



THE GEORGE INSTITUTE
for International Health



Year in Review

2005
Calendar Year

This Report reviews the achievements and activities of a unique Australian-based health research institute during 2005. Compared to similar institutions, The George Institute for International Health is relatively young in that it was only established in 1999. Yet in those seven years it has earned an international reputation for excellence in both population health and clinical research.

The Institute's primary mission is to enhance global health through conducting research and by applying the outcomes of research to policy development and practice. To do this, it undertakes research and other activities that can deliver improvements in health outcomes where these are most urgently needed. This includes low and middle-income countries in Asia, and also in Australia amongst Indigenous and ethnic populations.

The Institute recognises that its finite resources may not be sufficient to tackle some major health issues. In such cases, it works in collaboration with reputable and capable partners around the globe on key health projects, often involving multiple countries and local expertise, to effect the best result.

In reviewing this Report we encourage the reader to consider the enormity of the challenge in tackling non-communicable diseases and injury in many parts of the world, and the efforts made by organisations such as The George Institute to address this challenge.

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The George Institute is at the forefront of medical research in Australia and internationally, combining a wide diversity of clinical trials and population health programs with a strong focus on applying the outcomes of these activities to the real world.

The breadth of research programs within the Institute at any particular moment is quite remarkable. From mental health to motor vehicle injury, from stroke to smoking, the Institute is active across the broad landscape of health research. Layered onto these activities are the Institute's translational initiatives, which deliver research outcomes to governments, health workers and the community by way of policy formulation, awareness-raising, education, consultation, and capacity development.

Since its creation seven years ago, a core research area for the Institute has been non-communicable diseases, particularly in low and middle-income countries. In October 2005, the World Health Organization (WHO) released a report entitled *Preventing Chronic Diseases – A vital investment*, calling for more concerted action to be directed towards the prevention and treatment of chronic diseases in poorer regions of the world. Amongst other findings, it noted that the causes of chronic disease in low-income countries are largely the same as those in western countries and included common and familiar factors such as smoking, obesity and diabetes. Most significantly, it emphasised that even a 2% reduction in mortality due to chronic disease could save over 30 million lives within the next 10 years. The WHO report is a clear endorsement of the critical need to focus more resources on 'everyday' diseases that claim millions of lives in developing regions.

The George Institute will continue both its commitment to chronic disease research and its focus on delivering practical solutions to significant health problems in countries such as China and India.



Whilst the control of infectious diseases, such as HIV/AIDS and avian flu, has been deemed to be a high priority by many governments, the effects of these diseases are still relatively minor in most Asian countries when compared with the devastation caused by chronic diseases. Australia has been, and continues to be, a global leader in addressing chronic diseases. Its experience, as well as its intellectual and economic resources, place Australia in a unique position to make a major contribution to the control of common, non-communicable diseases among its regional neighbours. The George Institute will continue both its commitment to chronic disease research and its focus on delivering practical solutions to significant health problems in countries such as China and India.

A clear recognition of Australia's central role in improving health and reducing the impact of disease within the region was the visit to this country in late September by China's Minister of Health, Mr GAO Qiang. His meetings with Institute staff, key state and federal health officials, and visits to health facilities in Sydney, were organised by the Institute in concert with The University of Sydney, the NSW Ministry for Science and Medical Research, and the Sydney South West Area Health Service. The importance of the visit was recognised through the granting of Guest of Government status by the Department of the Prime Minister and Cabinet. Minister GAO is a highly vocal advocate of health reform in China and has clearly expressed his wish to continue the strong and productive relationship established between his Ministry and The George Institute.

The progression of the above work by The George Institute would not be possible without a continuing infusion of funds. Again this year, I would like to congratulate the staff of the Institute for their recent success in obtaining significant NHMRC¹ funding for a spectrum of new research projects, ranging from Indigenous health through to the treatment of osteoarthritis. These grants recognise the high quality of the projects themselves and the calibre of the academic staff undertaking them, as well as the relevance and uniqueness of the Institute's research approach.

As noted in my message in the previous year's Annual Report, the financial stability of the Institute will be enhanced through The George Foundation, established in 2004. With the appointment, in April 2005, of Jenni Elliott as the new Executive Director of the Foundation, strategies have been put in place to secure philanthropic funding for the Institute's future work. This, and other recent initiatives, will reduce the Institute's reliance on temporal grants and place it on a much firmer financial footing.

The direction of the Institute was reviewed in October 2005 by the Research and Development Advisory Committee (RADAC). RADAC comprises experts from around the world who are recognised in many of the fields of endeavour undertaken by the Institute. They meet every second year to collectively examine the Institute's activities and outputs, and to offer guidance and advice on its research approach and strategic direction. The RADAC meeting, held in late October, again provided an invaluable and important opportunity for such input and benchmarking.

The other principal source of guidance and strategic direction for the Institute comes, of course, from its Board. I would like to pay tribute to my fellow Board members for their continuing contribution to, and empathy with, the mission of the Institute. I would also like to thank Paul Torzillo, whose involvement with the Board ended during the year, for his interest and participation.

Finally, I would like to recognise the contributions and dedication of all the Institute's staff, from the Principal Directors through to the academic and operational staff, as well as the visiting and student researchers, who make the Institute a vibrant and vital contributor to international health research.



Peter Burrows, AO
Chairman

¹ National Health and Medical Research Council



ADVANCE regional coordinators' meeting, France



China Health Care Safety Roundtable, China



China's Minister of Health, Mr GAO Qiang is welcomed by Professor Robyn Norton



Andhra Pradesh Rural Health Initiative, India



China Seatbelt Intervention launch, China

- In recognition of the rapidly growing importance of chronic kidney disease as a health issue in its own right, **a new Renal Program was created within the Institute in 2005**, and an experienced senior staff member, Dr Alan Cass, appointed as head.
- **The China Seatbelt Intervention was launched in Guangzhou, China in 2005.** The launch was attended by senior officials from the Chinese government, the World Health Organization, and BP China.
- **NHMRC funding of the order of \$2 million** was awarded to the Institute's Injury Prevention and Trauma Care Division for clinical trials on osteoarthritis.
- **The China Health Care Safety Roundtable took place in April, 2005 in Beijing**, with topics relevant to the development of health care safety in China being discussed both by international speakers and delegates from the China Ministry of Health.
- **First meeting of the Obesity in Asia Collaboration** in Kuala Lumpur, Malaysia in July 2005. This collaboration has been developed to provide reliable evidence concerning the relationships between anthropometrical markers of adiposity with cardiovascular risk factors within, and across, ethnic groups.
- **An Academic Alliance for Clinical Trials (AACT) was launched** in 2005 by three major clinical research institutions - the Berman Center (USA), the Julius Center (the Netherlands) and The George Institute. This Alliance will facilitate relationships with the pharmaceutical industry and government regulatory agencies, whilst encouraging the innovative use of technologies to maximise reliability and minimise cost.
- The Institute co-hosted **a visit to Australia by China's Minister of Health, Mr GAO Qiang** in September 2005 for talks with senior Australian health officials on healthcare reform strategies.
- **A Centre for Research Management was established within the Institute** in 2005 to provide the staff, resources and expertise required to manage the growing portfolio of research projects within the Institute with optimal efficiency and appropriate quality.
- **A large clinical trial called INTERACT was launched in China** in October 2005. It will determine the effects of early intensive blood pressure lowering on death and disability in stroke patients, and aim to provide evidence concerning the optimal approach to managing blood pressure after intra-cerebral haemorrhage.
- **Funding was secured from the UK Wellcome Trust** for the development, implementation and evaluation of enhancements to the ongoing paper-based mortality surveillance system in rural Andhra Pradesh.
- Two former George Institute Divisions, Neurological Diseases and Ageing, and Mental Health, merged in 2005 to form the **Neurological and Mental Health Division**. The merger reflects the increasing realisation of the interaction between mental health and chronic disease.
- **Servier Laboratories provided major additional funding for the ADVANCE study**, which is testing interventions to reduce cardiovascular disease in people with type 2 diabetes. This includes support for an extension of participant treatment and follow-up, which will ensure the successful completion of ADVANCE by the end of 2007.

Message from the Principal Directors

A review of the **Institute Highlights** on page four of this Report clearly indicates that 2005 was another year of substantial achievement and consolidation for the Institute, both domestically and internationally.

The launch of several new health initiatives, as well as the continuation of existing projects and activities, in Asia (and in China, in particular), confirm the Institute's ongoing commitment to enhancing health and clinical practices in this region. The China Roundtable meetings, the seatbelt intervention project in Guangzhou, the Obesity in Asia collaboration, the INTERACT stroke study, and the Andhra Pradesh Rural Health Initiative (APRHI) are but a handful of examples of the broad spectrum of clinical and translational research undertaken by the Institute in the region during the year. In particular, the securing of Wellcome Trust funding for APRHI was a major achievement of the Institute in 2005. These funds will help facilitate a major practical global advancement in mortality surveillance and will enable planning for priority health interventions beyond the project area.

The Institute also strengthened its alliances with key partners in other parts of the globe, through the establishment of the Academic Alliance for Clinical Trials. This arrangement with the Berman Center in the United States and the Julius Center in the Netherlands will provide opportunities and efficiencies in working with both regulators and manufacturers in the pharmaceutical sector on future international drug trials.

Internally, the Institute continued to grow through the year, both in terms of staff numbers and in the diversity of its research programs. The growing awareness, and incidence, of chronic kidney disease and its effects on populations in poorer regions, led to the establishment of a new Renal Program within the Institute. To underscore the role of this new program, a major new collaborative project in renal research with the Australian and New Zealand Intensive Care Society Clinical Trials Group was launched in 2005.

A growing understanding of the causal relationship between chronic illness and mental health was recognised during the year with the merger of two former George Institute Divisions, Neurological Diseases and Ageing, and Mental Health, into the Neurological and Mental Health Division. This merger will strengthen and complement research, knowledge and output in both areas.

Integral to the successful delivery of any research project is the management of the staff, data and resources on which it depends. Recognising this, a Centre for Research Management (CRM) was established within the Institute in 2005, and will be a key tool in ensuring that the Institute's many research activities are well supported to maximise their outcomes. In parallel, the operational side of the Institute was also enhanced, with key appointments being made in the human resources, finance and public affairs areas in the second half of 2005. Like the CRM, these new operational units will play a key role in supporting the growth and development of the organisation's clinical and translational research. Similarly, the appointment of a new Executive Director of The George Foundation will greatly assist the Institute to achieve its financial goals in the years ahead.

Little of the above work would be possible without adequate, and in many cases, generous funding from a variety of sources. The funding bodies supporting the Institute's research are listed later in this Report, but we would like to take this opportunity to express our gratitude to these bodies which see the value of the Institute's research and its potential to alleviate suffering in countries where the need is greatest. Research, by its nature, carries with it no guarantees, and for many funding sources it is a leap of faith to commit funds in uncertain economic times. The Institute's ongoing commitment to the translation and practical implementation of research should hopefully reward this faith by delivering real solutions to health problems in the short, medium and longer term.



