.*
- O'Toole J.** Water reuse and alternative water sources: attitudes, practices, risk assessment and human health outcomes. Monash University. Anticipated completion: 2009. *Department of Epidemiology and Preventive Medicine, Monash.*
- Panjari M.** Efficacy and safety of exogenous DHEA in postmenopausal women. Monash University. Anticipated completion: 2009. *Women's Health Program, Monash / Department of Medicine, Monash.*
- Pedrana A.** On the scene: the epidemiology of HIV among men who have sex with men (MSM) in Victoria. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash / Burnet.*
- Peut V.** The impact of anti-envelope CD8 T cell responses on SIV and HIV infection. Completed 2008. University of Melbourne. *Infectious Diseases Unit, Alfred.*
- Peyton P.** The effect of V/Q inhomogeneity on the second gas effect during anaesthesia. University of Melbourne. Anticipated completion 2009. *Department of Allergy, Immunology and Respiratory Medicine, Alfred.*
- Pham Y.** Atherosclerosis and fibrosis: role of cell division auto antigen 1. Monash University. Anticipated completion: 2009. *Department of Immunology, Monash / Baker IDI.*
- Pinto A.** Molecular regulation of telomerase. Monash University. Completed 2008. *Department of Immunology, Monash.*
- Potts J.** Epigenetic modifications in response to double-strand breaks. Monash University. Anticipated completion: 2015. *Department of Medicine, Monash / Baker IDI.*
- Prabhu S.** To develop a non-invasive mechanism of identifying unstable atheromatous plaques from stable plaques, as well as intravascular thrombosis, using MRI technology. Monash University. Anticipated completion: 2010. *Department of 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. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*
- Racunica T.** The effect of lifestyle factors on knee cartilage volume in healthy subjects. Monash University. Completed 2008. *Department of Rheumatology, Alfred.*
- Rajasuriar R.** Biological determinants of immune reconstitution. Monash University. Anticipated completion: 2010. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash / Burnet.*
- Roche M.** Understanding HIV-1 entry; insights through the envelope protein. Monash University. *Department of Medicine, Monash / Burnet.*
- Rodrigo S.** Health effects of increased usage of recycled water and alternative water sources. Monash University. Anticipated completion: 2010. *Department of Epidemiology and Preventive Medicine, Monash.*
- Ryan C.** The HIV epidemics in Australia, Papua New Guinea and the Pacific Islands – a molecular epidemiological investigation. Monash University. Anticipated completion: 2009. *Department of Medicine, Monash / Burnet.*
- Scholzen A.** Modulation of the human immune system by particulate vaccines and the malaria parasite *Plasmodium falciparum*. Monash University. Completed 2008. *Department of Immunology, Monash.*
- Selathurai A.** CD4+ CD25+ T cells regulating atherosclerosis: mechanisms and therapeutic targets. Monash University. Anticipated completion: 2010. *Baker IDI.*
- Semple B.** Chemokines in secondary tissue damage following traumatic brain injury. Monash University. Anticipated completion: 2010. *Department of Medicine, Monash / National Trauma Research Institute, Alfred.*
- Shah S.** Determinants of cognitive function in women across the adult life span. Monash University. Completed 2008. *Women's Health Program, Monash / Monash Alfred Psychiatry Research Centre.*
- Sheeran FL.** The role of mitochondria in cardiovascular health and disease. Monash University. Completed 2008. *Department of Surgery, Monash / Department of Cardiothoracic Surgery, Alfred / Baker IDI.*
- Shield K.** Describing an *in vitro* model for ovarian cancer metastasis. Deakin University. Completed 2008. *Baker IDI.*
- Shoushtarian M.** An investigation of Parkinson's disease using electrovestibulography. Monash University. Completed 2008. *Monash Alfred Psychiatry Research Centre.*
- Slater J.** Traumatic brain injury, neurotrauma and road traffic crashes. Monash University. Anticipated completion: 2012. *Department of Epidemiology and Preventive Medicine, Monash.*
- Smith B.** Novel approaches for the diagnosis and management of atherosclerosis. Monash University. Anticipated completion: 2011. *Department of Medicine, Monash / Baker IDI.*
- Smyth R.** Recombination and the evolution of HIV. Monash University. *Burnet.*
- Snelgrove S.** The Role of beta-2 micro-globulin in Type 1 diabetes. Monash University. Anticipated completion: 2009. *Department of Immunology, Monash.*
- 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. Anticipated completion: 2010. *Australian Centre for Blood Diseases, Monash.*
- Soufan C.** The effect of physical activity in the knee joint: is it good or bad? Monash University. Anticipated completion: 2009. *Department of Rheumatology, 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.*
- Stebbing M.** Current issues in risk perception and the transmission of ideas of risk. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash.*
- Sterjovski J.** Pathogenesis of CCR5-restricted human immunodeficiency virus type 1. Monash University. Anticipated completion: 2009. *Burnet / Department of Medicine, Monash.*
- 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.*
- Stuckey R.** Evaluation of occupational health for light vehicle use. Monash University. Anticipated completion: 2009. *Department of Epidemiology and Preventive Medicine, Monash.*
- Szollosi I.** Characteristics of sleep disordered breathing in heart failure. Monash University. Anticipated completion: 2009. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Medicine, Monash.*
- Taechalertpaisam T.** Investigation of human erythrocyte invasion by *Plasmodium falciparum*. University of Melbourne. *Burnet.*
- Tan A.** Pathological pathways determined by the interaction between advanced glycation receptors in diabetic nephropathy. University of Melbourne. Anticipated completion: 2010. *Baker IDI.*
- Teichtahl A.** The determinants of articular cartilage health. Monash University. Anticipated completion: 2016. *Department of Epidemiology and Preventive Medicine, Monash.*
- Teo JW.** Design of novel 'intelligent' drugs for the treatment of thrombosis and myocardial infarction. Monash University. Anticipated completion: 2013. *Department of Medicine, Monash.*
- 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: 2010. *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: 2011. *Department of Epidemiology and Preventive Medicine, Monash / Department of Anaesthesia and Perioperative Medicine, Alfred.*

- Thompson J.** Characterisation of the IGF dependent and independent actions of IGF-binding protein G. Monash University. Anticipated completion: 2010. *Baker IDI / Department of Endocrinology and Diabetes, Alfred / Department of Medicine, Monash.*
- Thomson N.** Public health implications of amphetamine use epidemic in Northern Thailand. Monash University. Anticipated completion: 2009. *Department of Epidemiology and Preventive Medicine, Monash.*
- Tippett E.** Contribution of monocyte subsets to HIV-1 viral reservoirs. Monash University (part time). Anticipated completion: 2011. *Department of Medicine, Monash / Burnet.*
- To K.** The mechanisms of action and suppression of natural killer T cells in atherosclerosis. Monash University. Anticipated completion: 2009. *Department of Immunology, Monash / Baker IDI.*
- Tong Y.** VLP for improved immune response to HIV-1 gp140. Monash University. Anticipated completion: 2009. *Department of Immunology, Monash / Burnet.*
- Tran H.** The development of COPD in a cohort of childhood asthma. Monash University. Anticipated completion: 2010. *Department of Allergy, Immunology and Respiratory Medicine, Alfred.*
- Tran L.** Therapeutic targeting of signalling pathways in cardiovascular disease. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*
- Tu YG.** The anti-proliferative activity of CDA1 is mediated by p53- and TGF- $\beta$ -signalling pathways. Monash University. Completed 2008. *Department of Immunology, Monash / Baker IDI.*
- Upton D.** A functional measure of prefrontal plasticity – cognitive performance on a Stroop negative priming task post rTMS. Monash University. Completed 2008. *Monash Alfred Psychiatry Research Centre.*
- Vaddadi G.** Sympathetic neurobiology of recurrent syncope. Monash University. Anticipated completion: 2010. *Department of Cardiovascular Medicine, Alfred / 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: 2010. *Department of Surgery, Monash / Department of Cardiothoracic Surgery, Alfred.*
- van Hoeven V.** Structural and biochemical studies on HIV assembly determinants. Utrecht University. Completed 2008. *Burnet.*
- Vinh A.** Assessment of novel inhibitors of matrix metalloproteinase in abdominal aortic aneurysm formation. Monash University. Completed 2008. *Australian Centre for Blood Diseases, Monash.*
- Vlahos K.** Investigation into manipulation of tolerance mechanisms as potential therapy for autoimmune disease and organ transplantation. Monash University. Completed 2008. *Department of Immunology, Monash.*
- Wade J.** Mechanisms of direct and bystander cell death by CCR5-restricted HIV-1 envelope glycoproteins. University of Melbourne. *Burnet.*
- Walker J.** Chlamydia incidence and re-infection rates: a longitudinal study of young Australian women. University of Melbourne. *Melbourne Sexual Health Centre.*
- Walls H.** Effectiveness, cost-effectiveness and equity of obesity prevention strategies. Monash University. Anticipated completion: 2010. *Department of Epidemiology and Preventive Medicine, Monash.*
- Walsh N.** Psychosocial, environmental and pharmacotherapy determinants of antiviral treatment in injecting drug users. Monash University. Anticipated completion: 2009. *Department of Epidemiology and Preventive Medicine, Monash.*
- Wang Q.** An assessment of the medical and psychosocial outcomes of adolescents with congenital heart disease. Monash University. Anticipated completion: 2009. *Monash Alfred Psychiatry Research Centre.*
- 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.*
- Warner N.** *In vitro* phenotypic analysis of hepatitis B virus variants provides new insights into HBV replication. University of Melbourne. Completed 2008. *Infectious Diseases Unit, Alfred.*
- Warning J.** Microtransfusion and viral exposure in infants born to HIV-infected women. University of New South Wales. Completed 2008. *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.*
- Weller C.** Chronic wounds: outcomes for people attending specialist wound clinics. Monash University. Anticipated completion: 2010. *Department of Epidemiology and Preventive Medicine, Monash.*
- Westein E.** Thrombosis and haemostasis: platelet biology. Monash University. Completed 2008. *Department of Medicine, Monash / Australian Centre for Blood Diseases, Monash.*
- Westhorpe C.** Effects of HIV-1 infection *in vitro* on transendothelial migration by cells of the macrophage lineage. Monash University. Completed 2008. *Department of Immunology, Monash / Burnet.*
- White J.** Modulating cellular DNA damage responses by altering the chromosomal damage. University of Melbourne (part-time). Anticipated completion: 2010. *Baker IDI.*
- Wijayarathne P.** Osteoarthritis – factors affecting patella cartilage volume in healthy population. Monash University. Anticipated completion: 2009. *Department of Epidemiology and Preventive Medicine, Monash.*
- Wijemunige R.** Improving the prevention and early detection of secondary brain injury in severe TBI patients. Monash University. Anticipated completion: 2010. *Department of Neurosurgery, Alfred / Intensive Care Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*
- Willis C.** The practicality of using indicators to assess quality within health systems. Monash University. Anticipated completion: 2010. *Department of Epidemiology and Preventive Medicine, Monash.*
- Wolfgang B.** The role of emotion regulation in recovery from trauma. University of Melbourne. Completed 2008. *National Trauma Research Institute, Alfred.*
- Wong SS.** The function of the M protein of Dengue virus. University of Melbourne. *Burnet.*
- Wong V.** New strategies and agents for clot-targeted anticoagulation with lower bleeding risk. Monash University. Anticipated completion: 2010. *Baker IDI.*
- Wright E.** Neuropathogenesis of HIV dementia. Monash University (part time). Anticipated completion: 2009. *Infectious Diseases Unit, Alfred / Department of Medicine, Monash / Burnet.*
- Yallop J.** Multi-centre national and multi-national clinical trials in chronic disease – methodological considerations. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash.*
- Yap SH.** Role of mutations in the connection domain of the HIV reverse transcriptase in drug resistance. Monash University. *Burnet.*
- Young A.** Hypoxia and hypercapnia in cystic fibrosis – mechanisms, clinical effects and treatment. Monash University. Completed 2008. *Department of Allergy, Immunology and Respiratory Medicine, Alfred / Department of Medicine, Monash.*
- Yu K.** Implementing a core dataset for the reporting of medication incidents. Monash University. Anticipated completion: 2009. *Pharmacy Department, Alfred.*
- Yuen YC.** A novel haemodynamic role for interleukin-6 in the regulation of skeletal muscle blood flow. Monash University. Completed 2008. *Baker IDI.*
- Zaffino L.** Role of FoxO proteins in the regulation of skeletal muscle anabolism, catabolism and insulin sensitivity. Monash University. Anticipated completion: 2009. *Baker IDI.*
- Zazryn T.** A prospective study of cumulative brain injury in boxers. Monash University. Completed 2008. *Department of Epidemiology and Preventive Medicine, Monash / National Trauma Research Institute / Emergency Medicine, Alfred.*
- Ziebell J.** Cell apoptosis and inflammation following focal closed head injury. Monash University. Anticipated completion: 2009. *National Trauma Research Institute, Alfred / Department of Medicine, Monash.*

**Zimmet H.** Stem cells in treatment of heart failure. Monash University. Anticipated completion: 2009. *Clinical Pharmacology Unit, Alfred / Department of Epidemiology and Preventive Medicine, Monash.*

**Zoma E.** Epidemiological modelling of cardiovascular disease and prevention strategies in patients with metabolic syndrome. Monash University. Anticipated completion: 2011. *Department of Epidemiology and Preventive Medicine, Monash.*

## OTHER DOCTORATES

**Adamides A.** Intensive monitoring of severe brain injury. Doctor of Medicine, Monash University. Anticipated completion: 2009. *Department of Neurosurgery, Alfred / Department of Surgery, Monash.*

**Anderson J.** Examining cognition function in patients with the orthostatic intolerance. Doctor of Psychology, Monash University. Completed 2008. *Department of Cardiovascular Medicine, Alfred / Baker IDI.*

**Buttigieg K.** An investigation of the psychosocial correlates to optimal health management in young people with insulin-dependent diabetes mellitus (IDDM). Doctor of Psychology, Monash University. Anticipated completion: 2010. *Monash Alfred Psychiatry Research Centre.*

**Cameron C.** A cognitive investigation of belief formation in individuals with high schizotypy. Doctor of Clinical Psychology, University of Melbourne. Completed 2008. *Monash Alfred Psychiatry Research Centre.*

**Cox A.** The schoolyard participation project. Doctor of Occupational Therapy, La Trobe University. Anticipated completion: 2010. *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: 2010. *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: 2009. *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.*

**Gordon A.** The effect of treatment with pegylated interferon alpha-2a plus ribavirin on portal haemodynamics, virologic response and liver histology in patients with chronic hepatitis C and compensated cirrhosis. Doctor of Medicine, Monash University. Completed 2008. *Department of Gastroenterology, Alfred.*

**Halley S.** Psychosocial outcomes following stroke. Doctor of Psychology, Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*

**Incedon E.** Psychosocial predictors of overweight and obesity in children and preadolescents. Doctor of Psychology, Monash University. Anticipated completion: 2011. *Monash Alfred Psychiatry Research Centre.*

**Ireland S.** Optimising the monitoring and management of hypothermia in adult major trauma patients. Doctor of Nursing, La Trobe University. Anticipated completion: 2010. *Nursing, Alfred / Emergency Medicine, Alfred.*

**Khan F.** Rehabilitation in multiple sclerosis. Doctor of Medicine, University of Melbourne. Completed 2008. *Rehab, Aged and Community Care, Caulfield Hospital.*

**Lee A.** The relationship between current symptoms of mental illness and childhood abuse in women. Doctor of Psychology, Monash University. Completed 2008. *Monash Alfred Psychiatry Research Centre.*

**Lee S.** Spatial and melodic measures of right hemisphere memory functioning. Doctor of Psychology, Monash University. Completed 2008. *Monash Alfred Psychiatry Research Centre.*

**Leet A.** Myocardial fibrosis and function after heart transplantation. Doctor of Medicine, Monash University (part time). Anticipated completion: 2014.

*Department of Medicine, Monash / Department of Cardiovascular Medicine, Alfred.*

**Lim S.** Pain sensitivity in patients with Parkinson's disease. Doctor of Medicine, University of Melbourne. Completed 2008. *Rehab, Aged and Community Care, Caulfield Hospital.*

**Maggie H.** Examining dialectical behaviour therapy in a community setting in patients with primary diagnosis of borderline personality disorder. Doctor of Psychology, Deakin University. Anticipated completion: 2009. *Department of Psychology, Alfred.*

**Marrone J.** A look at two opposing STI trends in Australia: Increasing HIV and decreasing *Trichomonas vaginalis*. Doctor of Public Health, University of Melbourne. Completed 2008. *Melbourne Sexual Health Centre.*

**Montjoy R.** Cognitive biases associated with belief formation in anorexia nervosa. Doctor of Clinical Psychology, La Trobe University. Anticipated completion: 2009. *Monash Alfred Psychiatry Research Centre.*

**Ng WH.** Glial cell line-derived neurotrophic factor family of ligands is a mitogenic agent in human glioblastoma and confers resistance in a ligand-specific fashion. Doctor of Medicine, National University of Singapore. Anticipated completion: 2010. *Department of Neurosurgery, Alfred.*

**O'Halloran C.** The localization and fractionation of executive attention and social cognition within the cerebellum following cerebellar infarction. Doctor of Clinical Neuropsychology, La Trobe University. Anticipated completion: 2012. *Department of Neurology, Alfred.*

**Ong S.** Memory and learning in mild cognitive impairment: contribution of working memory. Doctor of Clinical Neuropsychology, La Trobe University. Anticipated completion: 2009. *Department of Neurology, Alfred / Caulfield Hospital.*

**Plowright B.** Trauma in older adults: cognitive outcome and recovery. Doctor of Clinical Neuropsychology, La Trobe University. Completed 2008. *National Trauma Research Institute, Alfred*

**Roberts K.** People's experience of return to work following upper limb amputation. Doctor of Occupational Therapy, La Trobe University. Anticipated completion: 2012. *Caulfield Hospital.*

**Roffel K.** Explicit and implicit memory functioning in PTSD: an event related potential investigation. Doctor of Psychology, University of Melbourne. Completed 2008. *National Trauma Research Institute, Alfred.*

**Segrave R.** EEG, alpha and depression. Doctor of Clinical Neuropsychology, Monash University. Anticipated completion: 2010. *Monash Alfred Psychiatry Research Centre.*

**Sheehan J.** The development and evaluation of a 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.*

**Smit DeV.** Doctor of Medicine, Monash University. Completed 2008. *Emergency Medicine, Alfred.*

**Smith L.** Financial decision-making and younger onset dementia. Doctor of Clinical Psychology, La Trobe University. Anticipated completion: 2009. *Caulfield Hospital.*

**Tempany M.** An investigation of the conceptions of mental health and well being in Sudanese youth. Doctor of Psychology, Monash University. Completed 2008. *Monash Alfred Psychiatry Research Centre.*

**Ventieri D.** The effect of an educational intervention on the knowledge and attitudes toward mental illness in pre-adolescents. Doctor of Psychology, Monash University. Completed 2008. *Monash Alfred Psychiatry Research Centre.*

# PUBLICATIONS

## JOURNAL ARTICLES

**Abbott AL, Donnan GA.** Does the 'high risk' patient with asymptomatic carotid stenosis really exist? *Eur J Vasc Endovasc Surg* 2008;35(5):524-33. Review.

**Absetz P, Valve R, Oldenburg B, Heinonen H, Nissinen A, Fogelhom M, Ilvesmaki V, Talja M, Uutela A.** Outcomes of diabetes prevention study partly achieved by lifestyle intervention. *Suomen Laakarilehti* 2008;22:2065-70.

**Ackerly T, Gesoand M, Smith R.** Radiotherapy DICOM packet sniffing. *Australas Phys Eng Sci Med* 2008;31(3):243-51.

**ADVANCE Collaborative Group, Patel A, MacMahon S, Chalmers J, Neal B, Billot L, Woodward M, Marre M, Cooper M, Glasziou P, Grobbee D, Hamet P, Harrap S, Heller S, et al.** Intensive blood glucose control and vascular outcomes in patients with Type 2 diabetes. *N Engl J Med* 2008;358(24):2560-72.

**Affandi JS, Price P, Imran D, Yuniastuti E, Djauzi S, Cherry CL.** Can we predict neuropathy risk before stavudine prescription in a resource-limited setting? *AIDS Res Hum Retroviruses* 2008;24(10):1281-4.

**Agrotis A.** Simvastatin, an inhibitor of epithelial-to-mesenchymal transition in experimental atherosclerotic renovascular disease? *J Hypertens* 2008;26(8):1553-5. Editorial.

**Ahimastos AA, Dart AM, Kingwell BA.** Angiotensin II blockade in Marfan's syndrome. *N Engl J Med* 2008;359(16):1732. author reply 1733-4.

**Ahimastos AA, Dart AM, Lawler A, Blombery PA, Kingwell BA.** Reduced arterial stiffness may contribute to angiotensin-converting enzyme inhibitor induced improvements in walking time in peripheral arterial disease patients. *J Hypertens* 2008;26(5):1037-42.

**Ahrens I, Ellwanger C, Smith BK, Bassler N, Chen YC, Neudorfer I, Ludwig A, Bode C, Peter K.** Selenium supplementation induces metalloproteinase-dependent L-selectin shedding from monocytes. *J Leukoc Biol* 2008;83(6):1091-8.

**Ahrens I, Peter K.** Humanizing mouse thrombi. *Nat Biotechnol* 2008;26(1):62-3. Review.

**Ahrens I, Peter K.** Therapeutic integrin inhibition: allosteric and activation-specific inhibition strategies may surpass the initial ligand-mimetic strategies. *Thromb Haemost* 2008;99(5):803-4. Comment.

**Aitken C, Higgs P, Bowden S.** Differences in the social networks of ethnic Vietnamese and non-Vietnamese injecting drug users and their implications for blood-borne virus transmission. *Epidemiol Infect* 2008;136(3):410-6.

**Aitken C, Higgs P, Hellard M.** Buprenorphine injection in Melbourne, Australia – an update. *Drug Alcohol Rev* 2008;27(2):197-9.

**Aitken C, Power R, Dwyer R.** A very low response rate in an online survey of medical practitioners. *Aust N Z J Public Health* 2008;32(3):288-9.

**Aitken C, Tracy S, Revill P, Bharadwaj M, Bowden S, Winter R, Hellard M.** Consecutive infections with different hepatitis C virus genotypes in an injecting drug user. *J Clin Virol* 2008;41(4):293-6.

**Aitken C, Wain D, Lubman D, Hides L, Hellard M.** Mental health screening among injecting drug users outside treatment settings – implications for research and health services. *Mental Health and Substance Use: Dual Diagnosis* 2008;1(2):99-103.

**Aitken CK, Lewis J, Tracy SL, Spelman T, Bowden D S, Bharadwaj M, Drummer H, Hellard M.** High incidence of hepatitis C virus reinfection in a cohort of injecting drug users. *Hepatology* 2008;48(6):1746-52.

**Aitken LM, Currey J, Marshall AP, Elliott D.** Discrimination of educational outcomes between differing levels of critical care programs by selected stakeholders in Australia: a mixed method approach. *Intensive Crit Care Nurs* 2008;24(2):68-77.

**Ajani AE, Reid CM, Duffy SJ, Andrianopoulos N, Lefkovits J, Black A, New G, Lew R, Shaw JA, Yan BP, Gurvitch R, Al-Fiadh A, Brennan AL, Clark DJ.** Outcomes after percutaneous coronary intervention in contemporary Australian practice: insights from a large multicentre registry. *Med J Aust* 2008;189(8):423-8.

**Al Salmi I, Hoy WE, Kondalsamy-Chennakes S, Wang Z, Healy H, Shaw JE.** Birth weight and stages of CKD: a case-control study in an Australian population. *Am J Kidney Dis* 2008;52(6):1070-8.

**Al Salmi I, Hoy WE, Kondalsamy-Chennakesavan S, Wang Z, Gobe GC, Barr EL, Shaw JE.** Disorders of glucose regulation in adults and birth weight: results from the Australian Diabetes, Obesity and Lifestyle (AusDiab) Study. *Diabetes Care* 2008;31(1):159-64.

**Alberti KG, Zimmet PZ.** Should we dump the metabolic syndrome? No. *BMJ* 2008;336(7645):641. Letter.

**Alem L, Joseph M, Kethers S, Steele C, Wilkinson R.** Information environments for supporting consistent registrar medical handover. *HIM J* 2008;37(1):9-25.

**Allen K, Guy R, Leslie D, Goller J, Medland N, Roth N, Lewis J, Hellard M.** The rise of infectious syphilis in Victoria and the impact of enhanced clinical testing. *Aust N Z J Public Health* 2008;32(1):38-42.

**Allen KJ, Mifsud NA, Williamson R, Bertolino P, Hardikar W.** Cell-mediated rejection results in allograft loss after liver cell transplantation. *Liver Transpl* 2008;14(5):688-94.

**Amirahmadi F, Turnbull L, Du XJ, Graham RM, Woodcock EA.** Heightened  $\alpha_{1A}$ -adrenergic receptor activity suppresses ischaemia/reperfusion-induced  $\text{Ins}(1,4,5)\text{P}_3$  generation in the mouse heart: a comparison with ischaemic preconditioning. *Clin Sci* 2008;114(2):157-64.

**Anand K, Shah B, Gupta V, Khaparde K, Pau E, Menon GR, Kapoor SK.** Risk factors for non-communicable disease in urban Haryana: a study using the STEPS approach. *Indian Heart J* 2008;60(1):9-18.

**Anderson DJ, Richet H, Chen LF, Spelman DW, Hung YJ, Huang AT, Sexton DJ, Raoult D.** Seasonal variation in *Klebsiella pneumoniae* bloodstream infection on 4 continents. *J Infect Dis* 2008;197(5):752-6.

**Anderson J, Hoy J, Hillman R, Gittleson C, Hartel G, Medley G, Bassler R.** Abnormal anal cytology in high-risk human papilloma virus infection in HIV-infected Australians. *Sex Transm Infect* 2008;84(2):94-6.

**Anderson JFI, Saling MM, Srikanth VK, Thrift AG, Donnan GA.** Individuals with first-ever clinical presentation of a lacunar infarction syndrome: Is there an increased likelihood of developing mild cognitive impairment in the first 12 months after stroke? *J Neuropsychol* 2008;2(2):373-385.

**Andrew M, Parr JR, Stacey R, Rosenfeld JV, Hart Y, Pretorius P, Nijhawan S, Zaiwalla Z, McShane MA.** Transcallosal resection of hypothalamic hamartoma for gelastic epilepsy. *Childs Nerv Syst* 2008;24(2):275-9.

- Andrew NE, Gabbe BJ, Wolfe R, Williamson OD, Richardson MD, Edwards ER, Cameron PA.** Twelve-month outcomes of serious orthopaedic sport and active recreation-related injuries admitted to Level 1 trauma centers in Melbourne, Australia. *Clin J Sport Med* 2008;18(5):387-93.
- Andrews RK, Berndt MC.** Microparticles facilitate neutrophil/platelet crosstalk. *Blood* 2008;112(6):2174-5.
- Andrews RK, Berndt MC.** Platelet adhesion: a game of catch and release. *J Clin Invest* 2008;118(9):3009-11.
- Anglesio MS, Arnold JM, George J, Tinker AV, Tothill R, Waddell N, Simms L, Locandro B, Fereday S, Traficante N, Russell P, Sharma R, Birrer MJ; AOGS Study Group, Defazio A, Chenevix-Trench G, Bowtell DD.** Mutation of ERBB2 provides a novel alternative mechanism for the ubiquitous activation of RAS-MAPK in ovarian serous low malignant potential tumors. *Mol Cancer Res* 2008;6(11):1678-90.
- Anpalahan M, Gibson SJ.** Geriatric syndromes as predictors of adverse outcomes of hospitalization. *Intern Med J* 2008;38(1):16-23.
- Apostolopoulos V, Yuriev E, Lazoura E, Yu M, Ramsland PA.** MHC and MHC-like molecules: Structural perspectives on the design of molecular vaccines. *Hum Vaccin* 2008;4(6):400-9.
- Arthur JF, Gardiner EE, Kenny D, Andrews RK, Berndt MC.** Platelet receptor redox regulation. *Platelets* 2008;19(1):1-8.
- Arulogun S, Prince M, Ng J, Lade S, Ryan G, Blewitt O, McCormack C.** Long-term outcomes of patients with advanced-stage cutaneous T-cell lymphoma and large cell transformation. *Blood* 2008;112(8):3082-7.
- ASDIAB Study Group, Thai AC, Mohan V, Khalid BA, Cockram CS, Pan CY, Zimmet P, Yeo JP.** Islet autoimmunity status in Asians with young-onset diabetes (12-40 years): association with clinical characteristics, beta cell function and cardio-metabolic risk factors. *Diabetes Res Clin Pract* 2008;80(2):224-30.
- Atkin JD, Farg MA, Walker AK, McLean C, Tomas D, Horne MK.** Endoplasmic reticulum stress and induction of the unfolded protein response in human sporadic amyotrophic lateral sclerosis. *Neurobiol Dis Neurobiol Dis* 2008;30(3):400-7.
- Azarpazhooh MR, Nicol MB, Donnan GA, Dewey HM, Sturm JW, Macdonell RA, Pearce DC, Thrift AG.** Patterns of stroke recurrence according to subtype of first stroke event: the North East Melbourne Stroke Incidence Study (NEMESIS). *Int J Stroke* 2008;3(3):158-64.
- Bach LA.** Post-transplant diabetes. *DMJ* 2008;25:8-9.
- Bach LA.** Rho kinase inhibition: a new approach for treating diabetic nephropathy? *Diabetes* 2008;57(3):532-3.
- Bach LA.** Blogging during terminal care: communication, color schemes, and creating a community. *J Clin Oncol* 2008;26(27):4504-6.
- Baddley JW, Benjamin DK, Patel M, Miró J, Athan E, Barsic B, et al. for the International Collaboration on Endocarditis-Pro prospective Cohort Study Group.** Candida infective endocarditis. *Eur J Clin Microbiol Infect Dis* 2008;27(7):519-29.
- Bailie R, Si D, Connors C, Weeramanthri T, Clark L, Dowden M, O'Donohue L, Condon J, Thompson S, Clelland N, Nagel T, Gardner K, Brown A.** Study protocol: Audit and Best Practice for Chronic Disease Extension (ABCDE) Project. *BMC Health Serv Res* 2008;8:184.
- Bailie RS, Si D, Dowden MC, Connors CM, O'Donoghue L, Liddle HE, Kennedy CM, Cox RJ, Burke HP, Thompson SC, Brown AD.** Delivery of child health services in Indigenous communities: implications for the federal government's emergency intervention in the Northern Territory. *Med J Aust* 2008;188(10):615-8.
- Baker ST, Chiang CY, Zajac JD, Bach LA, Jerums G, MacIsaac RJ.** Outcomes for general medical inpatients with diabetes mellitus and new hyperglycaemia. *Med J Aust* 2008;188(6):340-3.
- Balasubramani Y, Ellul S, Kam A, McLean C, Malham G.** Sinonasal inverted papilloma mimicking a pituitary macroadenoma. *J Clin Neurosci* 2008;16(2):328-30.
- Baldwin S, Boisen N, Power R.** Managing information: using systematic data collection to estimate process and impact indicators related to harm reduction services in Myanmar. *Int J Drug Policy* 2008;19(Suppl1):S74-9.
- Ballinger ML, Osman N, Wilks AF, Su S, Burns CJ, Bu X, Little PJ.** Pyridopyrimidine derivative CYC10424 inhibits glycosaminoglycan changes on vascular smooth muscle-derived proteoglycans and reduces lipoprotein binding. *J Cardiovasc Pharmacol* 2008;52(5):403-12.
- Bandopadhyay P, Goldschlager T, Rosenfeld JV.** The role of evidence-based medicine in neurosurgery. *J Clin Neurosci* 2008;15(4):373-8.
- Banerjee A, Grumont R, Gugasyan R, White C, Strasser A, Gerondakis S.** NF- $\kappa$ B1 and c-Rel cooperate to promote the survival of TLR4-activated B cells by neutralizing Bim via distinct mechanisms. *Blood* 2008;112(13):5063-73.
- Barbetti J, Lee G.** Medical emergency team: a review of the literature. *Nurs Crit Care* 2008;13(2):80-5. Review.
- Bardy GH, Lee KL, Mark DB, Poole JE, Toff WD, et al.; HAT Investigators.** Home use of automated external defibrillators for sudden cardiac arrest. *N Engl J Med* 2008;358(17):1793-804.
- Bardy GH, Lee KL, Mark DB, Poole JE, Toff WD, et al.; HAT Investigators.** Rationale and design of the Home Automatic External Defibrillator Trial (HAT). *Am Heart J* 2008;155(3):445-54.
- Barit D, Cooper ME.** Diabetic patients and kidney protection: an attainable target. *J Hypertens* 2008;26(Suppl 2):S3-7. Review.
- Barrington MJ, Olive DJ, McCutcheon CA, Scarff C, Said S, Kluger R, Gillett N, Choong P.** Stimulating catheters for continuous femoral nerve blockade after total knee arthroplasty: a randomized, controlled, double-blinded trial. *Anesth Analg* 2008;106(4):1316-21.
- Bartholomeusz CF, Wesnes KA, Kulkarni J, Vitetta L, Croft RJ, Nathan PJ.** Estradiol treatment and its interaction with the cholinergic system: effects on cognitive function in healthy young women. *Horm Behav* 2008;54(5):684-93.
- Barton DA, Esler MD, Dawood T, Lambert EA, Haikerwal D, Brenchley C, Socratous F, Hastings J, Guo L, Wiesner G, Kaye DM, Bayles R, Schlaich MP, Lambert GW.** Elevated brain serotonin turnover in patients with depression: effect of genotype and therapy. *Arch Gen Psychiatr* 2008;65(1):38-46.
- Barutta F, Pinach S, Giunti S, Vittone F, Forbes JM, Chiarle R, Arnstein M, Cavallo Perin P, Camussi G, Cooper ME, Gruden G.** Heat shock protein expression in diabetic nephropathy. *Am J Physiol Renal Physiol* 2008;295(6):F1817-24.
- Bathgate RA, Lekgabe ED, McGuane JT, Su Y, Pham T, Ferraro T, Layfield S, Hannan RD, Thomas WG, Samuel CS, Du XJ.** Adenovirus-mediated delivery of relaxin reverses cardiac fibrosis. *Mol Cell Endocrinol* 2008;280(1-2):30-8.
- Baumert M, Lambert GW, Dawood T, Lambert EA, Esler MD, McGrane M, Barton D, Nalivaiko E.** QT interval variability and cardiac norepinephrine spillover in patients with depression and panic disorder. *Am J Physiol Heart Circ Physiol* 2008;295(3):H962-H968.
- Bayles RG, Dawood T, Lambert EA, Schlaich MP, Lambert GW.** Elevated cardiac risk in patients with major depressive disorder. *Am J Psychiatry* 2008;165(1):137. author reply 137-8.
- Bayliss J, Bailey M, Leet A, Stein AN, Thomson NM, McLean CA.** Late onset antibody-mediated rejection and endothelial localization of vascular endothelial growth factor are associated with development of cardiac allograft vasculopathy. *Transplantation* 2008;86(7):991-7.
- Bayliss J, Maguire JA, Bailey M, Leet A, Kaye D, Richardson M, Bergin PJ, Dowling J, Thomson NM, Stein AN.** Increased vascular endothelial growth factor mRNA in endomyocardial biopsies from allografts demonstrating severe acute rejection: a longitudinal study. *Transpl Immunol* 2008;18(3):264-74.
- Bayne S, Jones ME, Li H, Pinto AR, Simpson ER, Liu JP.** Estrogen deficiency leads to telomerase inhibition, telomere shortening and reduced cell proliferation in the adrenal gland of mice. *Cell Res* 2008;18(11):1141-50.
- Beal A.** Exercise regimes for treatment of cancer related fatigue. *The Radiographer* 2008;55(1):12-5.
- Beddoes L, Botti M, Duke MM.** Patients' experiences of cardiology procedures using minimal conscious sedation. *Heart Lung* 2008;37(3):196-204.
- Bell RJ, Lijovic M, Fradkin P, Davis SR.** A pragmatic approach to the classification of menopausal status for community-based research. *Menopause* 2008;15(5):978-83.