Stephen MacMahon

Principal Director
Professor of Cardiovascular Medicine and
Epidemiology, The University of Sydney



Robyn Norton

Principal Director
Professor of Public Health, The University of Sydney



Stephen MacMahon
Principal Director



Robyn Norton
Principal Director

The George Institute is registered as an independent charitable organisation. It is affiliated with The University of Sydney and formally associated with the Sydney South West Area Health Service, through Memoranda of Understanding. The Institute's direction and operations are overseen by its Board of Directors, and its research, policy and capacity development activities are reviewed by an independent Research and Development Advisory Committee. Specific advice on Institute activities in China related to research, policy and capacity development is provided by a China Advisory Board.

Responsible to the Board are the Institute's two Principal Directors, who receive reports and advice from a Management Committee on a regular basis. The Management Committee, in turn, is counselled on relevant issues by various sub-committees and working groups covering the operational, clinical research, and policy and practice activities of the Institute.

The George Institute is affiliated with The University of Sydney and formally associated with Sydney South West Area Health Service.

Board of Directors

The George Institute's Board of Directors provides advice on the Institute's strategic directions, governance, investment and expenditure, and executive administration and management. Details on the members of the Board are provided later in this Report.

Research and Development Advisory Committee

The Research and Development Advisory Committee (RADAC) comprises international authorities on non-communicable diseases and injuries, authorities on health research and development in low and middle-income countries, representatives of international health and development agencies, and representatives of the Australasian and Asia-Pacific research community. RADAC conducts a bi-annual review of the Institute's research and development activities, and provides advice on both its implementation and direction with respect to the Institute's mission.

China Advisory Board

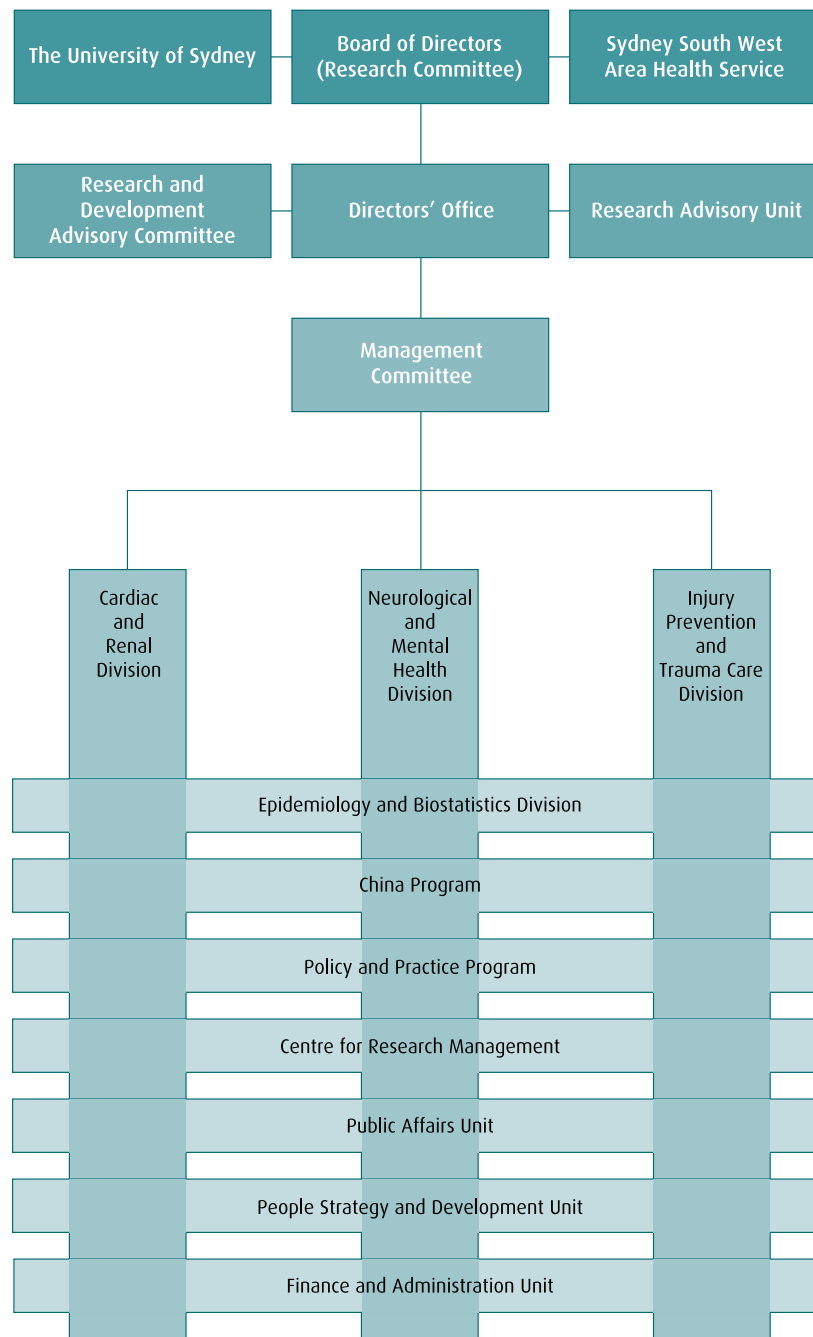
The China Advisory Board consists of individuals from the university and government sectors, as well as multilateral organisations. The Board meets annually to provide advice on key health and policy issues in China, and to assist with both the implementation of current research findings into policy and practice, as well as the planning of new projects.

The University of Sydney

The George Institute has a Memorandum of Understanding (MOU) with The University of Sydney, designating the Institute as a research department of the University, with primary associations with the Central Clinical School and the School of Public Health. Applications from the Institute for support from peer-reviewed agencies and foundations are channeled through The University of Sydney.

Sydney South West Area Health Service

The George Institute is formally associated with the Sydney South West Area Health Service through an MOU. Senior academic staff at the Institute hold Honorary Consultant appointments at the Royal Prince Alfred Hospital in a number of clinical divisions.



Global Collaborations in 2005



Action in Diabetes and Vascular Disease: Preterax and Diamicon MR Controlled Evaluation - ADVANCE

AUSTRALIA, CANADA, CHINA, CZECH REPUBLIC, ESTONIA, FRANCE, GERMANY, HUNGARY, INDIA, IRELAND, ITALY, LITHUANIA, MALAYSIA, NETHERLANDS, NEW ZEALAND, PHILIPPINES, POLAND, RUSSIA, SLOVAKIA, UNITED KINGDOM

Collaborators

The University of Melbourne; The University of Auckland; Chinese Academy of Medical Sciences; Imperial College; University of Montreal; Utrecht University; and 215 clinical centres in 20 countries worldwide.

Intensive Blood Pressure Reduction in Acute Cerebral Haemorrhage Trial - INTERACT

AUSTRALIA, CHINA, HONG KONG, NEW ZEALAND, SINGAPORE, USA

Collaborators

National Stroke Research Institute; The Greater Metropolitan Clinical Taskforce; Australasian Stroke Trials Network; Hunter Stroke Service.

China Plant Sterol Trial - CPST

CHINA

Collaborators

School of Public Health, Peking University Health Science Center.

Study of the Economic Impact of the Burden of Chronic Kidney Disease in Australia - CKD Burden

AUSTRALIA

Collaborators

School of Public Health, The University of Sydney; Royal Prince Alfred Hospital; Australia and New Zealand Dialysis and Transplant Registry (ANZDATA), Queen Elizabeth Hospital.

Familial Intracranial Aneurysm - FIA

AUSTRALIA, NEW ZEALAND, USA

Collaborators

Royal Prince Alfred Hospital; Flinders Medical Centre; Westmead Hospital; Royal Perth Hospital; Royal Melbourne Hospital; Auckland Hospital/Clinical Trials Research Unit; Royal North Shore Hospital; Sir Charles Gairdner Hospital; Royal Adelaide Hospital; University of Cincinnati.

Normoglycaemia in Intensive Care Evaluation - NICE

AUSTRALIA, NEW ZEALAND, CANADA

Collaborators

Australian and New Zealand Intensive Care Society Clinical Trials Group; over 23 hospitals in Australia, New Zealand and Canada.



Heart Disease in Indians - HINDI

INDIA, AUSTRALIA

Collaborators

Department of Cardiology, Royal Prince Alfred Hospital; Byrraju Foundation; CARE Hospital, Hyderabad.

Andhra Pradesh Rural Health Initiative - APRHI

INDIA, AUSTRALIA

Collaborators

Byrraju Foundation; CARE Hospital, Hyderabad; Centre for Chronic Disease Control; School of Population Health, The University of Queensland.

Motorcycle Helmet Use in Vietnam: Prevalence, Barriers to Use and Policy Implications

VIETNAM

Collaborators

Ministry of Health and the Hai Duong Provincial Government.

Internet-based Cholesterol Assessment Trial - I-CAT, AUSTRALIA

Collaborators

School of Public Health, The University of Sydney; Lipid and Cardiovascular Risk Assessment Clinic, Westmead Hospital; Lipid Clinic, Royal Prince Alfred Hospital.

The George Institute works in conjunction with numerous research partners across the globe. It understands the significance of international collaborations in order to achieve its goal of reducing the global burden of non-communicable disease and injury.

By forming international networks and long-term partnerships with universities, hospitals and research institutes across the globe, the Institute continues to deliver improvements in health outcomes where they are most urgently needed.

The Institute collaborates with dozens of investigators in around 30 countries. Through this international network, the Institute encourages and draws on a wide range of expertise as it seeks to identify effective and affordable prevention and treatment strategies.

The world map shows a selection of the collaborations that were a focus of the Institute's efforts in 2005. From Singapore to Slovakia, these collaborations have allowed the Institute to work with reputable and capable partners on key health projects. Complete details of all the Institute's collaborative projects are found under the relevant divisions in this Report.

In addition to working with international agencies such as the World Health Organization, the World Bank and the Global Forum for Health Research, the Institute also has formal, reciprocal arrangements with key health research bodies.

Domestically, Memoranda of Understanding (MOUs) exist between the Institute and The University of Sydney, Sydney South West Area Health Service, and the Brain and Mind Research Institute.

MOUs are also maintained by the Institute with Johns Hopkins University Bloomberg School of Public Health in the United States, the China Ministry of Health, and Peking University Health Science Center in China.

Improving Indigenous Patient Access to Kidney Transplantation - IMPAKT

AUSTRALIA

Collaborators

Menzies School of Health Research; Cooperative Research Centre for Aboriginal Health; specialist renal units in Sydney, Dubbo, Brewarrina, Darwin, Alice Springs, Brisbane, Cairns, Townsville, Adelaide, Port Augusta, Perth, Kalgoorlie and Broome.

Randomised Evaluation of Normal vs Augmented Level of Renal Replacement Therapy in ICU - RENAL

AUSTRALIA, NEW ZEALAND

Collaborators

Australia and New Zealand Intensive Care Society Clinical Trials Group.

Injury Prevention and Safety Promotion for Urban Aboriginal Children and Youth in South Western Sydney

AUSTRALIA

Collaborators

Yooroang Garang, School of Indigenous Health Studies, The University of Sydney.

Safe Koori Kids: Community Based Approaches to Indigenous Injury Prevention

AUSTRALIA

Collaborators

Yooroang Garang, School of Indigenous Health Studies, The University of Sydney.

The George Institute acknowledges the generous support of the following organisations during 2005

AstraZeneca	Kidney Health Australia
Attorney General's Department of NSW	MBF Australia Limited
Auckland City Hospital	Merck, Sharp & Dohme, China
Auckland Uniservices Limited	Motor Accidents Authority of NSW
AusAID	National Health & Medical Research Council
Australian Government Department of Education, Science and Training	National Heart Foundation Australia
Australian Government Department of Health and Ageing	National Institute of Neurological Disorders and Stroke
Australian Health Management Group Limited	National Institutes of Health
Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS)	NRMA Motoring & Services
Australian, State, Territory and Local Governments	NSW Department of Health
Bayer	NSW Institute of Trauma & Injury Management
Boehringer-Ingelheim	Pfizer Inc.
BP China	Roads and Traffic Authority, NSW
Byrraju Foundation	Royal Hobart Hospital
China Capital Medical Science Development Fund	Sanofi-Aventis
Future Forum	Servier
Guidant Corporation	SESQUI Research and Development Scheme
Health Policy and Management Department, School of Public Health, Yale University	Solvay S.A.
Health Research Council of New Zealand (HRC)	The Department of International Relations, Joint Commission International
High Blood Pressure Foundation	The Emerging Risk Factors Collaboration
HLSP International Ltd (member of the Mott MacDonald Group)	The George Foundation for International Health
Initiative for Cardiovascular Health Research in Developing Countries (IC Health), India	The Johns Hopkins University
Insurance Institute for Highway Safety	The Royal Australasian College of Physicians
International Association for the Study of Obesity - International Obesity Task Force	The University of Queensland
International Development Fund - IDA World Bank	The University of Sydney
	Unilever
	US Centres for Disease Control and Prevention
	University of Cambridge
	University of Dundee
	University of Oxford
	University of Pittsburgh
	Wellcome Trust

Cardiac and Renal Division

The Cardiac and Renal Division researches and implements new strategies for the prevention and treatment of major vascular diseases such as stroke and heart attack, as well as kidney disease.

Worldwide, stroke and heart attack represent the two leading causes of death. With the incidence of ill health attributable to vascular diseases predicted to rise sharply in the next few decades, new treatments and prevention strategies are global health priorities.

Established risk factors for stroke and heart attack include blood pressure, tobacco, cholesterol, diabetes and obesity, with each being a major contributor to the total global burden of vascular disease.

Increasingly known to be another key cause of vascular disease, and growing rapidly as a health issue in its own right, is chronic kidney disease. The Cardiac and Renal Division works to improve equity in both health outcomes and access to health care for patients with kidney disease.

In recognition of this expanding focus, two separate programs were formed within the Division in 2005, the Cardiac Program and the Renal Program, with the appointment of experienced senior staff to head each. Throughout 2005, the Division completed several projects, commenced a number of new initiatives and was successful in attracting substantial new funding. Once again, developing countries featured highly in the research achievements, although the start of a major new collaborative project in renal research with the Australian and New Zealand Intensive Care Society Clinical Trials Group was a significant local success.

Research achievements for 2005 included two China-based dietary trials and a major survey of acute coronary syndromes in China. Work in India highlighted the extensive problem of cardiovascular disease in the country's rural areas (see page 14).

The outlook over the next few years remains extremely positive. Utilising funding provided by the NHMRC Program Grant it has been possible to establish a series of new academic and industry collaborations. Excellent progress has been made towards a series of large-scale research initiatives in the cardiovascular field.



Associate Professor Bruce Neal
Director, Cardiac and Renal Division

Bruce Neal is Director of the Cardiac and Renal Division at The George Institute. He is an Associate Professor in the Faculty of Medicine at The University of Sydney and an Honorary Consultant Epidemiologist at the Royal Prince Alfred Hospital. He holds a five-year career development award from the National Heart Foundation of Australia.

Bruce completed his medical training at Bristol University in the UK in 1990 and spent four years in clinical posts during which he gained membership of the UK Royal College of Physicians. Prior to taking up his current post in 1999, he worked as an epidemiologist at the Clinical Trials Research Unit in Auckland, New Zealand, where he completed a PhD in Medicine.

Highlights

- The scope of the Division was expanded and renamed Cardiac and Renal.
- A major new renal research initiative was commenced with the Australian and New Zealand Intensive Care Society Clinical Trials Group.
- Funding was secured from the Wellcome Trust for the expansion of the surveillance system developed for the Andhra Pradesh Rural Health Initiative (APRHI).
- A large survey of management practices for acute coronary syndromes in hospitals in China was completed.
- Funding from the NHMRC Program Grant was utilised to establish a series of new academic and industry relationships.
- New approaches to addressing the enormous impact of vascular disease and diabetes in poor rural areas of India were investigated.



Dr Anushka Patel
Head, Cardiac Program

Anushka Patel is Head of the Cardiac Program at The George Institute, and a Staff Specialist in the Department of Cardiology at Royal Prince Alfred Hospital. Anushka completed her undergraduate medical training at The University of Queensland in December 1989, and her training in cardiology (leading to Fellowship of the Royal Australian College of Physicians) in 1998. She has a Master of Science degree in Epidemiology from Harvard University, and completed her PhD in Medicine at The University of Sydney. Prior to joining The George Institute in 2001, Anushka was a Research Fellow at the NHMRC Clinical Trials Centre in Sydney.

Studies in the Division

- Action in Diabetes and Vascular Disease: Preterax and Diamicon MR Controlled Evaluation – ADVANCE
- Andhra Pradesh Rural Health Initiative - APRHI
- Blood Pressure Lowering Treatment Trialists' Collaboration - BPLTTC
- China Plant Sterol Trial - CPST
- China Salt Substitute Study - CSSS
- Clinical Pathways for Acute Coronary Syndromes in China - CPACS
- Dietary Intervention in e-shopping Trial - DIeT
- Heart Disease in Indians Study - HINDI
- Improving Indigenous Patient Access to Kidney Transplantation - IMPAKT
- Internet-based Cholesterol Assessment Trial - I-CAT
- Perindopril Protection against Recurrent Stroke Study - PROGRESS
- RCT of Normal vs. Augmented Level of Renal Replacement Therapy in ICU - RENAL
- Study of Heart and Renal Protection - SHARP
- Study of the Economic Impact of the Burden of Chronic Kidney Disease in Australia - CKD Burden



Dr Alan Cass
Head, Renal Program

Alan Cass is Head of the Renal Program at The George Institute for International Health. He has trained and worked as a kidney diseases specialist physician, epidemiologist, and health services researcher. From 1998 to 2002, he undertook research into Aboriginal health and worked as a clinician in the Northern Territory. In 2003, he was awarded an Australian Harkness Fellowship in Health Policy at Harvard University where he examined access to, and quality of, renal care in Australia, New Zealand, Canada, and the United States. Alan has broad-based research skills and particular interest and expertise in translational research issues.

Action in Diabetes and Vascular Disease: Preterax and Diamicon MR Controlled Evaluation – ADVANCE

The aim of ADVANCE is to determine the effects of routine blood pressure lowering and intensive glucose control on the risks of major cardiovascular events in high-risk patients with type 2 diabetes. The study is a factorial, multi-centre, randomised controlled trial involving 11,140 participants. The primary outcomes will be major macrovascular complications (stroke and heart attack) and major microvascular complications (eye and renal disease). The trial completed recruitment on schedule and finalised the follow-up phase in late 2005. This project is well underway and is expected to be completed in 2009.

The George Institute works on this study in collaboration with the University of Melbourne; The University of Auckland; the Chinese Academy of Medical Sciences; Imperial College; the University of Montreal; Utrecht University and 215 clinical centres in 20 countries worldwide. The Institute acknowledges both Servier Laboratories and NHMRC, which are the key funding agencies for this study.

Institute Investigators:

Anushka Patel, Stephen MacMahon, John Chalmers, Bruce Neal, Mark Woodward.

Project Managers:

Helen Monaghan, Samantha Flynn.

Andhra Pradesh Rural Health Initiative - APRHI

This study aims to formulate, implement and evaluate simple low-cost programs for the treatment and prevention of cardiovascular disease and injury, and is part of a broader rural development initiative in India. The project consists of a mortality surveillance system, a disease and risk factor survey, and trialling of primary health care interventions.

The mortality surveillance system has been incorporated into the existing primary health system, while a large-scale disease and risk factor survey has been completed. APRHI highlights the importance of chronic conditions in the villages and reports are now being prepared. The first intervention project addressing the treatment and prevention of cardiovascular disease is in early stages with evaluation ongoing over the next few years.

Under the initiative, the Institute works in collaboration with the Byrraju Foundation; CARE Hospital, Hyderabad; the Centre for Chronic Disease Control; and the School of Population Health, The University of Queensland.

The Institute would like to acknowledge the following organisations for their funding contributions for APRHI: The George Foundation; Byrraju Foundation; Australian Government Department of Education, Science and Technology; The University of Sydney; the National Heart Foundation of Australia; NHMRC; Initiative for Cardiovascular Health Research in Developing Countries (IC Health); The Wellcome Trust; The Future Forum.

Institute Investigators:

Bruce Neal, Stephen MacMahon, Rohina Joshi, Magnolia Cardona, Clara Chow, Rebecca Ivers, Mark Stevenson.

Blood Pressure Lowering Treatment Trialists' Collaboration - BPLTTC

The purpose of this study is to provide reliable evidence regarding the effects of different classes of blood pressure-lowering drugs on cardiovascular mortality and morbidity. Methods include prospectively-designed overviews (meta-analyses) of major trials addressing blood pressure lowering.

Reported results showed that the short-to-medium term effects of the major classes of blood pressure lowering drugs on major cardiovascular events were broadly comparable for patients with and without diabetes. The Collaboration is working on analyses to quantify the effects of blood pressure lowering regimens beyond their blood pressure lowering effects. A Renal Working Group has also been established to guide new analyses examining the effects of different drug types in patients with kidney disease. The Collaboration has grown from 29 trials in 2003 to 48 trials in 2005. A third cycle of overviews is planned for 2006.

The Institute works in collaboration with principal investigators from large-scale trials worldwide, including studies conducted in Australasia, Asia, North America and Europe.

The George Institute would like to acknowledge the following funding bodies of this trial: Analyses funding: NHMRC; National Heart Foundation of Australia. Sponsors of collaborator meetings: AstraZeneca; Bayer; Boehringer-Ingelheim; Merck; Pfizer; Servier; Solvay.

Institute Investigators:

Fiona Turnbull, Bruce Neal, Charles Algert, Stephen MacMahon, Mark Woodward, John Chalmers, Hisatomi Arima, Vlado Perkovic, Nicole Li.

APRHI



China Plant Sterol Trial – CPST

This trial, involving 300 participants from urban Beijing, aims to evaluate the effectiveness of plant sterols in lowering adult serum cholesterol levels. The project commenced in March 2005, with 300 volunteers from three institutions participating in the trial. The effects of plant sterol on blood cholesterol levels were investigated in a double-blind randomised trial of six weeks duration. Study follow-up was finalised in July 2005, with reporting of results expected in 2006.

The Institute works on this study in collaboration with the School of Public Health, Peking University Health Science Center and would like to acknowledge Unilever Foods (China) for the funding of this project.

Institute Investigators:

Nicole Li, Bruce Neal.



China Salt Substitute Study – CSSS

The CSSS evaluates the effects of a salt substitute on blood pressure in individuals living in northern China that are at high risk of cardiovascular disease. The study is a double-blind, randomised controlled trial. Over 600 high-risk individuals were recruited from northern China and assigned to use either salt substitute or normal salt for cooking. Blood pressure levels, electrolytes and preferred level of 'saltiness' were collected from participants during the follow up period. On completion of the follow-up, in August 2005, preliminary study results were made available.