- Benke G, Sim MR, McKenzie DP, Macfarlane E, Del Monaco A, Hoving JL, Fritschi L.** Comparison of first, last, and longest-held jobs as surrogates for all jobs in estimating cumulative exposure in cross-sectional studies of work-related asthma. *Ann Epidemiol* 2008;18(1):23-7.
- Bennett NJ, Bull AL, Dunt DR, Motley J, Russo PL, Spelman DW, Richards MJ.** A user assessment of a smaller hospital surveillance program. *Am J Infect Control* 2008;36(10):761-3.
- Berkovic SF, Dibbens LM, Oshlack A, Silver JD, Katerelos M, Vears DF, Ilmann-Rauch R, Blanz J, Zhang KW, Stankovich J, Kalnins RM, Dowling JP, Andermann E, Andermann F, Faldini E, D'Hooge R, Vadlamudi L, Macdonell RA, Hodgson BL, Bayly MA *et al.*** Myoclonus epilepsy and glomerulosclerosis due to deficiency of the lysosomal membrane protein SCARB2/Limp2. *Am J Hum Genet* 2008;82(3):673-84.
- Bermingham N, Cowie TF, Paine M, Storey E, McLean C.** Frontotemporal dementia and Parkinsonism linked to chromosome 17 in a young Australian patient with the G389R Tau mutation. *Neuropathol Appl Neurobiol* 2008;34(3):366-70.
- Berndt MC, Andrews RK.** Molecular regulation of platelet adhesion. *J Thrombos Hemostasis* 2008;19(1):77-84.
- Berndt MC, Andrews RK.** Systems biology meets platelet biology. *Blood* 2008;112(10):3920-1.
- Berndt MC, Andrews RK.** New direction for WE thrombin. *Arterioscler Thromb Vasc Biol* 2008;28(2):205-7.
- Bernhardt J, Chitravas N, Meslo IL, Thrift AG, Indredavik B.** Not all stroke units are the same: a comparison of physical activity patterns in Melbourne, Australia, and Trondheim, Norway. *Stroke* 2008;39(7):2059-65.
- Bernhardt J, Dewey H, Thrift A, Collier J, Donnan G.** A Very Early Rehabilitation Trial for Stroke (AVERT): phase II safety and feasibility. *Stroke* 2008;39(2):390-6.
- Berry PA, Hanna FS, Teichtahl AJ, Wluka AE, Urquhart DM, Bell RJ, Davis SR, Cicuttini FM.** Vastus medialis cross-sectional area is associated with patella cartilage defects and bone volume in healthy women. *Osteoarthritis Cartilage* 2008;16(8):956-60.
- Berry PA, Teichtahl AJ, Galevska-Dimitrovska A, Hanna FS, Wluka AE, Wang Y, Urquhart DM, English DR, Giles GG, Cicuttini FM.** Vastus medialis cross-sectional area is positively associated with patella cartilage and bone volume in a pain-free, community based population. *Arthritis Res Ther* 2008;10(6):R143.
- Blade J, Sonneveld P, San Miguel JF, Sutherland HJ, Hajek R, Nagler A, Spencer A, Robak T, Cibeira MT, Zhuang SH, Harousseau JL, Orlowski RZ; DOXIL-MMY-3001 Study Investigators.** Pegylated liposomal doxorubicin plus bortezomib in relapsed or refractory multiple myeloma: efficacy and safety in patients with renal function impairment. *Clin Lymphoma Myeloma* 2008;8(6):352-5.
- Blecher GE, Mitra B, Cameron PA, Fitzgerald M.** Failed Emergency Department disposition to the ward of patients with thoracic injury. *Injury* 2008;39(5):586-91.
- Bobik A.** Apolipoprotein CIII and atherosclerosis: beyond effects on lipid metabolism. *Circulation* 2008;118(7):702-4. Editorial.
- Bobrova N, Rughnikov U, Neifeld E, Rhodes T, Alcorn R, Kirichenko S, Power R.** Challenges in providing drug user treatment services in Russia: providers' views. *Subst Use Misuse* 2008;43(12-13):1770-84.
- Bolton K, Segal D, McMillan J, Jowett J, Heilbronn L, Abberton K, Zimmet P, Chisholm D, Collier G, Walder K.** Decorin is a secreted protein associated with obesity and Type 2 diabetes. *Int J Obes* 2008;32(7):1113-21.
- Borggren M, Repits J, Kuylenstierna C, Sterjovski J, Churchill MJ, Purcell DFJ, Karlsson A, Albert J, Gorry PR, Jansson M.** Evolution of DC-SIGN use revealed by fitness studies of R5 HIV-1 variants emerging during AIDS progression. *Retrovirology* 2008;5:28.
- Botlero R, Urquhart DM, Davis SR, Bell RJ.** Prevalence and incidence of urinary incontinence in women: review of the literature and investigation of methodological issues. *Int J Urol* 2008;15(3):230-4. Review.
- Bousquet J, Khaltaev N, Cruz AA, Denburg J, Fokkens WJ, Togias A, Zuberbier T, Baena-Cagnani CE, *et al.*** Allergic Rhinitis and its Impact on Asthma (ARIA) 2008 update (in collaboration with the World Health Organization, GA(2)LEN and AllerGen). *Allergy* 2008;63(Suppl 86):8-160.
- Boyko EJ, Barr EL, Zimmet PZ, Shaw JE.** Two-hour glucose predicts the development of hypertension over 5 years: the AusDiab study. *J Hum Hypertens* 2008;22(3):168-76.
- Boyko EJ, Shaw JE, Zimmet PZ, Chitson P, Tuomilehto J, Alberti KG.** A prospective study of glycemia, body size, insulin resistance and the risk of hypertension in Mauritius. *J Hypertens* 2008;26(9):1742-9.
- Bradshaw CS, Fairley CK, Tabrizi SN.** Validation of COBAS Taqman CT for the detection of *Chlamydia trachomatis* in vulvo-vaginal swabs. *Sex Transm Inf* 2008;84:278-9. Comment.
- Brady Z, Taylor ML, Haynes M, Whitaker M, Mullen A, Clews L, Partridge M, Hicks RJ, Trapp JV.** The clinical application of PET/CT: a contemporary review. *Australas Phys Eng Sci Med* 2008;31(2):90-109. Review.
- Brand C, Lowe A, Hall S.** The utility of clinical decision tools for diagnosing osteoporosis in postmenopausal women with rheumatoid arthritis. *BMC Musculoskelet Disord* 2008;9:13.
- Brand CA.** The role of self-management in designing care for people with osteoarthritis of the hip and knee. *Med J Aust* 2008;189(Suppl 10):S25-8.
- Brand CA, Cameron PA, Greenberg PB, Scott IA.** Health services under siege: the case for clinical process redesign. *Med J Aust* 2008;189(4):239.
- Brand CA, Ibrahim JE, Cameron PA, Scott IA.** Standards for health care: a necessary but unknown quantity. *Med J Aust* 2008;189(5):257-60.
- Brand CA, Tropea J, Ibrahim JE, Elkadi SO, Bain CA, Ben-Tovim DI, Bucknall TK, Greenberg PB, Spigelman AD.** Measurement for improvement: a survey of current practice in Australian public hospitals. *Med J Aust* 2008;189(1):35-40.
- Brecknell JE, Malham GM.** Os odontoideum: report of three cases. *J Clin Neurosci* 2008;15(3):295-301.
- Brooks NA, Wilcox G, Walker KZ, Ashton JF, Cox MB, Stojanovska L.** Beneficial effects of *Lepidium meyenii* (Maca) on psychological symptoms and measures of sexual dysfunction in postmenopausal women are not related to estrogen or androgen content. *Menopause* 2008;15(6):1157-62.
- Brooks R, Silove D, Bryant R, O'Donnell M, Creamer M, McFarlane A.** A confirmatory factor analysis of the acute stress disorder interview. *J Trauma Stress* 2008;21(3):352-5.
- Brown WA, Burton PR, Anderson M, Korin A, Dixon JB, Hebbard G, O'Brien PE.** Symmetrical pouch dilatation after laparoscopic adjustable gastric banding: incidence and management. *Obes Surg* 2008;18(9):1104-8.
- Bryant RA, Creamer M, O'Donnell ML, Silove D, McFarlane AC.** A multisite study of the capacity of acute stress disorder diagnosis to predict posttraumatic stress disorder. *J Clin Psychiatry* 2008;69(6):923-9.
- Buchbinder R.** Self-management education en masse: effectiveness of the Back Pain: Don't Take It Lying Down mass media campaign. *Med J Aust* 2008;189(Suppl 10):S29-32.
- Buchbinder R, Barber M, Heuzenroeder L, Wluka AE, Giles G, Hall S, Harkness A, Lewis D, Littlejohn G, Miller MH, Ryan PF, Jolley D.** Incidence of melanoma and other malignancies among rheumatoid arthritis patients treated with methotrexate. *Arthritis Rheum* 2008;59(6):794-9.
- Buchbinder R, Gross DP, Werner EL, Hayden JA.** Understanding the characteristics of effective mass media campaigns for back pain and methodological challenges in evaluating their effects. *Spine* 2008;33(1):74-80.
- Burgess AN, Serpell JW.** Parotidectomy: preoperative investigations and outcomes in a single surgeon practice. *ANZ J Surg* 2008;78(9):791-3.
- Burgess JA, Dharmage SC, Byrnes GB, Matheson MC, Gurrin LC, Wharton CL, Johns DP, Abramson MJ, Hopper JL, Walters EH.** Childhood eczema and asthma incidence and persistence: a cohort study from childhood to middle age. *J Allergy Clin Immunol* 2008;122(2):280-5.
- Burke SL, Evans RG, Moretti JL, Head GA.** Levels of renal and extrarenal sympathetic drive in angiotensin II-induced hypertension. *Hypertension* 2008;51(4):878-83.
- Burns B, Beckett J, Jones D, Webb S.** Using a medical emergency team to manage anaphylactic shock. *Jt Comm J Qual Patient Saf* 2008;34(6):360-3.
- Busija L, Osborne RH, Nilsson A, Buchbinder R, Roos EM.** Magnitude and meaningfulness of change in SF-36 scores in four types of orthopedic surgery. *Health Qual Life Outcomes* 2008;6:55.

- Busso N, Chobaz-Peclat V, Hamilton J, Spee P, Wagtmann N, So A.** Essential role of platelet activation via protease activated receptor 4 in tissue factor-initiated inflammation. *Arthritis Res Ther* 2008;10(2):R42.
- Byrne M, Kaye DM, Power J.** The synergism between atrial fibrillation and heart failure. *J Card Fail* 2008;14(4):320-6.
- Byrne MJ, Power JM, Prevolos A, Mariani JA, Hajjar RJ, Kaye DM.** Recirculating cardiac delivery of AAV2/1SERCA2a improves myocardial function in an experimental model of heart failure in large animals. *Gene Ther* 2008;15(23):1550-7.
- Calkin AC, Giunti S, Sheehy KJ, Chew C, Boolell V, Rajaram YS, Cooper ME, Jandeleit-Dahm KA.** The HMG-CoA reductase inhibitor rosuvastatin and the angiotensin receptor antagonist candesartan attenuate atherosclerosis in an apolipoprotein E-deficient mouse model of diabetes via effects on advanced glycation, oxidative stress and inflammation. *Diabetologia* 2008;51(9):1731-40.
- Calkin AC, Thomas MC.** PPAR agonists and cardiovascular disease in diabetes. *PPAR Res* 2008;2008:245410. Review.
- Camerino MA, Kong DC, Chalmers DK, Thompson PE.** Solid phase synthesis and circular dichroism analysis of (i>i+4) cyclic lactam analogues of kisspeptin. *Int J Pept Res Ther* 2008;14(4):323-31.
- Cameron AJ, Boyko EJ, Sicree RA, Zimmet PZ, Söderberg S, Alberti KG, Tuomilehto J, Chitson P, Shaw JE.** Central obesity as a precursor to the metabolic syndrome in the AusDiab Study and Mauritius. *Obesity* 2008;16(12):2707-2716.
- Cameron AJ, Magliano DJ, Zimmet PZ, Welborn TA, Colagiuri S, Tonkin AM, Shaw JE.** The metabolic syndrome as a tool for predicting future diabetes: the AusDiab study. *J Intern Med* 2008;264(2):177-86.
- Cameron AJ, Zimmet PZ.** Expanding evidence for the multiple dangers of epidemic abdominal obesity. *Circulation* 2008;117(13):1624-6. Editorial.
- Cameron PA, Gabbe BJ, Cooper DJ, Walker T, Judson R, McNeil J. A** statewide system of trauma care in Victoria: effect on patient survival. *Med J Aust* 2008;189(10):546-50.
- Caminschi I, Proietto AI, Ahmet F, Kitsoulis S, Shin Teh J, Lo JC, Rizzitelli A, Wu L, Vremec D, van Dommelen SL, Campbell IK, Maraskovsky E, Braley H, Davey GM, Mottram P, van de Velde N, Jensen K, Lew AM, Wright MD, Heath WR, Shortman K, Lahoud MH.** The dendritic cell subtype-restricted C-type lectin Clec9A is a target for vaccine enhancement. *Blood* 2008;112(8):3264-73.
- Campbell EM, Perez O, Anderson JL, Hope TJ.** Visualisation of a proteasome-independent intermediate during restriction of HIV-1 by rhesus TRIM5 $\alpha$ . *J Cell Biol* 2008;180(3):549-61.
- Campbell IG, Qiu W, Polyak K, Haviv I.** Breast-cancer stromal cells with TP53 mutations. *N Engl J Med* 2008;358(15):1634-5;author reply 1636.
- Campbell NA, Brown WA, Smith AI, Skinner S, Nottle P.** Small bowel obstruction creates a closed loop in patients with a laparoscopic adjustable gastric band. *Obes Surg* 2008;18(10):1346-9.
- Cannon CP, Giugliano RP, Blazing MA, Harrington RA, Peterson JL, Sisk CM, Strony J, Musliner TA, McCabe CH, Veltri E, Braunwald E, Califf RM; IMPROVE-IT Investigators.** Rationale and design of IMPROVE-IT (IMProved Reduction of Outcomes: Vytorin Efficacy International Trial): comparison of ezetimibe/simvastatin versus simvastatin monotherapy on cardiovascular outcomes in patients with acute coronary syndromes. *Am Heart J* 2008;156(5):826-32.
- Carlton JM, Adams JH, Silva JC, Bidwell SL, Lorenzi H, Caler E, Crabtree J, Angiuoli SV, Merino EF, Amedeo P, Cheng Q, Coulson RM, Crabb BS, Del Portillo HA, Essien K, Feldblyum TV, Fernandez-Becerra C, Gilson PR, Gueye AH, Guo X, Kang'a S *et al.*** Comparative genomics of the neglected human malaria parasite *Plasmodium vivax*. *Nature* 2008;455(7214):757-63.
- Carrington M, Murphy NF, Strange G, Peacock A, McMurray JJ, Stewart S.** Prognostic impact of pulmonary arterial hypertension: a population-based analysis. *Int J Cardiol* 2008;124(2):183-7.
- Carrington M, Stewart S.** Is fenofibrate a cost-saving treatment for middle-aged individuals with Type II diabetes? An economic analysis of the FIELD Study. *Int J Cardiol* 2008;127(1):51-6.
- Carrington MJ, Trinder J.** Blood pressure and heart rate during continuous experimental sleep fragmentation in healthy adults. *Sleep* 2008;31(12):1701-1712.
- Casamento AJ, Dunlop C, Jones DA, Duke G.** Improving the documentation of medical emergency team reviews. *Crit Care Resusc* 2008;10(1):29.
- Cassar L, Li H, Pinto AR, Nicholls C, Bayne S, Liu JP.** Bone morphogenetic protein-7 inhibits telomerase activity, telomere maintenance, and cervical tumor growth. *Cancer Res* 2008;68(22):9157-66.
- Catroppa C, Anderson VA, Morse SA, Haritou F, Rosenfeld JV.** Outcome and predictors of functional recovery 5 years following pediatric traumatic brain injury (TBI). *J Pediatr Psychol* 2008;33(7):707-18.
- Cendron AC, Wines BD, Brownlee RT, Ramsland PA, Pietersz GA, Hogarth PM.** An Fc $\alpha$ R11a-binding peptide that mimics the interaction between Fc $\alpha$ R11a and IgG. *Mol Immunol* 2008;45(2):307-19.
- Chaicharn J, Carrington M, Trinder J, Khoo MC.** The effects on cardiovascular autonomic control of repetitive arousal from sleep. *Sleep* 2008;31(1):93-103.
- Chalmers J, Cooper ME.** UKPDS and the Legacy Effect. *N Engl J Med* 2008;359(15):1618-20. Editorial.
- Chan J, Ban EJ, Chun KH, Wang S, Backstrom BT, Bernard CC, Toh BH, Alderuccio F.** Transplantation of bone marrow transduced to express self-antigen establishes deletion tolerance and permanently remits autoimmune disease. *J Immunol* 2008;181(11):7571-80.
- Chan J, Ban EJ, Chun KH, Wang S, McQualter J, Bernard C, Toh BH, Alderuccio F.** Methylprednisolone induces reversible clinical and pathological remission and loss of lymphocyte reactivity to myelin oligodendrocyte glycoprotein in experimental autoimmune encephalomyelitis. *Autoimmunity* 2008;41(5):405-13.
- Chan K, Stooze M, Reidpath D.** Stigma, social reciprocity and exclusion of HIV/AIDS patients with illicit drug histories: a study of Thai nurses' attitudes. *Harm Reduct J* 2008;5:28.
- Chan K, Stooze M, Sringeruayang L, Reidpath D.** Stigmatization of AIDS patients: disentangling Thai nursing students' attitudes towards HIV/AIDS, drug use, and commercial sex. *AIDS Behav* 2008;12(1):146-57.
- Chand V, Rosenfeldt FL, Pepe S.** The publication rate and impact of abstracts presented at the Cardiac Society of Australia and New Zealand (1999-2005). *Heart Lung Circ* 2008;17(5):375-9.
- Chang CC, Athan E, Morrissey CO, Slavin MA.** Preventing invasive fungal infection during hospital building works. *Intern Med J* 2008;38(6b):538-41.
- Charles PG, Whitby M, Fuller AJ, Stirling R, Wright AA, Korman TM, Holmes PW, Christiansen KJ, Waterer GW, Pierce RJ, Mayall BC, Armstrong JG, Catton MG, Nimmo GR, Johnson B, Hooy M, Grayson ML; Australian CAP Study Collaboration.** The etiology of community-acquired pneumonia in Australia: why penicillin plus doxycycline or a macrolide is the most appropriate therapy. *Clin Infect Dis* 2008;46(10):1513-21.
- Charles PG, Wolfe R, Whitby M, Fine MJ, Fuller AJ, Stirling R, *et al.*; Australian Community-Acquired Pneumonia Study Collaboration, Grayson ML.** SMART-COP: a tool for predicting the need for intensive respiratory or vasopressor support in community-acquired pneumonia. *Clin Infect Dis* 2008;47(3):375-84.
- Chaston TB, Dixon JB.** Factors associated with percent change in visceral versus subcutaneous abdominal fat during weight loss: findings from a systematic review. *Int J Obes (Lond)* 2008;32(4):619-28. Review.
- Chastre J, Wunderink R, Prokocimer P, Lee M, Kaniga K, Friedland I.** Efficacy and safety of intravenous infusion of doripenem versus imipenem in ventilator-associated pneumonia: a multicenter, randomized study. *Crit Care Med* 2008;36(4):1089-96.
- Chee L, Brown M, Sasadeusz J, MacGregor L, Grigg AP.** Gram-negative organisms predominate in Hickman line-related infections in non-neutropenic patients with hematological malignancies. *J Infect* 2008;56(4):227-33.
- Chen L, Rogers SL, Colagiuri S, Cadilhac DA, Mathew TH, Boyden AN, Peeters A, Magliano DJ, Shaw JE, Zimmet PZ, Tonkin AM; National Vascular Disease Prevention Alliance.** How do the Australian guidelines for lipid-lowering drugs perform in practice? Cardiovascular disease risk in the AusDiab Study, 1999-2000. *Med J Aust* 2008;189(6):319-22.
- Chen MY.** Sexual health services in Australia: challenges and opportunities. *Hong Kong J Dermatol Venereol* 2008;16(4):197-202.

- Cheng CH, Graham CA, Gabbe BJ, Yeung JH, Kossmann T, Judson RT, Rainer TH, Cameron PA.** Trauma care systems: a comparison of trauma care in Victoria, Australia, and Hong Kong, China. *Ann Surg* 2008;247(2):335-42.
- Cher L, Rosenthal MA, Drummond KJ, Dally M, Murphy M, Ashley D, Thursfield V, Giles GG.** The use of chemotherapy in patients with gliomas: patterns of care in Victoria from 1998-2000. *J Clin Neurosci* 2008;15(4):398-401.
- Cherbuin N, Anstey KJ, Sachdev PS, Maller JJ, Meslin C, Mack HA, Wen W, Easteal S.** Total and regional gray matter volume is not related to APOE\*E4 status in a community sample of middle-aged individuals. *J Gerontol A Biol Sci Med Sci* 2008;63(5):501-4.
- Cherbuin N, Windsor TD, Anstey KJ, Maller JJ, Meslin C, Sachdev PS.** Hippocampal volume is positively associated with behavioural inhibition (BIS) in a large community-based sample of mid-life adults: the PATH through life study. *Soc Cogn Affect Neurosci* 2008;3(3):262-9.
- Cherk MH, Kalff V, Yap KS, Bailey M, Topliss D, Kelly MJ.** Incidence of radiation thyroiditis and thyroid remnant ablation success rates following 1110 MBq (30 mCi) and 3700 MBq (100 mCi) post-surgical 131I ablation therapy for differentiated thyroid carcinoma. *Clin Endocrinol (Oxf)* 2008;69(6):957-62.
- Cherk MH, Moore M, Serpell J, Swain S, Topliss DJ.** Metastatic colorectal cancer to a primary thyroid cancer. *World J Surg Oncol* 2008;6:122.
- Cherry CL, Duncan AJ, Mackie KF, Wesselingh SL, Brew BJ.** A report on the effect of commencing enfuvirtide on peripheral neuropathy. *AIDS Res Hum Retroviruses* 2008;24(8):1027-30.
- Cherry CL, Hoy JF, Rowe JS, Krum H, Mills J, Lewin SR.** Phase 1 single dose studies to optimize the pharmacokinetics of DG17, a novel HIV-protease inhibitor pro-drug, using sodium bicarbonate and ritonavir. *Curr HIV Res* 2008;6(3):272-5.
- Cherry CL, Rosenow A, Affandi JS, McArthur JC, Wesselingh SL, Price P.** Cytokine genotype suggests a role for inflammation in nucleoside analog-associated sensory neuropathy (NRTI-SN) and predicts an individual's NRTI-SN risk. *AIDS Res Hum Retroviruses* 2008;24(2):117-23.
- Chessman D, Kostenko L, Lethborg T, Purcell AW, Williamson NA, Chen Z, Kjer-Nielsen L, Mifsud NA, Tait BD, Holdsworth R, Almeida CA, Nolan D, Macdonald WA, Archbold JK, Kellerher AD, Marriott D, Mallal S, Bharadwaj M, Rossjohn J, McCluskey J.** Human leukocyte antigen class I-restricted activation of CD8+ T cells provides the immunogenetic basis of a systemic drug hypersensitivity. *Immunity* 2008;28(6):822-32.
- Cheung N, Wong TY, Liew G, Saw SM.** Low birth weight and retinal vascular caliber in young children. *Pediatrics* 2008;121(4):862-3.
- Chieng R.** ISOPP/HOPA 2008. *J Pharm Pract Res* 2008;38:250. Letter.
- Chojnacki J, Grgacic EVL.** Enveloped viral fusion: insights into the fusion of hepatitis B virus. *Future Virol* 2008;3(6):543-52.
- Cholesterol Treatment Trialists' (CTT) Collaborators, Kearney PM, Blackwell L, Collins R, Keech A, Simes J, Peto R, Armitage J, Baigent C.** Efficacy of cholesterol-lowering therapy in 18,686 people with diabetes in 14 randomised trials of statins: a meta-analysis. *Lancet* 2008;371(9607):117-25.
- Chua B, Eriksson EM, Brown LE, Zeng W, Gowans EJ, Torresi J, Jackson DC.** A self-adjuvanting lipopeptide-based vaccine candidate for the treatment of hepatitis C virus infection. *Vaccine* 2008;26(37):4866-75.
- Chung A, Rollman E, Johansson S, Kent SJ, Stratov I.** The utility of ADCC responses in HIV infection. *Curr HIV Res* 2008;6(6):515-9.
- Chung J, Nguyen AK, Henstridge DC, Holmes AG, Chan MH, Mesa JL, Lancaster GI, Southgate RJ, Bruce CR, Duffy SJ, Horvath I, Mestriil R, Watt MJ, Hooper PL, Kingwell BA, Vigh L, Hevener A, Febbraio MA.** HSP72 protects against obesity-induced insulin resistance. *Proc Natl Acad Sci USA* 2008;105(5):1739-44.
- Clarke S, Bailey M, Yelas S.** Successful applications of statistical modeling to betting markets. *Mathematics Today* 2008;44(1):38-44.
- Codyre D, Wilson A, Begg J, Barton D.** Dissemination and implementation of the Royal Australian and New Zealand College of Psychiatrists' clinical practice guidelines. *Australas Psychiatry* 2008;16(5):336-9.
- Coghlan JA, Bell SN, Forbes A, Buchbinder R.** Comparison of self-administered University of California, Los Angeles, shoulder score with traditional University of California, Los Angeles, shoulder score completed by clinicians in assessing the outcome of rotator cuff surgery. *J Shoulder Elbow Surg* 2008;17(4):564-9.
- Coghlan JA, Forbes A, Bell SN, Buchbinder R.** Efficacy and safety of a subacromial continuous ropivacaine infusion for post-operative pain management following arthroscopic rotator cuff surgery: a protocol for a randomised double-blind placebo-controlled trial. *BMC Musculoskelet Disord* 2008;9:56.
- Cohen E, Botti M, Hanna B, Leach S, Boyd S, Robbins J.** Pain beliefs and pain management of oncology patients. *Cancer Nurs* 2008;31(2):E1-8.
- Cohen ND, Dunstan DW, Robinson C, Vulikh E, Zimmet PZ, Shaw JE.** Improved endothelial function following a 14-month resistance exercise training program in adults with Type 2 diabetes. *Diabetes Res Clin Pract* 2008;79(3):405-11.
- Colles SL, Dixon JB, O'Brien PE.** Loss of control is central to psychological disturbance associated with binge eating disorder. *Obesity* 2008;16(3):608-614.
- Colles SL, Dixon JB, O'Brien PE.** Grazing and loss of control related to eating: two high-risk factors following bariatric surgery. *Obesity* 2008;16(3):615-22.
- Connelly KA, Gilbert RE, Krum H.** Letter by Connelly *et al* regarding article, "Diastolic stiffness of the failing diabetic heart: importance of fibrosis, advanced glycation end products, and myocyte resting tension". *Circulation* 2008;117(23):e483. Letter.
- Cook DA, Duke G, Hart GK, Pilcher D, Mullany D.** Review of the application of risk-adjusted charts to analyse mortality outcomes in critical care. *Crit Care Resusc* 2008;10(3):239-51. Review.
- Cooper DJ, Buist MD.** Vitalness of vital signs, and medical emergency teams. *Med J Aust* 2008;188(11):630-1.
- Cooper DJ, Rosenfeld JV, Murray L, Wolfe R, Ponsford J, Davies A, D'Urso P, Pellegrino V, Malham G, Kossmann T.** Early decompressive craniectomy for patients with severe traumatic brain injury and refractory intracranial hypertension – a pilot randomized trial. *J Crit Care* 2008;23(3):387-93.
- Cooper ME.** Oxidative stress and Type 2 diabetic nephropathy. *Diabetographia Med Rev* 2008;19:2-4. Review.
- Cooper NR, Fitzgerald PB, Croft RJ, Upton DJ, Segrave RA, Daskalakis ZJ, Kulkarni J.** Effects of rTMS on an auditory oddball task: a pilot study of cortical plasticity and the EEG. *Clin EEG Neurosci* 2008;39(3):139-43.
- Coughlan MT, Mibus AL, Forbes JM.** Oxidative stress and advanced glycation in diabetic nephropathy. *Ann N Y Acad Sci* 2008;1126:190-3. Review.
- Cowan FM, Pascoe SJ, Langhaug LF, Dirawo J, Chidiya S, Jaffar S, Mbizvo M, Stephenson JM, Johnson AM, Power RM, Woelk G, Hayes RJ.** The Regai Dzive Shiri Project: a cluster randomised controlled trial to determine the effectiveness of a multi-component community-based HIV prevention intervention for rural youth in Zimbabwe--study design and baseline results. *Trop Med Int Health* 2008;13(10):1235-44.
- Cox H, McDermid C.** XDR Tuberculosis can be cured with aggressive treatment. *Lancet* 2008;372(9647):1363-5. Comment.
- Cox H, Morrow M, Deutschmann P.** Long-term efficacy of DOTs regimens for tuberculosis: systematic review. *BMJ* 2008;336(7642):484-7. Review.
- Cox H, Sibilila K, Kalon S, Karimovich H, Mills C, Niemann S.** Emergence of extensive drug resistance during treatment for multidrug-resistant tuberculosis. *New Eng J Med* 2008;359(22):2398-2400. Letter.
- Crane M, Matthews G, Lewin SR.** Hepatitis virus immune restoration disease of the liver. *Curr Opin HIV AIDS* 2008;3(4):446-52.
- Creamer M, O'Donnell M.** The pros and cons of psychoeducation following-trauma: too early to judge? *Psychiatry* 2008;71(4):319-21.
- Cronin AA, Shrestha D, Cornier N, Abdalla F, Ezard N, Aramburu C.** A review of water and sanitation provision in refugee camps in association with selected health and nutrition indicators--the need for integrated service provision. *J Water Health* 2008;6(1):1-13. Review.
- Crosbie JC, Svalbe I, Midgley SM, Yagi N, Rogers PA, Lewis RA.** A method of dosimetry for synchrotron microbeam radiation therapy using radiochromic films of different sensitivity. *Phys Med Biol* 2008;53(23):6861-77.
- Crosby IT, Pietersz GA, Ripper JA.** Synthesis of succinimidoalkylbenzaldehyde analogues: potential bifunctional linkers for bioconjugation. *Aust J Chem* 2008;61(2):138-43.
- Crummy F, Cameron PA, Swann P, Kossmann T, Naughton MT.** Prevalence of sleepiness in surviving drivers of motor vehicle collisions. *Intern Med J* 2008;38(10):769-75.

- Crummy F, Naughton MT, Elborn JS.** Obesity and the respiratory physician. *Thorax* 2008;63(7):576-7.
- Crummy F, Piper AJ, Naughton MT.** Obesity and the lung: 2. Obesity and sleep-disordered breathing. *Thorax* 2008;63(8):738-46. Review.
- Cui J, Forbes A, Kirby A, Marschner I, Simes J, West M, Tonkin A.** Parametric conditional frailty models for recurrent cardiovascular events in the lipid study. *Clin Trials* 2008;5(6):565-74.
- Cumming TB, Collier J, Thrift AG, Bernhardt J.** The effect of very early mobilisation after stroke on psychological well-being. *J Rehabil Med* 2008;40(8):609-14.
- Cunningham J, O'Dea K, Dunbar T, Weeramanthri T, Shaw J, Zimmet P.** Socioeconomic status and diabetes among urban Indigenous Australians aged 15-64 years in the DRUID study. *Ethn Health* 2008;13(1):23-37.
- Cussons AJ, Watts GF, Burke V, Shaw JE, Zimmet PZ, Stuckey BG.** Cardiometabolic risk in polycystic ovary syndrome: a comparison of different approaches to defining the metabolic syndrome. *Hum Reprod* 2008;23(10):2352-8.
- Cvetkovski S, Dietze P.** The incidence and characteristics of volatile substance misuse related ambulance attendances in metropolitan Melbourne, Australia. *Soc Sci Med* 2008;66(3):776-83.
- Dadlani H, Ballinger ML, Osman N, Getachew R, Little PJ.** Smad and p38 MAP kinase-mediated signaling of proteoglycan synthesis in vascular smooth muscle. *J Biol Chem* 2008;283(12):7844-52.
- Dadlani H, Osman N, Ballinger ML, Marasco S, Little PJ.** Calcific aortic valve disease and hypertension. *Curr Hypertens Rev* 2008;4(2):107-113.
- Darby JD, Huber MG, Sieling WL, Spelman DW.** African trypanosomiasis in two short-term Australian travelers to Malawi. *J Travel Med* 2008;15(5):375-7.
- D'Arcy CE, Bjorksten A, Yiu EM, Bankier A, Gillies R, McLean CA, Shield LK, Ryan MM.** King-Denborough syndrome caused by a novel mutation in the ryanodine receptor gene. *Neurology* 2008;71(10):776-7.
- Dart AM, Kingwell BA, Gatzka CD, Willson K, Liang YL, Berry KL, Wing LM, Reid CM, Ryan P, Beilin LJ, Jennings GL, Johnston CI, McNeil JJ, MacDonald GJ, Morgan TO, West MJ, Cameron JD.** Smaller aortic dimensions do not fully account for the greater pulse pressure in elderly female hypertensives. *Hypertension* 2008;51(4):1129-34.
- Daskalakis ZJ, Christensen BK, Fitzgerald PB, Chen R.** Dysfunctional neural plasticity in patients with schizophrenia. *Arch Gen Psychiatry* 2008;65(4):378-85.
- Daskalakis ZJ, Christensen BK, Fitzgerald PB, Moller B, Fountain SI, Chen R.** Increased cortical inhibition in persons with schizophrenia treated with clozapine. *J Psychopharmacol* 2008;22(2):203-9.
- Daskalakis ZJ, Farzan F, Barr MS, Maller JJ, Chen R, Fitzgerald PB.** Long-interval cortical inhibition from the dorsolateral prefrontal cortex: a TMS-EEG study. *Neuropsychopharmacology* 2008;33(12):2860-9.
- Daskalakis ZJ, Farzan F, Barr MS, Rusjan PM, Favalli G, Levinson AJ, Fitzgerald PB.** Evaluating the relationship between long interval cortical inhibition, working memory and gamma band activity in the dorsolateral prefrontal cortex. *Clin EEG Neurosci* 2008;39(3):150-5.
- Daskalakis ZJ, Levinson AJ, Fitzgerald PB.** Repetitive transcranial magnetic stimulation for major depressive disorder: a review. *Can J Psychiatry* 2008;53(9):555-66. Review.
- Davenport MP, Loh L, Petravic J, Kent SJ.** Rates of HIV immune escape and reversion: implications for vaccination. *Trends Microbiol* 2008;16(12):561-6.
- Davey M, Buchbinder R.** Glucocorticoids in early rheumatoid arthritis. *Aust Fam Physician* 2008;37(1-2):31-2.
- Davidson AJ, McCann ME, Morton NS, Myles PS.** Anesthesia and outcome after neonatal surgery: the role for randomized trials. *Anesthesiology* 2008;109(6):941-4.
- Davidson PM, Driscoll A, Clark R, Newton PJ, Stewart S.** Heart failure nursing in Australia: challenges, strengths, and opportunities. *Prog Cardiovasc Nurs* 2008;23(4):195-7. Review.
- Davies JM, Mittag D, Dang TD, Symons K, Voskamp A, Rolland JM, O'Hehir RE.** Molecular cloning, expression and immunological characterisation of Pas n 1, the major allergen of Bahia grass *Paspalum notatum* pollen. *Mol Immunol* 2008;46(2):286-93.
- Davies JM, O'Hehir RE.** Immunogenetic characteristics of immunoglobulin E in allergic disease. *Clin Exp Allergy* 2008;38(4):566-78.
- Davies-Tuck M, Teichtahl AJ, Wluka AE, Wang Y, Urquhart DM, Cui J, Cicuttini FM.** Femoral sulcus angle and increased patella facet cartilage volume in an osteoarthritic population. *Osteoarthritis Cartilage* 2008;16(1):131-5.
- Davies-Tuck ML, Martel-Pelletier J, Wluka AE, Pelletier JP, Ding C, Jones G, Davis S, Cicuttini FM.** Meniscal tear and increased tibial plateau bone area in healthy post-menopausal women. *Osteoarthritis Cartilage* 2008;16(2):268-71.
- Davies-Tuck ML, Wluka AE, Teichtahl AJ, Martel-Pelletier J, Pelletier JP, Jones G, Ding C, Davis SR, Cicuttini FM.** Association between meniscal tears and the peak external knee adduction moment and foot rotation during level walking in postmenopausal women without knee osteoarthritis: a cross-sectional study. *Arthritis Res Ther* 2008;10(3):R58.
- Davies-Tuck ML, Wluka AE, Wang Y, Teichtahl AJ, Jones G, Ding C, Cicuttini FM.** The natural history of cartilage defects in people with knee osteoarthritis. *Osteoarthritis Cartilage* 2008;16(3):337-42.
- Davis S, Papalia MA, Norman RJ, O'Neill S, Redelman M, Williamson M, Stuckey BG, Wlodarczyk J, Gard'ner K, Humberstone A.** Safety and efficacy of a testosterone metered-dose transdermal spray for treating decreased sexual satisfaction in premenopausal women: a randomized trial. *Ann Intern Med* 2008;148(8):569-77.
- Davis SM, Donnan GA, Parsons MW, Levi C, Butcher KS, Peeters A, Barber PA, Bladin C, De Silva DA, Byrnes G, Chalk JB, Fink JN, Kimber TE, Schultz D, Hand PJ, Frayne J, Hankey G, Muir K, Gerraty R, Tress BM, Desmond PM; EPITHET investigators.** Effects of alteplase beyond 3 h after stroke in the Echoplanar Imaging Thrombolytic Evaluation Trial (EPITHET): a placebo-controlled randomised trial. *Lancet Neurol* 2008;7(4):299-309.
- Davis SR, Moreau M, Kroll R, Bouchard C, Panay N, Gass M, Braunstein GD, Hirschberg AL, Rodenberg C, Pack S, Koch H, Moufarege A, Studd J; APHRODITE Study Team.** Testosterone for low libido in postmenopausal women not taking estrogen. *N Engl J Med* 2008;359(19):2005-17.
- Davis SR, Nijland EA.** Pharmacological therapy for female sexual dysfunction: has progress been made? *Drugs* 2008;68(3):259-64. Review.
- Davis SR, Shah SM, McKenzie DP, Kulkarni J, Davison SL, Bell RJ.** Dehydroepiandrosterone sulfate levels are associated with more favourable cognitive function in women. *J Clin Endocrinol Metab* 2008;93(3):801-8.
- Davis SR, Stuckey BG, Norman RJ, Papalia MA, Drillich A, Bell RJ.** Effects of the route of estrogen administration on insulinlike growth factor-I, IGF binding protein-3, and insulin resistance in healthy postmenopausal women: results from a randomized, controlled study. *Menopause* 2008;15(6):1065-9.
- Davison SL, Bell RJ, La China M, Holden SL, Davis SR.** Assessing sexual function in well women: validity and reliability of the Monash Women's Health Program Female Sexual Satisfaction Questionnaire. *J Sex Med* 2008;5(11):2575-86.
- Davison SL, Bell RJ, La China M, Holden SL, Davis SR.** Sexual function in well women: stratification by sexual satisfaction, hormone use, and menopause status. *J Sex Med* 2008;5(5):1214-22.
- Dawood T, Lambert EA, Barton D, Lambert GW.** Depressive illness: biological mechanisms of cardiac risk. *Stress and Health* 2008;24(3):213-222.
- De Cruz P, Lust M, Trost N, Wall A, Gerraty R, Connell WR.** Cerebral venous thrombosis associated with ulcerative colitis. *Intern Med J* 2008;38(11):865-7.
- De Rose R, Fernandez CS, Loh L, Peut V, Mason RD, Alcantara S, Reece J, Kent SJ.** Delivery of immunotherapy with peptide-pulsed blood in macaques. *Virology* 2008;378(2):201-4.
- De Rose R, Fernandez CS, Smith MZ, Batten CJ, Alcantara S, Peut V, Rollman E, Loh L, Mason RD, Wilson K, Law MG, Handley AJ, Kent SJ.** Control of viremia and prevention of AIDS following immunotherapy of SIV-infected macaques with peptide-pulsed blood. *PLoS Pathog* 2008;4(5):e1000055.
- De Rose R, Mason RD, Loh L, Peut V, Smith MZ, Fernandez CS, Alcantara S, Amarasena T, Reece J, Seddiki N, Kelleher AD, Zundersers J, Kent SJ.** Safety, immunogenicity and efficacy of peptide-pulsed cellular immunotherapy in macaques. *J Med Primatol* 2008;37(Suppl 2):69-78.
- De Rose R, Zelikin A, Johnston APR, Sexton A, Chong SF, Cortez C, Mulholland W, Caruso F, Kent SJ.** Binding, internalisation and antigen presentation of vaccine-loaded nanoengineered capsules in blood. *Adv Mater* 2008;20:4698-703.