The Institute works in collaboration with Fu Wai Hospital, China and the Clinical Trials Research Unit (CTRU), New Zealand. It acknowledges the following funding agencies: National Heart Foundation of Australia; The University of Sydney; Foundation for High Blood Pressure Research and China Capital Medical Science Development Fund.

Institute Investigators:

Nicole Li, Bruce Neal, Rachel Huxley.

Study of the Economic Impact of the Burden of Chronic Kidney Disease in Australia - CKD Burden

This study is evaluating the impact of improved treatment of chronic kidney disease, the costs and benefits of screening for chronic kidney disease, the costs of provision of renal replacement therapy and the costs and benefits of increasing kidney transplant rates. Information on treatment characteristics and outcomes for patients treated with dialysis or kidney transplant was obtained from the Royal Prince Alfred Hospital and Australia and New Zealand Dialysis and the Transplant Registry (ANZDATA). Future healthcare costs and benefits of treatment for kidney disease were estimated. Ongoing modelling is underway to project the costs and benefits of earlier detection and treatment.

An initial report entitled *The Economic Impact of End-Stage Kidney Disease in Australia: Part I of the Study of the Economic Impact of the Burden of Kidney and Urinary Tract Disease in Australia* was submitted to Kidney Health Australia in September 2005. The second phase of the project includes a cost-benefit analysis of early detection and intervention during early stages of chronic kidney disease.

The Institute works on this research in collaboration with the School of Public Health, The University of Sydney; ANZDATA, Queen Elizabeth Hospital. The Institute gratefully acknowledges the funding of the study by Kidney Health Australia.

Institute Investigators:

Alan Cass, Vlado Perkovic, Sarah White.

Project Manager:

Alan Cass.

Clinical Pathways for Acute Coronary Syndromes in China - CPACS

CPACS aims to develop, implement and evaluate clinical pathways for the management of acute coronary syndromes (ACS) in China. Recruitment for phase one included a total of 51 hospitals, 31 tertiary level centres, and 2975 ACS patients. A survey of the management of patients was completed in June 2005. Phase two will consist of development, implementation and evaluation of clinical pathways for ACS management. The pathways will be developed on the basis of data collected in phase one. Data was analysed late 2005, and the results are to be used to help design the second phase of this study.

For this project, the Institute works in collaboration with the Chinese Cardiology Society; Peking University Health Science Center and it would like to acknowledge Sanofi-Aventis, Guidant Corporation, and the Royal Australasian College of Physicians for the funding of this work.

Institute Investigators:

Anushka Patel, Fiona Turnbull, Charles Algert, LU Xin, Lucy Chen.

Project Managers:

HAN Dorothy, ZHANG Jean, XIOMAN Zou.

Dietary Intervention in e-shopping Trial - DIeT

DIeT is determining the effects of tailored dietary advice on the amount of saturated fat purchased by consumers using a commercial internet-based shopping service. DIeT is a randomised, double-blind, controlled trial in which 500 participants were enrolled and followed over a three-month period. The intervention was successful in reducing the amount of saturated fat purchased by consumers. Further investigations of the data are ongoing, with publication of the main results anticipated shortly.

The Institute works in collaboration with the Department of Human Nutrition, The University of Sydney; Shopfast, Australia; the British Heart Foundation. It would like to thank Future Forum and the National Heart Foundation of Australia for the funding of this project.

Institute Investigators:

HUANG Ling-Ya, Bruce Neal, Federica Barzi, Rachel Huxley.

HINDI



Heart Disease in Indians Study - HINDI Study

The HINDI study seeks to ascertain why South Asian Indians living in Australia have such disproportionately high levels of cardiovascular disease. It includes surveys of two South Asian Indian populations and a comparator Australian population (South Asian populations are a non-migrant population living in Andhra Pradesh, India, and a migrant population of South Indians living in Sydney, Australia). The whole study will involve a total of approximately 2,000 people. Cardiovascular risk factors and measures of atherosclerosis will be recorded in each and comparisons will be made between them.

The Andhra Pradesh component of the study is now completed. The Australian component of the study began recruiting in late 2005, with the first results anticipated in 2006.

The Institute works in collaboration with the Department of Cardiology, Royal Prince Alfred Hospital, Sydney; the Byrraju Foundation; CARE Hospital, Hyderabad.

Acknowledgment is made of the Byrraju Foundation; NHMRC; the Initiative for Cardiovascular Health Research in Developing Countries (IC Health) and The George Foundation for supporting this project.

Institute Investigators:

Clara Chow, Bruce Neal.

Improving Access to Kidney Transplants - IMPAKT

IMPAKT identifies the barriers to Indigenous Australians accessing renal transplantation and proposes strategies that will reduce disparities. The project involves a survey of Australian nephrologists' attitudes and practices. It also includes a study of the knowledge, attitudes, education and decision-making processes of Indigenous and non-Indigenous Australians in relation to transplantation, follow-up of patients commencing dialysis at renal units in urban, rural and remote areas and modelling of the impact of alternative strategies for kidney transplant allocation. The survey of nephrologists has finished, while the study of patients is scheduled for completion in 2006. Data analysis of these first components will commence in February 2006 and the full study results will be available in 2007.

IMPAKT is undertaken in collaboration with the Menzies School of Health Research, Darwin; the Cooperative Research Centre for Aboriginal Health; specialist renal units in Sydney, Dubbo, Brewarrina, Darwin, Alice Springs, Brisbane, Cairns, Townsville, Adelaide, Port Augusta, Perth, Kalgoorlie, Broome. The IMPAKT study is funded by a three-year project grant from the NHMRC.

Institute Investigators:

Kate Anderson, Alan Cass, Cilla Preece.

IMPAKT



Internet-based Cholesterol Assessment Trial - I-CAT

The aim of the I-CAT is to discover whether advice about cholesterol provided via the internet can improve an individual's management of their cholesterol levels. I-CAT is a large-scale randomised controlled trial that is planned to include 3,500 participants. The principal determinant of success will be the number of participants that commence or increase their use of cholesterol-lowering medication following use of the study website. Participants will be recruited via the general media, advertising, healthcare facilities and through email networks. Recruitment took place in 2005, and final results are anticipated in 2006.

I-CAT is a collaborative study with the School of Public Health, The University of Sydney; the Lipid and Cardiovascular Risk Assessment Clinic, Westmead Hospital; and the Lipid Clinic, Royal Prince Alfred Hospital. The Institute would like to thank the following funding agencies: Medical Benefits Fund (MBF); National Heart Foundation of Australia; Pfizer.

Institute Investigators:

Stephen Li, Bruce Neal, Nicola Lewis, Kathy Jayne.

Studies

Perindopril Protection against Recurrent Stroke Study - PROGRESS

PROGRESS was a large-scale trial that achieved its primary goal of demonstrating the huge benefits to be gained from the use of routine blood pressure lowering amongst patients with a history of cerebrovascular disease. Since reporting of the main results, a series of subsidiary analyses have been commenced utilising the data collected and new funding has been awarded. To date, several papers have been completed reporting important findings additional to those documented in the initial report.

PROGRESS is a collaboration with The University of Auckland; the University of Melbourne; the Chinese Academy of Medical Sciences; the National Cardiovascular Centre, Japan; the University of Glasgow; the Lariboisiere Hospital; Università degli Studi di Milano; Uppsala University; and 172 other hospital and university centres worldwide.

The Institute would like to thank the following funding agencies: the Health Research Council of New Zealand (HRC); NHMRC; the US National Institutes of Health; the Australian Health Management Group; Pfizer Cardiovascular Lipid Grants and Servier.

Institute Investigators:

John Chalmers, Stephen MacMahon, Bruce Neal, Mark Woodward, Anushka Patel, Hisatomi Arima, Craig Anderson.

Project Manager:

Rochelle Currie.

Randomised Controlled Trial of Normal vs. Augmented Level of Renal Replacement Therapy in Intensive Care Units - RENAL

This study seeks to determine if increasing the dose of continuous renal replacement therapy (CRRT) reduces mortality in intensive care patients with acute renal failure. The study is a multi-centre, randomised, controlled trial of two different doses of continuous renal replacement therapy. Fifteen hundred patients will be recruited from 34 centres across Australia and New Zealand. Recruitment commenced in November 2005.

RENAL is a joint initiative of the Australia and New Zealand Intensive Care Society Clinical Trials Group and The George Institute. The Renal study is funded by a four-year Project Grant from NHMRC.

Institute Investigators:

Alan Cass, Martin Gallagher, Robyn Norton.

Project Manager:

David Ali.

SHARP: The Role of Lipid-Lowering in Preventing Cardiovascular Disease in People with Chronic Kidney Disease

Individuals with kidney disease have much higher mortality compared to healthy people of the same age and sex. In people on dialysis, approximately one in six die each year and half of this mortality is due to heart disease. In the general population, lowering serum cholesterol using HMG CoA reductase inhibitors, or statins, has been proven to reduce mortality from heart disease.

What evidence is available to support the routine use of cholesterol-lowering treatments in people with kidney disease, who are at very high risk of premature heart attack and stroke?

Despite a markedly increased risk of death from heart disease in patients with kidney disease, almost all the studies examining the effects of lowering cholesterol upon mortality and heart disease have excluded such patients. With increasing rates of kidney disease in ageing populations, the effect of lowering cholesterol on heart disease and mortality in patients with kidney disease is an important, yet unanswered, research question with major implications for national and global health expenditure and population health.

By enrolling only people with significant kidney disease, the SHARP study is designed to provide a definitive answer to this question. With an enrollment of 9,000 people in almost 20 countries, it is the largest ever randomised controlled trial undertaken in chronic kidney disease. SHARP will contribute significantly to our knowledge of how best to manage people with kidney disease and how to prevent its progression.



Study of Heart and Renal Protection - SHARP

SHARP aims to determine the effects of cholesterol lowering (using a combination of simvastatin and ezetimibe) on the risk of major vascular complications in patients with chronic kidney disease. The study is a randomised placebo-controlled trial that recruited 9,000 individuals from approximately 300 centres worldwide. The George Institute coordinates recruitment and follow-up of one-quarter of participants from centres in Australia, New Zealand, Malaysia and Thailand. The planned average follow-up for participants will be four and a half years.

Recruitment of patients commenced in Australia and Malaysia in October 2003, New Zealand in February 2004 and Thailand in August 2004. Recruitment should continue until mid-2006. To date, researchers have randomised over 70% of the target of 2,400 patients. Approximately 300 training and monitoring visits to the study sites have taken place. The results of SHARP are expected to be available in 2009.

SHARP is a collaboration with the University of Oxford; the Australia and New Zealand Society of Nephrology; the Clinical Research Centre, Kuala Lumpur Hospital and 64 specialist renal centres in Australia, New Zealand, Malaysia and Thailand. Grateful acknowledgement is made of both NHMRC and the University of Oxford for funding this research project.

Institute Investigators:

Alan Cass, Martin Gallagher, Bruce Neal, Vlado Perkovic.

Project Manager:

Rochelle Currie.

A Low-Sodium, High-Potassium Salt Substitute – The Answer To Blood Pressure Control In China and Beyond

Salt (sodium chloride), the common seasoning added to food every day across the world, raises blood pressure levels, and is a leading cause of heart attacks and strokes. The problem is particularly marked in China, where salt consumption is very high, elevated blood pressure levels are extremely prevalent and the predominant vascular disease is stroke, which is most strongly blood pressure dependent.

Despite compelling evidence of the value of reducing sodium intake, long term restriction of salt consumption has proved difficult to achieve. The recently completed China Salt Substitute Study, a double-blind randomised controlled trial of 12 months duration, provides new hope in this area. The trial, which investigated the blood pressure lowering effects of a low-sodium high-potassium salt substitute among 600 high risk individuals in rural Northern China showed that replacing normal salt with salt substitute could reduce blood pressure to almost the same extent as drug therapy. Furthermore, these effects were not only achieved at low cost but increased over time as the salt substitute was incorporated into progressively more of the daily diet.

The evidence from this study will form the basis for new initiatives designed to persuade Chinese policy makers to increase the use of salt substitute. Either through immediate efforts to modify national salt supply through the state monopoly of salt manufacture and distribution, or through the commissioning of an even larger piece of research that will demonstrate the direct beneficial effects of the salt substitute on cardiovascular disease itself. In the latter case, the results would likely influence the use of salt substitutes in many other developed and developing countries worldwide.



Injury Prevention and Trauma Care Division has developed a comprehensive research and training program which focuses on the leading causes of injury-related morbidity and mortality

The identification of injuries as an important contributor to the burden of death and disability was highlighted in 1997, following the release of the *Global Burden of Disease Study*. In the early 1990s, injuries accounted for 15% of the burden of death and disability worldwide, but this is projected to increase to 20% by 2020. Of concern is that a significant proportion of these injuries occur in low and middle-income countries in the Asia-Pacific region. In response to this, The George Institute's Injury Prevention and Trauma Care Division has developed a comprehensive research and training program which focuses on the leading causes of injury-related morbidity and mortality, both in Australia and in the Asia-Pacific region.

Throughout 2005 the Division continued to develop its extensive research programs in road traffic injuries; trauma management (including critical care management); musculoskeletal conditions; and injury to Indigenous Australians.

A highlight in the road traffic injury research program was the release of the research findings investigating the relationship between mobile phone use and car crash resulting in injury. The release of these findings provided considerable international exposure of the Division's expertise in road injury research. Beyond this, DRIVE – a leading cohort study of young drivers – began linking 20,000+ records obtained at baseline with the first of the outcome databases. The latter part of 2005 was devoted to planning a large case-control study to investigate key risk factors associated with heavy vehicle crashes.

The Division also continued recruiting patients for the Australian and New Zealand Intensive Care Society's collaborative trial – the Normoglycaemia in Intensive Care Evaluation (NICE) study – as well as recruiting rugby players for a large cohort study on mild traumatic brain injury. The latter study is an ambitious project that will assess over 3,000 players and develop return-to-play guidelines for players sustaining a concussion.

Professor Mark Stevenson

Director, Injury Prevention and Trauma Care Division

Mark Stevenson is Director of the Injury Prevention and Trauma Care Division at The George Institute and a Professor in the School of Public Health at The University of Sydney. Prior to these appointments, he was an Associate Professor in the School of Population Health, in the Faculty of Medicine and Dentistry at The University of Western Australia. Mark has also worked as an Associate Professor in the Department of Epidemiology and Biostatistics at Curtin University, Perth, Australia; as an epidemiologist at the Centres for Disease Control and Prevention in Atlanta, USA; and has spent time at Harvard

University School of Public Health.

A strong advocate for road and child injury prevention, Mark has worked on numerous national and international projects related to these areas. He is a member of the Australasian Trauma Society, sits on the editorial boards of international journals, is Chair of the New South Wales (Sydney) Chapter of the Australasian College of Road Safety and is a member of the Technical Advisory Group for The Alliance for Safe Children.



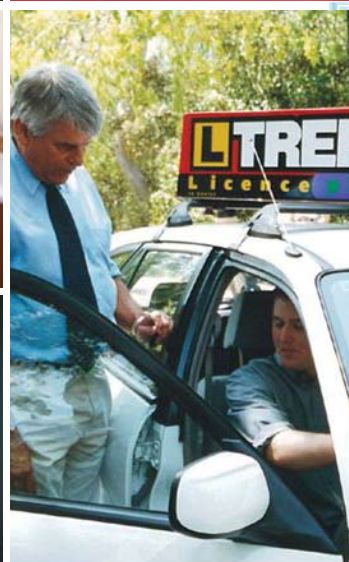
The Division's research program in the musculoskeletal area was highly successful in 2005. The HIPAID study – namely the Prevention of Ectopic Bone-related Pain and Disability after Elective Hip Replacement Surgery – concluded this year with the findings having significant practice implications. Importantly, the Division attracted over \$2 million in new funding to support clinical trials in osteoarthritis.

Research into Indigenous injury was also boosted during the year with the success of a NHMRC grant which will fund an intervention focused on safety promotion among Indigenous children in urban, rural and remote communities. This is the first grant of its kind, the Division's Indigenous research program is now suitably placed to expand over the ensuing years.

Internationally, the Division's research activities have also grown. In early 2005, the China Seatbelt Intervention in Guangzhou, China, was launched. This comprehensive intervention, which is supported by BP China and The George Foundation, and implemented by the Ministry of Public Security and the Traffic Command and Control Center (Guangzhou Police), continues to attract much international interest. The Division is also involved in extensive research on motorcycle helmet use in Vietnam. The research, which includes a review of current policies related to motorcycle helmet use, will be instrumental in changing existing road safety policies.

Finally, the Institute's commitment to building capacity in injury prevention and trauma care expanded during the year, when the Division obtained further funding from the Australian Department of Health and Ageing to develop an on-line falls prevention course. This builds on the already successful injury epidemiology course which is also delivered on-line. Part of the Division's strategic plan for the next triennium is to extend capacity development and training into Asia. This was facilitated in 2005 by the offering of a number of scholarships in Asia.

- The China Seatbelt Intervention was launched in Guangzhou, China in 2005. Attendees at the launch included dignitaries from the World Health Organization (WHO), BP and the Chinese government.
- Senior Research Fellow, Dr Marlene Fransen, received an NHMRC Career Development Award.
- First Indigenous injury prevention project, "Safe Koori Kids" received funding by NHMRC.
- Leading research on the role of mobile phones in motor vehicle crashes resulting in hospital attendance was published in the *British Medical Journal*.
- Additional funding was obtained to implement an on-line course in falls prevention for the elderly.
- NHMRC funding of the order of \$2 million was awarded for clinical trials on osteoarthritis.



- China Seatbelt Intervention
- Developing Return-to-Play Guidelines Following Mild Traumatic Brain Injury
- Development, Implementation and Evaluation of an Intervention to Increase the Use of Seatbelts in Abu-Dhabi, United Arab Emirates
- Evaluation of the Lismore Driver Education Program 'On the Road'
- Improving Vision to Prevent Falls: A Randomised Trial
- Injury Prevention and Safety Promotion for Urban Aboriginal Children and Youth in South Western Sydney
- Mobile Phone Use and Road Crashes
- Motorcycle Helmet Use in Vietnam: Prevalence, Barriers to Use and Policy Implications
- Normoglycaemia in Intensive Care Evaluation - NICE
- Prevention of Ectopic Bone-Related Pain and Disability after Elective Hip Replacement Surgery - HIPAID
- Saline vs. Albumin Fluid Evaluation Study - SAFE
- Safe Koori Kids: Community Based Approaches to Indigenous Injury Prevention
- Surge Capacity of Patients in Emergencies - SCOPE Study
- Systematic Reviews of Interventions in Motorcycle Safety
- Systematic Review of Trauma Volume and Patient Outcomes
- Young Driver Cohort Study - DRIVE

China Seatbelt Intervention



China Seatbelt Intervention

This research program seeks to determine whether the implementation of a comprehensive intervention will lead to an increase in seatbelt restraint use in Guangzhou, China. The evaluation of the intervention involves a controlled pre-test/post-test design. Extensive pre-test measures of key outcomes will take place, measures will be repeated, follow-up will assess the sustainability of the intervention, and an economic evaluation will be conducted to determine cost-effectiveness.

Observational surveys were conducted in early 2005 to estimate the prevalence of seatbelt use, and the official launch of the year-long intervention took place in April 2005. In October, the first of the social marketing activities and enhanced law enforcement programs took place, which will continue through 2006.

The George Institute is undertaking this work in collaboration with the China Ministry of Health and China Ministry of Public Security; the Guangzhou Municipal Bureau of Public Security, China. The Institute would like to acknowledge the funding provided by BP China and The George Foundation.

Institute Investigators:

Mark Stevenson, ZHANG Junhua, YU James, YING Zhou, Rebecca Ivers, Robyn Norton.

Developing Return-to-Play Guidelines Following Mild Traumatic Brain Injury

This unique study is investigating the incidence and risk factors for sport-related mild traumatic brain injury (mTBI) in non-elite rugby union players. The study will develop guidelines for managing return-to-play decisions following mTBI. A cohort study will track 3,500 rugby union players over three years. Demographic information, past history of injury, potential risk factors and results from a baseline neuro-psychological test will be collected.

Outcomes of interest will be the incidence of mTBI, the time until intact cognitive functioning is achieved, and when participants return to play. Based on findings, national and international guidelines and policies will be developed.

Baseline data collection for the first season was completed in April 2005 with 1,254 rugby union players recruited. Follow-up of concussed players, using a computer-based test that measures neurocognitive functioning including memory, brain processing speed, reaction time, and post-concussive symptoms, was completed in December 2005.

The George Institute is undertaking this work in collaboration with the School of Safety Science and the NSW Injury Risk Management Research Centre, The University of New South Wales; the University of Pittsburgh Medical Center, Center for Sports Medicine and the School of Psychology, Macquarie University. The Institute would like to thank the US Centers for Disease Control and Prevention for funding, through the University of Pittsburgh.

Institute Investigators:

Mark Stevenson, Katina Kardamanidis, Tracey Bruce.



Rugby image (middle left) courtesy of **sportography**

Development, Implementation and Evaluation of an Intervention to Increase the Use of Seatbelts in Abu-Dhabi, United Arab Emirates

This study will estimate the prevalence of seat belt use by motor vehicle drivers and front seat passengers in Abu-Dhabi, United Arab Emirates. The aim is to implement and evaluate an intervention to increase seat belt use in the city. This research reflects the approach undertaken as part of the China Seatbelt Intervention namely, the adoption of a pre-test/post-test design. However, due to financial and time constraints, the intervention is not being evaluated using a control site. Prior to the implementation of the intervention, extensive baseline measures of the key outcomes will be undertaken in Abu-Dhabi. These measures will be repeated at six months post-intervention. Currently in the pilot phase, full implementation of the project is expected to take place in 2006.

Institute Investigators:

Yousif Alhosani, Mark Stevenson.

Evaluation of the Lismore Driver Education Program 'On the Road'

'On the Road' is a comprehensive driver education program that targets Indigenous people on the Far North Coast of NSW. The Program seeks to assist licence achievement, support drivers with unpaid fines and disqualified drivers regain their licence through fine negotiation. The Program also aims to reduce the over representation of Indigenous Australians in the criminal justice system in the area.

The aim of the evaluation was to assess the effectiveness of the 'On the Road' Program. It also assessed the viability of the Program as a court diversion tool. ABS Population Statistics, Crime Statistics and Offence Data plus participation data was obtained, along with data from interviews and focus groups.