- De Silva D, Woon FP, Chen C, Chang HM, Kingwell B, Cameron J, Wong MC.** Profile and associations of central pulse wave velocity and central pulse pressure among ischaemic stroke patients. *Eur J Neurol* 2008;15(2):196-8.
- De Silva DA, Woon F-P, Gan H-Y, Cameron JD, Kingwell BA, Koh T-H, Chen C, Chang H-M, Wong M-C.** Arterial stiffness, metabolic syndrome and inflammation among Asian ischaemic stroke patients. *Eur J Neurol* 2008;15(8):872-875.
- De Silva DA, Woon FP, Gan HY, Chen C, Chang HM, Cameron J, Kingwell B, Wong MC.** Arterial stiffness is associated with raised levels of the inflammatory marker erythrocyte sedimentation rate. *Intern Med J* 2008;38(12):918-20.
- Delaney A, Angus DC, Bellomo R, Cameron P, Cooper DJ, et al.; Resuscitation in Sepsis Evaluation (ARISE); Protocolized Care for Early Septic Shock (ProCESS) Investigators; Protocolised Management in Sepsis (ProMiSe) Investigators.** Bench-to-bedside review: the evaluation of complex interventions in critical care. *Crit Care* 2008;12(2):210. Review.
- Delmas PD, Davis SR, Hensen J, Adami S, van Os S, Nijland EA.** Effects of tibolone and raloxifene on bone mineral density in osteopenic postmenopausal women. *Osteoporos Int* 2008;19(8):1153-60.
- Deraos G, Chatzantoni K, Matsoukas M-T, Katsara M, Tselios T, Deraos S, Papathanasopoulos P, Vynios D, Mouzaki A, Matsoukas J, Apostolopoulos V.** Citrullination of linear and cyclic altered peptide ligands from myelin basic protein (MBP87-99) epitope elicits a Th1 polarized responses by T cells isolated from multiple sclerosis patients: implications in triggering disease. *J Med Chem* 2008;51(24):7834-42.
- Desmond CP, Bartholomeusz A, Gaudieri S, Revill PA, Lewin SR.** A systematic review of T-cell epitopes in hepatitis B virus: identification, genotypic variation and relevance to antiviral therapeutics. *Antivir Ther* 2008;13(2):161-75. Review.
- Devers MC, Campbell S, Shaw J, Zimmet P, Simmons D.** Should liver function tests be included in definitions of metabolic syndrome? Evidence from the association between liver function tests, components of metabolic syndrome and prevalent cardiovascular disease. *Diabet Med* 2008;25(5):523-9.
- Di Quinzio MK, Georgiou HM, Holdsworth-Carson SJ, Ayhan M, Heng YJ, Walker SP, Rice GE, Permezel M.** Proteomic analysis of human cervico-vaginal fluid displays differential protein expression in association with labor onset at term. *J Proteome Res* 2008;7(5):1916-21.
- Dietze P.** What more can we learn from the heroin drought? *Int J Drug Policy* 2008;19(4):270-72. Editorial.
- Dietze P, Cvetkovski S, Barrat M, Clemens S.** Patterns and incidence of gamma-hydroxybutyrate (GHB)-related ambulance attendances in Melbourne, Victoria. *Med J Aust* 2008;188(12):709-12.
- Dietze P, Fitzgerald J, Jenkinson R.** Drinking by professional Australian Football League (AFL) players: prevalence and correlates of risk. *Med J Aust* 2008;189(9):479-83.
- Dilley RJ, Little PJ.** Another piece of cell biology in the puzzle of inflammation, glucose and diabetic vascular disease. *J Hypertens* 2008;26(3):396-8. Editorial.
- Dimmock DP, Trapane P, Feigenbaum A, Keegan CE, Cederbaum S, Gibson J, Gambello MJ, Vaux K, Ward P, Rice GM, Wolff JA, O'Brien WE, Fang P.** The role of molecular testing and enzyme analysis in the management of hypomorphic citrullinemia. *Am J Med Genet A* 2008;146A(22):2885-90.
- Ding C, Cicuttini F, Jones G.** How important is MRI for detecting early osteoarthritis? *Nat Clin Pract Rheumatol* 2008;4(1):4-5.
- Ding C, Martel-Pelletier J, Pelletier JP, Abram F, Raynauld JP, Cicuttini F, Jones G.** Two-year prospective longitudinal study exploring the factors associated with change in femoral cartilage volume in a cohort largely without knee radiographic osteoarthritis. *Osteoarthritis Cartilage* 2008;16(4):443-9.
- Ding C, Parameswaran V, Cicuttini F, Burgess J, Zhai G, Quinn S, Jones G.** Association between leptin, body composition, sex and knee cartilage morphology in older adults: the Tasmanian older adult cohort (TASOAC) study. *Ann Rheum Dis* 2008;67(9):1256-61.
- Dinh D, Lee G, Billah B, Smith JA, Shardey GC, Reid C.** Trends in coronary artery bypass graft surgery in Victoria, 2001-2006: findings from the Australasian Society of Cardiac and Thoracic Surgeons database project. *Med J Aust* 2008;188(4):214-7.
- Dionne CE, Dunn KM, Croft PR, Nachemson AL, Buchbinder R, et al.** A consensus approach toward the standardization of back pain definitions for use in prevalence studies. *Spine* 2008;33(1):95-103.
- Dixon JB, Hayden MJ, Lambert GW, Dawood T, Anderson ML, Dixon ME, O'Brien PE.** Raised CRP levels in obese patients: symptoms of depression have an independent positive association. *Obesity* 2008;16(9):2010-5.
- Dixon JB, O'Brien PE, Playfair J, Chapman L, Schachter LM, Skinner S, Proietto J, Bailey M, Anderson M.** Adjustable gastric banding and conventional therapy for Type 2 diabetes: a randomized controlled trial. *JAMA* 2008;299(3):316-23.
- Dixon JB, Piterman L, O'Brien PE, Hayden MJ.** Physician attitudes, beliefs and barriers towards the management and treatment of adult obesity: a literature review. *Aust J Primary Health* 2008;14(3):9-18. Review.
- Dobre D, van Veldhuisen DJ, Gouder MA, Krum H, Willenheimer R.** Clinical effects of initial 6 months monotherapy with bisoprolol versus enalapril in the treatment of patients with mild to moderate chronic heart failure. Data from the CIBIS III Trial. *Cardiovasc Drugs Ther* 2008;22(5):399-405.
- Doig GS, Simpson F, Finfer S, Delaney A, Davies AR, Mitchell I, Dobb G; Nutrition Guidelines Investigators of the ANZICS Clinical Trials Group.** Effect of evidence-based feeding guidelines on mortality of critically ill adults: a cluster randomized controlled trial. *JAMA* 2008;300(23):2731-41.
- Doody O, Given MF, Harper M, Kavnoudias H, Thomson KR, Lyon SM.** Rendezvous technique following thermal ureteric injury after radiofrequency ablation in a solitary kidney. *J Vasc Interv Radiol* 2008;19(7):1112-4.
- Doody O, Given MF, Lyon SM.** Extremities – indications and techniques for treatment of extremity vascular injuries. *Injury* 2008;39(11):1295-303. Review.
- Dooley MJ, Carrington C.** Recommendations for managing patients receiving oral chemotherapy and target therapies. *Asia-Pacific J Clin Oncol* 2008;4(2):122. Letter to the Editor.
- Dooley MJ, Dixon B, Poole SG, Chiang C, Whitlock A, Schneider H.** Phenotyping for thiopurine therapy in clinical practice. *J Pharm Pract Res* 2008;38:188-90.
- Dooley MJ, Van De Vreede M, Tan E.** Patient-completed medication histories versus those obtained by a pharmacist in a pre-admission clinic. *J Pharm Pract Res* 2008;38:216-18.
- Downey AW, Quach JL, Haase M, Haase-Fielitz A, Jones D, Bellomo R.** Characteristics and outcomes of patients receiving a medical emergency team review for acute change in conscious state or arrhythmias. *Crit Care Med* 2008;36(2):477-81.
- Downie LE, Pianta MJ, Vingrys AJ, Wilkinson-Berka JL, Fletcher EL.** AT1 receptor inhibition prevents astrocyte degeneration and restores vascular growth in oxygen-induced retinopathy. *Glia* 2008;56(10):1076-90.
- Doxanakis A, Hayes RD, Chen MY, Gurrin LC, Hocking J, Bradshaw CS, Williams H, Fairley CK.** Missing pelvic inflammatory disease? Substantial differences in the rate at which doctors diagnose PID. *Sex Transm Infect* 2008;84(7):518-23.
- DREAM Trial Investigators, Dagenais GR, Gerstein HC, Holman R, Budaj A, Escalante A, Hedner T, Keltai M, Lonn E, McFarlane S, McQueen M, Teo K, Sheridan P, Bosch J, Pogue J, Yusuf S.** Effects of ramipril and rosiglitazone on cardiovascular and renal outcomes in people with impaired glucose tolerance or impaired fasting glucose: results of the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) trial. *Diabetes Care* 2008;31(5):1007-14.
- Drenckhahn JD, Schwarz QP, Gray S, Laskowski A, Kiriazis H, Ming Z, Harvey RP, Du XJ, Thorburn DR, Cox TC.** Compensatory growth of healthy cardiac cells in the presence of diseased cells restores tissue homeostasis during heart development. *Dev Cell* 2008;15(4):521-33.
- Drew BG, Kingwell BA.** Acadesine, an adenosine-regulating agent with the potential for widespread indications. *Expert Opin Pharmacother* 2008;9(12):2137-44. Review.
- Driscoll A, Currey J, Worrall-Carter L, Stewart S.** Ethical dilemmas of a large national multi-centre study in Australia: time for some consistency. *J Clin Nurs* 2008;17(16):2212-20.
- Du XJ.** Distinct role of adrenoceptor subtypes in cardiac adaptation to chronic pressure overload. *Clin Exp Pharmacol Physiol* 2008;35(3):355-60. Review.

- Duffy SJ, Dart AM.** Novel cardiac therapies and innocent bystanders. *Lancet* 2008;371(9626):1726-8. Comment.
- Duke GJ, Santamaria J, Shann F, Stow P, Pilcher D, Ernest D, George C.** Critical care outcome prediction equation (COPE) for adult intensive care. *Crit Care Resusc* 2008;10(1):41.
- Dunkley S, Phillips L, McCall P, Brereton J, Lindeman R, Jankelowitz G, Cameron P.** Recombinant activated factor VII in cardiac surgery: experience from the Australian and New Zealand Haemostasis Registry. *Ann Thorac Surg* 2008;85(3):836-44.
- Dunstan DW.** Aerobic exercise and resistance training for the management of Type 2 diabetes mellitus. *Nat Clin Pract Endocrinol Metab* 2008;4(5):250-1. Review.
- Durante-Mangoni E, Bradley S, Selton-Suty C, Tripodi MF, Barsic B, et al.; International Collaboration on Endocarditis Prospective Cohort Study Group.** Current features of infective endocarditis in elderly patients: results of the International Collaboration on Endocarditis Prospective Cohort Study. *Arch Intern Med* 2008;168(19):2095-103.
- Dyer WB, Zaunders JJ, Yuan FF, Wang B, Learmont JC, Geczy AF, Saksena NK, McPhee DA, Gorry PR, Sullivan J.** Mechanisms of HIV non-progression; robust and sustained CD4+ T-cell proliferative responses to p24 antigen correlate with control of viraemia and lack of disease progression after long-term transfusion-acquired HIV-1 infection. *Retrovirology* 2008;5:112.
- Eades S, Read AW, Stanley FJ, Eades FN, McCaullay D, Williamson A.** Bibbulung Gnarnep ('solid kid'): causal pathways to poor birth outcomes in an urban Aboriginal birth cohort. *J Paediatr Child Health* 2008;44(6):342-6.
- Eakin EG, Reeves MM, Lawler SP, Oldenburg B, Del Mar C, Wilkie K, Spencer A, Battistutta D, Graves N.** The Logan Healthy Living Program: a cluster randomized trial of a telephone-delivered physical activity and dietary behavior intervention for primary care patients with Type 2 diabetes or hypertension from a socially disadvantaged community--rationale, design and recruitment. *Contemp Clin Trials* 2008;29(3):439-54.
- Edsell M, Bailey M, Keith J, Millar I.** Hyperbaric oxygen therapy in the treatment of skin ulcers due to calcific uraemic arteriopathy: experience from an Australian hyperbaric unit. *Diving Hyperbaric Med* 2008;38(3):139-44.
- Egi M, Bellomo R, Stachowski E, French CJ, Hart GK, Hegarty C, Bailey M.** Blood glucose concentration and outcome of critical illness: the impact of diabetes. *Crit Care Med* 2008;36(8):2249-55.
- Elam G, Macdonald N, Hickson F, Imrie J, Power R, McGarrigle C, Fenton K, Gilbert V, Ward H, Evans B on behalf of the INSIGHT Collaborative Research Team.** Risky sexual behaviour in context: qualitative results from an investigation into risk factors for seroconversion among gay men who test for HIV. *Sex Transm Infect* 2008;84(6):473-7.
- Ellen S, Olver J, Norman T, Burrows GB.** The neurobiology of benzodiazepine receptors in panic disorder and post-traumatic stress disorder. *Stress and Health* 2008;24(1):13-21.
- Elliott JH, Lynen L, Calmy A, De Luca A, Shafer RW, Zolfo M, Clotet B, Huffam S, Boucher CA, Cooper DA, Schapiro JM.** Rational use of antiretroviral therapy in low-income and middle-income countries: optimizing regimen sequencing and switching. *AIDS* 2008;22(16):2053-67.
- Elliott JH, Pujari S.** Protease inhibitor therapy in resource-limited settings. *Curr Opin HIV AIDS* 2008;3(6):612-619.
- El-Osta A, Brasacchio D, Yao D, Poci A, Jones PL, Roeder RG, Cooper ME, Brownlee M.** Transient high glucose causes persistent epigenetic changes and altered gene expression during subsequent normoglycemia. *J Exp Med* 2008;205(10):2409-17.
- English DR, Young JP, Simpson JA, Jenkins MA, Southey MC, Walsh MD, Buchanan DD, Barker MA, Haydon AM, Royce SG, Roberts A, Parry S, Hopper JL, Jass JJ, Giles GG.** Ethnicity and risk for colorectal cancers showing somatic BRAF V600E mutation or CpG island methylator phenotype. *Cancer Epidemiol Biomarkers Prev* 2008;17(7):1774-80.
- Enticott PG, Hoy KE, Herring SE, Johnston PJ, Daskalakis ZJ, Fitzgerald PB.** Reduced motor facilitation during action observation in schizophrenia: a mirror neuron deficit? *Schizophr Res* 2008;102(1-3):116-21.
- Enticott PG, Johnston PJ, Herring SE, Hoy KE, Fitzgerald PB.** Mirror neuron activation is associated with facial emotion processing. *Neuropsychologia* 2008;46(11):2851-4.
- Enticott PG, Ogloff JR, Bradshaw JL, Fitzgerald PB.** Response inhibition and impulsivity in schizophrenia. *Psychiatry Res* 2008;157(1-3):251-4.
- Enticott PG, Ogloff JR, Bradshaw JL, Fitzgerald PB.** Cognitive inhibitory control and self-reported impulsivity among violent offenders with schizophrenia. *J Clin Exp Neuropsychol* 2008;30(2):157-62.
- Ernst M, Najdovska M, Grail D, Lundgren-May T, Buchert M, Tye H, Matthews VB, Armes J, Bhathal PS, Hughes NR, Marcusson EG, Karras JG, Na S, Sedgwick JD, Hertzog PJ, Jenkins BJ.** STAT3 and STAT1 mediate IL-11-dependent and inflammation-associated gastric tumorigenesis in gp130 receptor mutant mice. *J Clin Invest* 2008;118(5):1727-38.
- Erskin B, Marshall E.** Retrospective analysis of diagnostic outcomes in acute lower gastrointestinal bleeding using nuclear medicine and angiography. *Radiographer* 2008;55(3):28-33.
- Esler M, Eikelis N, Schlaich M, Lambert G, Alvarenga M, Dawood T, Kaye D, Barton D, Pier C, Guo L, Brenchley C, Jennings G, Lambert E.** Chronic mental stress is a cause of essential hypertension: presence of biological markers of stress. *Clin Exp Pharmacol Physiol* 2008;35(4):498-502. Review.
- Esler M, Eikelis N, Schlaich M, Lambert G, Alvarenga M, Kaye D, El-Osta A, Guo L, Barton D, Pier C, Brenchley C, Dawood T, Jennings G, Lambert E.** Human sympathetic nerve biology: parallel influences of stress and epigenetics in essential hypertension and panic disorder. *Ann N Y Acad Sci* 2008;1148:338-48.
- Esler MD, Eikelis N, Lambert E, Straznicki N.** Neural mechanisms and management of obesity-related hypertension. *Curr Cardiol Rep* 2008;10(6):456-63.
- Esmore D, Kaye D, Spratt P, Larbaestier R, Ruygrok P, Tsui S, Meyers D, Fiane AE, Woodard J.** A prospective, multicenter trial of the VentrAssist left ventricular assist device for bridge to transplant: safety and efficacy. *J Heart Lung Transplant* 2008;27(6):579-88.
- Esmore DS, Kaye D, Salamonsen R, Buckland M, Begg JR, Negri J, Ayre P, Woodard J, Rosenfeldt FL.** Initial clinical experience with the VentrAssist left ventricular assist device: the pilot trial. *J Heart Lung Transplant* 2008;27(5):479-85.
- Evans VA, Cameron PU, Lewin SR.** Human thymic dendritic cells: regulators of T cell development in health and HIV-1 infection. *Clin Immunol* 2008;126(1):1-12.
- Fairley C, Grulich AE, Imrie JC, Pitts M.** Investment in HIV prevention works: a natural experiment. *Sex Health* 2008;5(2):207-10.
- Fairley CK, Fehler G, Lewin SR, Pitts M, Chen MY, Bradshaw CS, Hocking JS.** Sexually transmissible infection and HIV management among men who have sex with men with and without HIV: survey of medical practitioners who are members of the Australasian Society for HIV Medicine. *Sex Health* 2008;5(2):155-9.
- Fairley CK, Grulich AE, Imrie JC, Pitts M.** Introductory editorial: the analysis of a natural experiment in HIV control. *Sex Health* 2008;5(2):89.
- Fairley CK, Newton DC, Cummings R, Chen MY.** Chaperones: getting the balance right. *Int J STD AIDS* 2008;19(2):143.
- Fang L, Gao XM, Samuel CS, Su Y, Lim YL, Dart AM, Du XJ.** Higher levels of collagen and facilitated healing protect against ventricular rupture following myocardial infarction. *Clin Sci* 2008;115(3):99-106.
- Fedi M, Bach LA, Berkovic SF, Willoughby JO, Scheffer IE, Reutens DC.** Association of a nicotinic receptor mutation with reduced height and blunted physostigmine-stimulated growth hormone release. *J Clin Endocrinol Metab* 2008;93(2):634-7.
- Feng L, Cui J.** Application of quasi-likelihood independence criterion in GEE analyses of longitudinal data. *Chinese J Health Stat* 2008;25:369-72.
- Ferguson JM, Minas J, Siapantas S, Komesaroff PA, Sudhir K.** Effects of a fixed-dose ACE inhibitor-diuretic combination on ambulatory blood pressure and arterial properties in isolated systolic hypertension. *J Cardiovasc Pharmacol* 2008;51(6):590-5.
- Ferguson M, Brand C, Lowe A, Gabbe B, Dowrick A, Hart M, Richardson M; Victorian Orthopaedic Trauma Outcomes Registry (VOTOR) Research Group.** Outcomes of isolated tibial shaft fractures treated at level 1 trauma centres. *Injury* 2008;39(2):187-95.

- Fethers KA, Fairley CK, Hocking JS, Gurrin LC, Bradshaw CS.** Sexual risk factors and bacterial vaginosis: a systematic review and meta-analysis. *Clin Infect Dis* 2008;47(11):1426-35.
- Field J, Alderuccio F, Hertzog P, Toh BH.** GM-CSF-induced autoimmune gastritis in interferon alpha receptor deficient mice. *J Autoimmun* 2008;31(3):274-80.
- Figueiredo A, Zelina S, Sluis-Cremer N, Tachedjian G.** Impact of residues in the nonnucleoside reverse transcriptase inhibitor binding pocket on HIV-1 reverse transcriptase heterodimer stability. *Curr HIV Res* 2008;6(2):130-7.
- Fillipas S, Bowtell-Harris CA, Oldmeadow LB, Cicuttini F, Holland AE, Cherry CL.** Physical activity uptake in patients with HIV: who does how much? *Int J STD AIDS* 2008;19(8):514-8.
- Fitzgerald M, Basu A, Rahman F, Russell TJ, Hines J, Gooi J, Marasco S, Bezer L, Effenev P, Bunbury K.** Survival following resuscitative thoracotomy for combined left ventricle and left atrium ruptures secondary to blunt trauma. *Injury* 2008;39(9):1089-92.
- Fitzgerald M, Mackenzie CF, Marasco S, Hoyle R, Kossmann T.** Pleural decompression and drainage during trauma reception and resuscitation. *Injury* 2008;39(1):9-20.
- Fitzgerald P.** Brain stimulation techniques for the treatment of depression and other psychiatric disorders. *Australas Psychiatry* 2008;16(3):183-90.
- Fitzgerald P, Herring S, Hoy K, McQueen S, Segrave R, Kulkarni J, Daskalakis ZJ.** A study of the effectiveness of bilateral transcranial magnetic stimulation in the treatment of the negative symptoms of schizophrenia. *Brain Stimulat* 2008;1(1):27-32.
- Fitzgerald PB, Daskalakis ZJ.** The use of repetitive transcranial magnetic stimulation and vagal nerve stimulation in the treatment of depression. *Curr Opin Psychiatry* 2008;21(1):25-9. Review.
- Fitzgerald PB, Daskalakis ZJ.** A review of repetitive transcranial magnetic stimulation use in the treatment of schizophrenia. *Can J Psychiatry* 2008;53(9):567-76. Review.
- Fitzgerald PB, Daskalakis ZJ, Hoy K, Farzan F, Upton DJ, Cooper NR, Maller JJ.** Cortical inhibition in motor and non-motor regions: a combined TMS-EEG study. *Clin EEG Neurosci* 2008;39(3):112-7.
- Fitzgerald PB, Laird AR, Maller J, Daskalakis ZJ.** Meta-analytic study of changes in brain activation in depression. *Hum Brain Mapp* 2008;29(6):683-95.
- Fitzgerald PB, Sriithiran A, Benitez J, Daskalakis ZZ, Oxley TJ, Kulkarni J, Egan GF.** An fMRI study of prefrontal brain activation during multiple tasks in patients with major depressive disorder. *Hum Brain Mapp* 2008;29(4):490-501.
- Fitzgerald SM, Srikanth VK, Evans RG, Thrift AG.** Benefits and challenges in stroke research in developing countries. *Brain Impair* 2008;9(2):198-204. Review.
- Flannery G, Gehrig-Mills R, Billah B, Krum H.** Analysis of randomized controlled trials on the effect of magnitude of heart rate reduction on clinical outcomes in patients with systolic chronic heart failure receiving beta-blockers. *Am J Cardiol* 2008;101(6):865-9.
- Fletcher JM, Jordan MA, Snelgrove SL, Slattey RM, Dufour FD, Kyparissoudis K, Besra GS, Godfrey DI, Baxter AG.** Congenic analysis of the NKT cell control gene Nkt2 implicates the peroxisomal protein Pmp4. *J Immunol* 2008;181(5):3400-12.
- Forbes A, Shortreed S.** Inverse probability weighted estimation of the marginal odds ratio: correspondence regarding 'The performance of different propensity score methods for estimating marginal odds ratios'. *Stat Med* 2008;27(26):5556-9.
- Forbes JM, Coughlan MT, Cooper ME.** Oxidative stress as a major culprit in kidney disease in diabetes. *Diabetes* 2008;57(6):1446-54. Review.
- Ford NL, Rosenfeld JV.** Mild traumatic brain injury and bomb blast: stress, injury or both? *ADF Health* 2008;9(2):68-73.
- Foroud T, Sauerbeck L, Brown R, Anderson C, Woo D, Kleindorfer D, Flaherty ML, Deka R, Hornung R, Meissner I, Bailey-Wilson JE, Rouleau G, Connolly ES, Lai D, Koller DL, Huston J 3rd, Broderick JP; FIA Study Investigators.** Genome screen to detect linkage to intracranial aneurysm susceptibility genes: the Familial Intracranial Aneurysm (FIA) study. *Stroke* 2008;39(5):1434-40.
- Fowler SJ, Symons J, Sabato S, Myles PS.** Epidural analgesia compared with peripheral nerve blockade after major knee surgery: a systematic review and meta-analysis of randomized trials. *Br J Anaesth* 2008;100(2):154-64. Review.
- Frantseva MV, Fitzgerald PB, Chen R, Moller B, Daigle M, Daskalakis ZJ.** Evidence for impaired long-term potentiation in schizophrenia and its relationship to motor skill learning. *Cereb Cortex* 2008;18(5):990-6.
- Frayman KB, Cerritelli B, Wilson J, Sawyer SM.** Reproductive and sexual health in boys with cystic fibrosis: what do parents know and say? *Pediatr Pulmonol* 2008;43(11):1107-16.
- Frazzetto M, Suphioglu C, Zhu J, Schmidt-Kittler O, Jennings IG, Cranmer SL, Jackson SP, Kinzler KW, Vogelstein B, Thompson PE.** Dissecting isoform selectivity of PI3K inhibitors: the role of non-conserved residues in the catalytic pocket. *Biochem J* 2008;414(3):383-90.
- Fredericks B.** An exploration of the issues associated with the increasing Indigenous population in the greater Brisbane area. *J Aust Indigenous Issues* 2008;11(4):3-13.
- Fredericks B.** The need to extend beyond the knowledge gained in cross-cultural awareness training. *Aust J Indigenous Edu* 2008;37S:81-9.
- Fredericks BL.** Researching with Aboriginal women as an Aboriginal women researcher. *Aust Feminist Studies* 2008;23(55):113-29.
- Fredericks BL.** So you want to do oral history with Aboriginal Australians. *Old Stories, New Ways (2), Oral History Assoc Australia J* 2008;30:22-4.
- Fredericks BL.** Making an impact researching with Australian Aboriginal and Torres Strait Islander peoples. *Studies in Learning, Eval, Innov Develop* 2008;5(1):24-35.
- Fredericks BL, Croft P.** Finding a space to make an impact within the contemporary world. *Studies in Learning, Eval, Innov Develop* 2008;5(1):1-12.
- Friedman ND, Kotsanas D, Brett J, Billah B, Korman TM.** Investigation of an outbreak of *Serratia marcescens* in a neonatal unit via a case-control study and molecular typing. *Am J Infect Control* 2008;36(1):22-8.
- Friedrich MG, Abdel-Aty H, Taylor A, Schulz-Menger J, Messroghli D, Dietz R.** The salvaged area at risk in reperfused acute myocardial infarction as visualized by cardiovascular magnetic resonance. *J Am Coll Cardiol* 2008;51(16):1581-7.
- Fritschi L, Hoving JL, Sim MR, Del Monaco A, MacFarlane E, McKenzie D, Benke G, de Klerk N.** All cause mortality and incidence of cancer in workers in bauxite mines and alumina refineries. *Int J Cancer* 2008;123(4):882-7.
- Fruchart JC, Sacks F, Hermans MP, Assmann G, Brown WV, Ceska R, Chapman MJ, Dodson PM, Fioretto P, Ginsberg HN, Kadowaki T, Lablanche JM, Marx N, Plutzky J, Reiner Z, Rosenson RS, Staels B, Stock JK, Sy R, Wanner C, Zambon A, Zimmet P.** The Residual Risk Reduction Initiative: a call to action to reduce residual vascular risk in patients with dyslipidemia. *Am J Cardiol* 2008;102 (10 Suppl):1K-34K. Review.
- Fruchart JC, Sacks FM, Hermans MP, Assmann G, Brown WV, Ceska R, Chapman MJ, Dodson PM, Fioretto P, Ginsberg HN, Kadowaki T, Lablanche JM, Marx N, Plutzky J, Reiner Z, Rosenson RS, Staels B, Stock JK, Sy R, Wanner C, Zambon A, Zimmet P; Residual Risk Reduction Initiative (R3I).** The Residual Risk Reduction Initiative: a call to action to reduce residual vascular risk in dyslipidaemic patient. *Diab Vasc Dis Res* 2008;5(4):319-35. Review.
- Fruhwald FM, Fahrleitner-Pammer A, Obermayer-Pietsch B, Goulder MA, Krum H, van Veldhuisen DJ, van de Ven L, Verkenne P, Pieske B, Meyer W, Willenheimer R.** Neurohormones as predictors of outcome in an elderly heart failure population naive of neurohormonal blockers: results from the CIBIS III Neurohormonal Substudy. *Open Heart Failure J* 2008;1:9-16.
- Fry C, Khosnood K, Power R, Sharma M.** Harm reduction ethics: acknowledging the values and beliefs behind our actions. *Int J Drug Policy* 2008;19(1):1-3.
- Fukuda K, Tesch GH, Yap FY, Forbes JM, Flavell RA, Davis RJ, Nikolic-Paterson DJ.** MKK3 signalling plays an essential role in leukocyte-mediated pancreatic injury in the multiple low-dose streptozotocin model. *Lab Invest* 2008;88(4):398-407.
- Fuller M, Rozaklis T, Lovejoy M, Zarrinkalam K, Hopwood JJ, Meikle PJ.** Glucosylceramide accumulation is not confined to the lysosome in fibroblasts from patients with Gaucher disease. *Mol Genet Metab* 2008;93(4):437-43.

- Furtado CP, Maller JJ, Fitzgerald PB.** A magnetic resonance imaging study of the entorhinal cortex in treatment-resistant depression. *Psychiatry Res* 2008;163(2):133-42.
- Gabbe BJ, Simpson PM, Sutherland AM, Williamson OD, Judson R, Kossmann T, Cameron PA.** Functional measures at discharge: are they useful predictors of longer term outcomes for trauma registries? *Ann Surg* 2008;247(5):854-9.
- Gardiner EE, Al-Tamimi M, Mu FT, Karunakaran D, Thom JY, Moroi M, Andrews RK, Berndt MC, Baker RI.** Compromised ITAM-based platelet receptor function in a patient with immune thrombocytopenic purpura. *J Thromb Haemost* 2008;6(7):1175-82.
- Gardiner EE, Andrews RK.** The cut of the clot(h): snake venom fibrinogenases as therapeutic agents. *J Thromb Haemost* 2008;6(8):1360-2.
- Gardiner EE, Karunakaran D, Arthur JF, Mu FT, Powell MS, Baker RI, Hogarth PM, Kahn ML, Andrews RK, Berndt MC.** Dual ITAM-mediated proteolytic pathways for irreversible inactivation of platelet receptors: de-ITAM-izing FcγRIIIa. *Blood* 2008;111(1):165-74.
- Gardner SM, Komesaroff PA, Fensham RS.** Dancing beyond exercise: young people's experience in dance classes. *J Youth Studies* 2008;11(6):701-9.
- Gasser A, Forbes JM.** Advanced glycation: implications in tissue damage and disease. *Protein Pept Lett* 2008;15(4):385-91.
- Gavrilescu M, Stuart GW, Rossell S, Henshall K, McKay C, Sergejew AA, Copolov D, Egan GF.** Functional connectivity estimation in fMRI data: influence of preprocessing and time course selection. *Hum Brain Mapp* 2008;29(9):1040-52.
- Genton B, D'Acremont V, Rare L, Bae K, Reeder J, Alpers M, Müller I.** *Plasmodium vivax* and mixed infections are associated with severe malaria: a prospective cohort study from Papua New Guinea. *PLoS Med* 2008;5(6):e127.
- George J, Cleland J, Bond CM, McCaig DJ, Cunningham IT, Diack HL, Stewart DC.** Views of pharmacists and mentors on experiential learning for pharmacist supplementary prescribing trainees. *Pharm World Sci* 2008;30(3):265-71.
- George J, Elliott RA, Stewart DC.** A systematic review of interventions to improve medication taking in elderly patients prescribed multiple medications. *Drugs Aging* 2008;25(4):307-24. Review.
- Georgiou HM, Lappas M, Georgiou GM, Marita A, Bryant VJ, Hiscock R, Permezel M, Khalil Z, Rice GE.** Screening for biomarkers predictive of gestational diabetes mellitus. *Acta Diabetol* 2008;45(3):157-65.
- Germano C, Kinsella GJ, Storey E, Ong B, Ames D.** The episodic buffer and learning in early Alzheimer's disease. *J Clin Exp Neuropsychol* 2008;30(6):627-38.
- Geso M, Ackerly T, Brown S, Chua Z, He C, Wong CJ, Powell CE, Ho A, Qiao G, Solomon DH, Patterson W, Droegge JM.** Determination of dosimetric perturbations caused by aneurysm clip in stereotactic radiosurgery using gel phantoms and EBT-Gafchromic films. *Med Phys* 2008;35(2):744-52.
- Ghali JK, Anand IS, Abraham WT, Fonarow GC, Greenberg B, Krum H, Massie BM, Wasserman SM, Trotman ML, Sun Y, Knusel B, Armstrong P; Study of Anemia in Heart Failure Trial (STAMINA-HeFT) Group.** Randomized double-blind trial of darbepoetin alfa in patients with symptomatic heart failure and anemia. *Circulation* 2008;117(4):526-35.
- Gianni L, Cole BF, Panzini I, Snyder R, Holmberg SB, Byrne M, Crivellari D, Colleoni M, Aebi S, Simoncini E, Pagani O, Castiglione-Gertsch M, Price KN, Goldhirsch A, Coates AS, Ravaoli A.** Anemia during adjuvant non-taxane chemotherapy for early breast cancer: incidence and risk factors from two trials of the International Breast Cancer Study Group. *Support Care Cancer* 2008;16(1):67-74.
- Gibney KB, MacGregor L, Leder K, Torresi J, Marshall C, Ebeling PR, Biggs BA.** Vitamin D deficiency is associated with tuberculosis and latent tuberculosis infection in immigrants from sub-Saharan Africa. *Clin Infect Dis* 2008;46(3):443-6.
- Gibson SJ.** Building research capacity in pain-related ageing research. *IASP Pain Older Persons Spec Int Group Newsletter* 2008;3:2-3.
- Gicquel C, El-Osta A, Le Bouc Y.** Epigenetic regulation and fetal programming. *Best Pract Res Clin Endocrinol Metab* 2008;22(1):1-16. Review.
- Giles ML, McDonald AM, Elliott EJ, Ziegler JB, Hellard ME, Lewin SR, Kaldor JM.** Variable uptake of recommended interventions to reduce mother-to-child transmission of HIV in Australia, 1982-2005. *Med J Aust* 2008;189(3):151-4.
- Giummarra MJ, Gibson SJ, Georgiou-Karistianis N, Bradshaw JL.** Mechanisms underlying embodiment, disembodiment and loss of embodiment. *Neurosci Biobehav Rev* 2008;32(1):143-60. Review.
- Giunti S, Tesch GH, Pinach S, Burt DJ, Cooper ME, Cavallo-Perin P, Camussi G, Gruden G.** Monocyte chemoattractant protein-1 has pro-sclerotic effects both in a mouse model of experimental diabetes and *in vitro* in human mesangial cells. *Diabetologia* 2008;51:198-207.
- Given MF, Geoghegan T, Lyon SM, McGrath F, Lee MJ.** Percutaneous antegrade ureteric stent removal using a rigid alligator forceps. *J Med Imaging Radiat Oncol* 2008;52(6):576-9.
- Given MF, McDonald BC, Brookfield P, Niggemeyer L, Kossmann T, Varma DK, Thomson KR, Lyon SM.** Retrievable Gunther Tulip inferior vena cava filter: experience in 317 patients. *J Med Imaging Radiat Oncol* 2008;52(5):452-7.
- Given MF, Smith P, Lyon SM, Robertson D, Thomson KR.** Embolization of spontaneous hemarthrosis post total knee replacement. *Cardiovasc Intervent Radiol* 2008;31(5):986-8.
- Glasziou PP, Irwig L, Heritier S, Simes RJ, Tonkin A; LIPID Study Investigators.** Monitoring cholesterol levels: measurement error or true change? *Ann Intern Med* 2008;148(9):656-61.
- Goh SY, Cooper ME.** Clinical review: the role of advanced glycation end products in progression and complications of diabetes. *J Clin Endocrinol Metab* 2008;93(4):1143-52. Review.
- Goh SY, Jasik M, Cooper ME.** Agents in development for the treatment of diabetic nephropathy. *Expert Opin Emerg Drugs* 2008;13(3):447-63. Review.
- Gomez-Sanchez EP, Romero DG, de Rodriguez AF, Warden MP, Krozowski Z, Gomez-Sanchez CE.** Hexose-6-phosphate dehydrogenase and 11 β-hydroxysteroid dehydrogenase-1 tissue distribution in the rat. *Endocrinology* 2008;149(2):525-33.
- Gorman L, Ruben J, Myers R, Dally M.** Role of hypofractionated stereotactic radiotherapy in treatment of skull base meningiomas. *J Clin Neurosci* 2008;15(8):856-62.
- Gosling CM, Gabbe BJ, Forbes AB.** Triathlon related musculoskeletal injuries: the status of injury prevention knowledge. *J Sci Med Sport* 2008;11(4):396-406.
- Gosling CM, Gabbe BJ, McGivern J, Forbes AB.** The incidence of heat casualties in sprint triathlon: the tale of two Melbourne race events. *J Sci Med Sport* 2008;11(1):52-7.
- Gould PA, Esler MD, Kaye DM.** Atrial fibrillation is associated with decreased cardiac sympathetic response to isometric exercise in CHF in comparison to sinus rhythm. *Pacing Clin Electrophysiol* 2008;31(9):1125-9.
- Goy K, Von Bibra S, Lewis J, Laurie K, Barr I, Anderson D, Hellard M, French R.** Heterosubtypic T-cell responses against avian influenza H5 haemagglutinin are frequently detected in individuals vaccinated against or previously infected with human subtypes of influenza. *Influenza Other Respir Viruses* 2008;2(4):115-25.
- Graham HK, Boyd R, Carlin JB, Dobson F, Lowe K, Nattrass G, Thomason P, Wolfe R, Reddihough D.** Does botulinum toxin a combined with bracing prevent hip displacement in children with cerebral palsy and "hips at risk"? A randomized, controlled trial. *J Bone Joint Surg Am* 2008;90(1):23-33.
- Grainger R, Stuckey S, O'Sullivan R, Davis SR, Ebeling PR, Wluka AE.** What is the clinical and ethical importance of incidental abnormalities found by knee MRI? *Arthritis Res Ther* 2008;10(1):R18.
- Gray SP, Kenna K, Bertram JF, Hoy WE, Yan EB, Bocking AD, Brien JF, Walker DW.** Repeated ethanol exposure during late gestation decreases nephron endowment in fetal sheep. *Am J Physiol Regul Integr Comp Physiol* 2008;295(2):R568-74.
- Greenwood DL, Crock P, Braye S, Davidson P, Sentry JW.** Autoimmune gastritis and parietal cell reactivity in two children with abnormal intestinal permeability. *Eur J Pediatr* 2008;167(8):917-25.
- Greenwood DL, Dynon K, Kalkanidis M, Xiang S, Plebanski M, Scheerlinck JP.** Vaccination against foot-and-mouth disease virus using peptides conjugated to nano-beads. *Vaccine* 2008;26(22):2706-13.

- Greenwood Z, Black J, Weld L, O'Brien D, Leder K, Von Sonnenburg F, Pandey P, Schwartz E, Connor BA, Brown G, Freedman DO, Torresi J; GeoSentinel Surveillance Network.** Gastrointestinal infection among international travelers globally. *J Travel Med* 2008;15(4):221-8.
- Gregorevic P, Blankinship MJ, Allen JM, Chamberlain JS.** Systemic microdystrophin gene delivery improves skeletal muscle structure and function in old dystrophic mdx mice. *Mol Ther* 2008;16(4):657-64.
- Gregorevic P, Mezmarich NA, Blankinship MJ, Crawford RW, Chamberlain JS.** Fluorophore-labeled myosin-specific antibodies simplify muscle-fiber phenotyping. *Muscle Nerve* 2008;37(1):104-6.
- Gregory J, Hartz-Karp J, Watson R.** Using deliberative techniques to engage the community in policy development. *Aust N Z Health Policy* 2008;5:16.
- Grigg AP, Sasadeusz J.** Hepatitis B reactivation after thalidomide. *Intern Med J* 2008;38(4):301-2.
- Grodski S, Brown T, Sidhu S, Gill A, Robinson B, Learoyd D, Sywak M, Reeve T, Delbridge L.** Increasing incidence of thyroid cancer is due to increased pathologic detection. *Surgery* 2008;144(6):1038-43.
- Grodski S, Gill A, Robinson BG, Sidhu S.** Nonfunctioning parathyroid cancer presenting as a cervical mass. *Thyroid* 2008;18(4):473-4.
- Grodski S, Serpell J.** Evidence for the role of perioperative PTH measurement after total thyroidectomy as a predictor of hypocalcemia. *World J Surg* 2008;32(7):1367-73.
- Grossmann M, Thomas MC, Panagiotopoulos S, Sharpe K, Macisaac RJ, Clarke S, Zajac JD, Jerums G.** Low testosterone levels are common and associated with insulin resistance in men with diabetes. *J Clin Endocrinol Metab* 2008;93(5):1834-40.
- Grove J, Nielsen S, Zhong J, Bassendine MF, Drummer HE, Balfe P, McKeating JA.** Identification of a residue in hepatitis C virus E2 glycoprotein that determines scavenger receptor BI and CD81 receptor dependency and sensitivity to neutralizing antibodies. *J Virol* 2008;82(24):12020-9.
- Groves J, Newton DC, Chen MY, Hocking J, Bradshaw CS, Fairley CK.** Sex workers working within a legalised industry: their side of the story. *Sex Transm Infect* 2008;84(5):393-4.
- Grubb DR, Vasilevski O, Huynh H, Woodcock EA.** The extreme C-terminal region of phospholipase C $\beta$ 1 determines subcellular localization and function; the "b" splice variant mediates  $\alpha$ 1-adrenergic receptor responses in cardiomyocytes. *FASEB J* 2008;22(8):2768-74.
- Gruber G, Cole BF, Castiglione-Gertsch M, Holmberg SB, Lindtner J, Golouh R, Collins J, Crivellari D, Thurlimann B, Simoncini E, Fey MF, Gelber RD, Coates AS, Price KN, Goldhirsch A, Viale G, Gusterson BA; International Breast Cancer Study Group.** Extracapsular tumor spread and the risk of local, axillary and supraclavicular recurrence in node-positive, premenopausal patients with breast cancer. *Ann Oncol* 2008;19(8):1393-401.
- Gruen RL, Elliott JH, Nolan ML, Lawton PD, Parkhill A, McLaren CJ, Lavis JN.** Sustainability science: an integrated approach for health-programme planning. *Lancet* 2008;372(9649):1579-89.
- Guda R, Dugdale P, Evans S, McNeil J.** Considerations in the design of service specific chronic disease management registers. *Australasian Epidemiologist* 2008;15(3):28-31.
- Guebre-Egziabher F, Rabasa-Lhoret R, Bonnet F, Bastard JP, Desage M, Skilton MR, Vidal H, Laville M.** Nutritional intervention to reduce the n-6/n-3 fatty acid ratio increases adiponectin concentration and fatty acid oxidation in healthy subjects. *Eur J Clin Nutr* 2008;62(11):1287-93.
- Guerreiro AS, Fattet S, Fischer B, Shalaby T, Jackson SP, Schoenwaelder SM, Grotzer MA, Delattre O, Arcaro A.** Targeting the PI3K p110 $\alpha$  isoform inhibits medulloblastoma proliferation, chemoresistance, and migration. *Clin Cancer Res* 2008;14(21):6761-9.
- Gurvich CT, Fitzgerald PB, Georgiou-Karistianis N, White OB.** Saccadic impairment in schizophrenia with prominent negative symptoms. *Neuroreport* 2008;19(14):1435-9.
- Gurvitch R, Yan BP, Warren R, Marasco S, Black AJ, Ajani AE.** Spontaneous resolution of multiple coronary aneurysms complicating drug eluting stent implantation. *Int J Cardiol* 2008;130(1):e7-10.
- Guy R, Devadason D, Lim M, Higgins N, Pedrana A, Gibson K, Lewis J, White B, Kaldor J, Hellard M.** Enhanced case detection for newly acquired hepatitis C infection: epidemiological findings and health service implications. *Comm Dis Intell* 2008;32(2):250-6.
- Guy R, McDonald A, Bartlett M, Murray J, Giele C, Davey T, Appuhamy R, Knibbs P, Coleman D, Hellard M, Grulich A, Kaldor J.** Characteristics of HIV diagnoses in Australia, 1993–2006. *Sex Health* 2008;5(2):91-6.
- Ha T, Hua F, Liu X, Ma J, McMullen JR, Shioi T, Izumo S, Kelley J, Gao X, Browder W, Williams DL, Kao RL, Li C.** Lipopolysaccharide-induced myocardial protection against ischaemia/reperfusion injury is mediated through a PI3K/Akt-dependent mechanism. *Cardiovasc Res* 2008;78(3):546-53.
- Haller G, Myles PS, Langley M, Stoelwinder J, McNeil J.** Assessment of an unplanned admission to the intensive care unit as a global safety indicator in surgical patients. *Anaesth Intensive Care* 2008;36(2):190-200.
- Hamilton MT, Healy GN, Dunstan DW, Zderic TW, Owen N.** Too little exercise and too much sitting: inactivity physiology and the need for new recommendations on sedentary behaviour. *Curr Cardiovasc Risk Rep* 2008;2(4):292-298.
- Han Y, Masaki T, Hurst LA, Ikezumi Y, Trzaskos JM, Atkins RC, Nikolic-Paterson DJ.** Extracellular signal-regulated kinase-dependent interstitial macrophage proliferation in the obstructed mouse kidney. *Nephrology (Carlton)* 2008;13(5):411-8.
- Hanna FS, Bell RJ, Cicuttini FM, Davison SL, Wluka AE, Davis SR.** High sensitivity C-reactive protein is associated with lower tibial cartilage volume but not lower patella cartilage volume in healthy women at mid-life. *Arthritis Res Ther* 2008;10(1):R27.
- Haqqani HM, Kalman JM, Kistler PM.** Catheter ablation for atrial fibrillation: have we come the full circle? *J Cardiovasc Electrophysiol* 2008;19(5):480-2. Editorial.
- Harikrishnan KN, Karagiannis TC, Chow MZ, El-Osta A.** Effect of valproic acid on radiation-induced DNA damage in euchromatic and heterochromatic compartments. *Cell Cycle* 2008;7(4):468-76.
- Harris K, Jackson DE.** Unravelling the complicated networks of integrin  $\alpha$ IIb $\beta$ 3 signalling in platelets. *Curr Signal Transduct Ther* 2008;3(3):158-67.
- Hassali MA, Stewart K, Kong DC.** A national survey on knowledge and perceptions of senior medical students in Australia about generic medicines. *Med J Aust* 2008;188(2):123-4.
- Hawkes E, Haydon A, Murugasu A, Schwarz MA.** Inferior vena caval leiomyosarcoma in a patient with past bilateral retinoblastoma. *Asia-Pacific J Clin Oncol* 2008;4(3):181-3.
- Hawley JA, Dunstan DW.** The battle against obesity – attacking physical inactivity as a primary means of defense. *Nat Clin Pract Endocrinol Metab* 2008;4(10):548-9. Review.
- Hawley JA, Dunstan DW.** Overweight and obesity in Australia. *Med J Aust* 2008;188(11):678, discussion 678-9.
- Hayes RD.** Assessing female sexual dysfunction in epidemiological studies: why is it necessary to measure both low sexual function and sexually-related distress? *Sex Health* 2008;5(3):215-8.
- Hayes RD, Dennerstein L, Bennett CM, Fairley CK.** What is the "true" prevalence of female sexual dysfunctions and does the way we assess these conditions have an impact? *J Sex Med* 2008;5(4):777-87.
- Hayes RD, Dennerstein L, Bennett CM, Sidat M, Gurrin LC, Fairley CK.** Risk factors for female sexual dysfunction in the general population: exploring factors associated with low sexual function and sexual distress. *J Sex Med* 2008;5(7):1681-93.
- He CF, Geso M, Ackerly T, Wong CJ.** Stereotactic dose perturbation from an aneurysm clip measured by Gafchromic EBT film. *Australas Phys Eng Sci Med* 2008;31(1):18-23.
- Head GA, Lukoshkova EV.** Understanding the morning rise in blood pressure. *Clin Exp Pharmacol Physiol* 2008;35(4):516-21. Review.
- Head GA, Lukoshkova EV, Reid CM.** Response to: Analysis and interpretation of 24 hour blood pressure profiles. *Am J Hypertens* 2008;21(2):127-129. Letter.

- Healy DG, Falchi M, O'Sullivan SS, Bonifati V, Durr A, et al.; International LRRK2 Consortium.** Phenotype, genotype, and worldwide genetic penetrance of LRRK2-associated Parkinson's disease: a case-control study. *Lancet Neurol* 2008;7(7):583-90.
- Healy DL, Bell R, Robertson DM, Jobling T, Oehler MK, Edwards A, Shekleton P, Oldham J, Piessens S, Teoh M, Mamers P, Taylor N, Walker F.** Ovarian status in healthy postmenopausal women. *Menopause* 2008;15(6):1109-14.
- Healy GN, Dunstan DW, Salmon J, Cerin E, Shaw JE, Zimmet PZ, Owen N.** Breaks in sedentary time: beneficial associations with metabolic risk. *Diabetes Care* 2008;31(4):661-6.
- Healy GN, Dunstan DW, Salmon J, Shaw JE, Zimmet PZ, Owen N.** Television time and continuous metabolic risk in physically active adults. *Med Sci Sports Exerc* 2008;40(4):639-45.
- Healy GN, Wijndaele K, Dunstan DW, Shaw JE, Salmon J, Zimmet PZ, Owen N.** Objectively-measured sedentary time, physical activity and metabolic risk: the AusDiab study. *Diabetes Care* 2008;31(2):369-71.
- Heller R, Chang Q, Ehrlich G, Hsieh SN, Schoenwaelder SM, Kuhlencordt PJ, Preissner KT, Hirsch E, Wetzker R.** Overlapping and distinct roles for PI3Kbeta and gamma isoforms in S1P-induced migration of human and mouse endothelial cells. *Cardiovasc Res* 2008;80(1):96-105.
- Heng YJ, Di Quinzio MK, Permezel M, Rice GE, Georgiou HM.** Interleukin-1 receptor antagonist in human cervicovaginal fluid in term pregnancy and labor. *Am J Obstet Gynecol* 2008;199(6):656.e1-7.
- Hettiarachchi KD, Zimmet PZ, Danial NN, Myers MA.** Transplacental exposure to the vacuolar-ATPase inhibitor bafilomycin disrupts survival signaling in beta cells and delays neonatal remodeling of the endocrine pancreas. *Exp Toxicol Pathol* 2008;60(4-5):295-306.
- Hettiarachchi KD, Zimmet PZ, Myers MA.** Dietary toxins, endoplasmic reticulum (ER) stress and diabetes. *Curr Diabetes Rev* 2008;4(2):146-56. Review.
- Hicks P, Cooper DJ, Webb S, Myburgh J, Seppelt I, Peake S, Joyce C, Stephens D, Turner A, French C, Hart G, Jenkins I, Burrell A. The Surviving Sepsis Campaign.** International guidelines for management of severe sepsis and septic shock: 2008. An assessment by the Australian and New Zealand intensive care society. *Anaesth Intensive Care* 2008;36(2):149-51.
- Hicks P, Cooper DJ; The Australian and New Zealand Intensive Care Society (ANZICS) Board and Clinical Trials Group Executive Committee.** The Surviving Sepsis Campaign: international guidelines for management of severe sepsis and septic shock: 2008. *Crit Care Resusc* 2008;10(1):8.
- Higgs P, Owada K, Hellard M, Power R, Maher L.** Gender, culture and harm: an exploratory study of female heroin users of Vietnamese ethnicity. *Cult Health Sex* 2008;10(7):681-96.
- Hii SW, Tam JD, Thompson BR, Naughton MT.** Bullous lung disease due to marijuana. *Respirology* 2008;13(1):122-7.
- Hill CJ, Denehy L, Holland AE, McDonald CF.** Measurement of functional activity in chronic obstructive pulmonary disease: the grocery shelving task. *J Cardiopulm Rehabil Prev* 2008;28(6):402-9.
- Hilton AK, Pellegrino VA, Scheinkestel CD.** Avoiding common problems associated with intravenous fluid therapy. *Med J Aust* 2008;189(9):509-13.
- Hiwase DK, Hiwase S, Bailey M, Bollard G, Schwarzer AP.** Higher infused lymphocyte dose predicts higher lymphocyte recovery, which in turn, predicts superior overall survival following autologous hematopoietic stem cell transplantation for multiple myeloma. *Biol Blood Marrow Transplant* 2008;14(1):116-24.
- Hiwase DK, Hiwase S, Bailey M, Bollard G, Schwarzer AP.** The role of stem cell mobilization regimen on lymphocyte collection yield in patients with multiple myeloma. *Cytotherapy* 2008;10(5):507-17.
- Hoang A, Tefft C, Duffy SJ, Formosa M, Henstridge DC, Kingwell BA, Sviridov D.** ABCA1 expression in humans is associated with physical activity and alcohol consumption. *Atherosclerosis* 2008;197(1):197-203.
- Hocking JS, Parker RM, Pavlin N, Fairley CK, Gunn JM.** What needs to change to increase chlamydia screening in general practice in Australia? The views of general practitioners. *BMC Public Health* 2008;8:425.
- Hocking JS, Walker J, Regan D, Chen MY, Fairley CK.** Chlamydia screening – Australia should strive to achieve what others have not. *Med J Aust* 2008;188(2):106-8.
- Hodge K, Janus E, Sundararajan V, Taylor S, Brand W, Ibrahim JE, Wolff A.** Coordinated anticoagulation management in a rural setting. *Aust Fam Physician* 2008;37(4):280-3.
- Holland AE, Hill CJ, Conron M, Munro P, McDonald CF.** Short term improvement in exercise capacity and symptoms following exercise training in interstitial lung disease. *Thorax* 2008;63(6):549-54.
- Holmes AG, Mesa JL, Neill BA, Chung J, Carey AL, Steinberg GR, Kemp BE, Southgate RJ, Lancaster GI, Bruce CR, Watt MJ, Febbraio MA.** Prolonged interleukin-6 administration enhances glucose tolerance and increases skeletal muscle PPAR $\alpha$  and UCP2 expression in rats. *J Endocrinol* 2008;198(2):367-74.
- Holmes W, Maher L, Rosenthal S.** Attitudes of men in an Australian male tolerance study towards microbicide use. *Sex Health* 2008;5(3):273-8.
- Hoppenbrouwers SS, Schutter DJ, Fitzgerald PB, Chen R, Daskalakis ZJ.** The role of the cerebellum in the pathophysiology and treatment of neuropsychiatric disorders: a review. *Brain Res Rev* 2008;59(1):185-200. Review.
- House MJ, St Pierre TG, McLean C.** 1.4T study of proton magnetic relaxation rates, iron concentrations, and plaque burden in Alzheimer's disease and control postmortem brain tissue. *Magn Reson Med* 2008;60(1):41-52.
- Hoy KE, Georgiou-Karistianis N, Farrow M, Fitzgerald PB.** Neurological soft signs in schizophrenia: Investigating motor overflow. *World J Biol Psychiatry* 2008;1:1-9.
- Hoy KE, Georgiou-Karistianis N, Laycock R, Fitzgerald PB.** A transcranial magnetic stimulation study of transcallosal inhibition and facilitation in schizophrenia. *J Clin Neurosci* 2008;15(8):863-7.
- Hu WP, Lu Y, Precioso NA, Chen HY, Howard T, Anderson D, Guan M.** Double-antigen enzyme-linked immunosorbent assay for detection of hepatitis E virus-specific antibodies in human or swine sera. *Clin Vaccine Immunol* 2008;15(8):1151-57.
- Hudson P, Quinn K, Kristjanson L, Thomas T, Braithwaite M, Fisher J, Cockayne M.** Evaluation of a psycho-educational group programme for family caregivers in home-based palliative care. *Palliat Med* 2008;22(3):270-80.
- Huggins CE, Bell JR, Pepe S, Delbridge LM.** Benchmarking ventricular arrhythmias in the mouse – revisiting the 'Lambeth Conventions' 20 years on. *Heart Lung Circ* 2008;17(6):445-50.
- Hughes TP, Branford S, White DL, Reynolds J, Koelmeyer R, Seymour JF, Taylor K, Arthur C, Schwarzer A, et al.; Australasian Leukaemia and Lymphoma Group.** Impact of early dose intensity on cytogenetic and molecular responses in chronic-phase CML patients receiving 600 mg/day of imatinib as initial therapy. *Blood* 2008;112(10):3965-73.
- Ibrahim J, Jeffcott S.** Successful risk management requires the left brain to meet with the right brain. *Aust Health Law Bulletin* 2008;16(8):131-4.
- Ibrahim MG, Bunter R, Rajasooriar S, Thien F.** Paragonimiasis: an unusual case of haemoptysis. *Med J Aust* 2008;188(12):734-5. Letter to the Editor.
- Iles L, Pfluger H, Phrommintikul A, Cherayath J, Aksit P, Gupta SN, Kaye DM, Taylor AJ.** Evaluation of diffuse myocardial fibrosis in heart failure with cardiac magnetic resonance contrast-enhanced T1 mapping. *J Am Coll Cardiol* 2008;52(19):1574-80.
- Inglis SC, Clark RA, Shakib S, Wong DT, Molae P, Wilkinson D, Stewart S.** Hot summers and heart failure: seasonal variations in morbidity and mortality in Australian heart failure patients (1994-2005). *Eur J Heart Fail* 2008;10(6):540-9.
- Inyang I, Benke G, McKenzie R, Abramson M.** Comparison of measuring instruments for radiofrequency radiation from mobile telephones in epidemiological studies: implications for exposure assessment. *J Expo Sci Environ Epidemiol* 2008;18(2):134-41.
- Irvine JC, Ritchie RH, Favaloro JL, Andrews KL, Widdop RE, Kemp-Harper BK.** Nitroxyl (HNO): the Cinderella of the nitric oxide story. *Trends Pharmacol Sci* 2008;29(12):601-8. Review.

- Isbister J, Phillips L, Dunkley S, Jankelowitz G, McNeil J, Cameron P.** Recombinant activated factor VII in critical bleeding: experience from the Australian and New Zealand Haemostasis Register. *Intern Med J* 2008;38(3):156-65.
- Iser DM, Sasadeusz JJ.** Current treatment of HIV/hepatitis B virus coinfection. *J Gastroenterol Hepatol* 2008;23(5):699-706.
- Ivey ME, Little PJ.** Thrombin regulates vascular smooth muscle cell proteoglycan synthesis via PAR-1 and multiple downstream signalling pathways. *Thromb Res* 2008;123(2):288-97.
- Ivey ME, Osman N, Little PJ.** Endothelin-1 signalling in vascular smooth muscle: pathways controlling cellular functions associated with atherosclerosis. *Atherosclerosis* 2008;199(2):237-47. Review.
- James AL, Green FH, Abramson MJ, Bai TR, Dolhnikoff M, Mauad T, McKay KO, Elliot JG.** Airway basement membrane perimeter distensibility and airway smooth muscle area in asthma. *J Appl Physiol* 2008;104(6):1703-8.
- Janakiraman N, Teichtahl AJ, Wluka AE, Ding C, Jones G, Davis SR, Cicuttini FM.** Static knee alignment is associated with the risk of unicompartmental knee cartilage defects. *J Orthop Res* 2008;26(2):225-30.
- Jandeleit-Dahm K, Cooper ME.** The role of AGEs in cardiovascular disease. *Curr Pharm Des* 2008;14(10):979-86. Review.
- Jandeleit-Dahm K, Watson A, Soro-Paavonen A.** The AGE/RAGE axis in diabetes-accelerated atherosclerosis. *Clin Exp Pharmacol Physiol* 2008;35(3):329-34. Review.
- Januszewski AS, Thomas MC, Karschimkus CS, Chung JS, Rowley KG, Nelson CL, O'Neal DN, Dragicevic G, Harper CA, Best JD, Jenkins AJ.** Longitudinal analysis of low-molecular weight fluorophores in Type 1 diabetes mellitus. *J Med Invest* 2008;55(1-2):29-36.
- Jaques A, Daviskas E, Turton JA, McKay K, Cooper P, Stirling RG, Robertson CF, Bye PT, Lesouef PN, Shadbolt B, Anderson SD, Charlton B.** Inhaled mannitol improves lung function in cystic fibrosis. *Chest* 2008;133(6):1388-96.
- Jayasooriya AP, Begg DP, Chen N, Mathai ML, Sinclair AJ, Wilkinson-Berka J, Wark JD, Weisinger HS, Weisinger RS.** Omega-3 polyunsaturated fatty acid supplementation reduces hypertension in TGR(mRen-2)27 rats. *Prostaglandins Leukot Essent Fatty Acids* 2008;78(1):67-72.
- Jayasooriya AP, Mathai ML, Walker LL, Begg DP, Denton DA, Cameron-Smith D, Egan GF, McKinley MJ, Rodger PD, Sinclair AJ, Wark JD, Weisinger HS, Jois M, Weisinger RS.** Mice lacking angiotensin-converting enzyme have increased energy expenditure, with reduced fat mass and improved glucose clearance. *Proc Natl Acad Sci USA* 2008;105(18):6531-6.
- Jeffcott SA, Mackenzie CF.** Measuring team performance in healthcare: review of research and implications for patient safety. *J Crit Care* 2008;23(2):188-96. Review.
- Jennings N, O'Reilly G, Lee G, Cameron P, Free B, Bailey M.** Evaluating outcomes of the emergency nurse practitioner role in a major urban emergency department, Melbourne, Australia. *J Clin Nurs* 2008;17(8):1044-50.
- Jensen JS, Bradshaw CS, Tabrizi SN, Fairley CK, Hamasuna R.** Azithromycin treatment failure in *Mycoplasma genitalium*-positive patients with nongonococcal urethritis is associated with induced macrolide resistance. *Clin Infect Dis* 2008;47(12):1546-53.
- Jerums G, Panagiotopoulos S, Premaratne E, Power DA, MacIsaac RJ.** Lowering of proteinuria in response to antihypertensive therapy predicts improved renal function in late but not in early diabetic nephropathy: a pooled analysis. *Am J Nephrol* 2008;28(4):614-27.
- Johnston AE, Russell SL, Gleeson JF.** Evidence of semantic processing abnormalities in schizotypy using an indirect semantic priming task. *J Nerv Ment Dis* 2008;196(9):694-701.
- Jones D, George C, Hart GK, Bellomo R, Martin J.** Introduction of medical emergency teams in Australia and New Zealand: a multi-centre study. *Crit Care* 2008;12(2):R46.
- Jones KL, Brown LE, Eriksson EMY, Ffrench RA, Latour PA, Loveland BE, Dominic M, Wall DM, Roberts SK, Jackson DC, Gowans EJ.** Human dendritic cells pulsed with specific lipopeptides stimulate autologous antigen-specific CD8+ T-cells without the addition of exogenous maturation factors. *J Viral Hepatitis* 2008;15(10):761-72.
- Jones KL, Sonza S, Mak J.** Primary T-lymphocytes rescue the replication of HIV DIS RNA mutants in part by facilitating reverse transcription. *Nucleic Acids Res* 2008;36(5):1578-88.
- Jordan JE, Briggs AM, Brand CA, Osborne RH.** Enhancing patient engagement in chronic disease self-management support initiatives in Australia: the need for an integrated approach. *Med J Aust* 2008;189(10 Suppl):S9-S13. Review.
- Joubert J, Joubert L, Reid C, Barton D, Cumming T, Mitchell P, House M, Heng R, Meadows G, Walterfang M, Pantelis C, Ames D, Davis S.** The positive effect of integrated care on depressive symptoms in stroke survivors. *Cerebrovasc Dis* 2008;26(2):199-205.
- Kadekoppala M, O'Donnell R, Grainger M, Crabb B, Holder A.** Deletion of the *Plasmodium falciparum* Merozoite Surface Protein 7 gene impairs parasite invasion of erythrocytes. *Eukaryot Cell* 2008;7(12):2123-32.
- Kalff A, Shortt J, Farr J, McLennan R, Lui A, Scott J, Spencer A.** Laboratory tumor lysis syndrome complicating LBH589 therapy in a patient with acute myeloid leukaemia. *Haematologica* 2008;93(1):e16-7.
- Karapetis CS, Khambata-Ford S, Jonker DJ, O'Callaghan CJ, Tu D, Tebbutt NC, Simes RJ, Chalchal H, Shapiro JD, Robitaille S, Price TJ, Shepherd L, Au HJ, Langer C, Moore MJ, Zalberg JR.** K-ras mutations and benefit from cetuximab in advanced colorectal cancer. *N Engl J Med* 2008;359(17):1757-65.
- Karipidis K, Benke G, Sim MR.** Feasibility of constructing the radiation component of an Australian job-exposure matrix. *J Occup Health Safety - Aust NZ* 2008;24(1):53-62.
- Katsara M, Deraos G, Tselios T, Matsoukas J, Apostolopoulos V.** Design of novel cyclic altered peptide ligands of myelin basic protein MBP83-99 that modulate immune responses in SJL/J mice. *J Med. Chem* 2008;51(13):3971-8.
- Katsara M, Matsoukas J, Deraos G, Apostolopoulos V.** Towards immunotherapeutic drugs and vaccines against multiple sclerosis. *Acta Biochim Biophys Sin (Shanghai)* 2008;40(7):636-42.
- Katsara M, Minigo G, Plebanski M, Apostolopoulos V.** The good, the bad and the ugly: how altered peptide ligands modulate immunity. *Expert Opin Biol Ther* 2008;8(12):1873-84. Review.
- Katsara M, Yuriev E, Ramsland PA, Deraos G, Tselios T, Matsoukas J, Apostolopoulos V.** A double mutation of MBP83-99 peptide induces IL-4 responses and antagonizes IFN- $\gamma$  responses. *J Neuroimmunol* 2008;200(1):77-89.
- Katsara M, Yuriev E, Ramsland PA, Deraos G, Tselios T, Matsoukas J, Apostolopoulos V.** Mannosylation of mutated MBP83-99 peptides diverts immune responses from Th1 to Th2. *Mol Immunol* 2008;45(13):3611-70.
- Kaye DM, Esler MD.** Autonomic control of the aging heart. *Neuromolecular Med* 2008;10(3):179-86.
- Kaye DM, Esler MD.** Re: Cardiac denervation does/does not play a major role in exercise limitation after heart transplantation. *J Appl Physiol* 2008;104(2):567. Letter.
- Kaye DM, Hoshijima M, Chien KR.** Reversing advanced heart failure by targeting Ca<sup>2+</sup> cycling. *Annu Rev Med* 2008;59:13-28. Review.
- Keating DT, Westall GP, Marasco SF, Burton JH, Buckland MR, Robertson CF, Williams TJ, Snell GI.** Paediatric lobar lung transplantation: addressing the paucity of donor organs. *Med J Aust* 2008;189(3):173-5.
- Kekulawala JR, Murphy A, D'Souza W, Wai C, Chin-Dusting J, Kingwell B, Sviridov D, Mukhamedova N.** Impact of freezing on high-density lipoprotein functionality. *Anal Biochem* 2008;379(2):213-5.
- Kelsall H, McKenzie D, Sim M, Leder K, Ross J, Forbes A, Ikin J.** Comparison of self-reported and recorded vaccinations and health effects in Australian Gulf War veterans. *Vaccine* 2008;26(33):4290-7.
- Kemp W, Roberts S, Komesaroff PA, Zomer E, Krum H.** Urotensin II in chronic liver disease: *in vivo* effect on vascular tone. *Scand J Gastroenterol* 2008;43(1):103-9.
- Kemp W, Roberts S, Krum H.** Increased circulating urotensin II in cirrhosis: potential implications in liver disease. *Peptides* 2008;29(5):868-72.

- Kent SJ, De Rose R, Mokhonov VV, Mokhonova EI, Fernandez CS, Alcantara S, Rollman E, Mason RD, Loh L, Peut V, Reece JC, Wang XJ, Wilson KM, Suhrbier A, Khromykh A.** Evaluation of recombinant Kunjin replicon SIV vaccines for protective efficacy in macaques. *Virology* 2008;374(2):528-34.
- Kerr D, Dietze P, Kelly AM.** Intranasal naloxone for the treatment of suspected heroin overdose. *Addiction* 2008;103(3):379-86.
- Kerr D, Dietze P, Jolley D, Kelly A-M.** Attitudes of Australian heroin users to peer distribution of naloxone for heroin overdose: perspectives on intranasal administration. *J Urban Health* 2008;85(3):352-60.
- Khong T, Sharkey J, Spencer A.** The effect of azacitidine on interleukin-6 signaling and nuclear factor- $\kappa$ B activation and its *in vitro* and *in vivo* activity against multiple myeloma. *Haematologica* 2008;93(6):860-9.
- Khoos SK, O'Neill S, Travers C, Oldenburg B; LAW Study Group.** Age-related changes relevant to health in women: design, recruitment, and retention strategies for the Longitudinal Assessment of Women (LAW) study. *J Womens Health (Larchmt)* 2008;17(1):135-46.
- King SJ, Collins CE, Crowder T, Matson AG, Volders E.** Nutritional management of cystic fibrosis in Australia and New Zealand. *Nutri Diet* 2008;65(4):253-8.
- Kinsman L, Champion R, Lee G, Martin M, Masman K, May E, Mills T, Taylor MD, Thomas P, Williams RJ, Zalstein S.** Assessing the impact of streaming in a regional emergency department. *Emerg Med Australas* 2008;20(3):221-7.
- Kiriazis H, Wang K, Xu Q, Gao XM, Ming Z, Su Y, Moore XL, Lambert G, Gibbs ME, Dart AM, Du XJ.** Knockout of  $\beta_1$ - and  $\beta_2$ -adrenoceptors attenuates pressure overload-induced cardiac hypertrophy and fibrosis. *Br J Pharmacol* 2008;153(4):684-92.
- Kistler PM.** Multi electrode ablation for paroxysmal atrial fibrillation: pulmonary vein isolation made easy? *Heart Rhythm* 2008;5(12):1643-44. Editorial.
- Kistler PM, Rajappan K, Harris S, Earley MJ, Richmond L, Sporton SC, Schilling RJ.** Impact of image integration on catheter ablation of atrial fibrillation using electroanatomic mapping: a prospective randomized study. *Eur Heart J* 2008;29(24):3029-36.
- Kitson MT, Yong MK, Hoy JF.** Ocular syphilis: are we seeing all there is to see? *Med J Aust* 2008;189(7):411.
- Knight MA, Hernandez D, Diede SJ, Dauwerse HG, Rafferty I, van de Leemput J, Forrest SM, Gardner RJ, Storey E, van Ommen GJ, Tapscott SJ, Fischbeck KH, Singleton AB.** A duplication at chromosome 11q12.2-11q12.3 is associated with spinocerebellar ataxia type 20. *Hum Mol Genet* 2008;17(24):3847-53.
- Koblinsky M, Anwar I, Mridha MK, Chowdhury ME, Botlero R.** Reducing maternal mortality and improving maternal health: Bangladesh and MDG 5. *J Health Popul Nutr* 2008;26(3):280-94.
- Koeh F, Ackland HM, Varma DK, Williamson OD, Malham GM.** Nonoperative management of Type II odontoid fractures in the elderly. *Spine* 2008;33(26):2881-6.
- Koitka A, Cooper ME, Thomas MC, Tikellis C.** Angiotensin converting enzyme 2 in the kidney. *Clin Exp Pharmacol Physiol* 2008;35(4):420-5. Review.
- Koitka A, Tikellis C.** Advances in the renin-angiotensin-aldosterone system: relevance to diabetic nephropathy. *ScientificWorldJournal* 2008;8:434-45. Review.
- Kompa AR, See F, Lewis DA, Adrahtas A, Cantwell DM, Wang BH, Krum H.** Long-term but not short-term p38 mitogen-activated protein kinase inhibition improves cardiac function and reduces cardiac remodeling post-myocardial infarction. *J Pharmacol Exp Ther* 2008;325(3):741-50.
- Kondalsamy-Chennakesavan S, Hoy WE, Wang Z, Briganti E, Polkinghorne K, Chadban S, Shaw J; AusDiab Study Group.** Anthropometric measurements of Australian Aboriginal adults living in remote areas: comparison with nationally representative findings. *Am J Hum Biol* 2008;20(3):317-24.
- Kondalsamy-Chennakesavan S, Hoy WE, Wang Z, Shaw J.** Quantifying the excess risk of Type 2 diabetes by body habitus measurements among Australian Aborigines living in remote areas. *Diabetes Care* 2008;31(3):585-6.
- Konstantatos A, Silvers AJ, Myles PS.** Analgesia best practice after cardiac surgery. *Anesthesiol Clin* 2008;26(3):591-602.
- Kosmala W, Wong C, Kuliczowska J, Leano R, Przewlocka-Kosmala M, Marwick TH.** Use of body weight and insulin resistance to select obese patients for echocardiographic assessment of subclinical left ventricular dysfunction. *Am J Cardiol* 2008;101(9):1334-40.
- Kotsanas D, Brett J, Kidd TJ, Stuart RL, Korman TM.** Disinfection of *Burkholderia cepacia* complex from non-touch taps in a neonatal nursery. *J Perinat Med* 2008;36(3):235-9.
- Krum H.** Clinical investigations of statins in heart failure: ventricular function and anti-remodeling. *Heart Fail Clin* 2008;4(2):177-86.
- Krum H.** Hypertension fundamentals. *Med J Aust* 2008;188(12):689.
- Krum H.** Beta-blockers should remain as first-line therapy in the management of hypertension. *Int J Clin Pract* 2008;62(8):1137-41.
- Krum H.** Role of renin in heart failure and therapeutic potential of direct renin inhibition. *J Renin Angiotensin Aldosterone Syst* 2008;9(3):177-80.
- Krum H, Iyngkaran P.** The black dog and the weak heart: comorbid depression in the patient with heart failure. *J Card Fail* 2008;14(6):465-6.
- Kulkarni J.** Women's mental health. *Aust N Z J Psychiatry* 2008;42(1):1-2.
- Kulkarni J, Berk M, Fitzgerald PB, de Castella AR, Montgomery W, Kelin K, Brnabic A, Granger RE, Dodd S.** The Bipolar Comprehensive Outcomes Study (BCOS): baseline findings of an Australian cohort study. *J Affect Disord* 2008;107(1-3):135-44.
- Kulkarni J, de Castella A, Fitzgerald PB, Gurvich CT, Bailey M, Bartholomeusz C, Burger H.** Estrogen in severe mental illness: a potential new treatment approach. *Arch Gen Psychiatry* 2008;65(8):955-60.
- Kulkarni J, Gurvich C, Gilbert H, Mehmedbegovic F, Mu L, Marston N, Gavrilidis E, de Castella A.** Hormone modulation: a novel therapeutic approach for women with severe mental illness. *Aust N Z J Psychiatry* 2008;42(1):83-8.
- Kulkarni J, McCauley-Elsom K, Marston N, Gilbert H, Gurvich C, de Castella A, Fitzgerald P.** Preliminary findings from the National Register of Antipsychotic Medication in Pregnancy. *Aust N Z J Psychiatry* 2008;42(1):38-44.
- Lamb MM, Myers MA, Barriga K, Zimmet PZ, Rewers M, Norris JM.** Maternal diet during pregnancy and islet autoimmunity in offspring. *Pediatr Diabetes* 2008;9(2):135-41.
- Lambert E, Dawood T, Schlaich M, Straznicki N, Esler M, Lambert G.** Single-unit sympathetic discharge pattern in pathological conditions associated with elevated cardiovascular risk. *Clin Exp Pharmacol Physiol* 2008;35(4):503-7. Review.
- Lambert E, Eikelis N, Esler M, Dawood T, Schlaich M, Bayles R, Socratous F, Agrotis A, Jennings G, Lambert G, Vaddadi G.** Altered sympathetic nervous reactivity and norepinephrine transporter expression in patients with the postural tachycardia syndrome. *Circ Arrhythmia Electrophysiol* 2008;1:103-109.
- LaMontagne AD, Keegel T, Vallance D, Ostry A, Wolfe R.** Job strain – attributable depression in a sample of working Australians: assessing the contribution to health inequalities. *BMC Public Health* 2008;8:181.
- Lancaster CM, Crosbie JC, Davis SR.** *In vivo* dosimetry from total body irradiation patients (2000-2006): results and analysis. *Australas Phys Eng Sci Med* 2008;31(1):191-5.
- Larizza M.** ASCO – the ultimate oncology experience. *J Pharm Pract Res* 2008;38:163-4. Letter.
- Larobina ME, Mariani JA, Rowland MA.** Aortic valve replacement for aortic stenosis during orthotopic cardiac transplant. *Ann Thorac Surg* 2008;86(6):1979-82. Review.
- Laslett A, Dietze P, Dwyer R.** The oral health of street-recruited injecting drug users: prevalence and correlates of problems. *Addiction* 2008;103(11):1821-3.
- Lau D, Fedinands M, Leung L, Fullinfaw R, Kong D, Davies G, Daniell M.** Penetration of voriconazole, 1%, eyedrops into human aqueous humor: a prospective open-label study. *Arch Ophthalmol* 2008;126(3):343-6.
- Leder K, Wilson ME, Freedman DO, Torresi J.** A comparative analysis of methodological approaches used for estimating risk in travel medicine. *J Travel Med* 2008;15(4):263-72.