The evaluation revealed that 'On the Road' has been highly successful. An estimated 520 participants represented a steady growth in licensed driving. The Program also contributed to improved self-esteem and employment outcomes. Results, in terms of reduction in road crashes and the criminal justice system, are less clear. The increase of legal drivers within the community most likely contributed to reductions in incarceration and improved road safety. The evaluation recommended longer time-frames for evaluation and improved data. The George Institute is undertaking this work in collaboration with the Yooroang Garang, School of Indigenous Health Studies, The University of Sydney. The Institute would like to thank the Attorney General's Department of NSW for funding the evaluation.

Institute Investigators:

Kathleen Clapham, Rebecca Ivers, Mark Stevenson.

Improving Vision to Prevent Falls: A Randomised Trial

For older Australians, falls and visual impairment are common problems. The primary objective of this study was to measure the effect of identifying and treating visual impairment on risk of falls. It used a randomised trial with two groups: a control group and a group completing visual function and eye tests. Tests were followed by interventions to improve vision and reduce disability caused by impaired vision. Interventions included new spectacles, cataract surgery, laser therapy, home modifications and aids. A total of 617 participants were recruited between August 2002 and July 2004. Follow-up and analysis were completed in 2005.

The George Institute worked in collaboration with the Centre for Education and Research on Ageing, Concord Hospital, Sydney, Australia and the Centre for Vision Research, Westmead Hospital. The Institute would like to thank NHMRC for funding this trial.

Institute Investigator:

Rebecca Ivers.

Injury Prevention and Safety Promotion for Urban Aboriginal Children and Youth in South Western Sydney

This pilot study investigates the impact of injury on Indigenous children and youth in South Western Sydney. The study will document the extent of injury, increase understanding of suitable injury prevention strategies and propose community-based, collaborative interventions. These activities are anticipated to reduce injury among urban Indigenous children and youth, and promote their safety and resilience.

Across three stages, investigators will conduct a descriptive epidemiological study, qualitative field research and a community participatory approach to the design of an intervention. Following the completion of stage one, a paper has been published in the *Medical Journal of Australia* showing consistently higher rates of hospitalisation and death as a result of injury in the Indigenous population, which is consistent with data reported for other parts of Australia. Of particular concern is the rate of Indigenous death and hospitalisation due to interpersonal violence. Stages two and three are underway and have identified key stakeholders in an Indigenous child safety partnership in South Western Sydney. Development and piloting of an Indigenous child and youth safety intervention is planned for 2006.

The George Institute is undertaking this work in collaboration with Yooroang Garang, School of Indigenous Health Studies, The University of Sydney. The Institute would like to thank Australian Institute of Aboriginal and Torres Strait Islander Studies for its support of this research.

Institute Investigators:

Kathleen Clapham, Mark Stevenson.

Safe Koori Kids: A Community Based Approach to Indigenous Injury Prevention

Due to commence in January 2006, Safe Koori Kids will develop interventions that target injury amongst urban Indigenous communities. This research will explore the incidence and impact of intentional and unintentional injury in selected Indigenous communities in urban NSW; identify contributing factors to positive and negative consequences of injury; develop and evaluate initiatives aimed at increasing resiliency in at-risk children, youth and families; and make recommendations for changes to policy and practice across a range of government portfolios and non-government organisations.

A combination of qualitative and quantitative research methods will be undertaken over three phases. Baseline data includes collection of routine hospital data and school injury reports. Risk and protective factors will be identified by conducting in-depth interviews, injury impact narratives and case studies. A participatory approach is taken regarding the development of intervention and a local safety partnership. A pre-test/post-test design will be employed to evaluate the intervention.

The George Institute is working in collaboration with Yooroang Garang, School of Indigenous Health Studies, The University of Sydney, and would like to thank NHMRC for funding Safe Koori Kids.

Institute Investigators:

Kathleen Clapham, Mark Stevenson.



Dr Kathleen Clapham (far right) raises awareness of the Safe Koori Kids Project

Mobile Phone Use and Road Crashes

This project examined the role of driver distractions, in particular mobile phone use, in road crashes. Data collection for a case-crossover study took place in May 2002 to July 2004. Recruitment for a case-control study started in June 2003 to January 2004. Cases were injured drivers, while controls were drivers from nearby service stations sought at the same time to simulate traffic conditions.

The case-crossover study was published in the *British Medical Journal* in August 2005. Data showed the use of a mobile phone while driving increased the likelihood of a serious accident resulting in hospital attendance fourfold. Available hands-free devices did not mitigate the risk. Results of the case-control study were presented at the International Driver Distraction Conference held in Sydney in June 2005.

The George Institute undertook this work in collaboration with the Injury Research Centre, School of Population Health, The University of Western Australia. The Institute would like to acknowledge the support of the Insurance Institute for Highway Safety (U.S.) and the Motor Accidents Authority of New South Wales (MAA) for their funding of this project.

Institute Investigators:

Suzanne McEvoy, Mark Stevenson.

Motorcycle Helmet Use in Vietnam: Prevalence, Barriers to Use and Policy Implications

This project investigates the prevalence of helmet use in motorcycle riders in Hai Duong, Vietnam. Investigators will examine current policies, identify barriers of helmet use, study risky behaviour among drivers and make recommendations to increase motorcycle helmet use in Vietnam.

An observational survey design was implemented to estimate the prevalence of helmet use based on a random sample of the road hierarchy. A random sample of interviews with riders and pillion passengers is proposed to identify barriers to helmet use along with obtaining determinants of risky driving behaviour. Finally, an extensive review of government policies related to motorcycle helmet use will be undertaken. The cross-sectional observational surveys were completed in December 2005, whilst data from the interviews and policy review will be undertaken in early 2006. A paper has been drafted based on the findings from the cross-sectional observational surveys.

The George Institute is undertaking this work in collaboration with the Ministry of Health, Vietnam and the Hai Duong Provincial Government. Funding for this work was provided by an AusAID Scholarship and The George Institute.

Institute Investigators:

Dang Viet Hung, Mark Stevenson, Rebecca Ivers.

Normoglycaemia in Intensive Care Evaluation - NICE

The primary aim of the NICE study is to compare two blood glucose targets on all cause mortality in intensive care unit (ICU) patients. Hyperglycaemia is common in critically ill patients in ICUs, which has potential to cause adverse effects. Cases have been known to lead to organ failure, death, prolonged ventilation period and hence extending the length of stay in intensive care.

Patient sample will be recruited from more than 23 ICUs throughout Australia, New Zealand and Canada over two years. Treatment groups will be assigned to receive an insulin sliding scale regimen from two groups. A continuous infusion of insulin will commence if the blood glucose concentration exceeds the upper limit of the blood glucose range. The infusion will be adjusted to maintain the blood glucose concentration within the allocated range. Study treatment will be administered until the patient is eating, not requiring enteral or intravenous nutrition or until the patient leaves the intensive care unit. Following a pilot study in 2004, recruitment for the study was suspended until April 2005 whilst a new secure web-based insulin titration algorithm was developed. Recruitment recommenced in April 2005 and is surpassing the projected target.

The George Institute is undertaking this work in collaboration with the Australian and New Zealand Intensive Care Society Clinical Trials Group; over 23 hospitals in Australia, New Zealand and Canada. The Institute would like to thank the NHMRC and Health Research Council of New Zealand (HRC) for their funding of this project.

Institute Investigators:

Robyn Norton, Stephen MacMahon, Suzanne McEvoy, Bruce Neal, Mark Stevenson.

Project Manager:

Leonie Crampton.

The NICE study



Prevention of Ectopic Bone-Related Pain and Disability After Elective Hip Replacement Surgery - HIPAID

HIPAID explored the effects of a short, post-operative course of a non-steroidal, anti-inflammatory drug (ibuprofen) on ectopic bone-related pain and disability six to 12 months after elective hip replacement surgery. It was a randomised placebo-controlled trial involving 900 patients recruited from orthopaedic centres in Australia and New Zealand. The patient sample was randomised within 24 hours after surgery to receive either ibuprofen (1200mg daily) or matching placebo in three divided doses for 14 days.

A total of 26 hospitals throughout Australia and New Zealand recruited patients into the HIPAID study, with recruitment closing in November 2003, after a sample of 903 patients was randomised. Data collection was finalised in July 2004. The main results have been analysed and a paper has been submitted for publication.

The George Institute undertook this work in collaboration with The University of Auckland; Royal Prince Alfred Hospital, Royal North Shore Hospital and Prince Charles Hospital; Rehabilitation Studies Unit; Middlemore Hospital; and 17 other hospitals in Australia and New Zealand. The Institute would like to thank the NHMRC and Medical Benefits Fund (MBF) for their support.

Institute Investigators:

Marlene Fransen, Robyn Norton, Bruce Neal, Stephen MacMahon, Mark Woodward.

Saline vs. Albumin Fluid Evaluation Study - SAFE

The SAFE study investigates the effects of fluid resuscitation with 4% human albumin solution or normal saline on all cause mortality in critically ill patients in intensive care settings. Following a pilot study, the main study commenced in March 2002 using a randomised controlled double-blind trial of saline versus albumin. A total of 7,000 patients were recruited from intensive care units in Australia and New Zealand.

The study concluded there is no discernable difference in the death rate in intensive care patients resuscitated using either of two commonly used fluids. A paper describing the study rationale and protocol and an accompanying editorial were published in the *British Medical Journal* in 2003. In addition, a paper recounting the main findings was published in the *New England Journal of Medicine* in 2004. Further papers are in preparation.

The George Institute undertook this work in collaboration with the Australian and New Zealand Intensive Care Society Clinical Trials Group; the Australian Red Cross Blood Service; and 16 hospitals around Australia and New Zealand.

The Institute would like to thank the following funding agencies: NHMRC; the Health Research Council of New Zealand (HRC); Australian Government Department of Health and Ageing; Australian State and Territory governments; Auckland Hospital; Middlemore Hospital; Royal Hobart Hospital and CSL.

Institute Investigators:

Robyn Norton, Stephen MacMahon, Bruce Neal, Suzanne McEvoy, Sing Kai Lo.

Surge Capacity of Patients in Emergencies Study - SCOPE

SCOPE assesses current disaster clinical preparedness in Australasian metropolitan hospitals. A cross-sectional survey of all hospitals will quantify hospital surge capacity and create suitable benchmarks in hospital disaster clinical preparedness. Data collection was completed at the end of 2004. A paper has been submitted for publication.

The George Institute worked on this project in collaboration with the Australasian Trauma Society's Trauma Research Group.

Institute Investigators:

Matthias Traub, Suzanne McEvoy, Mark Stevenson, Robyn Norton.

Systematic Reviews of Interventions in Motorcycle Safety

The aim of this study is to review and synthesize evidence for interventions designed to reduce motorcycle injury, and to summarise the estimated reductions in risk of death and injury achieved by these interventions. Four Cochrane Collaboration-style systematic reviews will be completed:

1. Helmets for preventing injuries;
2. Effectiveness of interventions to increase motorcycle and rider conspicuousness in reducing motorcycle crash fatalities and injuries in motorcyclists;
3. Effectiveness of motorcycle rider training and education in reducing motorcycle crash fatalities and injuries in motorcyclists; and
4. Effectiveness of helmet use legislation in reducing motorcycle crash fatalities and injuries in motorcyclists.