- Lee A, Button B, Denehy L.** Current Australian and New Zealand physiotherapy practice in the management of patients with bronchiectasis and chronic obstructive pulmonary disease. *N Z J Physiother* 2008;36(2):49-58.
- Lee CM, Huxley RR, Woodward M, Zimmet P, Shaw J, Cho NH, Kim HR, Viali S, Tominaga M, Vistisen D, Borch-Johnsen K, Colagiuri S; DETECT-2 Collaboration.** The metabolic syndrome identifies a heterogeneous group of metabolic component combinations in the Asia-Pacific region. *Diabetes Res Clin Pract* 2008;81(3):377-80.
- Lee CM, Huxley RR, Woodward M, Zimmet P, Shaw J, Cho NH, Kim HR, Viali S, Tominaga M, Vistisen D, Borch-Johnsen K, Colagiuri S; Detect-2 Collaboration.** Comparisons of metabolic syndrome definitions in four populations of the Asia-Pacific region. *Metab Syndr Relat Disord* 2008;6(1):37-46.
- Lee G.** Commentary on Norris T & Melby V (2006) The acute care nurse practitioner: challenging existing boundaries of emergency nurses in the United Kingdom. *Journal of Clinical Nursing* 15, 253-263. *J Clin Nurs* 2008;17(8):1116-9. Comment.
- Lee G.** Patient and spouse perceived quality of life five years after coronary artery bypass graft surgery. *Open Nurs J* 2008;2(5):63-67.
- Lee G, Carrington M, Sliwa K, Stewart S.** Are ECG abnormalities common in Black Africans with heart failure? Results from the Heart of Soweto Study. *SA Heart J* 2008;5(1):4-11.
- Lee G, Smith S, Jennings N.** Low acuity abdominal pain in the emergency department: still a long wait. *Int Emerg Nurs* 2008;16(2):94-100.
- Lee GA.** Patients reported health-related quality of life five years post coronary artery bypass graft surgery--a methodological study. *Eur J Cardiovasc Nurs* 2008;7(1):67-72.
- Lee GA, Fitzgerald L.** A clinical internship model for the nurse practitioner programme. *Nurse Educ Pract* 2008;8(6):397-404.
- Lenon GB, Li CG, Xue CC, Thien FC, Story DF.** Inhibition of inducible nitric oxide production and iNOS protein expression in lipopolysaccharide-stimulated rat aorta and Raw 264.7 macrophages by ethanol extract of a Chinese herbal medicine formula (RCM-101) for allergic rhinitis. *J Ethnopharmacol* 2008;116(3):547-53.
- Leslie DE, Higgins N, Fairley CK.** Dangerous liaisons – syphilis and HIV in Victoria. *Med J Aust* 2008;188(11):676-7.
- Leslie K, Myles PS, Chan MT, Paech MJ, Peyton P, Forbes A, McKenzie D; ENIGMA Trial Group.** Risk factors for severe postoperative nausea and vomiting in a randomized trial of nitrous oxide-based vs nitrous oxide-free anaesthesia. *Br J Anaesth* 2008;101(4):498-505.
- Levinger I, Goodman C, Matthews V, Hare DL, Jerums G, Garnham A, Selig S.** BDNF, metabolic risk factors, and resistance training in middle-aged individuals. *Med Sci Sports Exerc* 2008;40(3):535-41.
- Levvey BJ, Snell GI.** The evolution of donation after cardiac death (DCD) lung donation and transplantation in Australia. *Transplant Nurses J* 2008;17:8-11.
- Lewin SR, Murray JM, Solomon A, Wightman F, Cameron PU, Purcell DJ, Zaunders JJ, Grey P, Bloch M, Smith D, Cooper DA, Kelleher AD.** Virologic determinants of success after structured treatment interruptions of antiretrovirals in acute HIV-1 infection. *J Acquir Immune Defic Syndr* 2008;47(2):140-47.
- Lewis PM, Rosenfeld JV, Diehl RR, Mehdorn HM, Lang EW.** Phase shift and correlation coefficient measurement of cerebral autoregulation during deep breathing in traumatic brain injury (TBI). *Acta Neurochir (Wien)* 2008;150(2):139-46.
- Li S, Gowans EJ, Chougnet C, Plebanski M, Dittmer U.** Natural regulatory T cells and persistent viral infection. *J Virol* 2008;82(1):21-30.
- Lifson AR; INSIGHT Cause of Death Writing Group, Belloso WH, Carey C, Davey RT, Duprez D, El-Sadr WM, Gatell JM, Gey DC, Hoy JF, Krum EA, Nelson R, Nixon DE, Paton N, Pedersen C, Perez G, Price RW, Prineas RJ, Rhame FS, Sampson J, Worley J.** Determination of the underlying cause of death in three multicenter international HIV clinical trials. *HIV Clin Trials* 2008;9(3):177-85.
- Lijovic M, Davis SR, Fradkin P, La China M, Farrugia H, Wolfe R, Bell RJ.** Use of a cancer registry is preferable to a direct-to-community approach for recruitment to a cohort study of wellbeing in women newly diagnosed with invasive breast cancer. *BMC Cancer* 2008;8:126.
- Lim M, Hellard M, Hocking J, Aitken C.** A cross-sectional survey of young people attending a music festival: associations between drug use and musical preference. *Drug Alcohol Rev* 2008;27(4):439-41.
- Lim M, Hocking JS, Hellard M, Aitken C.** SMS STI: A review of the uses of mobile phone text-messaging in sexual health. *Int J STD AIDS* 2008;19(5):287-90. Review.
- Lim SY, Farrell MJ, Gibson SJ, Helme RD, Lang AE, Evans AH.** Do dyskinesia and pain share common pathophysiological mechanisms in Parkinson's disease? *Mov Disord* 2008;23(12):1689-95.
- Lim WG, Chen X, Liu JP, Tan BJ, Zhou S, Smith A, Lees N, Hou L, Gu F, Yu XY, Du Y, Smith D, Verma C, Liu K, Duan W.** The C-terminus of PRK2/PKN $\gamma$  is required for optimal activation by RhoA in a GTP-dependent manner. *Arch Biochem Biophys* 2008;479(2):170-8.
- Lister NA, Chaves NJ, Phang CW, Smith A, Fairley CK.** Clinical significance of questionnaire-elicited or clinically reported anorectal symptoms for rectal *Neisseria gonorrhoeae* and *Chlamydia trachomatis* amongst men who have sex with men. *Sex Health* 2008;5(1):77-82.
- Litherland B, Given M, Lyon S.** Percutaneous radiological management of high-output chylothorax with CT-guided needle disruption. *J Med Imaging Radiat Oncol* 2008;52(2):164-7.
- Little PJ, Ballinger ML, Burch ML, Osman N.** Biosynthesis of natural and hyperelongated chondroitin sulfate glycosaminoglycans: new insights into an elusive process. *Open Biochem J* 2008;2:135-42.
- Little PJ, Ballinger ML, Survase S, Osman N, Ogru E, Geytenbeek S, Bruemmer D, Nigro J.** Phosphorylated troglitazone activates PPAR $\gamma$  and inhibits vascular smooth muscle cell proliferation and proteoglycan synthesis. *J Cardiovasc Pharmacol* 2008;51(3):274-9.
- Little PJ, Drennon KD, Tannock LR.** Glucosamine inhibits the synthesis of glycosaminoglycan chains on vascular smooth muscle cell proteoglycans by depletion of ATP. *Arch Physiol Biochem* 2008;114(2):120-6.
- Little PJ, Ivey ME, Osman N.** Endothelin-1 actions on vascular smooth muscle cell functions as a target for the prevention of atherosclerosis. *Curr Vasc Pharmacol* 2008;6(3):195-203.
- Little PJ, Osman N, O'Brien KD.** Hyperelongated biglycan: the surreptitious initiator of atherosclerosis. *Curr Opin Lipidol* 2008;19(5):448-54. Review.
- Liu H, Hu Y, Simpson RW, Dear AE.** Glucagon-like peptide-1 attenuates tumour necrosis factor- $\alpha$ -mediated induction of plasminogen activator inhibitor-1 expression. *J Endocrinol* 2008;196(1):57-65.
- Liu W, McArthur GA, Trivett M, Murray WK, Wolfe R, Kelly JW.** Correlation of subjective self-reported melanoma growth rate with objective tumor proliferation markers. *Arch Dermatol* 2008;144(4):555-6.
- Livingston M, Laslett A, Dietze P.** Individual and community correlates of young people's high-risk drinking in Victoria, Australia. *Drug Alcohol Depend* 2008;98(3):241-8.
- Livingston PM, Craike M, Considine J, Botti M, O'Connell B.** Presentation to emergency departments due to chemotherapy-induced complications: opportunities for improving service delivery. *Asia-Pacific J Clin Oncol* 2008;4(2):331.
- Loesch DZ, Cook M, Litewka L, Gould E, Churchyard A, Tassone F, Slater HR, Storey E.** A low symptomatic form of neurodegeneration in younger carriers of the FMR1 premutation, manifesting typical radiological changes. *J Med Genet* 2008;45(3):179-81.
- Loh L, Kent SJ.** Quantification of simian immunodeficiency virus cytotoxic T lymphocyte escape mutant viruses. *AIDS Res Hum Retroviruses* 2008;24(8):1067-72.
- Loh L, Petravic J, Batten CJ, Davenport MP, Kent SJ.** Vaccination and timing influence SIV immune escape viral dynamics *in vivo*. *PLoS Pathog* 2008;4(1):e12.
- Looby S, Keeling AN, McErlean A, Given MF, Geoghegan T, Lee MJ.** Efficacy and safety of the angioseal vascular closure device post antegrade puncture. *Cardiovasc Intervent Radiol* 2008;31(3):558-62.
- Looi JC, Lindberg O, Liberg B, Tatham V, Kumar R, Maller J, Millard E, Sachdev P, Hogberg G, Pagani M, Botes L, Engman EL, Zhang Y, Svensson L, Wahlund LO.** Volumetrics of the caudate nucleus: reliability and validity of a new manual tracing protocol. *Psychiatry Res* 2008;163(3):279-88.

- Lowe AJ, Carlin JB, Bennett CM, Hosking CS, Abramson MJ, Hill DJ, Dharmage SC.** Do boys do the atopic march while girls dawdle? *J Allergy Clin Immunol* 2008;121(5):1190-5.
- Lowthian J, Diug B.** Lessons from the TAPS study – warfarin: a major cause of threats to patients safety. *Aust Fam Physician* 2008;37(12):983.
- Lowthian J, Walker RG.** The role of medical directors in dialysis facilities. *Semin Dial* 2008;21(1):113.
- Lundie R, de Koning-Ward T, Davey G, Nie C, Hansen D, Lau L, Mintern J, Belz G, Schofield L, Carbone F, Villadangos J, Crabb B, Heath W.** Blood-stage *Plasmodium* infection induces CD8+ T lymphocytes to parasite-expressed antigens, largely regulated by CD8a+ dendritic cells. *Proc Natl Acad Sci USA* 2008;105(38):10509-14.
- Luo G, Tang J, He W, Wu J, Ma B, Wang X, Chen X, Yi S, Zhang X, Li X, Fitzgerald M.** Antibacterial effect of dressings containing multivalent silver ion carried by zirconium phosphate on experimental rat burn wounds. *Wound Repair Regen* 2008;16(6):800-4.
- Lymbury R, Tinggi U, Griffiths L, Rosenfeldt F, Perkins AV.** Selenium status of the Australian population: effect of age, gender and cardiovascular disease. *Biol Trace Elem Res* 2008;126 Suppl 1:S1-10.
- Lyon SM, Given M, Marshall NL.** Interventional radiology in the provision and maintenance of long-term central venous access. *J Med Imaging Radiat Oncol* 2008;52(1):10-7.
- MacDonald MR, Petrie MC, Hawkins NM, Petrie JR, Fisher M, McKelvie R, Aguilar D, Krum H, McMurray JJ.** Diabetes, left ventricular systolic dysfunction, and chronic heart failure. *Eur Heart J* 2008;29(10):1224-40.
- Macdonald N, Elam G, Hickson F, Imrie J, McGarrigle C, Fenton K, Baster K, Ward H, Gilbert V, Power R, Evans B.** Factors associated with HIV seroconversion in gay men in England at the start of the 21st century. *Sex Transm Infect* 2008;84(1):8-13.
- Macfarlane E, Chapman A, Benke G, Meaklim J, Sim M, McNeil J.** Training and other predictors of personal protective equipment use in Australian grain farmers using pesticides. *Occup Environ Med* 2008;65(2):141-6.
- MacIsaac RJ, Thomas MC, Panagiotopoulos S, Smith TJ, Hao H, Matthews DG, Jerums G, Burrell LM, Srivastava PM.** Association between intrarenal arterial resistance and diastolic dysfunction in Type 2 diabetes. *Cardiovasc Diabetol* 2008;7:15.
- Mackie K.** International symposium on HIV and emerging infectious diseases. *J Pharm Pract Res* 2008;38:249-50. Letter.
- MacLaren G, Yeoh SF, Spelman D.** Antibiotic prophylaxis in cardiac surgery. *Heart* 2008;94(5):646; author reply 646.
- Maeder MT, Holst DP, Kaye DM.** Tricuspid regurgitation contributes to renal dysfunction in patients with heart failure. *J Card Fail* 2008;14(10):824-30.
- Maeder MT, Kaye DM.** B-type natriuretic peptide in end-stage renal disease: a neurohormone rather than a volume status monitor. *South Med J* 2008;101(11):1081-2.
- Magliano DJ, Barr EL, Zimmet PZ, Cameron AJ, Dunstan DW, Colagiuri S, Jolley D, Owen N, Phillips P, Tapp RJ, Welborn TA, Shaw JE.** Glucose indices, health behaviors, and incidence of diabetes in Australia: the Australian Diabetes, Obesity and Lifestyle Study. *Diabetes Care* 2008;31(2):267-72.
- Magliano DJ, Shaw JE, Shortreed SM, Nusselder WJ, Liew D, Barr EL, Zimmet PZ, Peeters A.** Lifetime risk and projected population prevalence of diabetes. *Diabetologia* 2008;51(12):2179-86.
- Mahar P, Wasiak J, Bailey M, Cleland H.** Clinical factors affecting mortality in elderly burn patients admitted to a burns service. *Burns* 2008;34(5):629-36.
- Malabanan KP, Kanellakis P, Bobik A, Khachigian LM.** Activation transcription factor-4 induced by fibroblast growth factor-2 regulates vascular endothelial growth factor-A transcription in vascular smooth muscle cells and mediates intimal thickening in rat arteries following balloon injury. *Circ Res* 2008;103(4):378-87.
- Mallon PW, Sedwell R, Rogers G, Nolan D, Unemori P, Hoy J, Samaras K, Kelleher A, Emery S, Cooper DA, Carr A, Rosey Investigators.** Effect of rosiglitazone on peroxisome proliferator-activated receptor  $\gamma$  gene expression in human adipose tissue is limited by antiretroviral drug-induced mitochondrial dysfunction. *J Infect Dis* 2008;198(12):1794-803.
- Mankowski JL, Queen SE, Fernandez CS, Tarwater PM, Karper JM, Adams RJ, Kent SJ.** Natural host genetic resistance to lentiviral CNS disease: a neuroprotective MHC class I allele in SIV-infected macaques. *PLoS ONE* 2008;3(11):e3603.
- Maple-Brown L, Cunningham J, Dunne K, Whitbread C, Howard D, Weeramanthri T, Tatipata S, Dunbar T, Harper CA, Taylor HR, Zimmet P, O'Dea K, Shaw JE.** Complications of diabetes in urban Indigenous Australians: the DRUID study. *Diabetes Res Clin Pract* 2008;80(3):455-62.
- Marasco SF.** Ischaemic mitral regurgitation and the role of surgical intervention. *Heart Lung Circ* 2008;17(Suppl 4):S14-20.
- Marasco SF, Lim K, New G, Esmore DS.** Iatrogenic aortic dissection after coronary artery bypass grafting. *J Cardiovasc Surg (Torino)* 2008;49(1):134.
- Marasco SF, Lukas G, McDonald M, McMillan J, Ihle B.** Review of ECMO (extra corporeal membrane oxygenation) support in critically ill adult patients. *Heart Lung Circ* 2008;17 Suppl 4:S41-7. Review.
- Marasco SF, Rosenfeldt FL, Lim HK, Mennen M, Cairo S, Bain C.** Correction of posteromedial papillary muscle displacement in repair of ischemic mitral regurgitation. *J Heart Valve Dis* 2008;17(6):620-7.
- Marasco SF, Sharwood LN, Abramson MJ.** No improvement in neurocognitive outcomes after off-pump versus on-pump coronary revascularisation: a meta-analysis. *Eur J Cardiothorac Surg* 2008;33(6):961-70.
- Marfurt J, de Monbrison F, Brega S, Barbolat L, Mu?ller I, Sie A, Goroti M, Reeder J, Beck H-P, Picot S, Genton B.** Molecular markers of *in vivo Plasmodium vivax* resistance to amodiaquine plus sulphadoxine-pyrimethamine: mutations in pvdhfr and pvmdr1. *J Infect Dis* 2008;198(3):409-17.
- Marfurt J, Muller I, Sie A, Oa O, Reeder J, Smith TA, Beck H-P, Genton B.** The usefulness of twenty-four molecular markers in predicting treatment outcome with combination therapy of amodiaquine plus sulphadoxine-pyrimethamine against falciparum malaria in Papua New Guinea. *Malar J* 2008;7:61-71.
- Marrone J, Fairley CK, Saville M, Bradshaw C, Bowden FJ, Horvath LB, Donovan B, Chen M, Hocking JS.** Temporal associations with declining *Trichomonas vaginalis* diagnosis rates among women in the state of Victoria, Australia, 1947 to 2005. *Sex Transm Dis* 2008;35(6):572-6.
- Martin E, Baggaley K, Buchbinder R, Johnston R, Tugwell P, Maxwell L, Santesso N.** Occupational therapists should be more involved in the Cochrane Collaboration: the example of the Australian Cochrane Musculoskeletal Review Group. *Aust Occ Ther J* 2008;55(3):207-11.
- Mason KD, Vandenberg CJ, Scott CL, Wei AH, Cory S, Huang DC, Roberts AW.** *In vivo* efficacy of the Bcl-2 antagonist ABT-737 against aggressive Myc-driven lymphomas. *Proc Natl Acad Sci U S A* 2008;105(46):17961-6.
- Mason RD, De Rose R, Kent SJ.** CD4+ T-cell subsets: what really counts in preventing HIV disease? *Expert Rev Vaccines* 2008;7(2):155-8. Review.
- Mason RD, Rose RD, Seddiki N, Kelleher AD, Kent SJ.** Low pre-infection levels and loss of central memory CD4+ T cells may predict rapid progression in SIV-infected pigtail macaques. *Virology* 2008;381(1):11-5.
- Masuo K, Lambert GW, Rakugi H, Ogihara T, Esler MD.** Neurovascular role of sympathetic nervous system and beta- adrenoceptor polymorphisms in obesity and hypertension. *Curr Hypertens Rev* 2008;4(2):121-30. Review.
- Masuo K, Straznicki NE, Lambert GW, Katsuya T, Sugimoto K, Rakugi H, Socratous F, Hastings J, Lambert EA, Ogihara T, Esler MD.** Leptin-receptor polymorphisms relate to obesity through blunted leptin-mediated sympathetic nerve activation in a Caucasian male population. *Hypertens Res* 2008;31(6):1093-100.
- Matthews GV, Avihingsanon A, Lewin SR, Amin J, Rerknimitr R, Petcharapirat P, Marks P, Sasadeusz J, Cooper DA, Bowden S, Locarnini S, Ruxrungtham K, Dore GJ.** A randomized trial of combination hepatitis B therapy in HIV/HBV coinfecting antiretroviral naive individuals in Thailand. *Hepatology* 2008;48(4):1062-9.
- Matthews VB, Febbraio MA.** CNTF: a target therapeutic for obesity-related metabolic disease? *J Mol Med* 2008;86(4):353-61. Review.
- Mavhu W, Langhaug L, Manyonga B, Power R, Cowan F.** What is 'sex' exactly? Using cognitive interviewing to improve the validity of sexual behaviour reporting among young people in rural Zimbabwe. *Cult Health Sex* 2008;10(6):563-72.

- McCall MJ, Reeves M, Skinner M, Ginifer C, Myles P, Dalwood N.** Paramedic tracheal intubation using the intubating laryngeal mask airway. *Prehosp Emerg Care* 2008;12(1):30-4.
- McFarlane AC, McKenzie DP, Van Hooff M, Browne D.** Somatic and psychological dimensions of screening for psychiatric morbidity: a community validation of the SPHERE Questionnaire. *J Psychosom Res* 2008;65(4):337-45.
- McGain F, Cretikos MA, Jones D, Van Dyk S, Buist MD, Opdam H, Pellegrino V, Robertson MS, Bellomo R.** Documentation of clinical review and vital signs after major surgery. *Med J Aust* 2008;189(7):380-3.
- McLean CA.** The neuropathology of kuru and variant Creutzfeldt-Jakob disease. *Philos Trans R Soc Lond B Biol Sci* 2008;363(1510):3685-7. Review.
- McLean CA, Cleland H, Moncrieff NJ, Barton RJ, de Kretser DM, Phillips DJ.** Temporal expression of activin in acute burn wounds – from inflammatory cells to fibroblasts. *Burns* 2008;34(1):50-5.
- McMullen JR.** Role of insulin-like growth factor 1 and phosphoinositide 3-kinase in a setting of heart disease. *Clin Exp Pharmacol Physiol* 2008;35(3):349-54. Review.
- McNamee KM, Fairley CK, Hocking JS.** Chlamydia testing and notification in Australia: more money, more tests. *Sex Transm Infect* 2008;84(7):565-9; discussion 569.
- McQueen MJ, Hawken S, Wang X, Ounpuu S, Sniderman A, Probstfield J, Steyn K, Sanderson JE, Hasani M, Volkova E, Kazmi K, Yusuf S; INTERHEART study investigators.** Lipids, lipoproteins, and apolipoproteins as risk markers of myocardial infarction in 52 countries (the INTERHEART study): a case-control study. *Lancet* 2008;372(9634):224-33.
- McRobert EA, Tikoo A, Cooper ME, Bach LA.** Localization of the ezrin binding epitope for advanced glycation endproducts. *Int J Biochem Cell Biol* 2008;40(8):1570-80.
- McWilliams TJ, Williams TJ, Whitford HM, Snell GI.** Surveillance bronchoscopy in lung transplant recipients: risk versus benefit. *J Heart Lung Transplant* 2008;27(11):1203-9.
- Meade MO, Cook DJ, Guyatt GH, Slutsky AS, Arabi YM, Cooper DJ, Davies AR, Hand LE, Zhou Q, Thabane L, Austin P, Lapinsky S, Baxter A, Russell J, Skrobik Y, Ronco JJ, Stewart TE; Lung Open Ventilation Study Investigators.** Ventilation strategy using low tidal volumes, recruitment maneuvers, and high positive end-expiratory pressure for acute lung injury and acute respiratory distress syndrome: a randomized controlled trial. *JAMA* 2008;299(6):637-45.
- Mechanick JI, Kushner RF, Sugerman HJ, Gonzalez-Campoy JM, Collazo-Clavell ML, Guven S, Spitz AF, Apovian CM, Livingston EH, Brolin R, Sarwer DB, Anderson WA, Dixon J.** Executive summary of the recommendations of the American Association of Clinical Endocrinologists, the Obesity Society, and American Society for Metabolic & Bariatric Surgery medical guidelines for clinical practice for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient. *Endocr Pract* 2008;14(3):318-36.
- Mechanick JI, Kushner RF, Sugerman HJ, Gonzalez-Campoy JM, Collazo-Clavell ML, Guven S, Spitz AF, Apovian CM, Livingston EH, Brolin R, Sarwer DB, Anderson WA, Dixon J.** American Association of Clinical Endocrinologists, The Obesity Society, and American Society for Metabolic & Bariatric Surgery Medical guidelines for clinical practice for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric. *Endocr Pract* 2008;14(Suppl 1):1-83.
- Mechanick JI, Kushner RF, Sugerman HJ, Gonzalez-Campoy JM, Collazo-Clavell ML, Guven S, Spitz AF, Apovian CM, Livingston EH, Brolin R, Sarwer DB, Anderson WA, Dixon J.** Medical guidelines for clinical practice for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient. *Surg Obes Relat Dis* 2008;4(5 Suppl):S109-84.
- Mefford ME, Gorry PR, Kunstman K, Wolinsky SM, Gabuzda D.** Bioinformatic prediction programs underestimate the frequency of CXCR4 usage by R5X4 HIV-1 in brain and other tissues. *AIDS Res Human Retroviruses* 2008;24(9):1215-20.
- Meikle PJ, Duplock S, Blacklock D, Whitfield PD, Macintosh G, Hopwood JJ, Fuller M.** Effect of lysosomal storage on bis(monoacylglycerol)phosphate. *Biochem J* 2008;411(1):71-8.
- Meikle PJ, Whitfield PD, Rozaklis T, Blacklock D, Duplock S, Elstein D, Zimran A, Mengel E, Cannell P, Hopwood JJ, Fuller M.** Plasma lipids are altered in Gaucher disease: biochemical markers to evaluate therapeutic intervention. *Blood Cells Mol Dis* 2008;40(3):420-7.
- Meintjes G, Lawn SD, Scano F, Maartens G, French MA, Worodria W, Elliott JH, Murdoch D, Wilkinson RJ, Seyler C, John L, van der Loeff MS, Reiss P, Lynen L, Janoff EN, Gilks C, Colebunders R; International Network for the Study of HIV-associated IRIS.** Tuberculosis-associated immune reconstitution inflammatory syndrome: case definitions for use in resource-limited settings. *Lancet Infect Dis* 2008;8(8):516-23.
- Mifsud NA, Purcell AW, Chen W, Holdsworth R, Tait BD, McCluskey J.** Immunodominance hierarchies and gender bias in direct T(CD8)-cell alloreactivity. *Am J Transplant* 2008;8(1):121-32.
- Mikocka-Walus A, Turnbull D, Moulding N, Wilson I, Andrews JM, Holtmann G.** Psychological comorbidity and complexity of gastrointestinal symptoms in clinically diagnosed irritable bowel syndrome patients. *J Gastroenterol Hepatol* 2008;23(7 Pt 1):1137-43.
- Mikocka-Walus AA, Turnbull DA, Andrews JM, Moulding NT, Holtmann GJ.** The effect of functional gastrointestinal disorders on psychological comorbidity and quality of life in patients with inflammatory bowel disease. *Aliment Pharmacol Ther* 2008;28(4):475-83.
- Mikocka-Walus AA, Turnbull DA, Andrews JM, Moulding NT, Wilson IG, Harley HA, Hetzel DJ, Holtmann GJ.** Psychological problems in gastroenterology outpatients: a South Australian experience. Psychological co-morbidity in IBD, IBS and hepatitis C. *Clin Pract Epidemiol Ment Health* 2008;4:15.
- Mikocka-Walus AA, Turnbull DA, Moulding NT, Wilson IG, Holtmann GJ, Andrews JM.** Does psychological status influence clinical outcomes in patients with inflammatory bowel disease (IBD) and other chronic gastroenterological diseases: an observational cohort prospective study. *Biopsychosoc Med* 2008;2:11.
- Milland J, Yuriev E, Xing PX, McKenzie IF, Ramsland PA, Christiansen D, Sandrin MS.** Reply to Response to Milland *et al.*: Carbohydrate residues downstream of the terminal gal $\alpha$ (1,3) gal epitope modulate the specificity of xenoreactive antibodies. *Immunol Cell Biol* 2008;86(8):631-2; author reply 633-4.
- Mills PM, Wang Y, Cicutini FM, Stoffel K, Stachowiak GW, Podsiadlo P, Lloyd DG.** Tibio-femoral cartilage defects 3-5 years following arthroscopic partial medial Meniscectomy. *Osteoarthritis Cartilage* 2008;16(12):1526-31.
- Mishra A, Greaves R, Smith K, Carlin JB, Wootton A, Stirling R, Massie J.** Diagnosis of cystic fibrosis by sweat testing: age-specific reference intervals. *J Pediatr* 2008;153(6):758-63.
- Mitra B, Cameron PA, Gabbe BJ, Rosenfeld JV, Kavar B.** Management and hospital outcome of the severely head injured elderly patient. *ANZ J Surg* 2008;78(7):588-92.
- Mitra B, Cameron PA, Mele G, Archer P.** Rest during shift work in the emergency department. *Aust Health Rev* 2008;32(2):246-51.
- Moe KT, Woon FP, De Silva DA, Wong P, Koh TH, Kingwell B, Chin-Dusting J, Wong MC.** Association of acute ischemic stroke with the MTHFR C677T polymorphism but not with NOS3 gene polymorphisms in a Singapore population. *Eur J Neurol* 2008;15(12):1309-14.
- Mohebbi M, Mahmoodi M, Wolfe R, Nourijelani K, Mohammad K, Zeraati H, Fotouhi A.** Geographical spread of gastrointestinal tract cancer incidence in the Caspian Sea region of Iran: spatial analysis of cancer registry data. *BMC Cancer* 2008;8:137.
- Moloney JT, Fowler SJ, Chang W.** Anesthetic management of thoracic trauma. *Curr Opin Anaesthesiol* 2008;21(1):41-6. Review.
- Morley AP, Papageorgiou CH, Marinaki AM, Cooper DJ, Lewis CM.** The effect of pre-operative anxiety on induction of anaesthesia with propofol. *Anaesthesia* 2008;63(5):467-73.
- Morrissey CO, Bardy PG, Slavin MA, Ananda-Rajah MR, Chen SC, Kirsas SW, Ritchie DS, Upton A.** Diagnostic and therapeutic approach to persistent or recurrent fevers of unknown origin in adult stem cell transplantation and haematological malignancy. *Intern Med J* 2008;38(6b):477-95.

- Morton JM, McLean C, Booth SS, Snell GI, Whitford HM.** Regression of pulmonary lymphangiomyomatosis (PLAM)-associated retroperitoneal angiomyolipoma post-lung transplantation with rapamycin treatment. *J Heart Lung Transplant* 2008;27(4):462-5.
- Mu FT, Andrews RK, Arthur JF, Munday AD, Cranmer SL, Jackson SP, Stomski FC, Lopez AF, Berndt MC.** A functional 14-3-3 $\zeta$ -independent association of PI3-kinase with glycoprotein Ib  $\alpha$ , the major ligand-binding subunit of the platelet glycoprotein Ib-IX-V complex. *Blood* 2008;111(9):4580-7.
- Mukhamedova N, Escher G, D'Souza W, Tchoua U, Grant A, Krozowski Z, Bukrinsky M, Sviridov D.** Enhancing apolipoprotein A-I-dependent cholesterol efflux elevates cholesterol export from macrophages *in vivo*. *J Lipid Res* 2008;49(11):2312-22.
- Mulholland SA, Cameron PA, Gabbe BJ, Williamson OD, Young K, Smith KL, Bernard SA.** Prehospital prediction of the severity of blunt anatomic injury. *J Trauma* 2008;64(3):754-60.
- Mullighan CG, Heatley SL, Danner S, Dean MM, Doherty K, Hahn U, Bradstock KF, Minchinton R, Schwarer AP, Szer J, Bardy PG.** Mannose-binding lectin status is associated with risk of major infection following myeloablative sibling allogeneic hematopoietic stem cell transplantation. *Blood* 2008;112(5):2120-8.
- Munro PE, Button BM, Bailey M, Whitford H, Ellis SJ, Snell GI.** Should lung transplant recipients routinely perform airway clearance techniques? A randomized trial. *Respirology* 2008;13(7):1053-60.
- Murphy AJ, Woollard KJ, Hoang A, Mukhamedova N, Stirzaker RA, McCormick SP, Remaley AT, Sviridov D, Chin-Dusting J.** High-density lipoprotein reduces the human monocyte inflammatory response. *Arterioscler Thromb Vasc Biol* 2008;28(11):2071-7.
- Myburgh JA, Cooper DJ, Finfer SR, Venkatesh B, Jones D, Higgins A, Bishop N, Higlett T; Australasian Traumatic Brain Injury Study (ATBIS) Investigators for the Australian; New Zealand Intensive Care Society Clinical Trials Group.** Epidemiology and 12-month outcomes from traumatic brain injury in Australia and New Zealand. *J Trauma* 2008;64(4):854-62.
- Myburgh JA, Higgins A, Jovanovska A, Lipman J, Ramakrishnan N, Santamaria J; CAT Study investigators.** A comparison of epinephrine and norepinephrine in critically ill patients. *Intensive Care Med* 2008;34(12):2226-34.
- Myers M, Zimmet P.** Halting the accelerating epidemic of Type 1 diabetes. *Lancet* 2008;371(9626):1730-1. Review.
- Myhill P, Davis WA, Bruce DG, Mackay IR, Zimmet P, Davis TM.** Chronic complications and mortality in community-based patients with latent autoimmune diabetes in adults: the Fremantle Diabetes Study. *Diabet Med* 2008;25(10):1245-50.
- Myles PS, Chan MT, Kaye DM, McIlroy DR, Lau CW, Symons JA, Chen S.** Effect of nitrous oxide anesthesia on plasma homocysteine and endothelial function. *Anesthesiology* 2008;109(4):657-63.
- Myles PS, Chan MT, Leslie K, Peyton P, Paech M, Forbes A.** Effect of nitrous oxide on plasma homocysteine and folate in patients undergoing major surgery. *Br J Anaesth* 2008;100(6):780-6.
- Myles PS, Marasco S.** Misleading turbulent flow through pulmonary venous anastomoses during lung transplantation. *Anesth Analg* 2008;107(5):1504-5.
- Myles PS, Smith J, Knight J, Cooper DJ, Silbert B, McNeil J, Esmore DS, Buxton B, Krum H, Forbes A, Tonkin A; ATACAS Trial Group.** Aspirin and Tranexamic Acid for Coronary Artery Surgery (ATACAS) Trial: rationale and design. *Am Heart J* 2008;155(2):224-30.
- Nagle C, Lewis S, Meiser B, Gunn J, Halliday J, Bell R.** Exploring general practitioners' experience of informing women about prenatal screening tests for foetal abnormalities: a qualitative focus group study. *BMC Health Serv Res* 2008;8:114.
- Nan H, Qiao Q, Söderberg S, Gao W, Zimmet P, Shaw J, Alberti G, Dong Y, Uusitalo U, Pauvaday V, Chitson P, Tuomilehto J.** Serum uric acid and components of the metabolic syndrome in non-diabetic populations in Mauritian Indians and Creoles and in Chinese in Qingdao, China. *Metab Syndr Relat Disord* 2008;6(1):47-57.
- Nan H, Qiao Q, Söderberg S, Pitkaniemi J, Zimmet P, Shaw J, Alberti G, Uusitalo U, Pauvaday V, Chitson P, Tuomilehto J.** Serum uric acid and incident diabetes in Mauritian Indian and Creole populations. *Diabetes Res Clin Pract* 2008;80(2):321-7.
- Naughton M, Howard M.** Is there a case for screening commercial drivers for sleep apnea? *Exp Rev Res Med* 2008;2(5):529-33.
- Naughton MT.** Common sleep problems in ICU: heart failure and sleep-disordered breathing syndromes. *Crit Care Clin* 2008;24(3):565-87.
- Naughton MT.** Testing for Cheyne-Stokes respiration in patients with heart failure: while sleeping or cycling? *Chest* 2008;132(5):1416-8.
- Naughton MT.** A tale of two citizens: sleeping with a snoring generator. *Eur J Cardiovasc Nurs* 2008;7(2):89-90. Review.
- Nelson MR, Reid CM, Ames DA, Beilin LJ, Donnan GA, Gibbs P, Johnston CI, Krum H, Storey E, Tonkin A, Wolfe R, Woods R, McNeil JJ.** Feasibility of conducting a primary prevention trial of low-dose aspirin for major adverse cardiovascular events in older people in Australia: results from the ASPirin in Reducing Events in the Elderly (ASPREE) pilot study. *Med J Aust* 2008;189(2):105-9.
- Nestel PJ.** Editorial. *Curr Opin Lipidol* 2008;19:1-3. Editorial.
- Nestel PJ.** Effects of dairy fats within different foods on plasma lipids. *J Am Coll Nutr* 2008;27(6):735S-40S. Review.
- Nestel PJ, O'Brien R, Nelson M.** Management of dyslipidaemia – evidence and practical recommendations. *Aust Fam Physician* 2008;37(7):521-7. Review.
- New PW.** Survey of patients' preference for the location of rehabilitation ward rounds. *J Rehabil Med* 2008;40(8):678-80.
- New PW.** Inappropriate suggestion of benefit from hyperbaric oxygen for spinal cord injury. *Spinal Cord* 2008;46(12):824. Letter.
- New PW, Poulos CJ.** Functional improvement of the Australian health care system – can rehabilitation assist? *Med J Aust* 2008;189(6):340-3.
- New PW, Sundararajan V.** Incidence of non-traumatic spinal cord injury in Victoria, Australia: a population-based study and literature review. *Spinal Cord* 2008;46(6):406-11.
- Newbold A, Lindemann RK, Cluse LA, Whitecross KF, Dear AE, Johnstone RW.** Characterisation of the novel apoptotic and therapeutic activities of the histone deacetylase inhibitor romidepsin. *Mol Cancer Ther* 2008;7(5):1066-79.
- Newman C, Butow P, Knight R, McMillan K, Treloar C, Kippax S, Eades S.** Cancer and Aboriginal people in Australia: a review of the literature. *Crit Pub Health* 2008;18(1):65-75. Review.
- Newton PJ, Davidson PM, Macdonald P, Ollerton R, Krum H.** Nebulized furosemide for the management of dyspnea: does the evidence support its use? *J Pain Symptom Manage* 2008;36(4):424-41.
- Ngo TT, Liu GB, Tilley AJ, Pettigrew JD, Miller SM.** The changing face of perceptual rivalry. *Brain Res Bull* 2008;75(5):610-8.
- Nguyen TH, Mifsud NA, Stewart LA, Rose MJ, Etto TL, Williamson NA, Purcell AW, Kotsimbos T, Schwarer AP.** Refinement in the production and purification of recombinant HCMV IE1-pp65 protein for the generation of epitope-specific T cell immunity. *Protein Expr Purif* 2008;61(1):22-30.
- Nguyen TT, Wang JJ, Islam FM, Mitchell P, Tapp RJ, Zimmet PZ, Simpson R, Shaw J, Wong TY.** Retinal arteriolar narrowing predicts incidence of diabetes: the Australian Diabetes, Obesity and Lifestyle (AusDiab) Study. *Diabetes* 2008;57(3):536-9.
- Nichol AD, Westbrook A, Bellomo R, Cooper DJ.** Is it too early to recommend a restrictive transfusion strategy in critically ill patients with ischemic heart disease? *Crit Care Med* 2008;36(11):3126-7.
- Niego B, Horvath A, Coughlin PB, Pugsley MK, Medcalf RL.** Desmoteplase-mediated plasminogen activation and clot lysis are inhibited by the lysine analogue tranexamic acid. *Blood Coagul Fibrinolysis* 2008;19(4):322-4.
- Nielsen S, Dietze P, Cantwell K, Lee N, Taylor D.** Methadone- and buprenorphine-related ambulance attendances: a population-based indicator of adverse events. *J Subst Abuse Treat* 2008;35(4):457-61.
- Nielsen TC, Meikle PJ, Hopwood JJ, Fuller M.** Minimum substrate requirements of endoglycosidase activities toward dermatan sulfate by electrospray ionization-tandem mass spectrometry. *Glycobiology* 2008;18(12):1119-28.
- Nigro J, Potter-Perigo S, Ivey ME, de Dios ST, Evanko SP, Wight TN, Little PJ.** The effect of PPAR ligands to modulate glucose metabolism alters the incorporation of metabolic precursors into proteoglycans synthesized by human vascular smooth muscle cells. *Arch Physiol Biochem* 2008;114(3):171-7.

- Nijland EA, Weijmar Schultz WC, Nathorst-Boos J, Helmond FA, Van Lunsen RH, Palacios S, Norman RJ, Mulder RJ, Davis SR; LISA study investigators.** Tibolone and transdermal E2/NETA for the treatment of female sexual dysfunction in naturally menopausal women: results of a randomized active-controlled trial. *J Sex Med* 2008;5(3):646-56.
- Nolan RC, Puy R, Deckert K, O'Hehir RE, Douglass JA.** Experience with a new commercial skin testing kit to identify IgE-mediated penicillin allergy. *Intern Med J* 2008;38(5):357-61.
- Norman J, Walsh N., Mugavin J, Stoope M, Kelsall J, Austin K, Lintzeris N.** The acceptability and feasibility of peer worker support role in community based HCV treatment for injecting drug users. *Harm Reduct J* 2008;5:8.
- Nyamdorj R, Qiao Q, Söderberg S, Pitkäniemi J, Zimmet P, Shaw J, Alberti G, Nan H, Uusitalo U, Pauvaday V, Chitson P, Tuomilehto J.** Comparison of body mass index with waist circumference, waist-to-hip ratio, and waist-to-stature ratio as a predictor of hypertension incidence in Mauritius. *J Hypertens* 2008;26(5):866-70.
- Obesity in Asia Collaboration, Huxley R, Barzi F, Lee CMY, Janus E, Lam TH, Caterson I, Azzzi F, Lear S, Patel J, Shaw J, Adam J, Oh SW, Kang JH, Zimmet P, Woodward M.** Is central obesity a better discriminator of the risk of hypertension than body mass index in ethnically diverse populations? *J Hypertens* 2008;26(2):169-77.
- Obesity in Asia Collaboration, Huxley R, James WP, Barzi F, Patel JV, Lear SA, Suriyawongpaisal P, Janus E, Caterson I, Zimmet P, Prabhakaran D, Reddy S, Woodward M.** Ethnic comparisons of the cross-sectional relationships between measures of body size with diabetes and hypertension. *Obes Rev* 2008;9(suppl 1):53-61. Review.
- O'Brien L, Bailey M.** Determinants of compliance with hand splinting in an acute brain injured population. *Brain Inj* 2008;22(5):411-8.
- O'Connell AM, Lyon SM, O'Sullivan P, Given MF, Morrin M, Lee MJ.** Secretin-assisted CT of the pancreas: improved pancreatic enhancement and tumour conspicuity. *Clin Radiol* 2008;63(4):401-6.
- O'Croinin DF, Nichol AD, Hopkins N, Boylan J, O'Brien S, O'Connor C, Laffey JG, McLoughlin P.** Sustained hypercapnic acidosis during pulmonary infection increases bacterial load and worsens lung injury. *Crit Care Med* 2008;36(7):2128-35.
- O'Dea K, Cunningham J, Maple-Brown L, Weeramanthri T, Shaw J, Dunbar T, Zimmet P.** Diabetes and cardiovascular risk factors in urban Indigenous adults: results from the DRUID study. *Diabetes Res Clin Pract* 2008;80(3):483-9.
- Odom GL, Gregorevic P, Allen JM, Finn E, Chamberlain JS.** Microtrophin delivery through rAAV6 increases lifespan and improves muscle function in dystrophic dystrophin/utrophin-deficient mice. *Mol Ther* 2008;16(9):1539-45.
- O'Donnell ML, Bryant RA, Creamer M, Carty J.** Mental health following traumatic injury: toward a health system model of early psychological intervention. *Clin Psychol Rev* 2008;28(3):387-406.
- O'Donnell ML, Creamer MC, Parslow R, Elliott P, Holmes AC, Ellen S, Judson R, McFarlane AC, Silove D, Bryant RA.** A predictive screening index for posttraumatic stress disorder and depression following traumatic injury. *J Consult Clin Psychol* 2008;76(6):923-32.
- O'Hehir RE, Sandrini A, Anderson GP, Rolland JM.** Sublingual allergen immunotherapy: immunological mechanisms and prospects for refined vaccine preparation. *Curr Med Chem* 2008;14(21):2235-44.
- Oldenburg BF, Harper TA.** Investing in the future: prevention a priority at last. *Med J Aust* 2008;189(5):267-8.
- Oono A, Westein E, Hsiao S, Nesbitt WS, Hamilton JR, Schoenwaelder SM, Jackson SP.** Identification of a fibrin-independent platelet contractile mechanism regulating primary hemostasis and thrombus growth. *Blood* 2008;112(1):90-9.
- Ooi EM, Barrett PH, Chan DC, Nestel PJ, Watts GF.** Dose-dependent effect of rosuvastatin on apolipoprotein B-100 kinetics in the metabolic syndrome. *Atherosclerosis* 2008;197(1):139-46.
- Ooi EM, Watts GF, Barrett PH, Chan DC, Clifton PM, Ji J, Nestel PJ.** Dietary plant sterols supplementation does not alter lipoprotein kinetics in men with the metabolic syndrome. *Asia Pac J Clin Nutr* 2008;16(4):624-31.
- Ooi EM, Watts GF, Chan DC, Chen MM, Nestel PJ, Sviridov D, Barrett PH.** Dose-dependent effect of rosuvastatin on VLDL-apolipoprotein C-III kinetics in the metabolic syndrome. *Diabetes Care* 2008;31(8):1656-61.
- Ooi EM, Watts GF, Nestel PJ, Sviridov D, Hoang A, Barrett PH.** Dose-dependent regulation of high-density lipoprotein metabolism with rosuvastatin in the metabolic syndrome. *J Clin Endocrinol Metab* 2008;93(2):430-7.
- Opravil M, Sasadeusz J, Cooper DA, Rockstroh JK, Clumeck N, Clotet B, Montaner J, Torriani FJ, Depamphilis J, Dieterich DT.** Effect of baseline CD4 cell count on the efficacy and safety of peginterferon Alfa-2a (40KD) plus ribavirin in patients with HIV/hepatitis C virus coinfection. *J Acquir Immune Defic Syndr* 2008;47(1):36-49.
- O'Reilly G, Fitzgerald M, Ariyananda PL, Williams S, Smith L, Jones T, Charlton S, Young S, Dziukas L, Fisher Z, Wragg S, Burke E.** In the wake of Sri Lanka's tsunami: the health for the south capacity-building project. *Emerg Med Australas* 2008;20(2):175-9.
- Origin Trial Investigators, Gerstein H, Yusuf S, Riddle MC, Ryden L, Bosch J.** Rationale, design, and baseline characteristics for a large international trial of cardiovascular disease prevention in people with dysglycemia: the ORIGIN Trial (Outcome Reduction with an Initial Glargine Intervention). *Am Heart J* 2008;155(1):26-32, 32.e1-6.
- Osman N, Ballinger ML, Dadlani H, Getachew R, Burch ML, Little PJ.** p38 MAP kinase mediated proteoglycan synthesis as a target for the prevention of atherosclerosis. *Cardiovasc Hematol Disord Drug Targets* 2008;8(4):287-92.
- O'Sullivan SS, Massey LA, Williams DR, Silveira-Moriyama L, Kempster PA, Holton JL, Revesz T, Lees AJ.** Clinical outcomes of progressive supranuclear palsy and multiple system atrophy. *Brain* 2008;131(Pt 5):1362-72.
- O'Sullivan SS, Williams DR, Gallagher DA, Massey LA, Silveira-Moriyama L, Lees AJ.** Nonmotor symptoms as presenting complaints in Parkinson's disease: a clinicopathological study. *Mov Disord* 2008;23(1):101-6.
- Oto T, Excell L, Griffiths AP, Levvey BJ, Bailey M, Marasco S, Macdonald P, Snell GI.** Association between primary graft dysfunction among lung, kidney and heart recipients from the same multiorgan donor. *Am J Transplant* 2008;8(10):2132-9.
- Oto T, Excell L, Griffiths AP, Levvey BJ, Snell GI.** The implications of pulmonary embolism in a multiorgan donor for subsequent pulmonary, renal, and cardiac transplantation. *J Heart Lung Transplant* 2008;27(1):78-85.
- O'Toole J, Sinclair M, Diaper C, Leder K.** Comparative survival of enteric indicators, *E. coli* and somatic and F-RNA bacteriophages on turf-grass irrigated with recycled water. *Water Sci Technol* 2008;58(3):513-8.
- O'Toole J, Sinclair M, Jeavons T, Leder K.** Alternative water sources and endotoxin. *Water Sci Technol* 2008;58(3):603-7.
- O'Toole J, Sinclair M, Leder K.** Maximising response rates in household telephone surveys. *BMC Med Res Methodol* 2008;8:71.
- Ott C, Schlaich MP, Harazny J, Schmidt BM, Michelson G, Schmieder RE.** Effects of angiotensin II type 1-receptor blockade on retinal endothelial function. *J Hypertens* 2008;26(3):516-22.
- Ott C, Schlaich MP, Schmidt BM, Titze SI, Schäufele T, Schmieder RE.** Rosuvastatin improves basal nitric oxide activity of the renal vasculature in patients with hypercholesterolemia. *Atherosclerosis* 2008;196(2):704-11.
- Owen AJ, Spinks J, Meehan A, Robb T, Hardy M, Kwasha D, Wlodarczyk J, Reid CM.** A new model to evaluate the long-term cost effectiveness of orphan and highly specialised drugs following listing on the Australian Pharmaceutical Benefits Scheme: the Bosentan Patient Registry. *J Med Economics* 2008;11(2):235-43.
- Owe-Young R, Webster NL, Mukhtar M, Pomerantz RJ, Smythe G, Walker D, Armati PJ, Crowe SM, Brew BJ.** Kynurenine pathway metabolism in human blood-brain-barrier cells: implications for immune tolerance and neurotoxicity. *J Neurochem* 2008;105(4):1346-57.
- Palumbo A, Facon T, Sonneveld P, Blade J, Offidani M, Gay F, Moreau P, Waage A, Spencer A, Ludwig H, Boccadoro M, Harousseau JL.** Thalidomide for treatment of multiple myeloma: 10 years later. *Blood* 2008;111(8):3968-77.
- Pan Y, Chamberlain AJ, Bailey M, Chong AH, Haskett M, Kelly JW.** Dermatoscopy aids in the diagnosis of the solitary red scaly patch or plaque-features distinguishing superficial basal cell carcinoma, intraepidermal carcinoma, and psoriasis. *J Am Acad Dermatol* 2008;59(2):268-74.

- Panjari M, Bell R, Adams J, Morrow C, Papalia MA, Astbury J, Davis SR.** Methodology and challenges to recruitment to a randomized, double-blind, placebo-controlled trial of oral DHEA in postmenopausal women. *J Womens Health (Larchmt)* 2008;17(10):1559-65.
- Pankonin C, Higgs P, Reid G, Aitken C.** Selling syringes to injecting drug users: a study of five pharmacies in Hanoi, Vietnam. *J Infect Developing Countries* 2008;2(1):51-8.
- Parving HH, de Zeeuw D, Cooper ME, Remuzzi G, Liu N, Luceford J, Shahinfar S, Wong PH, Lyle PA, Rossing P, Brenner BM.** ACE gene polymorphism and losartan treatment in Type 2 diabetic patients with nephropathy. *J Am Soc Nephrol* 2008;19(4):771-9.
- Pasarica M, Mashtalir N, McAllister EJ, Kilroy GE, Koska J, Permana P, de Courten B, Yu M, Ravussin E, Gimble JM, Dhurandhar NV.** Adipogenic human adenovirus Ad-36 induces commitment, differentiation, and lipid accumulation in human adipose-derived stem cells. *Stem Cells* 2008;26(4):969-78.
- Pasricha SR, Grigg A, Catalano J, Leahy M, Underhill C, Arthur C, D'Rozario J, Lowenthal R, Reed K, Spencer A.** A multicenter phase 2 study of risk-adjusted salvage chemotherapy incorporating vinorelbine and gemcitabine for relapsed and refractory lymphoma. *Cancer* 2008;113(11):3192-8.
- Paterson MA, Hosking PS, Coughlin PB.** Expression of the serpin centerin defines a germinal center phenotype in B-cell lymphomas. *Am J Clin Pathol* 2008;130(1):117-26.
- Patil S, Schwarzer A, McLean C.** Urinary cytology in multiple myeloma. *Cytopathology* 2008;19(2):130-1.
- Pavlin NL, Parker R, Fairley CK, Gunn JM, Hocking J.** Take the sex out of STI screening! Views of young women on implementing chlamydia screening in General Practice. *BMC Infect Dis* 2008;8:62.
- Payne WR, Walsh KJ, Harvey JT, Livy MF, McKenzie KJ, Donaldson A, Atkinson MG, Keogh JB, Moss RS, Dunstan DW, Hubbard WA.** Effect of a low-resource-intensive lifestyle modification program incorporating gymnasium-based and home-based resistance training on Type 2 diabetes risk in Australian adults. *Diabetes Care* 2008;31(12):2244-50.
- Pearce DC, Cadilhac DA, Pierce RJ, Thrift AG, David S, Donnan GA; SCOPES II Study Group.** Estimating the prevalence of sleep-disordered breathing in community-based, long-term stroke survivors using a validated predictive model. *Cerebrovasc Dis* 2008;26(4):441-6.
- Pedersen BK, Febbraio MA.** Muscle as an endocrine organ: focus on muscle-derived interleukin-6. *Physiol Rev* 2008;88(4):1379-406. Review.
- Pedrana A, Aitken C, Higgs P, Hellard M.** Blood borne viruses and risk behaviours among transient farm workers in rural Victoria. *Aust J Rural Health* 2008;16(3):143-9.
- Pedrana A, Hellard M, Giles M.** Registered post achieved a higher response rate than normal mail – a randomised controlled trial. *J Clin Epidemiol* 2008;61(9):896-9.
- Peiris D, Brown A, Cass A.** Addressing inequities in access to quality health care for indigenous people. *CMAJ* 2008;179(10):985-6.
- Pepe S, Leong JY, van der Merwe J, Marasco SF, Hadj A, Lymbury R, Perkins A, Rosenfeldt FL.** Targeting oxidative stress in surgery: effects of ageing and therapy. *Exp Gerontol* 2008;43(7):653-7. Review.
- Percival JM, Anderson KN, Gregorevic P, Chamberlain JS, Froehner SC.** Functional deficits in nNOSmu-deficient skeletal muscle: myopathy in nNOS knockout mice. *PLoS ONE* 2008;3(10):e3387.
- Percy CJ, Power DA, Gobe GC.** Renal ageing: changes in the cellular mechanism of energy metabolism and oxidant handling. *Nephrology (Carlton)* 2008;13(2):147-52.
- Petravic J, Loh L, Kent SJ, Davenport MP.** CD4+ target cell availability determines the dynamics of immune escape and reversion *in vivo*. *J Virol* 2008;82(8):4091-101.
- Peyton PJ, Fortuin M, Robinson GJ, Stuart-Andrews C, Pierce R, Thompson BR.** The rate of alveolar-capillary uptake of sevoflurane and nitrous oxide following anaesthetic induction. *Anaesthesia* 2008;63(4):358-63.
- Peyton PJ, Horriat M, Robinson GJ, Pierce R, Thompson BR.** Magnitude of the second gas effect on arterial sevoflurane partial pressure. *Anesthesiology* 2008;108(3):381-7.
- Pfluger HB, Phrommintikul A, Mariani JA, Cherayath JG, Taylor AJ.** Utility of myocardial fibrosis and fatty infiltration detected by cardiac magnetic resonance imaging in the diagnosis of arrhythmogenic right ventricular dysplasia—a single centre experience. *Heart Lung Circ* 2008;17(6):478-83.
- Phang CW, Hocking J, Fairley CK, Bradshaw C, Hayes P, Chen MY.** More than just anal sex: the potential for sexually transmitted infection transmission among men visiting sex-on-premises venues. *Sex Transm Infect* 2008;84(3):217-9.
- Philip JA, Gold M, Sutherland S, Finlayson F, Ware C, Braithwaite M, Harris J, Kotsimbos T, Wilson JW.** End-of-life care in adults with cystic fibrosis. *J Palliat Med* 2008;11(2):198-203.
- Phillips VL, Yarmo Roberts D, Hunsaker AE.** Certified nursing aides' and care assistants' views on falls: insight for creation and implementation of fall prevention programs. *J Am Med Dir Assoc* 2008;9(3):168-72.
- Phrommintikul A, Tran L, Kompa A, Wang B, Adrahtas A, Cantwell D, Kelly DJ, Krum H.** Effects of a Rho kinase inhibitor on pressure overload induced cardiac hypertrophy and associated diastolic dysfunction. *Am J Physiol Heart Circ Physiol* 2008;294(4):H1804-14.
- Pick AW.** Invited commentary on amiodarone cost effectiveness in preventing atrial fibrillation after coronary artery bypass graft surgery. *Ann Thorac Surg* 2008;85(1):32-3.
- Pierce R, Naughton MT.** Snoring, sleep apnoea and other sleep problems. *The Australian Lung Foundation*, 3rd edition 2008. Editorial.
- Piriyaprasarth P, Morris ME, Winter A, Bialocerowski AE.** The reliability of knee joint position testing using electrogoniometry. *BMC Musculoskelet Disord* 2008;9:6.
- Pitt B, Ahmed A, Love TE, Krum H, Nicolau J, Cardoso JS, Parkhomenko A, Aschermann M, Corbalan R, Solomon H, Shi H, Zannad F.** History of hypertension and eplerenone in patients with acute myocardial infarction complicated by heart failure. *Hypertension* 2008;52(2):271-8.
- Plebanski M, Locke E, Kazura JW, Coppel RL.** Malaria vaccines: into a mirror, darkly? *Trends Parasitol* 2008;24(12):532-6. Letter.
- Polizzotto MN, Neo H, Spelman D, Shortt J, Cole-Sinclair MF, Borosak M, Wong P, Wood EM.** *Streptococcus pneumoniae* septicemia associated with red blood cell transfusion. *Transfusion* 2008;48(7):1520-1.
- Polizzotto MN, Shortt J, Opat SS, Cole-Sinclair MF.** A drop of vitriol: microspherocytosis following sulphuric acid exposure. *Br J Haematol* 2008;140(6):596.
- Ponsford JL, Myles PS, Cooper DJ, McDermott FT, Murray LJ, Laidlaw J, Cooper G, Tremayne AB, Bernard SA.** Gender differences in outcome in patients with hypotension and severe traumatic brain injury. *Injury* 2008;39(1):67-76.
- Powell MS, Hogarth PM.** Fc receptors. *Adv Exp Med Biol* 2008;640:22-34. Review.
- Powell S, Cummings R, Lee D, Fairley CK.** HIV prevention during a sexual health consultation; a suggested quality audit. *Sex Health* 2008;5(3):309.
- Power DA, Ford D.** Biological drugs and the coming of biosimilars. *J Pharm Pract Res* 2008;38:137-9. Letter.
- Preiss S, Littlejohn M, Angus P, Thompson A, Desmond P, Lewin SR, Sasadeusz J, Matthews G, Dore GJ, Shaw T, Sozzi V, Yuen L, Lau G, Ayres A, Thio C, Avihingsanon A, Ruxrungtham K, Locarnini S, Revill PA.** Defective hepatitis B virus DNA is not associated with disease status but is reduced by polymerase mutations associated with drug resistance. *Hepatology* 2008;48(3):741-9.
- Pretorius L, Owen KL, Jennings GL, McMullen JR.** Promoting physiological hypertrophy in the failing heart. *Clin Exp Pharmacol Physiol* 2008;35(4):438-41. Review.
- Pritchett S, Zilberg E, Xu M, Burton D, Brown I, Myles P.** Power analysis of gamma frequencies (30 - 47Hz), adjusting for muscle activity (80 - 97Hz), in anesthesia: a comparison between young adults, middle-aged and the elderly. *Conf Proc IEEE Eng Med Biol Soc* 2008;2008:825-30.
- Proudfoot O, Drew N, Scholzen A, Xiang S, Plebanski M.** Investigation of a novel approach to scoring Giemsa-stained malaria-infected thin blood films. *Malar J* 2008;7:62.

- Qiu W, Hu M, Sridhar A, Opeskin K, Fox S, Shipitsin M, Trivett M, Thompson ER, Ramakrishna M, Gorringer KL, Polyak K, Haviv I, Campbell IG.** No evidence of clonal somatic genetic alterations in cancer-associated fibroblasts from human breast and ovarian carcinomas. *Nat Genet* 2008;40(5):650-5.
- Quintner JL, Cohen ML, Buchanan D, Katz JD, Williamson OD.** Pain medicine and its models: helping or hindering? *Pain Med* 2008;9(7):824-34. Review.
- Rajappan K, Kistler PM, Earley MJ, Thomas G, Izquierdo M, Sporton SC, Schilling RJ.** Acute and chronic pulmonary vein reconnection after atrial fibrillation ablation: a prospective characterization of anatomical sites. *Pacing Clin Electrophysiol* 2008;31(12):1598-604.
- Ramsden CM, Kinsella GJ, Ong B, Storey E.** Performance of everyday actions in mild Alzheimer's disease. *Neuropsychology* 2008;22(1):17-26.
- Rathore FA, Farooq F, Muzammil S, New PW, Ahmad N, Haig AJ.** Spinal cord injury management and rehabilitation: highlights and shortcomings from the 2005 earthquake in Pakistan. *Arch Phys Med Rehabil* 2008;89(3):579-85.
- Ravaoli A, Monti F, Regan MM, Maffini F, Mastropasqua MG, Spataro V, Castiglione-Gertsch M, Panzini I, Gianni L, Goldhirsch A, Coates A, Price KN, Gusterson BA, Viale G; International Breast Cancer Study Group.** p27 and Skp2 immunoreactivity and its clinical significance with endocrine and chemo-endocrine treatments in node-negative early breast cancer. *Ann Oncol* 2008;19(4):660-8.
- Reddy P, Dunbar J, Morgan M, O'Neil A.** Coronary heart disease and depression: getting evidence into clinical practice. *Stress Health* 2008;24(3):223-30.
- Reddy P, Dunbar JA, O'Neil A, Morgan MA, Wolff AM, Janus ED.** Depression in acute coronary syndrome: has the evidence been implemented? *Aust J Rural Health* 2008;16(4):245-6.
- Reid DW, Wen Y, Johns DP, Williams TJ, Ward C, Walters EH.** Bronchodilator reversibility, airway eosinophilia and anti-inflammatory effects of inhaled fluticasone in COPD are not related. *Respirology* 2008;13(6):799-809.
- Remaley AT, Amar M, Sviridov D.** HDL-replacement therapy: mechanism of action, types of agents and potential clinical indications. *Expert Rev Cardiovasc Ther* 2008;6(9):1203-15.
- RENAL Study Investigators.** Renal replacement therapy for acute kidney injury in Australian and New Zealand intensive care units: a practice survey. *Crit Care Resusc* 2008;10(3):225-30.
- RENAL Study Investigators, Bellomo R, Cass A, Cole L, Finfer S, Gallagher M, Goldsmith D, Myburgh J, Norton R, Scheinkestel C.** Design and challenges of the Randomized Evaluation of Normal versus Augmented Level Replacement Therapy (RENAL) Trial: high-dose versus standard-dose hemofiltration in acute renal failure. *Blood Purification* 2008;26(5):407-416.
- Repits J, Sterjovski J, Badia-Martinez D, Mild M, Gray L, Churchill MJ, Purcell DF, Karlsson A, Albert J, Fenyo EM, Achour A, Gorry PR, Jansson M.** Primary HIV-1 R5 isolates from end-stage disease display enhanced viral fitness in parallel with increased gp120 net charge. *Virology* 2008;379(1):125-34.
- Ritt M, Harazny JM, Ott C, Schlaich MP, Schneider MP, Michelson G, Schmieder RE.** Analysis of retinal arteriolar structure in never-treated patients with essential hypertension. *J Hypertens* 2008;26(7):1427-34.
- Rizak S, Hruddy SE.** Drinking-water safety: challenges for community-managed systems. *J Water Health* 2008;6 (Suppl 1):33-41. Review.
- Roberts SK, Cooksley G, Dore GJ, Robson R, Shaw D, Berns H, Hill G, Klumpp K, Najera I, Washington C.** Robust antiviral activity of R1626, a novel nucleoside analog: a randomized, placebo-controlled study in patients with chronic hepatitis C. *Hepatology* 2008;48(2):398-406.
- Robertson MS, Wilson SJ, Cade JF.** Acute stress ulceration prophylaxis: point prevalence surveys in intensive care units in Victoria, 1997 and 2005. *Crit Care Resusc* 2008;10(1):18.
- Roberts-Thomson KC, Stevenson IH, Kistler PM, Haqqani HM, Goldblatt JC, Sanders P, Kalman JM.** Anatomically determined functional conduction delay in the posterior left atrium relationship to structural heart disease. *J Am Coll Cardiol* 2008;51(8):856-62.
- Rodriguez Lay Lde L, Quintana A, Villalba MC, Lemos G, Corredor MB, Moreno AG, Prieto PA, Guzman MG, Anderson D.** Dual infection with hepatitis A and E viruses in outbreaks and in sporadic clinical cases: Cuba 1998-2003. *J Med Virol* 2008;80(5):798-802.
- Rogers SL, Tikellis G, Cheung N, Tapp R, Shaw J, Zimmet PZ, Mitchell P, Wang JJ, Wong TY.** Retinal arteriolar caliber predicts incident retinopathy: the Australian Diabetes, Obesity and Lifestyle (AusDiab) study. *Diabetes Care* 2008;31(4):761-3.
- Rolland JM, Apostolou E, de Leon MP, Stockley CS, O'Hehir RE.** Specific and sensitive enzyme-linked immunosorbent assays for analysis of residual allergenic food proteins in commercial bottled wine fined with egg white, milk, and nongrape-derived tannins. *J Agric Food Chem* 2008;56(2):349-54.
- Rolland JM, O'Hehir RE.** Latex allergy: a model for therapy. *Clin Exp Allergy* 2008;38(6):898-912.
- Rollman E, Mason RD, Lin J, Brooks AG, Kent SJ.** Protection afforded by live attenuated SIV is associated with rapid killing kinetics of CTLs. *J Med Primatol* 2008;37 Suppl 2:24-32.
- Rollman E, Turner SJ, Kedzierska K, Kent SJ.** Anti-SIV cytolytic molecules in pigtail macaques. *AIDS Res Hum Retroviruses* 2008;24(8):1127-31.
- Romiti M, Finch CF, Gabbe B.** A prospective cohort study of the incidence of injuries among junior Australian football players: evidence for an effect of playing-age level. *Br J Sports Med* 2008;42(6):441-6.
- Rose H, Hoy J, Woolley I, Tchoua U, Bukrinsky M, Dart A, Sviridov D.** HIV infection and high density lipoprotein metabolism. *Atherosclerosis* 2008;199(1):79-86.
- Rose M, Scharf S.** Is there any role for computed tomography measurements of medial temporal lobe atrophy in dementia? A review of the literature and case series from a memory clinic. *Intern Med J* 2008;38(2):136-9. Review.
- Rosenfeld JV.** ADF Health's first decade. *ADF Health* 2008;9(2):50. Editorial.
- Rosenfeld JV, Bandopadhyay P, Goldschlager T, Brown DJ.** The ethics of the treatment of spinal cord injury: stem cell transplants, motor neuroprosthetics, and social equity. *Top Spinal Cord Inj Rehabil* 2008;14(1):76-88.
- Rosenfeldt F, Braun L.** Other CMs promising in cardiology. *J Complement Med* 2008;7(5):6. Letter.
- Rosenthal MA, Ashley D, Drummond K, Dally M, Murphy M, Cher L, Thursfield V, Giles GG.** Intramedullary spinal cord tumors: patterns of care in Victoria from 1998-2000. *Asia-Pacific J Clin Oncol* 2008;4(2):77-80.
- Rosenthal MA, Ashley DM, Drummond KJ, Dally M, Murphy M, Cher L, Thursfield V, Giles GG.** Brain stem gliomas: patterns of care in Victoria from 1998-2000. *J Clin Neurosci* 2008;15(3):237-40.
- Russell SL, Batty RA.** Elucidating semantic disorganisation from a word comprehension task: do patients with schizophrenia and bipolar disorder show differential processing of nouns, verbs and adjectives? *Schizophr Res* 2008;102(1-3):63-8.
- Rossignol S, Netchine I, Le Bouc Y, Gicquel C.** Epigenetics in Silver-Russell syndrome. *Best Pract Res Clin Endocrinol Metab* 2008;22(3):403-14. Review.
- Roth JA, Pincock T, Sacks R, Forer M, Bousted N, Johnston W, Bailey M.** Harmonic scalpel tonsillectomy versus monopolar diathermy tonsillectomy: a prospective study. *Ear Nose Throat J* 2008;87(6):346-9.
- Rotty J, Hoy J.** New therapeutic agents in the management of HIV: an overview of darunavir for clinicians. *Sex Health* 2008;5(3):235-41.
- Rowley KG, O'Dea K, Anderson I, McDermott R, Saraswati K, Tilmouth R, Roberts I, Fitz J, Wang Z, Jenkins A, Best JD, Wang Z, Brown A.** Lower than expected morbidity and mortality for an Australian Aboriginal population: 10-year follow-up in a decentralised community. *Med J Aust* 2008;188(5):283-7.
- Ruben JD, Davis S, Evans C, Jones P, Gagliardi F, Haynes M, Hunter A.** The effect of intensity-modulated radiotherapy on radiation-induced second malignancies. *Int J Radiat Oncol Biol Phys* 2008;70(5):1530-6.
- Ruetens AT, Shaw JE.** Experimental and clinical pharmacology – incretin mimetics and enhancers: clinical applications. *Aust Prescr* 2008;31(4):104-108.
- Russell JA, Walley KR, Singer J, Gordon AC, Hebert PC, Cooper DJ, Holmes CL, Mehta S, Granton JT, Storms MM, Cook DJ, Presneill JJ, Ayers D; VASST Investigators.** Vasopressin versus norepinephrine infusion in patients with septic shock. *N Engl J Med* 2008;358(9):877-87.