The first review on helmets for preventing injury in motorcycle riders was published in the *Cochrane Database of Systematic Reviews* in February 2004. Protocols for the remaining reviews have also been published on the Cochrane Library. All reviews were completed by December 2005. Findings are currently being used to assist development of a series of intervention studies that examine methods of reducing injury amongst motorcycle riders in China.

The Institute would like to thank the following agencies for funding this project: The University of Sydney, SESQUI Research and Development Grants; Cochrane Health Promotion Field.

Institute Investigators:

Rebecca Ivers, Katina Kardamanidis, Stephanie Blows, Mark Stevenson, Robyn Norton.

Systematic Review of Trauma Volume and Patient Outcomes

This project will facilitate a systematic review to investigate the association between trauma volume and patient outcomes namely, in-hospital mortality. An extensive review of the literature was conducted by searching MEDLINE for English-language articles published between 1 January 1980 and 31 March 2005, which assessed the relationship between trauma volume and patient outcomes. Peer-reviewed articles were also collected. In-depth interviews in relation to trauma volume and patient outcomes were conducted with NSW trauma directors and all state trauma directors participated. Two separate papers have been drafted regarding the results of the systematic review and the interviews with the trauma directors. A report will be submitted to the NSW Institute of Injury and Trauma Management in early 2006.

The George Institute works in collaboration with NSW Institute of Trauma and Injury Management, which is also funding this review.

Institute Investigators:

Susanne Mouwen, Marlene Fransen, Mark Stevenson.

Young Driver Cohort Study - DRIVE

DRIVE investigates motor vehicle-related crashes and injuries among young drivers aged 17 to 24 years. Specifically, the project studies the significance of factors including road risk perceptions, driving behaviours, pre-licensing driving experience, training and education, mental health and sleep habits. DRIVE is a web-based study of 20,000 provisional drivers in New South Wales. Baseline information will be linked prospectively to information about motor vehicle infringements and crash and injury involvement.

This topical study was launched by the New South Wales Minister for Roads, in February 2003. Recruitment for the baseline phase is complete and findings will be published in 2006. The re-survey phase of the study commenced late 2005, and investigators began linking baseline results to NSW driving offence data.

The George Institute is undertaking this work in collaboration with the Injury Risk Management Research Centre and Centre for Multicultural Health, The University of New South Wales and the Roads and Traffic Authority of New South Wales (RTA). The Institute would like to thank NHMRC; the National Roads and Motorists' Association (NRMA) Motoring and Services; and the Motor Accidents Authority of New South Wales (MAA) for their generous support.

Institute Investigators:

Robyn Norton, Mark Stevenson, Rebecca Ivers, Jane Manderson.

Mobile phone study: Media coverage

Following over two years of extensive research investigating the role of mobile phones in motor vehicle crashes resulting in hospital attendance, the findings were published in the *British Medical Journal* in July 2005. They were extensively covered in the media, with staff in the division responding to journalists from around the world. Newspapers in North and South America, the UK, Europe and in Australasia reported on the research findings and the authors of the paper fielded interviews with television journalists including Good Morning America and leading news stations in the United States and Australia.

The research findings have been included in recent reports to state governments in Australia on issues related to driver distraction.



The social and economic costs of these diseases will increase along with the burden on healthcare systems, families and caregivers worldwide.

The Neurological and Mental Health Division is the result of the 2005 merger of two former George Institute Divisions, Neurological Diseases and Ageing, and Mental Health, and reflects the increasing realisation of the interaction between mental health and chronic disease. Projects in this area also address the concern and implications for low and middle-income countries facing emerging epidemics of these conditions.

Stroke is already established as a major cause of death and long-term disability and this burden will rise in line with population changes. Together with stroke, coronary artery disease is expected to become the leading cause of disease globally by the year 2020, with depression as the second leading cause. It is also anticipated that mental health disorders will increase their share of the total global burden of disease from 10.5% in 1990 to 15% by 2020. The social and economic costs of these diseases will increase along with the burden on healthcare systems, families and caregivers worldwide.

It is clear that there are significant gaps in knowledge about mental disorders in the Asia-Pacific region, most notably how these disorders relate to other non-communicable diseases, and the efficacy and effectiveness of interventions for these disorders.

During 2005, work commenced on:

- the Division's leading study, INTERACT (see page 28);
- analysis of two ideal stroke incidence studies (the Auckland Regional Community Stroke study and the Perth Community Stroke Study) to determine trends in stroke incidence, stroke burden and the impact of prevention strategies;
- developing a program of research on depression in vascular diseases, including observational studies with cross-cultural comparisons and an intervention study; and
- several acute stroke trials (CT/MRI perfusion, FAST, SAINT II, PERFORM).



Professor Craig Anderson

Director, Neurological and Mental Health Division

Craig Anderson is Director of the Neurological and Mental Health Division at The George Institute and is Professor of Stroke Medicine and Clinical Neuroscience in the Faculty of Medicine at The University of Sydney and the Department of Neurosciences of Royal Prince Alfred Hospital.

Craig holds specialist qualifications in clinical neurology and geriatrics, and a PhD in medicine and epidemiology from The University of Western Australia. From 1997 to 2003, he was Professor of Gerontology and Co-Director of the Clinical Trials Research Unit at The University of Auckland.

He is a member of several specialist societies, is an Editor for the Cochrane Stroke Group, and is currently President of the Stroke Society of Australasia. He has published widely on the clinical and epidemiological aspects of stroke, cardiovascular disease and aged care.

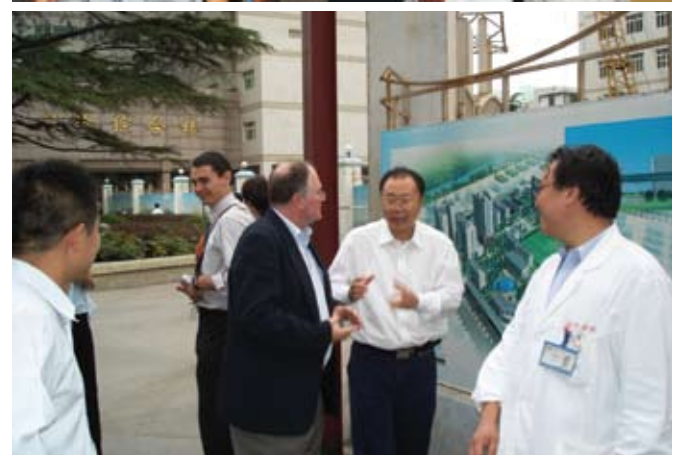
Craig is on the Steering Committee for several large-scale research projects including the Ongoing Telmisartan Alone and in Combination with Ramipril Global Endpoint Trial (ONTARGET) global trials programme in cardiovascular prevention, involving over 30,000 patients in 40 countries.

- Scientific symposia on the 'Co-morbidity of stroke and mental illness' were jointly hosted with Peking University for hospital clinicians and researchers in Beijing in April 2005.
- An evening seminar on 'Treating emotional disorders associated with physical illness' was held at The University of Sydney, including a keynote presentation from Allan House, Professor of Liaison Psychiatry, The University of Leeds.
- A collaborative group of investigators and start-up activities commenced for a randomised controlled trial on enhancing mood following stroke.
- Publication of the first paper from the Auckland Regional Community Stroke (ARCOS) study in collaboration with The University of Auckland, which showed a decline in stroke incidence in Auckland over the last two decades. Further publications from the ARCOS study are in press and under consideration.
- Two Institute staff, Ms Maree Hackett and Professor Craig Anderson, joined the editorial boards of *Stroke* and *Aging Health* respectively.



Studies in the Division

- Familial Intracranial Aneurysm - FIA
- Trends in Stroke Incidence and Impact in Populations
- Intensive Blood Pressure Reduction in Acute Cerebral Haemorrhage Trial - INTERACT
- Ongoing Telmisartan Alone and in Combination with Ramipril Global Endpoint Trial - ONTARGET



Studies

Familial Intracranial Aneurysm - FIA

This study aims to identify the gene, or genes associated with the formation and rupture of intracranial aneurysm in families with multiple affected family members. This is a large-scale investigation, conducted across 23 centres internationally, to identify regions on chromosomes that lead to the formation and potential rupture of intracranial aneurysms in the blood vessels of the brain. The study includes interviews and blood analysis from several hundred families from Australia, New Zealand, Canada and the United States who have two or more affected members with intracerebral aneurysms. Results from the study are expected to be available in 2007.

The George Institute is working on this project in collaboration with the Royal Prince Alfred Hospital; Flinders Medical Centre; Westmead Hospital; Royal Perth Hospital; Royal Melbourne Hospital; Auckland Hospital/Clinical Trials Research Unit; Royal North Shore Hospital; Sir Charles Gairdner Hospital; Royal Adelaide Hospital; the University of Cincinnati. The Clinical Trials Research Unit coordinates the study within the Australia/New Zealand region. The Institute would like to thank the National Institutes of Neurological Disorders and Stroke, National Institutes of Health, USA, for their funding of this work.

Institute Investigator:

Craig Anderson.

Project Manager:

Colin Howe.

Trends in Stroke Incidence and Impact in Populations

This study will aim to determine the impact of prevention strategies and improvements in stroke healthcare services on the incidence and outcome of stroke in different populations over recent decades. Analyses of datasets from the Auckland Regional Community Stroke Study (ARCOS) and Perth Community Stroke Study (PCSS) are being undertaken. Both ARCOS and PCSS have been shown to meet the stringent criteria for an 'ideal' stroke incidence study, providing the most reliable data on the incidence and outcome from stroke in a population.

Trends in the incidence of stroke will be investigated using crude and standardised rates by subgroups (age, sex and ethnicity). Trends in survival and outcome will be conducted, while data from the above studies will be pooled with similar datasets from The University of Melbourne, Australia. This will help ensure a better understanding of risk factors for various stroke subtypes and the organisation of various management strategies. Both ARCOS and PCSS have been completed and the data is cleaned and ready for analysis. Further data on the trend analyses will be available in 2006.

The Institute is undertaking this research in collaboration with the Clinical Trials Research Unit (CTRU), The University of Auckland; the School of Population Health, The University of Western Australia; the School of Population Health, The University of Queensland; the Stroke Prevention Research Unit, the University of Oxford. The Institute would like to acknowledge the financial support of the Health Research Council of New Zealand (HRC).

Institute Investigators:

Craig Anderson, Maree Hackett and Kristie Carter.

Intensive Blood Pressure Reduction in Acute Cerebral Haemorrhage Trial - INTERACT

INTERACT is a large clinical trial which will determine the effects of early intensive blood pressure lowering on death and disability after intra-cerebral haemorrhage, one of the most serious forms of stroke which affects up to three million people worldwide each year. It is a randomised controlled trial involving approximately 70 investigators across Australia, China, New Zealand, Singapore, Hong Kong, and the USA, with potential sites in India, Malaysia, Korea, Taiwan, Thailand and the Philippines. It will determine if a policy of early intensive, titratable blood pressure control against more conservative, guideline based blood pressure management can reduce death and disability in intracerebral haemorrhage patients.

Investigators held a meeting in Beijing in April 2005 to refine protocol for the trial, followed by start-up meetings in Melbourne (September 2005), Shanghai and Beijing (October 2005).