- Ruygrok PN, Esmore DS, Alison PM, Finucane KA, McGuinness SP, McGeorge AD, Negri J, Jones K, Gibbs HC.** Pediatric experience with the VentrAssist LVAD. *Ann Thorac Surg* 2008;86(2):622-6.
- Salamonsen MR, Bailey MJ, Salamonsen RF.** Can ICU stay be predicted accurately enough for fast-tracking cardiac surgical patients? *Crit Care Resusc* 2008;10(3):194-201.
- Salmon J, Dunstan D, Owen N.** Should we be concerned about children spending extended periods of time in sedentary pursuits even among the highly active? *Int J Pediatr Obes* 2008;3(2):66-8.
- Samson AL, Nevin ST, Croucher D, Niego B, Daniel PB, Weiss TW, Moreno E, Monard D, Lawrence DA, Medcalf RL.** Tissue-type plasminogen activator requires a co-receptor to enhance NMDA receptor function. *J Neurochem* 2008;107(4):1091-101.
- Samson AL, Nevin ST, Medcalf RL.** Low molecular weight contaminants in commercial preparations of plasmin and t-PA activate neurons. *J Thromb Haemost* 2008;6(12):2218-20.
- Sanderson K, Nicholson J, Graves N, Tilse E, Oldenburg B.** Mental health in the workplace: using the ICF to model the prospective associations between symptoms, activities, participation and environmental factors. *Disabil Rehabil* 2008;30(17):1289-97.
- Sari E, Bulut N, Altundag K.** Re: Adjuvant chemotherapy with sequential or concurrent anthracycline and docetaxel: Breast International Group 02-98 randomized trial. *J Natl Cancer Inst* 2008;100(9):683.
- Sasadeusz J, Audsley J, Mijch A, Baden R, Caro J, Hunter H, Matthews G, McMahon MA, Olender SA, Siliciano RF, Lewin SR, Thio CL.** The anti-HIV activity of entecavir: a multicentre evaluation of lamivudine-experienced and lamivudine-naive patients. *AIDS* 2008;22(8):947-55.
- Sasadeusz JJ, Silvers JE, Kent HE, Devenish W, Hocking J, Garland SM.** Prevalence of HSV-2 antibody in a Melbourne antenatal population attending a tertiary obstetric hospital. *Aust N Z J Obstet Gynaecol* 2008;48(3):266-72.
- Saunders B, Lyon S, Day M, Riley B, Chenette E, Subramaniam S, Vadivelu I.** The Molecule Pages database. *Nucleic Acids Res* 2008;36(Database issue):D700-6.
- Schlaich MP, Schmitt D, Ott C, Schmidt BM, Schmieder RE.** Basal nitric oxide synthase activity is a major determinant of glomerular haemodynamics in humans. *J Hypertens* 2008;26(1):110-6.
- Seifman MA, Adamides AA, Nguyen PN, Vallance SA, Cooper DJ, Kossman T, Rosenfeld JV, Morganti-Kossmann MC.** Endogenous melatonin increases in cerebrospinal fluid of patients after severe traumatic brain injury and correlates with oxidative stress and metabolic disarray. *J Cereb Blood Flow Metab* 2008;28(4):684-96.
- Seneviratne U, D'Souza W, Cook M.** Long-term assessment of oxcarbazepine in a naturalistic setting: a retrospective study. *Acta Neurol Scand* 2008;117(5):367-9.
- Serpell JW, Grodski S, Yeung M, Swann J, Kemp S, Johnson W.** Hemithyroidectomy: a heuristics perspective. *ANZ J Surg* 2008;78(12):1122-7.
- Sethi AA, Stonik JA, Thomas F, Demosky SJ, Amar M, Neufeld E, Brewer HB, Davidson WS, D'Souza W, Sviridov D, Remaley AT.** Asymmetry in the lipid affinity of bi-helical amphipathic peptides: a structural determinant for the specificity of ABCA1-dependent cholesterol efflux by peptides. *J Biol Chem* 2008;283(47):32273-82.
- Sharp A, Tapp R, Francis DP, McG Thom SA, Hughes AD, Stanton AV, Zambanini A, Chaturvedi N, Byrd S, Poulter NR, Sever PS, Mayet J.** Ethnicity and left ventricular diastolic function in hypertension an ASCOT (Anglo-Scandinavian Cardiac Outcomes Trial) substudy. *J Am Coll Cardiol* 2008;52(12):1015-21.
- Shaw J.** Obstructive sleep apnoea and Type 2 diabetes – the IDF consensus. *Diabetes Voice* 2008;53(3):29-32. Editorial.
- Shaw JA, Andrianopoulos N, Duffy S, Walton AS, Clark D, Lew R, Sebastian M, New G, Brennan A, Reid C, Ajani AE; On behalf of the Melbourne Interventional Group.** Renal impairment is an independent predictor of adverse events post coronary intervention in patients with and without drug-eluting stents. *Cardiovasc Revasc Med* 2008;9(4):218-223.
- Shaw JA, Bobik A, Murphy A, Kanellakis P, Blombery P, Mukhamedova N, Woollard K, Lyon S, Sviridov D, Dart AM.** Infusion of reconstituted high-density lipoprotein leads to acute changes in human atherosclerotic plaque. *Circ Res* 2008;103(10):1084-91.
- Shaw JE, Punjabi NM, Wilding JP, Alberti KG, Zimmet PZ; International Diabetes Federation Taskforce on Epidemiology and Prevention.** Sleep-disordered breathing and Type 2 diabetes: a report from the International Diabetes Federation Taskforce on Epidemiology and Prevention. *Diabetes Res Clin Pract* 2008;81(1):2-12.
- Shearer J, Johnston J, Kaye S, Dillon P, Dietze P, Collins L.** An Australian profile on cocaine supply. *Howard J Crim Justice* 2008;47(1):67-80.
- Sheng KC, Kalkanidis M, Pouniotis DS, Esparon S, Tang CK, Apostolopoulos V, Pietersz GA.** Delivery of antigen using a novel mannosylated dendrimer potentiates immunogenicity *in vitro* and *in vivo*. *Eur J Immunol* 2008;38(2):424-36.
- Sheng KC, Kalkanidis M, Pouniotis DS, Wright MD, Pietersz GA, Apostolopoulos V.** The adjuvanticity of a mannosylated antigen reveals TLR4 functionality essential for subset specialization and functional maturation of mouse dendritic cells. *J Immunol* 2008;181(4):2455-64.
- Shortt J, Westall GP, Roxby D, Chen JW, Snell GI, Polizzotto MN, Magrin G, Webb A, Street AM, Borosak M, Wood EM, Cole-Sinclair MF.** A 'dangerous' group O donor: severe hemolysis in all recipients of organs from a donor with multiple red cell alloantibodies. *Am J Transplant* 2008;8(3):711-4.
- Sicree RA, Zimmet PZ, Dunstan DW, Cameron AJ, Welborn TA, Shaw JE.** Differences in height explain gender differences in the response to the oral glucose tolerance test – the AusDiab study. *Diabet Med* 2008;25(3):296-302.
- Sidat MM, Mijch AM, Lewin SR, Hoy JF, Hocking J, Fairley CK.** Incidence of putative HIV superinfection and sexual practices among HIV-infected men who have sex with men. *Sex Health* 2008;5(1):61-7.
- Sidhom MA, Kneebone AB, Lehman M, Wiltshire KL, Millar JL, Mukherjee RK, Shakespeare TP, Tai KH.** Post-prostatectomy radiation therapy: consensus guidelines of the Australian and New Zealand Radiation Oncology Genito-Urinary Group. *Radiother Oncol* 2008;88(1):10-9.
- Silbert B, Evered L, Scott DA, McCutcheon C, Jamrozik K.** Homocysteine and C-reactive protein are not markers of cognitive impairment in patients with major cardiovascular disease. *Dement Geriatr Cogn Disord* 2008;25(4):309-16.
- Singh I, Carey AL, Watson N, Febbraio MA, Hawley JA.** Oxidative stress-induced insulin resistance in skeletal muscle cells is ameliorated by gamma-tocopherol treatment. *Eur J Nutr* 2008;47(7):387-92.
- Siwanuwatn R, Deshmukh P, Feiz-Erfan I, Rekeate HL, Zabramski JM, Spetzler RF, Rosenfeld JV.** Microsurgical anatomy of the transcallosal anterior interfenicine approach to the third ventricle. *Neurosurgery* 2008;62(6 Suppl 3):1059-65.
- Skilton MR.** Intrauterine risk factors for precocious atherosclerosis. *Pediatrics* 2008;121(3):570-4. Review.
- Skilton MR, Laville M, Cust AE, Moulin P, Bonnet F.** The association between dietary macronutrient intake and the prevalence of the metabolic syndrome. *Br J Nutr* 2008;100(2):400-7.
- Skilton MR, Sieveking DP, Harmer JA, Franklin J, Loughnan G, Nakhla S, Sullivan DR, Catterson ID, Celermajer DS.** The effects of obesity and non-pharmacological weight loss on vascular and ventricular function and structure. *Diabetes Obes Metab* 2008;10(10):874-84.
- Slavin MA.** Introduction to the updated Australian and New Zealand consensus guidelines for the use of antifungal agents in the haematology/oncology setting, 2008. *Intern Med J* 2008;38(6b):457-67.
- Slavin MA, Heath CH, Thursky KA, Morrissey CO, Szer J, Ling LM, Milliken ST, Grigg AP.** Antifungal prophylaxis in adult stem cell transplantation and haematological malignancy. *Intern Med J* 2008;38(6b):468-76.
- Sliwa K, Wilkinson D, Hansen C, Ntyintyane L, Tibazarwa K, Becker A, Stewart S.** Spectrum of heart disease and risk factors in a black urban population in South Africa (the Heart of Soweto Study): a cohort study. *Lancet* 2008;371(9616):915-22.
- Sluis-Cremer N, Tachedjian G.** Mechanisms of inhibition of HIV replication by non-nucleoside reverse transcriptase inhibitors. *Virus Res* 2008;134(1-2):147-56.

- Smith A, Farmer KC, Chapple K.** Clinical and endorectal ultrasound staging of circumferential rectal cancers. *J Med Imaging Radiat Oncol* 2008;52(2):161-3.
- Smith MZ, Asher TE, Venturi V, Davenport MP, Douek DC, Price DA, Kent SJ.** Limited maintenance of vaccine-induced simian immunodeficiency virus-specific CD8 T-cell receptor clonotypes after virus challenge. *J Virol* 2008;82(15):7357-68.
- Smyth I, Hacking DF, Hilton AA, Mukhamedova N, Meikle PJ, Ellis S, Slattery K, Collinge JE, de Graaf CA, Bahlo M, Sviridov D, Kile BT, Hilton DJ.** A mouse model of harlequin ichthyosis delineates a key role for Abca12 in lipid homeostasis. *PLoS Genet* 2008;4(9):e1000192.
- Snell GI, Griffiths A, Levvey BJ, Oto T.** Availability of lungs for transplantation: exploring the real potential of the donor pool. *J Heart Lung Transplant* 2008;27(6):662-7.
- Snell GI, Levvey B, Oto T, McEgan R, Mennan M, Eriksson L, Williams T, Rosenfeldt F.** Effect of multiorgan donation after cardiac death retrieval on lung performance. *ANZ J Surg* 2008;78(4):262-5.
- Snell GI, Levvey BJ, Oto T, McEgan R, Pilcher D, Davies A, Marasco S, Rosenfeldt F.** Early lung transplantation success utilizing controlled donation after cardiac death donors. *Am J Transplant* 2008;8(6):1282-9.
- Snooks MJ, Bhat P, Mackenzie J, Counihan NA, Vaughan N, Anderson DA.** Vectorial entry and release of hepatitis A virus in polarized human hepatocytes. *J Virol* 2008;82(17):8733-42.
- Soldatos G, Cooper ME.** Diabetic nephropathy: important pathophysiologic mechanisms. *Diabetes Res Clin Pract* 2008;82(Suppl 1):S75-9. Review.
- Sonneveld P, Hajek R, Nagler A, Spencer A, Blade J, Robak T, Zhuang SH, Housseau JL, Orlowski RZ; DOXIL-MMY-3001 Study Investigators.** Combined pegylated liposomal doxorubicin and bortezomib is highly effective in patients with recurrent or refractory multiple myeloma who received prior thalidomide/lenalidomide therapy. *Cancer* 2008;112(7):1529-37.
- Soon PS, Libe R, Benn DE, Gill A, Shaw J, Sywak MS, Groussin L, Bertagna X, Gicquel C, Bertherat J, McDonald KL, Sidhu SB, Robinson BG.** Loss of heterozygosity of 17p13, with possible involvement of ACADVL and ALOX15B, in the pathogenesis of adrenocortical tumors. *Ann Surg* 2008;247(1):157-64.
- Soro-Paavonen A, Watson AM, Li J, Paavonen K, Koitka A, Calkin AC, Barit D, Coughlan MT, Drew BG, Lancaster GI, Thomas M, Forbes JM, Nawroth PP, Bierhaus A, Cooper ME, Jandeleit-Dahm KA.** Receptor for advanced glycation end products (RAGE) deficiency attenuates the development of atherosclerosis in diabetes. *Diabetes* 2008;57(9):2461-9.
- Sourris KC, Forbes JM, Cooper ME.** Therapeutic interruption of advanced glycation in diabetic nephropathy: do all roads lead to Rome? *Ann N Y Acad Sci* 2008;1126:101-6. Review.
- Spelman D.** Endemic MRSA management: is screening useful? *Microbiol Aust* 2008;29(3):145-6.
- Spelman D, Buttery J, Daley A, Isaacs D, Jennens I, Kakakios A, Lawrence R, Roberts S, Torda A, Watson DA, Woolley I, Anderson T, Street A; Australasian Society for Infectious Diseases.** Guidelines for the prevention of sepsis in asplenic and hyposplenic patients. *Intern Med J* 2008;38(5):349-56. Review.
- Spencer A, Roberts A, Kennedy N, Ravera C, Cremers S, Bilic S, Neeman T, Copeman M, Schran H, Lynch K.** Renal safety of zoledronic acid with thalidomide in patients with myeloma: a pharmacokinetic and safety sub-study. *BMC Clin Pharmacol* 2008;8:2.
- Spinks A, Wasiak J, Cleland H, Beben N, Macpherson AK.** Ten-year epidemiological study of pediatric burns in Canada. *J Burn Care Res* 2008;29(3):482-8.
- Spronk D, Arns M, Bootsma A, van Ruth R, Fitzgerald PB.** Long-term effects of left frontal rTMS on EEG and ERPs in patients with depression. *Clin EEG Neurosci* 2008;39(3):118-24.
- Spry N, Harvey J, Macleod C, Borg M, Ngan SY, Millar JL, Graham P, Zissiadis Y, Kneebone A, Carroll S, Davies T, Reece WH, Iacopetta B, Goldstein D.** 3D radiotherapy can be safely combined with sandwich systemic gemcitabine chemotherapy in the management of pancreatic cancer: factors influencing outcome. *Int J Radiat Oncol Biol Phys* 2008;70(5):1438-46.
- Sriram S, Robertson MS.** Critically ill obstetric patients in Australia: a retrospective audit of 8 years' experience in a tertiary intensive care unit. *Crit Care Resusc* 2008;10(2):124.
- Srivastava PM, Calafiore P, Macisaac RJ, Patel SK, Thomas MC, Jerums G, Burrell LM.** Prevalence and predictors of cardiac hypertrophy and dysfunction in patients with Type 2 diabetes. *Clin Sci* 2008;114(4):313-20.
- Stadhouder A, Oner FC, Wilson KW, Vaccaro AR, Williamson OD, Verbout AJ, Verhaar JA, de Klerk LW, Buskens E.** Surgeon equipoise as an inclusion criterion for the evaluation of nonoperative versus operative treatment of thoracolumbar spinal injuries. *Spine J* 2008;8(6):975-81.
- Stafrace S, Lilly A.** Turnaround in an aged persons' mental health service in crisis: a case study of organisational renewal. *Aust Health Rev* 2008;32(3):577-82.
- Staples MP, Forbes A, Ptaszniak R, Gordon J, Buchbinder R.** A randomized controlled trial of extracorporeal shock wave therapy for lateral epicondylitis (tennis elbow). *J Rheumatol* 2008;35(10):2038-46.
- Stark RJ.** Topiramate for migraine prevention. *Medicine Today* 2008;9(7):79-80.
- Stark RJ, Stark CD.** Migraine prophylaxis. *Med J Aust* 2008;189(5):283-8. Review.
- Steel S, Coutsouvelis J, McKendrick J.** Single dose rasburicase in tumour lysis: one hospitals' experience. *Asia-Pacific J Clin Oncol* 2008;4(1):18-20.
- Stell R, Dooley M, Bonollo M, Fiddes K.** Successful integration of a clinical pharmacist into a disease management unit. *J Pharm Pract Res* 2008;38(2):132-6.
- Stephens DP, Thomas JH, Higgins A, Bailey M, Anstey NM, Currie BJ, Cheng AC.** Randomized, double-blind, placebo-controlled trial of granulocyte colony-stimulating factor in patients with septic shock. *Crit Care Med* 2008;36(2):448-54.
- Stevens MP, Tan SE, Horvath L, Fairley CK, Garland SM, Tabrizi SN.** Absence of a *Chlamydia trachomatis* variant, harbouring a deletion in the cryptic plasmid, in clients of a sexually transmissible infection clinic and antenatal patients in Melbourne. *Commun Dis Intell* 2008;32(1):77-81.
- Stevens W, Gelman R, Glencross DK, Scott LE, Crowe SM, Spira T.** Evaluating new CD4 enumeration technologies for resource-constrained countries. *Nature Rev Microbiol* 2008;4(11):S29-S38.
- Stewart DC, George J, Bond CM, Cunningham IT, Diack HL, McCaig DJ.** Exploring patients' perspectives of pharmacist supplementary prescribing in Scotland. *Pharm World Sci* 2008;30(6):892-7.
- Stewart RA, North FM, Sharples KJ, Simes RJ, Tonkin AM, White HD; Long-term Intervention with Pravastatin in Ischaemic Disease Study Investigators.** Differences in cardiovascular mortality between Australia and New Zealand according to socioeconomic status: findings from the Long-Term Intervention with Pravastatin in Ischaemic Disease (LIPID) Study. *N Z Med J* 2008;121(1269):11-23.
- Stewart S.** Beyond the numbers: the individual challenges of combating consistently poor survival in heart failure. *Am Heart J* 2008;155(2):195-6. Editorial.
- Stewart S, Wilkinson D, Hansen C, Vaghela V, Mvungi R, McMurray J, Sliwa K.** Predominance of heart failure in the Heart of Soweto Study Cohort. Emerging challenges for urban African communities. *Circulation* 2008;118(23):2360-7.
- Stirling R.** Airway inflammation: an important marker of control for asthma guidelines? *J Allergy Clin Immunol* 2008;121(5):1293; author reply 1293-4
- Stoove M, Dietze P, Aitken C, Jolley D.** Mortality among injecting drug users in Melbourne: a 16-year follow-up of the Victorian Injecting Cohort Study (VICS). *Drug Alcohol Depend* 2008;96(3):281-5.
- Stoove M, Fry C, Lintzeris N.** Quantifying hepatitis C transmission risk using a new weighted scoring system for the Blood-Borne Virus Transmission Risk Assessment Questionnaire (BBV-TRAQ): applications for community-based HCV surveillance, education and prevention. *Harm Reduct J* 2008;5:12.
- Strange G, Keogh AM, Williams TJ, Wlodarczyk J, McNeil KD, Gabbay E.** Bosentan therapy in patients with pulmonary arterial hypertension: the relationship between improvements in 6 minute walk distance and quality of life. *Respirology* 2008;13(5):674-82.

- Stratov I, Chung A, Kent SJ.** Robust NK cell-mediated human immunodeficiency virus (HIV)-specific antibody-dependent responses in HIV-infected subjects. *J Virol* 2008;82(11):5450-9.
- Straub A, Wendel HP, Dietz K, Schiebold D, Peter K, Schoenwaelder SM, Ziemer G.** Selective inhibition of the platelet phosphoinositide 3-kinase p110 $\beta$  as promising new strategy for platelet protection during extracorporeal circulation. *Thromb Haemost* 2008;99(3):609-15.
- Straznicki NE, Eikelis N, Lambert EA, Esler MD.** Mediators of sympathetic activation in metabolic syndrome obesity. *Curr Hypertens Rep* 2008;10(6):440-7. Review.
- Strobel K, Dummer R, Steinert HC, Conzett KB, Schad K, Lago MP, Soyka JD, Veit-Haibach P, Seifert B, Kalff V.** Chemotherapy response assessment in stage IV melanoma patients-comparison of 18F-FDG-PET/CT, CT, brain MRI, and tumormarker S-100B. *Eur J Nucl Med Mol Imaging* 2008;35(10):1786-95.
- Struthers A, Krum H, Williams GH.** A comparison of the aldosterone-blocking agents eplerenone and spironolactone. *Clin Cardiol* 2008;31(4):153-8.
- Stuchbery P, Kong DC, DeSantis G, Lo SK.** Determining clinical pharmacy workload by patient disease classification in medical and surgical patient. *J Pharm Pract Res* 2008;38(2):126-31.
- Sudhakaran S, Rayner CR, Li J, Kong DC, Gude NM, Nation RL.** Inhibition of placental P-glycoprotein: impact on indinavir transfer to the foetus. *Br J Clin Pharmacol* 2008;65(5):667-73.
- Sugiyama T, Healy GN, Dunstan DW, Salmon J, Owen N.** Is television viewing time a marker of a broader pattern of sedentary behavior? *Ann Behav Med* 2008;35(2):245-50.
- Sugiyama T, Healy GN, Dunstan DW, Salmon J, Owen N.** Joint associations of multiple leisure-time sedentary behaviours and physical activity with obesity in Australian adults. *Int J Behav Nutr Phys Act* 2008;5:35.
- Sutherland JS, Spyroglou L, Muirhead JL, Heng TS, Prieto-Hinojosa A, Prince HM, Chidgey AP, Schwarzer AP, Boyd RL.** Enhanced immune system regeneration in humans following allogeneic or autologous hemopoietic stem cell transplantation by temporary sex steroid blockade. *Clin Cancer Res* 2008;14(4):1138-49.
- Sviridov D, Hoang A, Ooi E, Watts G, Barrett PH, Nestel P.** Indices of reverse cholesterol transport in subjects with metabolic syndrome after treatment with rosuvastatin. *Atherosclerosis* 2008;197(2):732-9.
- Sviridov D, Mukhamedova N, Remaley AT, Chin-Dusting J, Nestel P.** Antiatherogenic functionality of high density lipoprotein: how much versus how good. *J Atheroscler Thromb* 2008;15(2):52-62.
- Sviridov D, Nestel P, Watts G.** Statins and metabolism of high density lipoprotein. *Cardiovasc Hematol Agents Med Chem* 2008;5(3):215-21. Review.
- Symons JA, Palmer GM.** Neuropathic pain and foot drop related to nerve injury after short duration surgery and caudal anal. *Clin J Pain* 2008;24(7):647-9.
- Szoek CE, Cicuttini FM, Guthrie JR, Dennerstein L.** The relationship of reports of aches and joint pains to the menopausal transition: a longitudinal study. *Climacteric* 2008;11(1):55-62.
- Szoek CE, Dennerstein L, Wluka AE, Guthrie JR, Taffe J, Clark MS, Cicuttini FM.** Physician diagnosed arthritis, reported arthritis and radiological non-axial osteoarthritis. *Osteoarthritis Cartilage* 2008.
- Szollosi I, Thompson BR, Krum H, Kaye DM, Naughton MT.** Impaired pulmonary diffusing capacity and hypoxia in heart failure correlates with central sleep apnea severity. *Chest* 2008;134(1):67-72.
- Sztal-Mazer S, Topliss DJ, Simpson RW, Hamblin PS, Rosenfeld JV, McLean CA.** Gonadotroph adenoma in multiple endocrine neoplasia type 1. *Endocr Pract* 2008;14(5):592-4.
- Taguchi H, Planque S, Nishiyama Y, Symersky J, Boivin S, Szabo P, Friedland RP, Ramsland PA, Edmundson AB, Paul S.** Autoantibody catalyzed hydrolysis of amyloid peptide. *J Biol Chem* 2008;283(8):4714-22.
- Tan G, Goonasekera C, Curran S.** Emergency medicine in Sri Lanka: the inevitable evolution to a new specialty. *Emerg Med Australas* 2008;20(1):81-4.
- Tan MA, Dean CJ, Hopwood JJ, Meikle PJ.** Diagnosis of metachromatic leukodystrophy by immune quantification of arylsulphatase A protein and activity in dried blood spots. *Clin Chem* 2008;54(11):1925-7.
- Tang CK, Katsara M, Apostolopoulos V.** Strategies used for MUC1 immunotherapy: human clinical studies. *Expert Rev Vaccines* 2008;7(7):963-75. Review.
- Tang CK, Sheng KC, Pouniotis D, Esparon S, Son HY, Kim CW, Pietersz GA, Apostolopoulos V.** Oxidized and reduced mannan mediated MUC1 DNA immunization induce effective anti-tumor responses. *Vaccine* 2008;26(31):3827-34.
- Tapp RJ, Tikellis G, Wong TY, Harper CA, Zimmet PZ, Shaw JE; Australian Diabetes Obesity and Lifestyle Study Group.** Longitudinal association of glucose metabolism with retinopathy: results from the Australian Diabetes Obesity and Lifestyle (AusDiab) study. *Diabetes Care* 2008;31(7):1349-54.
- Taylor ML, Franich RD, Trapp JV, Johnston PN.** The effective atomic number of dosimetric gels. *Australas Phys Eng Sci Med* 2008;31(2):131-8.
- Tay-Teo K, Moodie M, Bernhardt J, Thrift AG, Collier J, Donnan G, Dewey H.** Economic evaluation alongside a phase II, multi-centre, randomised controlled trial of very early rehabilitation after stroke (AVERT). *Cerebrovasc Dis* 2008;26(5):457-81.
- Tchoua U, D'Souza W, Mukhamedova N, Blum D, Niesor E, Mizrahi J, Maugeais C, Sviridov D.** The effect of cholesteryl ester transport protein overexpression and inhibition on reverse cholesterol transport. *Cardiovasc Res* 2008;77(4):732-9.
- Teague R, Fairley CK, Newton D, Bradshaw C, Donovan B, Bowden F, Cummings R, Chen MY.** How men with non-chlamydial, non-gonococcal urethritis are managed in Australasia. *Int J STD AIDS* 2008;19(9):581-5.
- Teague R, Mijch A, Fairley CK, Sidat M, Watson K, Boyd K, Chen MY.** Testing rates for sexually transmitted infections among HIV-infected men who have sex with men attending two different HIV services. *Int J STD AIDS* 2008;19(3):200-2.
- Teichtahl AJ, Wang Y, Wluka AE, Cicuttini FM.** Obesity and knee osteoarthritis: new insights provided by body composition studies. *Obesity* 2008;16(2):232-40. Review.
- Teichtahl AJ, Wang Y, Wluka AE, Szramka M, English DR, Giles GG, O'Sullivan R, Cicuttini FM.** The longitudinal relationship between body composition and patella cartilage in healthy adults. *Obesity* 2008;16(2):421-7.
- Teichtahl AJ, Wluka AE, Cicuttini FM.** Frontal plane knee alignment is associated with a longitudinal reduction in patella cartilage volume in people with knee osteoarthritis. *Osteoarthritis Cartilage* 2008;16(7):851-4.
- Teichtahl AJ, Wluka AE, Davies-Tuck ML, Cicuttini FM.** Imaging of knee osteoarthritis. *Best Pract Res Clin Rheumatol* 2008;22(6):1061-74.
- Tejero ME, Voruganti VS, Proffitt JM, Curran JE, Göring HH, Johnson MP, Dyer TD, Jowett JB, Collier GR, Moses EK, MacCluer JW, Mahaney MC, Blangero J, Comuzzie AG, Cole SA.** Cross-species replication of a resistin mRNA QTL, but not QTLs for circulating levels of resistin, in human and baboon. *Heredity* 2008;101(1):60-6.
- Tershakovec AM, Keane WF, Zhang Z, Lyle PA, Appel GB, McGill JB, Parving HH, Cooper ME, Shahinfar S, Brenner BM.** Effect of LDL cholesterol and treatment with losartan on end-stage renal disease in the RENAAL study. *Diabetes Care* 2008;31(3):445-7.
- Thallas-Bonke V, Thorpe SR, Coughlan MT, Fukami K, Yap FY, Sourris K, Penfold S, Bach LA, Cooper ME, Forbes JM.** Inhibition of NADPH oxidase prevents advanced glycation end product-mediated damage in diabetic nephropathy through a protein kinase C-alpha-dependent pathway. *Diabetes* 2008;57(2):460-9.
- Thammanichanon D, Yotnda P, Aitken C, Earnest-Silveira L, Jackson D, Hellard M, McCluskey J, Torresi J, Bharadwaj M.** Fiber-modified recombinant adenoviral constructs encoding hepatitis C virus proteins induce potent HCV-specific T cell response. *Clin Immunol* 2008;128(3):329-39.
- The Malaria Genomic Epidemiology Network (2008).** A global network for investigating the genomic epidemiology of malaria. *Nature* 2008;456(7223):732-8.
- Thien F, Friese M, Cowin G, Maillet D, Wang D, Galloway G, Brereton I, Robinson PJ, Heil W, Thompson B.** Feasibility of functional magnetic resonance lung imaging in Australia with long distance transport of hyperpolarized helium from Germany. *Respirology* 2008;13(4):599-602.
- Thomas CJ, McAllen RM, Salo LM, Woods RL.** Restorative effect of atrial natriuretic peptide or chronic neutral endopeptidase inhibition on blunted cardiopulmonary vagal reflexes in aged rats. *Hypertension* 2008;52(4):696-701.

- Thomas MC.** The assessment and management of albuminuria in primary care. *Diabetes Res Clin Pract* 2008;80(1):83-8.
- Thomas MC, Viberti G, Groop PH.** Screening for chronic kidney disease in patients with diabetes: are we missing the point? *Nat Clin Pract Nephrol* 2008;4(1):2-3. Review.
- Thompson BR, Johns DP, Bailey M, Raven J, Walters EH, Abramson MJ.** Prediction equations for single breath diffusing capacity (Tlco) in a middle aged caucasian population. *Thorax* 2008;63(10):889-93.
- Thompson DR, Stewart S.** Chronic cardiovascular disease management: how can it be improved? *Eur J Cardiovasc Prev Rehabil* 2008;15(1):1-2. Editorial.
- Thriff AG, Srikanth VK.** Risk factors for dementia. *Neuroepidemiology* 2008;31(1):68.
- Tikellis C, Bialkowski K, Pete J, Sheehy K, Su Q, Johnston C, Cooper ME, Thomas MC.** ACE2 deficiency modifies renoprotection afforded by ACE inhibition in experimental diabetes. *Diabetes* 2008;57(4):1018-25.
- Tikellis C, Jandeleit-Dahm KA, Sheehy K, Murphy A, Chin-Dusting J, Kling D, Sebokova E, Cooper ME, Mizrahi J, Woollard KJ.** Reduced plaque formation induced by rosiglitazone in an STZ-diabetes mouse model of atherosclerosis is associated with downregulation of adhesion molecules. *Atherosclerosis* 2008;199(1):55-64.
- Tikellis C, Thomas MC, Harcourt BE, Coughlan MT, Pete J, Bialkowski K, Tan A, Bierhaus A, Cooper ME, Forbes JM.** Cardiac inflammation associated with a Western diet is mediated via activation of RAGE by AGEs. *Am J Physiol Endocrinol Metab* 2008;295(2):E323-30.
- Tilbrook AJ, Rivalland EA, Turner AI, Lambert GW, Clarke IJ.** Responses of the hypothalamopituitary adrenal axis and the sympathoadrenal system to isolation/restraint stress in sheep of different adiposity. *Neuroendocrinology* 2008;87(4):193-205.
- Timperio A, Ball K, Roberts R, Campbell K, Andrianopoulos N, Crawford D.** Children's fruit and vegetable intake: associations with the neighbourhood food environment. *Prev Med* 2008;46(4):331-5.
- To TP, Ellis AG, Ching MS, Shilson AD, Kong DC and Garrett K.** Stability of a formulated N-acetylcysteine capsule for the prevention of contrast-induced nephropathy. *J Pharm Pract Res* 2008;38(3):219-22.
- Tobing D, French J, Varigos J, Meehan A, Billah B, Krum H; Post-MI Audit Group.** Do patients with heart failure appropriately undergo invasive procedures post-myocardial infarction? Results from a prospective multicentre study. *Intern Med J* 2008;38(11):845-51.
- Todryk SM, Bejon P, Mwangi T, Plebanski M, Urban B, Marsh K, Hill AV, Flanagan KL.** Correlation of memory T cell responses against TRAP with protection from clinical malaria, and CD4 CD25 high T cells with susceptibility in Kenyans. *PLoS ONE* 2008;3(4):e2027.
- Topliss DJ.** Diabetes and cystic fibrosis. *DMJ* 2008;25:10.
- Torok ME, Kambugu A, Wright E.** Immune reconstitution disease of the central nervous system. *Curr Opin HIV AIDS* 2008;3(4):438-45.
- Tothill RW, Tinker AV, George J, Brown R, Fox SB, Lade S, Johnson DS, Trivett MK, Etemadmoghadam D, Locandro B, Traficante N, Fereday S, Hung JA, Chiew YE, Haviv I; Australian Ovarian Cancer Study Group, Gertig D, DeFazio A, Bowtell DD.** Novel molecular subtypes of serous and endometrioid ovarian cancer linked to clinical outcome. *Clin Cancer Res* 2008;14(16):5198-208.
- Trauer JM, Wrobel JP, Young AC.** The syndrome of inappropriate anti-diuretic hormone secretion concurrent with an acute exacerbation of cystic fibrosis. *J Cyst Fibros* 2008;7(6):573-5.
- Tropea J, Slee JA, Brand CA, Gray L, Snell T.** Clinical practice guidelines for the management of delirium in older people in Australia. *Australas J Ageing* 2008;27(3):150-6.
- Tsui M, Wilson DI, Merry H, Phulwani K, Dooley MJ.** Implementing a hospital vendor-managed inventory system. *J Pharm Pract Res* 2008;38(1):40-3.
- Tugwell P, Maxwell L, Welch V, Kristjansson E, Petticrew M, Wells G, Buchbinder R, Suarez-Almazor ME, Nowlan MA, Ueffing E, Khan M, Shea B, Tsikata S.** Is health equity considered in systematic reviews of the Cochrane Musculoskeletal Group? *Arthritis Rheum* 2008;59(11):1603-10.
- Ukoumunne OC, Forbes AB, Carlin JB, Gulliford MC.** Comparison of the risk difference, risk ratio and odds ratio scales for quantifying the unadjusted intervention effect in cluster randomized trials. *Stat Med* 2008;27(25):5143-55.
- Urquhart DM, Bell RJ, Cicuttini FM, Cui J, Forbes A, Davis SR.** Negative beliefs about low back pain are associated with high pain intensity and high level disability in community-based women. *BMC Musculoskelet Disord* 2008;9:148.
- Urquhart DM, Hanna F, Graves S, Wang Y, Cameron P, Hannaford A, Cicuttini FM.** In-hospital outcomes and hospital resource utilization of hip replacement procedures. *ANZ J Surg* 2008;78(10):875-80.
- Urquhart DM, Soufan C, Teichtahl AJ, Wluka AE, Hanna F, Cicuttini FM.** Factors that may mediate the relationship between physical activity and the risk for developing knee osteoarthritis. *Arthritis Res Ther* 2008;10(1):203. Review.
- Van de Vreede M, Wilson SG, Dooley MJ.** Intravenous potassium chloride use in hospitals: current practice. *J Pharm Pract Res* 2008;38(1):19-22.
- Van de Vreede MA, McRae A, Wiseman M, Dooley MJ.** Successful introduction of tallman letters to reduce medication selection errors in a hospital network. *J Pharm Pract Res* 2008;38(4):263-6.
- Van de Vreede MA, Wilson SG, Dooley MJ.** Intravenous potassium chloride prescribing and administration practices in Victoria: an observational study. *Med J Aust* 2008;189(10):575-7.
- van der Meijden PE, Schoenwaelder SM, Feijge MA, Cosemans JM, Munnix IC, Wetzker R, Heller R, Jackson SP, Heemskerk JW.** Dual P2Y<sub>12</sub> receptor signaling in thrombin-stimulated platelets--involvement of phosphoinositide 3-kinase beta but not gamma isoform in Ca<sup>2+</sup> mobilization and procoagulant activity. *FEBS J* 2008;275(2):371-85.
- Vasar M, Houle PA, Douglass JA, Meltzer EO, Silvey M, Wu W, Caldwell M, Philpot E.** Fluticasone furoate nasal spray: effective monotherapy for symptoms of perennial allergic rhinitis in adults/adolescents. *Allergy Asthma Proc* 2008;29(3):313-21.
- Vasilevski O, Grubb DR, Filtz TM, Yang S, McLeod-Dryden TJ, Luo J, Karna D, Chen J, Woodcock EA.** Ins(1,4,5)P<sub>3</sub> regulates phospholipase Cβ1 expression in cardiomyocytes. *J Mol Cell Cardiol* 2008;45(5):679-84.
- Verbanck S, Schuermans D, Van Malderen S, Vincken W, Thompson B.** The effect of conductive ventilation heterogeneity on diffusing capacity measurement. *J Appl Physiol* 2008;104(4):1094-100.
- Viale G, Regan MM, Maiorano E, Mastropasqua MG, Golouh R, Perin T, Brown RW, Kovacs A, Pillay K, Ohlschlegel C, Braye S, Grigolato P, Rusca T, Gelber RD, Castiglione-Gertsch M, Price KN, Goldhirsch A, Gusterson BA, Coates AS.** Chemoendocrine compared with endocrine adjuvant therapies for node-negative breast cancer: predictive value of centrally reviewed expression of estrogen and progesterone receptors – International Breast Cancer Study Group. *J Clin Oncol* 2008;26(9):1404-10.
- Viale G, Regan MM, Mastropasqua MG, Maffini F, Maiorano E, et al.; International Breast Cancer Study Group.** Predictive value of tumor Ki-67 expression in two randomized trials of adjuvant chemoendocrine therapy for node-negative breast cancer. *J Natl Cancer Inst* 2008;100(3):207-12.
- Vinh A, Gaspari TA, Liu HB, Dousha LF, Widdop RE, Dear AE.** A novel histone deacetylase inhibitor reduces abdominal aortic aneurysm formation in angiotensin II-infused apolipoprotein E-deficient mice. *J Vasc Res* 2008;45(2):143-52.
- Vitetta L, Cicuttini F, Sali A.** Alternative therapies for musculoskeletal conditions. *Best Pract Res Clin Rheumatol* 2008;22(3):499-522.
- von Itzstein M, Plebanski M, Cooke BM, Coppel RL.** Hot, sweet and sticky: the glycobiology of *Plasmodium falciparum*. *Trends Parasitol* 2008;24(5):210-8.
- von Zur Muhlen C, Sibson NR, Peter K, Campbell SJ, Wilainam P, Grau GE, Bode C, Choudhury RP, Anthony DC.** A contrast agent recognizing activated platelets reveals murine cerebral malaria pathology undetectable by conventional MRI. *J Clin Invest* 2008;118(3):1198-207.
- von Zur Muhlen C, von Elverfeldt D, Choudhury RP, Ender J, Ahrens I, Schwarz M, Hennig J, Bode C, Peter K.** Functionalized magnetic resonance contrast agent selectively binds to glycoprotein IIb/IIIa on activated human platelets under flow conditions and is detectable at clinically relevant field strengths. *Mol Imaging* 2008;7(2):59-67.

- von zur Muhlen C, von Elverfeldt D, Moeller JA, Choudhury RP, Paul D, Hagemeyer CE, Olschewski M, Becker A, Neudorfer I, Bassler N, Schwarz M, Bode C, Peter K.** Magnetic resonance imaging contrast agent targeted toward activated platelets allows *in vivo* detection of thrombosis and monitoring of thrombolysis. *Circulation* 2008;118(3):258-67.
- Vuong T, Marriott J, Kong DCM, Siderov J.** Implementation of a community liaison pharmacy service: a randomised controlled trial. *Int J Pharm Pract* 2008;16(3):127-35.
- Walker F, Zhang HH, Matthews V, Weinstock J, Nice EC, Ernst M, Rose-John S, Burgess AW.** IL6/sIL6R complex contributes to emergency granulopoietic responses in G-CSF- and GM-CSF-deficient mice. *Blood* 2008;111(8):3978-85.
- Walker KZ, Woods JL, Rickard CA, Wong CK.** Product variety in Australian snacks and drinks: how can the consumer make a healthy choice? *Public Health Nutr* 2008;11(10):1046-53.
- Wallace RH, Freeman JL, Shouri MR, Izzillo PA, Rosenfeld JV, Mulley JC, Harvey AS, Berkovic SF.** Somatic mutations in GLI3 can cause hypothalamic hamartoma and gelastic seizures. *Neurology* 2008;70(8):653-5.
- Walsh N, Gibbie TM, Higgs P.** The development of peer educator-based harm reduction programmes in Northern Vietnam. *Drug Alcohol Rev* 2008;27(2):200-3.
- Walsh N, Lim M, Hellard M.** Using a surveillance system to identify and treat newly acquired hepatitis C infection. *J Gastroenterol Hepatol* 2008;23(12):1891-4.
- Walsh W, Brown A, Carapetis J; RF/RHD Guideline Development Working Group; National Heart Foundation of Australia; Cardiac Society of Australia and New Zealand.** The diagnosis and management of chronic rheumatic heart disease--an Australian guideline. *Heart Lung Circ* 2008;17(4):271-89. Review.
- Wand AP, Eades SJ.** Navigating the process of developing a research project in Aboriginal health. *Med J Aust* 2008;188(10):584-7. Review.
- Wang M, Dimopoulos MA, Chen C, Cibeira MT, Attal M, Spencer A, Rajkumar SV, Yu Z, Olesnyckyj M, Zeldis JB, Knight RD, Weber DM.** Lenalidomide plus dexamethasone is more effective than dexamethasone alone in patients with relapsed or refractory multiple myeloma regardless of prior thalidomide exposure. *Blood* 2008;112(12):4445-51.
- Wang Y, Tao ZZ, Chen SM, Xiao BK, Zhou XH, Liu JP.** Application of combination of short hairpin RNA segments for silencing VEGF, TERT and Bcl-xl expression in laryngeal squamous carcinoma. *Cancer Biol Ther* 2008;7(6):896-901.
- Wang Y, Wluka AE, Hodge AM, English DR, Giles GG, O'Sullivan R, Cicuttini FM.** Effect of fatty acids on bone marrow lesions and knee cartilage in healthy, middle-aged subjects without clinical knee osteoarthritis. *Osteoarthritis Cartilage* 2008;16(5):579-83.
- Wang YY, Rosenfeld JV, Lyon SM, O'Brien BJ.** Rapid development of a *de novo* intracranial aneurysm following carotid occlusion. *J Clin Neurosci* 2008;15(3):324-30.
- Wang Z, Hoy WE, Nicol JL, Wang Z, Su Q, Atkins RC, Polkinghorne KR.** Predictive value of nephelometric and high-performance liquid chromatography assays of urine albumin for mortality in a high-risk Aboriginal population. *Am J Kidney Dis* 2008;52(4):672-82.
- Watt MJ, van Denderen BJ, Castelli LA, Bruce CR, Hoy AJ, Kraegen EW, Macaulay L, Kemp BE.** Adipose triglyceride lipase regulation of skeletal muscle lipid metabolism and insulin responsiveness. *Mol Endocrinol* 2008;22(5):1200-12.
- Webb TE, Poulter M, Beck J, Uphill J, Adamson G, Campbell T, Linehan J, Powell C, Brandner S, Pal S, Siddique D, Wadsworth JD, Joiner S, Alner K, Petersen C, Hampson S, Rhymes C, Treacy C, Storey E, Geschwind MD, Nemeth AH, Wroe S, Collinge J, Mead S.** Phenotypic heterogeneity and genetic modification of P102L inherited prion disease in an international series. *Brain* 2008;131(Pt 10):2632-46.
- Wei A, Alison J, Goldstein J, Tippett C, Coughlan PB.** Prosthetic pulmonary valve thrombosis in pregnancy successfully treated with thrombolysis. *Intern Med J* 2008;38(2):142-3.
- Wei A, Jackson SP.** Boosting platelet production. *Nat Med* 2008;14(9):917-8.
- Wei AH, Roberts AW.** Bortezomib: putting mantle cell lymphoma on death row. *Leuk Lymphoma* 2008;49(4):657-8.
- West E, Cameron P, O'Reilly G, Drummer OH, Bystrzycki A.** Accuracy of current clinical diagnosis in recreational drug-related attendance to the emergency department. *Emerg Med Australas* 2008;20(4):333-8.
- West MJ, Nestel PJ, Kirby AC, Schnabel R, Sullivan D, Simes RJ, Pollicino C, Lubos E, Münzel TF, White HD, Tonkin AM, Bickel C, Tired L, Blankenberg S; LIPID Study Investigators.** The value of N-terminal fragment of brain natriuretic peptide and tissue inhibitor of metalloproteinase-1 levels as predictors of cardiovascular outcome in the LIPID study. *Eur Heart J* 2008;29(7):923-31.
- Westall GP, Komesaroff P, Gorton MW, Snell GI.** Ethics of organ donation and transplantation involving prisoners: the debate extends beyond our borders. *Intern Med J* 2008;38(1):56-9.
- Westall GP, Mifsud NA, Kotsimbos T.** Linking CMV serostatus to episodes of CMV reactivation following lung transplantation by measuring CMV-specific CD8+ T-cell immunity. *Am J Transplant* 2008;8(8):1749-54.
- Westall GP, Snell GI, McLean C, Kotsimbos T, Williams T, Magro C.** C3d and C4d deposition early after lung transplantation. *J Heart Lung Transplant* 2008;27(7):722-8.
- White SL, Polkinghorne KR, Cass A, Shaw J, Atkins RC, Chadban SJ.** Limited knowledge of kidney disease in a survey of AusDiab study participants. *Med J Aust* 2008;188(4):204-8.
- Wijayaratne SP, Teichtahl AJ, Wluka AE, Hanna F, Bell R, Davis SR, Adams J, Cicuttini FM.** The determinants of change in patella cartilage volume -- a cohort study of healthy middle-aged women. *Rheumatology* 2008;47(9):1426-9.
- Wilder-Smith A, Leder K, Tambyah PA.** Importation of poliomyelitis by travellers. *Emerg Infect Dis* 2008;14(2):351-2.
- Wilkinson-Berka JL.** Prorenin and the (pro)renin receptor in ocular pathology. *Am J Pathol* 2008;173(6):1591-4.
- Wilkinson-Berka JL, Miller AG.** Update on the treatment of diabetic retinopathy. *ScientificWorldJournal* 2008;8:98-120.
- Williams DR, Cowey M, Tuck K, Day B.** Psychogenic propriospinal myoclonus. *Mov Disord* 2008;23(9):1312-3.
- Williams DR, Doyle LM, Lees AJ, Brown P.** The auditory startle response in parkinsonism may reveal the extent but not type of pathology. *J Neurol* 2008;255(5):628-32.
- Williams DR, Lees AJ, Wherrett JR, Steele JC.** J. Clifford Richardson and 50 years of progressive supranuclear palsy. *Neurology* 2008;70(7):566-73.
- Williams DR, Warren JD, Lees AJ.** Using the presence of visual hallucinations to differentiate Parkinson's disease from atypical parkinsonism. *J Neurol Neurosurg Psychiatry* 2008;79(6):652-5.
- Williams TJ, Keating DT.** Endobronchial ultrasound: real progress or just a new toy? *Intern Med J* 2008;38(2):75-6. Editorial.
- Williams TJ, Wilson JW.** Challenges in pulmonary fibrosis: 7--Novel therapies and lung transplantation. *Thorax* 2008;63(3):277-84.
- Willis CD, Stoelwinder JU, Cameron PA.** Interpreting process indicators in trauma care: construct validity versus confounding by indication. *Int J Qual Health Care* 2008;20(5):331-8.
- Wilson JW, du Bois RM, King TE Jr.** Challenges in pulmonary fibrosis: 8--The need for an international registry for idiopathic pulmonary fibrosis. *Thorax* 2008;63(3):285-7.
- Wilson K, Cameron P, Jennings N.** Emergency nurse practitioners: an underestimated addition to the emergency care team. *Emerg Med Australas* 2008;20(6):453-5.
- Winn RD, Robinson DR, Farmer KC, Bell SW.** Deficiencies in pathological reporting of colorectal cancer in Victoria. *ANZ J Surg* 2008;78(9):796-9.
- Winograd-Gurvich C, Fitzgerald PB, Georgiou-Karistianis N, Millist L, White O.** Inhibitory control and spatial working memory: a saccadic eye movement study of negative symptoms in schizophrenia. *Psychiatry Res* 2008;157(1-3):9-19.
- Winter R, Nguyen O, Higgs P, Armstrong S, Duong D, Thach M, Aitken C, Hellard M.** Integrating enhanced hepatitis C testing and counseling in research. *Int J Drug Policy* 2008;19(1):66-70.
- Wluka AE, Wang Y, Davies-Tuck M, English DR, Giles GG, Cicuttini FM.** Bone marrow lesions predict progression of cartilage defects and loss of cartilage volume in healthy middle-aged adults without knee pain over 2 yrs. *Rheumatology* 2008;47(9):1392-6.

- Wong MX, Hayball JD, Jackson DE.** PECAM-1-regulated signaling thresholds control tolerance in anergic transgenic B cells. *Mol Immunol* 2008;45(6):1767-81.
- Wong TY, Liew G, Tapp RJ, Schmidt MI, Wang JJ, Mitchell P, Klein R, Klein BE, Zimmet P, Shaw J.** Relation between fasting glucose and retinopathy for diagnosis of diabetes: three population-based cross-sectional studies. *Lancet* 2008;371(9614):736-43.
- Wood L, France K, Hunt K, Eades S, Slack-Smith L.** Indigenous women and smoking during pregnancy: knowledge, cultural contexts and barriers to cessation. *Soc Sci Med* 2008;66(11):2378-89.
- Woodberry T, Minigo G, Piera KA, Hanley JC, de Silva HD, Salwati E, Kenangalem E, Tjitra E, Coppel RL, Price RN, Anstey NM, Plebanski M.** Antibodies to *Plasmodium falciparum* and *Plasmodium vivax* merozoite surface protein 5 in Indonesia: species-specific and cross-reactive responses. *J Infect Dis* 2008;198(1):134-42.
- Woodcock EA, Du XJ, Reichelt ME, Graham RM.** Cardiac  $\alpha_1$ -adrenergic drive in pathological remodelling. *Cardiovasc Res* 2008;77(3):452-62.
- Woodman OL, Malakul W, Cao AH, Xu Q, Ritchie RH.** Atrial natriuretic peptide prevents diabetes-induced endothelial dysfunction. *Life Sci* 2008;82(15-16):847-54.
- Woollard DJ, Haqshenas G, Dong X, Pratt BF, Kent SJ, Gowans EJ.** Virus-specific T-cell immunity correlates with control of GB virus B infection in marmosets. *J Virol* 2008;82(6):3054-60.
- Woollard KJ, Suhartoyo A, Harris EE, Eisenhardt SU, Jackson SP, Peter K, Dart AM, Hickey MJ, Chin-Dusting JP.** Pathophysiological levels of soluble P-selectin mediate adhesion of leukocytes to the endothelium through Mac-1 activation. *Circ Res* 2008;103(10):1128-38.
- Woollard KJ, Suhartoyo A, Harris EE, Eisenhardt SU, Jackson SP, Peter K, Dart AM, Hickey MJ, Chin-Dusting JP.** Pathophysiological levels of soluble P-selectin mediate adhesion of leukocytes to the endothelium through Mac-1 activation. *Circ Res* 2008;103(10):1128-38.
- Woon DT, Serpell JW.** Preoperative core biopsy of soft tissue tumours facilitates their surgical management: a 10-year update. *ANZ J Surg* 2008;78(11):977-81.
- Worth LJ, Blyth CC, Booth DL, Kong DC, Marriott D, Cassumbhoy M, Ray J, Slavin MA, Wilkes JR.** Optimizing antifungal drug dosing and monitoring to avoid toxicity and improve outcomes in patients with haematological disorders. *Intern Med J* 2008;38(6b):521-37.
- Wright E, Brew B, Arayawichanon A, Robertson K, Saminthanarany K, et al.** Neurologic disorders are prevalent in HIV-positive outpatients in the Asia-Pacific region. *Neurology* 2008;71(1):50-6.
- Wright E, Brew BJ, Lal L, Ali ST, Arayawichanon A, Imran D, Kamarulzaman A, Kongsangdao S, Kruiy L, Merati TP, Saminthanarany K, Sarim C, Tau G, Thangsing C, Vin-Samngang C, Wesselingh SL.** Response to Birbeck *et al.* *Epilepsia* 2008;49(3):541-3. Letter.
- Wright EJ, Brew BJ, Wesselingh SL.** Pathogenesis and diagnosis of viral infections of the nervous system. *Neurol Clin* 2008;26(3):617-33, vii.
- Wright EJ, Nunn M, Joseph J, Robertson K, Lal L, Brew BJ.** NeuroAIDS in the Asia Pacific Region. *J Neurovirol* 2008;14:1-9.
- Wrobel JP, O'Hehir RE, Douglass JA.** Food allergy in adults. *Aust Fam Physician* 2008;37(4):222-6.
- Xiang SD, Scalzo-Inguanti K, Minigo G, Park A, Hardy CL, Plebanski M.** Promising particle-based vaccines in cancer therapy. *Expert Rev Vaccines* 2008;7(7):1103-19.
- Xu D, Dwyer J, Li H, Duan W, Liu JP.** Ets2 maintains hTERT gene expression and breast cancer cell proliferation by interacting with c-Myc. *J Biol Chem* 2008;283(35):23567-80.
- Xu Q, Lekgabe ED, Gao XM, Ming Z, Tregear GW, Dart AM, Bathgate RA, Samuel CS, Du XJ.** Endogenous relaxin does not affect chronic pressure overload-induced cardiac hypertrophy and fibrosis. *Endocrinology* 2008;149(2):476-82.
- Yan BP, Ajani AE, New G, Duffy SJ, Farouque O, Shaw J, Sebastian M, Lew R, Brennan A, Andrianopoulos N, Reid C, Clark DJ; Melbourne Interventional Group Investigators.** Are drug-eluting stents indicated in large coronary arteries? Insights from a multi-centre percutaneous coronary intervention registry. *Int J Cardiol* 2008;130(3):374-9.
- Yan BP, Duffy SJ, Clark DJ, Lefkovits J, Warren R, Gurvitch R, Lew R, Sebastian M, Brennan A, Andrianopoulos N, Reid CM, Ajani AE; Melbourne Interventional Group.** Rates of stent thrombosis in bare-metal versus drug-eluting stents (from a large Australian multicenter registry). *Am J Cardiol* 2008;101(12):1716-22.
- Yan BP, Kiernan TJ, Gupta V, Ajani AE, Schainfeld RM.** Combined pharmacomechanical thrombectomy for acute inferior vena cava filter thrombosis. *Cardiovasc Revasc Med* 2008;9(1):36-40.
- Yancy CW, Krum H, Massie BM, Silver MA, Stevenson LW, Cheng M, Kim SS, Evans R for the FUSION II Investigators.** Safety and efficacy of outpatient nesiritide in patients with advanced heart failure. Results of the second follow-up serial infusions of nesiritide (FUSION II) trial. *Circ Heart Fail* 2008;1:9-16.
- Yang Y, Ma Y, Han W, Li J, Xiang Y, Liu F, Ma X, Zhang J, Fu Z, Su YD, Du XJ, Gao XM.** Age-related differences in postinfarct left ventricular rupture and remodeling. *Am J Physiol Heart Circ Physiol* 2008;294(4):H1815-22.
- Yeung MJ, Serpell JW.** Management of the solitary thyroid nodule. *Oncologist* 2008;13(2):105-12. Review.
- Young AC, Wilson JW, Kotsimbos TC, Naughton MT.** Randomised placebo controlled trial of non-invasive ventilation for hypercapnia in cystic fibrosis. *Thorax* 2008;63(1):72-7.
- Yuriev E, Sandrin MS, Ramsland PA.** Antibody-ligand docking: insights into peptide-carbohydrate mimicry. *Mol Simulation* 2008;34(4):461-8.
- Zalstein S, Pearce A, Scott DM, Rosenfeld JV.** Damage control resuscitation: a paradigm shift in the management of haemorrhagic shock. *Emerg Med Australas* 2008;20(4):291-3.
- Zang H, Davis SR.** Androgen replacement therapy in androgen-deficient women with hypopituitarism. *Drugs* 2008;68(15):2085-93.
- Zazryn TR, McCrory PR, Cameron PA.** Neurologic injuries in boxing and other combat sports. *Neurol Clin* 2008;26(1):257-70:xi. Review.
- Zhan Y, Gerondakis S, Coghill E, Bourges D, Xu Y, Brady JL, Lew AM.** Glucocorticoid-induced TNF receptor expression by T cells is reciprocally regulated by NF- $\kappa$ B and NFAT. *J Immunol* 2008;181(8):5405-13.
- Zhang WZ, Venardos K, Finch S, Kaye DM.** Detrimental effect of oxidized LDL on endothelial arginine metabolism and transportation. *Int J Biochem Cell Biol* 2008;40(5):920-8.
- Zimmerli LU, Schiffer E, Züribig P, Good DM, Kellmann M, Mouls L, Pitt AR, Coon JJ, Schmieder RE, Peter K, Mischak H, Kolch W, Delles C, Dominiczak AF.** Urinary proteomic biomarkers in coronary artery disease. *Mol Cell Proteomics* 2008;7(2):290-8.
- Zimmet H, Krum H.** Using adult stem cells to treat heart failure – fact or fiction? *Heart Lung Circ* 2008;17(Suppl 4):S48-54. Review.
- Zimmet P, Alberti G.** The metabolic syndrome: progress towards one definition for an epidemic of our time. *Nat Clin Pract Endocrinol Metab* 2008;4(5):239. Editorial.
- Zomer E, de Ridder I, Kompa A, Komesaroff P, Gilbert R, Krum H.** Effect of uterine II on skin microvessel tone in diabetic patients without heart failure or essential hypertension. *Clin Exp Pharmacol Physiol* 2008;35(10):1147-50.
- Zwahlen DR, Martin JM, Millar JL, Schneider U.** Effect of radiotherapy volume and dose on secondary cancer risk in stage I testicular seminoma. *Int J Radiat Oncol Biol Phys* 2008;70(3):853-8.

## BOOKS

- Bradford D, Hoy J, Matthews G.** *HIV, viral hepatitis and STIs: a guide for primary care.* 2008. ISBN 978-1-920773-50-2. Australasian Society for HIV Medicine, NSW.
- Button BM, Holland AE.** *Physiotherapy for cystic fibrosis in Australia: a consensus statement.* 2008. International Physiotherapy Group for Cystic Fibrosis, Australian Chapter. Endorsed by the Thoracic Society of Australia and New Zealand.
- Mauro MA, Thomson K, Murphy K, Zollikofer CL, Venbrux A (eds).** *Image-Guided Intervention.* 2008 ISBN-13: 9781416029649. Elsevier Inc., Australia.

## BOOK CHAPTERS

- Anderson DA, Shrestha IL.** Hepatitis E virus. In: *Richman DD, Whitley RJ, Hayden FG (eds) Clinical Virology, 4th edition.* 2008; pp1127-43.
- Apostolopoulos V, Lazoura E, Yu M.** MHC and MHC-like molecules: structural perspectives for the design of molecular vaccines. In: *Sigalov A, Schamel W (eds) Multichain Immune Recognition Receptor Signaling: from Spatiotemporal Organisation to Human Disease, volume 640.* 2008; pp252-67.
- Barr ELM, Zimmet P, Shaw JE.** Mortality and life expectancy associated with diabetes. In: *Ekoe J-M, Rewers M, Williams R, Zimmet P (eds) The Epidemiology of Diabetes Mellitus, 2nd edition, John Wiley & Sons Ltd, Chichester.* 2008; Chapter 36: pp603-25.
- Brownlee M, Aiello LP, Cooper ME, Vinik AI, Nesto R, Boulton AJM.** Complications of diabetes mellitus. In: *Kronenberg HM, Melmed S, Polonsky KS, Larsen PR (eds) Williams Textbook of Endocrinology, 11th edition, WB Saunders, Philadelphia.* 2008; Chapter 32.
- Caine T, Steele C.** Managing risk. In: *Crowther C (ed) Nurse Managers: a Guide to Practice, 2nd edition, Ausmed Publications.* 2008; pp101-12.
- Caine T, Steele C.** Maximising the quality factor. In: *Crowther C (ed) Nurse Managers: a Guide to Practice, 2nd edition, Ausmed Publications.* 2008; pp131-44.
- Cooper ME, Brownlee M.** Reducing the burden of diabetic vascular complications. In: *Greenbaum CJ, Harrison LC (eds) Diabetes: Translating Research into Practice, Informa Health Care, New York.* 2008; Chapter 9: pp159-73.
- Davies AR, Pilcher D.** Pulmonary embolism. In: *Bersten A, Soni N (eds) Oh's Intensive Care Manual, 6th edition, Butterworth Heinemann, UK.* 2008; Chapter 30.
- Dawood T, Lambert GW.** Depression as a risk factor for the development of heart disease. In: *Sher L (ed) Psychological Factors and Cardiovascular Disorders: the Role of Psychiatric Pathology and Maladaptive Personality Features, Nova Science Publishers, New York.* 2008; Chapter 3: pp31-44.
- Ekoe J-M, Zimmet PZ.** Diagnosis and classification. In: *Ekoe J-M, Rewers M, Williams R, Zimmet P (eds) The Epidemiology of Diabetes Mellitus, 2nd edition, John Wiley & Sons Ltd, Chichester.* 2008; Chapter 3: pp11-30.
- Ekoe J-M, Zimmet PZ, Yale J-F.** The clinical syndrome and the biochemical definition. In: *Ekoe J-M, Rewers M, Williams R, Zimmet P (eds) The Epidemiology of Diabetes Mellitus, 2nd edition, John Wiley & Sons Ltd, Chichester.* 2008; Chapter 2: pp5-9.
- Federman D, Kavanagh EC, Morrison WB, Koulouris G.** Role of advanced imaging in distal radial fractures. In: *Slutsky D, Osterman A (eds) Fractures and Injuries of the Distal Radius and Carpus, Elsevier, Australia.* 2008; Chapter 3, DVD-1.
- Given MF, Lyon SM, Thomson KR.** Arterial occlusive disease of the upper extremity. In: *Mauro M, Murphy K, Thomson K, Venbrux A, Zollikofer C (eds) Image-Guided Intervention. Elsevier, Australia.* 2008; Chapter 39.
- Given MF, Thomson KT, Lyon SM.** Percutaneous biopsy of the lung mediastinum and pleura. In: *Mauro M, Murphy K, Thomson K, Venbrux A, Zollikofer C (eds) Image-Guided Intervention. Elsevier, Australia.* 2008; Chapter 128.
- Gross DW, Andermann E, Reutens DC, Seneviratne U, Dubeau F, Andermann F.** An unusual cause of nocturnal attacks. In: *Schmidst D, Schachter SC, (eds) Puzzling Cases of Epilepsy, 2nd edition, Elsevier, New York.* 2008; pp73-5.
- Holland AE.** Non-invasive ventilation to assist airway clearance in cystic fibrosis. In: *Esquinas A, Scala R (eds) Yearbook of Noninvasive Mechanical Ventilation.* 2008; Chapter 55.
- Kalantaridou SN, Davis SR, Calis KA.** Hormone therapy in women. In: *Dipiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM (eds) Pharmacotherapy: a Pathophysiologic Approach, 7th edition, McGraw Medical, New York.* 2008; pp1351-61.
- Katsara M, Ramsland PA, Tselios T, Matsoukas J, Apostolopoulos V.** A structural perspective of peptides from myelin basic protein. In: *Boggs JM (ed) Myelin Basic Protein.* 2008; pp87-102.
- Komesaroff PA.** Bringing diverse voices into conversation. In: *Rothfield P, Fleming C, Komesaroff P (eds) Pathways to Reconciliation: Between Theory and Practice. Ashgate Publishing Group.* 2008; Introduction.
- Krum H, Schlaich M, Sobotka P.** Hypertension at the limits: novel therapeutic approaches to the management of systemic hypertension. In: *Opie LH, Yellon DM (eds) Cardiology at the Limits X. University of Cape Town Press, South Africa.* 2008; pp63-83.
- Kupersmidt M, Thomson KT.** Treatment of high-flow priapism. In: *Mauro M, Murphy K, Thomson K, Venbrux A, Zollikofer C (eds) Image-Guided Intervention, Elsevier, Australia.* 2008; Chapter 81.
- Lyon SM, Given MF, Thomson KT.** Acute lower extremity ischaemia. In: *Mauro M, Murphy K, Thomson K, Venbrux A, Zollikofer C (eds) Image-Guided Intervention, Elsevier, Australia.* 2008; Chapter 40.
- Magliano DJ, Cameron J, Shaw JE, Zimmet PZ.** Epidemiology of metabolic syndrome. In: *Ekoe J-M, Rewers M, Williams R, Zimmet P (eds) The Epidemiology of Diabetes Mellitus, 2nd edition, John Wiley & Sons Ltd, Chichester.* 2008; Chapter 4: pp31-55.
- Masuo K, Lambert GW, Esler MD.** Does epinephrine cause hypertension? Epinephrine hypothesis. In: *Lawson AG, Gorman RI (eds) Research Progress on Epinephrine, Nova Science Publishers, New York.* 2008; Chapter 5: pp95-114.
- Masuo K, Straznicki N, Esler MD.** Obesity and obesity-related hypertension: role of the sympathetic nervous system and beta-adrenoreceptor polymorphisms. In: *Kaneko M (ed) Sympathetic Nervous System Research Developments, Nova Science Publishers, USA.* 2008; Chapter 2: pp67-92.
- Munro PE, Hayes KJ, Aurora P.** Thoracic organ transplantation. In: *Pryor J, Prasad A (eds) Physiotherapy for Respiratory and Cardiac Problems – Adults and Paediatrics, Elsevier, New York.* 2008; pp495-514.
- Naughton MT, Tuxen DV.** Acute respiratory failure in chronic obstructive pulmonary disease. In: *Bersten A, Soni N (eds) Oh's Intensive Care Manual, 6th edition, Butterworth Heinemann, UK.* 2008; Chapter 26.
- O'Donnell ML, Creamer M.** Psychological conditions associated with motor vehicle collisions. In: *Duckworth M, Iezzi T, O'Donohue W (eds) Motor Vehicle Collisions: Medical, Psychosocial, and Legal Consequences, Academic Press.* 2008; Chapter 15.
- O'Hehir RE, Sutherland MF, Drew AC, Rolland JM.** Latex allergy. In: *Kay AB, Kaplan A, Bousquet J, Holt P (eds) Allergy and Allergic Disease, 2nd edition, Blackwell Publishing.* 2008; Chapter 53.
- Pattenden LK, Thomas WG.** Amylose affinity chromatography of maltose-binding protein: purification by both native and novel matrix-assisted dialysis-refolding methods. In: *Zachariou M (ed) Methods in Molecular Biology, volume 421, Affinity Chromatography: Methods and Protocols, 2nd edition, Humana Press, USA.* 2008; Chapter 12: pp169-89.
- Paul SL, Thrift AG.** The epidemiology of stroke in women. In: *Cadolotti JT, Burnside JE (eds) Women and Stroke Research, Nova Science Publishers, New York.* 2008; Chapter 2: pp25-56.
- Poole SG, Dooley MJ.** Prescribing. In: *Foley KM, Caraceni AT, Fainsinger R, Goh C, Glare P, Lloyd-Williams M, Olarte JN, Walsh D, Radbrucet L (eds) Palliative Medicine, Elsevier, St Louis.* 2008; pp687-91.
- Rosenfeld JV.** Neurosurgical injuries related to terror. In: *Shapira S, Hammond J, Cole LA (eds) Essentials of Terror Medicine, Springer Verlag, New York.* 2008; Chapter 19: pp331-6.
- Shaw JE, Dabelea DM.** Epidemiology of Type 2 diabetes in children and adolescents. In: *Ekoe J-M, Rewers M, Williams R, Zimmet P (eds) The Epidemiology of Diabetes Mellitus, 2nd edition, John Wiley & Sons Ltd, Chichester.* 2008; pp339-53.
- Shaw JE, Sicree R.** Epidemiology of Type 2 diabetes. In: *Feinglos MN, Bethel MA (eds) Type 2 Diabetes Mellitus: an Evidence-Based Approach to Practical Management, Humana Press, New Jersey.* 2008; Chapter 1: pp1-16.
- Straznicki NE, Nestel PJ, Esler MD.** Autonomic nervous control of metabolic function. In: *Squire LR (ed) Encyclopaedia of Neuroscience, Elsevier, Academic Press.* 2008.
- Sturm JW, Mackay MT, Thrift AG.** Stroke among women, ethnic groups, young adults, and children. In: *Fisher M (ed) Handbook of Clinical Neurology, volume 92, Stroke Part I: Basic and Epidemiological Aspects, Elsevier.* 2008; Chapter 92: pp337-53.
- Thomson KT, Lyon SM, Given MF, Burnes JP.** Endovascular treatment of peripheral aneurysms. In: *Mauro M, Murphy K, Thomson K, Venbrux A, Zollikofer C (eds) Image-Guided Intervention, Elsevier, Australia.* 2008; Chapter 48.

**Thomson KT.** Interventional anatomy of the lower limb. In: *Mauro M, Murphy K, Thomson K, Venbrux A, Zollikofer C (eds) Image-Guided Intervention, Elsevier, Australia.* 2008; Chapter 38.

**Thomson KT, Lyon SM, Given MF.** Peripheral arterial intervention. In: *Mauro M, Murphy K, Thomson K, Venbrux A, Zollikofer C (eds) Image-Guided Intervention, Elsevier, Australia.* 2008; Chapter 38A: Section 7.

**Thomson KT, Lyon SM, Given MF.** Adrenal venous sampling. In: *Mauro M, Murphy K, Thomson K, Venbrux A, Zollikofer C (eds) Image-Guided Intervention, Elsevier, Australia.* 2008; Chapter 108.

**Thomson KT, Lyon SM, Given MF.** Parathyroid venous sampling. In: *Mauro M, Murphy K, Thomson K, Venbrux A, Zollikofer C (eds) Image-Guided Intervention, Elsevier, Australia.* 2008; Chapter 109.

**Tuxen DV, Naughton MT.** Mechanical ventilation in asthma and chronic obstructive pulmonary disease. In: *Mckenzie I (ed) Core Topics in Mechanical Ventilation, Cambridge University Press.* 2008; pp196-209.

**Tuxen DV, Naughton MT.** Severe acute asthma. In: *Bersten A, Soni N (eds) Oh's Intensive Care Manual, 6th edition, Butterworth Heinemann.* 2008; Chapter 31.

**Watts R, Botti M, Gardner H.** Accommodating new technology: robotics in prostate cancer surgery. In: *Barraclough S, Gardner H (eds) Analysing Australian Health Policy: a Problem Orientated Approach, Elsevier, Australia.* 2008; pp240-9.

**Zimmet P, Kerr-Bayles L, Walder K, Jowett J.** Diabetes and cardiovascular medicine: epidemiological environmental and molecular contributions. In: *Opie LH, Yellon DM (eds) Cardiology at the Limits X, University of Cape Town Press, South Africa.* 2008; CATLx: pp89-102.

## COCHRANE REVIEWS

**Buchbinder R, Green S, Youd JM, Johnston RV, Cumpston M.** Arthrographic distension for adhesive capsulitis (frozen shoulder). *Cochrane Database Syst Rev* 2008;Jan 23;(1):CD007005.

**Coghlan JA, Buchbinder R, Green S, Johnston RV, Bell SM.** Surgery for rotator cuff disease. *Cochrane Database Syst Rev* 2008;Jan 23;(1):CD005619.

**de Courten B, Barber M, Johnston R, Liew D, de Courten M, van Doornum S, Reid C, Buchbinder R.** Hypolipidemic and antihypertensive drugs for prevention of cardiovascular complications in patients with rheumatoid arthritis (Protocol). *Cochrane Database Syst Rev* 2008;July16 (3):CD007326.

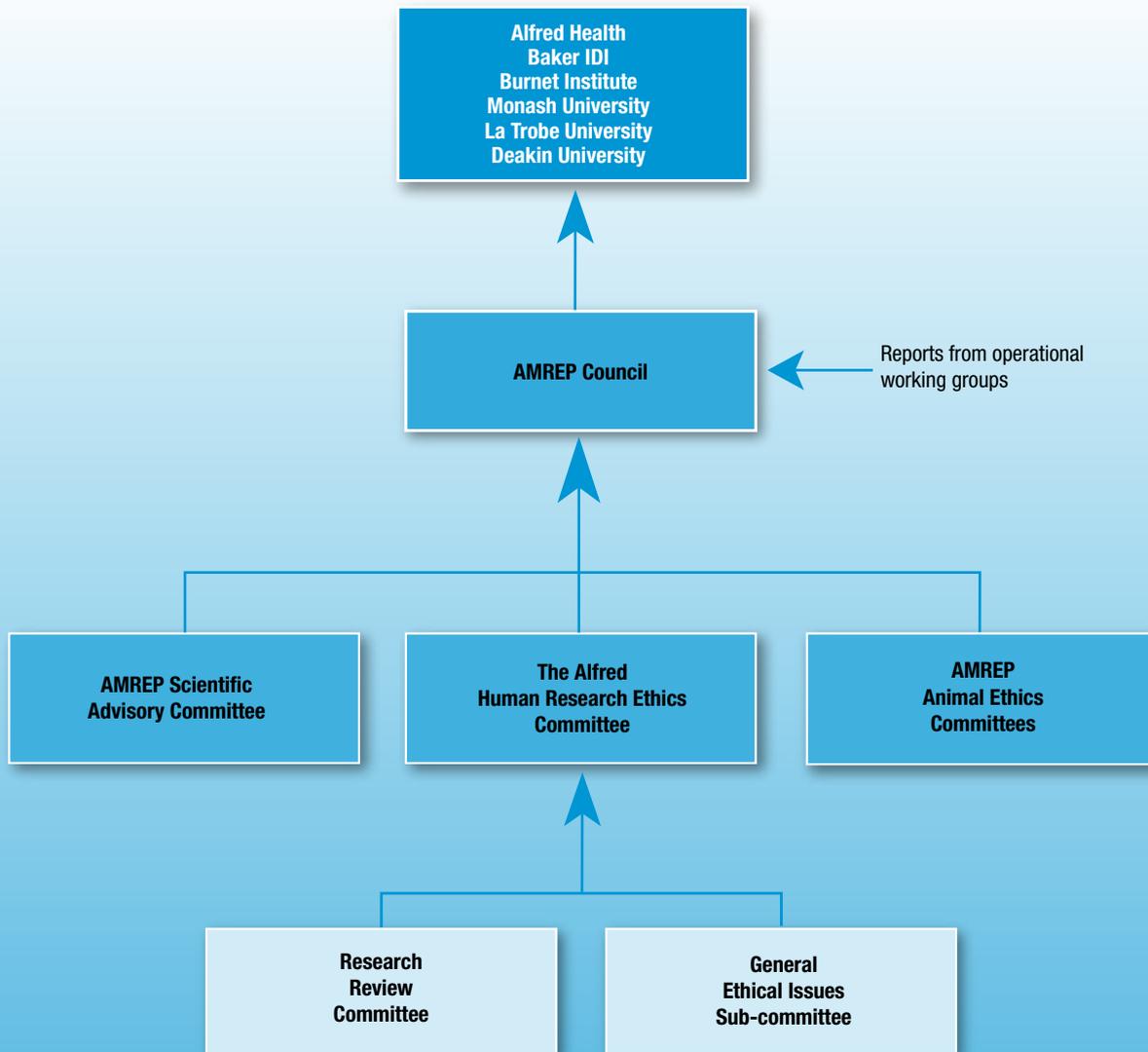
**Holland A, Hill C.** Physical training for interstitial lung disease. *Cochrane Database Syst Rev* 2008;Oct 8(4):CD006322.

**Massy-Westropp N, Johnston RV, Hill C.** Post-operative therapy for metacarpophalangeal arthroplasty. *Cochrane Database Syst Rev* 2008;Jan 23;(1):CD003522.

**Urquhart DM, Hoving JL, Assendelft WW, Roland M, van Tulder MW.** Antidepressants for non-specific low back pain. *Cochrane Database Syst Rev* 2008;Jan 23;(1):CD001703.

**Wasiak J, Cleland H, Campbell F.** Dressings for superficial and partial thickness burns. *Cochrane Database Syst Rev* 2008;Oct 8;(4):CD002106.

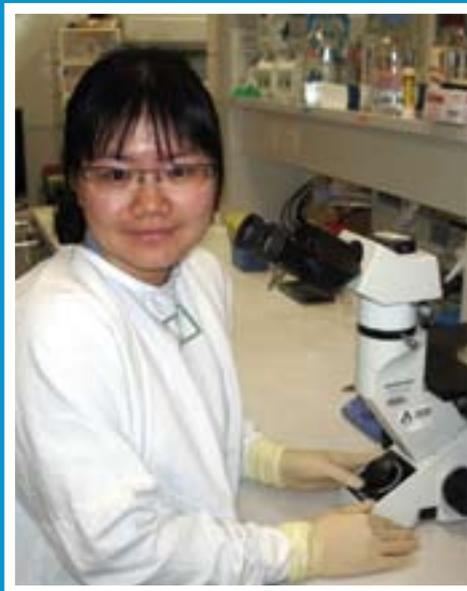
# AMREP Research Committee Structure



# AMREP 2009 Honours Scholarship Awardees



Maria Demaria  
Department of Immunology, Monash University



Li Let Tan  
Department of Immunology, Monash University



# AlfredHealth

c/- The Alfred  
Commercial Road, Melbourne, Victoria 3004, Australia

Telephone + 61 3 9076 2000

Facsimile + 61 3 9076 2222

[www.alfred.org.au](http://www.alfred.org.au)