Recruitment for INTERACT commenced during the year, and a George Foundation scholar from Sydney has joined the Institute's China office to assist with the study.



Launch of INTERACT, China



Craig Anderson presents INTERACT at Rui Jin Hospital, China

Studies

Intensive Blood Pressure Reduction in Acute Cerebral Haemorrhage Trial - INTERACT

One of the The George Institute's largest clinical trials, INTERACT, aims to determine if early intensive blood pressure-lowering therapy can reduce death and disability from intracerebral haemorrhage.

The study involves more than 4,000 participants and approximately 70 investigators across the globe. International meetings have been held in China and the USA, networking with representatives of the National Institute of Neurological Diseases and Stroke at the National Institutes of Health (NIH), in preparation for the vanguard phase of the study to be undertaken in 400 participants during 2005-2006. Further information is highlighted in the box on page 28.

The George Institute is undertaking this work in collaboration with the National Stroke Research Institute; the Greater Metropolitan Clinical Taskforce; Australasian Stroke Trials Network; Hunter Stroke Service.

The Institute would like to acknowledge the funding for this project from the NHMRC.

Institute Investigators:

Craig Anderson, John Chalmers, Bruce Neal, Stephen MacMahon, Mark Woodward, Ken Butcher, Hisatomi Arima.

Project Manager:

Jill Chisholm.

Ongoing Telmisartan Alone and in Combination with Ramipril Global Endpoint Trial - ONTARGET

The renin-angiotensin system (RAS) of the body may cause harmful cardiovascular effects because of trophic changes such as left ventricular hypertrophy (LVH), negative effects on endothelial function and contributions to the development of atherosclerosis. Blockade of the RAS not only lowers blood pressure but may also reverse these adverse effects.

ONTARGET is a large-scale, randomised double-blind, double-dummy trial comparing the effects of the novel angiotensin II receptor blocker telmisartan, the ACE inhibitor ramipril, alone and in combination, on vascular outcomes in patients with increased cardiovascular risk. ONTARGET is the largest cardiovascular prevention trial to date, involving over 30,000 patients (including 6,000 ACE inhibitor intolerant patients in a nested parallel study called TRANSCEND). The study commenced late 2001, with patient recruitment from 40 countries over two years and follow-up over four years. The study is to be centrally coordinated from the Population Health Research Unit of McMaster University, regionally coordinated from the Clinical Trials Research Unit, The University of Auckland. The study is funded by a grant from Boehringer Ingelheim through the Hamilton Health Sciences Corporation, McMaster University.

Institute Investigator:

Craig Anderson.

Project Managers:

Angela Wadham and Judy Murphy,
Clinical Trials Research Unit, The University of Auckland.

Visiting Fellows/Researchers

In 2005, the Division hosted several visiting fellows and medical students, including:

- Dr Alex Headley, one of the newest members of the Division, was the recipient of an AusAID Australian Youth Ambassador for Development award and received a George Foundation scholarship to work in Beijing on a series of stroke-related studies. Alex moved to Beijing in October 2005 for 12 months to work with researchers at Beijing University on INTERACT and an observational study of stroke incidence and outcome.
- Mr Zehra Memon, a visiting medical student from Pakistan, spent a month in the Division developing an on-line survey of the management of mood disorders following stroke, and conducting a systematic review of research on the cultural expression of depression in the setting of physical disease.
- Dr MING Cai, a neurologist from China on a World Health Organization fellowship, spent six months in the Division working on a series of stroke-related studies to be conducted in China and Australia. This includes adapting the on-line survey of the management of mood disorders for use in China.

One of the most significant research projects in 2005 was again the Asia Pacific Cohort Studies Collaboration (APCSC).

The Epidemiology and Biostatistics Division is an integral contributor to The George Institute's research and development activities, particularly in the areas of study design and data analysis. Whilst the Division undertakes independent research and development activities it also forms partnerships with external collaborators on specific projects. Another important part of the Division's activities is the provision of training in quantitative methods to medical researchers.

One of the most significant research projects in 2005 was again the Asia Pacific Cohort Studies Collaboration (APCSC). Involving more than 650,000 participants and 44 studies in ten countries, the APCSC investigates associations between blood pressure, obesity, lipids, cholesterol, diabetes and smoking with cardiovascular diseases and cancer.

The Obesity in Asia Collaboration seeks to provide evidence regarding the relationships between adiposity and cardiovascular risk factors in the Asia-Pacific region. Researchers from several countries in the region contributed datasets to the large Collaboration during 2005, including different measures for several hundred thousand individuals.

The Division is also involved in collaborative projects based at other institutions including The University of Dundee, The University of Oxford and The University of Glasgow.

In 2005, members of Mahidol University attended two workshops run by the Institute in Bangkok, Thailand. Building on earlier seminars held in previous years, the workshops focused on data analysis and writing papers for submission to international journals. Workshops were also held for Australian researchers on statistical methods in health research, including a course commissioned by the New South Wales Department of Health.



Professor Mark Woodward
Director, Epidemiology and Biostatistics Division

Mark Woodward is Director of the Epidemiology and Biostatistics Division at The George Institute in Sydney, Australia, Professor of Biostatistics at The University of Sydney and Honorary Consultant Epidemiologist at Royal Prince Alfred Hospital, Sydney.

Professor Woodward obtained his PhD from the Department of Applied Statistics at the University of Reading, UK, where he subsequently worked for several years, most recently as Senior Lecturer in Statistical Epidemiology. He holds Visiting Professorships at Mahidol University in Bangkok, Thailand and the University of Glasgow in Scotland. He is also an Honorary Senior Research Fellow at the Cardiovascular Epidemiology Unit of the University of Dundee, Scotland, and was previously the Director of the Institute of Statisticians' Training and Development Centre in the UK.

Professor Woodward has extensive experience of work in developing countries, including more than two years as Training Advisor to the Central Statistics Office in Zimbabwe. He has also worked for several aid agencies, including the Asian Development Bank, the World Health Organization and the UK Department for International Development. In 2004/05 he worked for the United Nations on developing a training package for the Millennium Development Goals. He is the author of two textbooks on medical statistics, the latest of which, *Epidemiology: Study Design and Data Analysis*, had its second edition published in January 2005.

- The first meeting of the Obesity in Asia Collaboration was held in Kuala Lumpur, Malaysia in July 2005, funded by Sanofi-Aventis.
- Extensive global media coverage was obtained for research completed by the APCSC.
- Two workshops on statistical methods were held in Sydney, with over 75 participants.
- A report was delivered to the Scottish Intercollegiate Guidelines Network on social inequalities in cardiovascular disease, accompanied by significant media coverage and a publication in *Heart*.
- The first paper on cancer by The George Institute was published by the *British Journal of Cancer*.

Studies in the Division

- Asia Pacific Cohort Studies Collaboration - APCSC
- Fetal-Origins Overviews
- Fletcher Challenge Blood Samples Study
- Obesity in Asia Collaboration
- PROGRESS Blood Samples Study
- PROGRESS Economic Analysis



Professor Mark Woodward receives his visiting Professorship at Mahidol University, Thailand



Research Fellow Alexandra Martiniuk and PhD students Alireza Ansari Moghaddam and Crystal Lee attend the World Congress of Epidemiology, Thailand



Dr Suzanne Ho welcomes Professor Mark Woodward to the Chinese University of Hong Kong



Epidemiology and Biostatistics Division held several successful workshops throughout 2005

Studies

Asia Pacific Cohort Studies Collaboration - APCSC

The Collaboration aims to provide direct, reliable evidence about determinants of stroke, coronary heart disease and other common causes of death in Asia-Pacific populations.

The APCSC involves the largest known medical database in the region. Analyses are developed in conjunction with colleagues at the Clinical Trials Research Unit in Auckland. Presentations of APCSC data have been made and papers published during 2005 (see **Publications and Presentations** later in this Report). More papers are in preparation, and links have been established with the Diverse Populations Collaboration in the USA.

The George Institute conducts this work in collaboration with Academia Sinica; the Chinese Academy of Medical Sciences; Sugiyama Jogakuen University; Shiga University; The University of Auckland; Yonsei University; and more than 80 investigators representing 44 cohorts from ten countries.

The Institute would like to thank the NHMRC and Pfizer for their support of this project. In November 2005, The University of Sydney's Cancer Research Fund also allocated \$100,000 over the next two years for the work of the APCSC.

Institute Investigators:

Mark Woodward, Rachel Huxley, Stephen MacMahon, Federica Barzi, Anushka Patel, Alex Martiniuk, Alireza Ansari Moghaddam.

Fetal-Origins Overviews

This study investigated evidence for the fetal-origins hypothesis of adult disease that proposes that impaired fetal and neonatal growth is associated with increased risk of morbidity and mortality in adult life.

Data collection for the analyses of the association between birth weight and coronary heart disease is finished and preliminary analyses have begun, with publication of results expected in 2006. Data collection for the renal and diabetes reviews is ongoing.

The George Institute worked on this study in collaboration with the Clinical Trial Service Unit, the University of Oxford; The University of Bristol; St George's Hospital, London; Harvard University. The Institute would like to acknowledge the funding agencies, NHMRC and SESQUI.

Institute Investigators:

Rachel Huxley, Alan Cass, Sarah White, Federica Barzi, Mark Woodward, Vlado Perkovic.



Epidemiology, Study Design and Data Analysis Course, Seoul

Obesity in Asia Collaboration

A major developing issue for the Asia-Pacific Region is an increasing obese and overweight population, the potential impact of which needs to be addressed. Historically, research has examined links between adiposity and cardiovascular disease (CVD) risk factors in Caucasians. A growing body of evidence suggests that ethnic groups are also at risk, however sufficient evidence to reliably examine this issue is lacking.

The Obesity in Asia Collaboration has been developed to provide reliable evidence concerning the relationships between anthropometrical markers of adiposity with CVD risk factors within, and across, ethnic groups. To date, researchers from 13 countries in the region have contributed datasets to this Collaboration, with information on different measures of adiposity and CVD risk factors on nearly 1.5 million individuals.

A further aim of the Collaboration is to facilitate the development of ethnically appropriate Body Mass Index (BMI) cut-points and aid in the development of intervention strategies for obesity-related disorders.

Fletcher Challenge Blood Samples Study

This study aims to identify novel risk factors for myocardial infarction (MI). In the early 1990's more than 10,000 participants, mainly employees of Fletcher Challenge, a multi-industry New Zealand organisation, were recruited for this study. Over the last two years, individuals who had suffered an MI since the study began were identified through linkage with routine medical records of hospitalisation and death. The hypotheses to be addressed are whether novel markers of oxidative stress and inflammation are independently associated with MI. Cases and controls have been identified and blood samples transported to Glasgow, Perth and Sydney.

The George Institute undertook this work in collaboration with the Centre for Thrombosis and Vascular Research, The University of New South Wales; the Department of Medicine, the University of Glasgow; the University of Cambridge; The University of Western Australia; Washington University. The Institute would like to thank the following agencies for their support: the US National Institutes of Health; the Emerging Risk Factors Collaboration; the University of Cambridge and the NHMRC.

Institute Investigators:

Mark Woodward, Stephen MacMahon, Robyn Norton.

Obesity in Asia Collaboration

During 2005, this large collaboration continued to work towards providing reliable evidence regarding the relationships between anthropometric markers of adiposity and cardiovascular risk factors within the Asia-Pacific Region. The study will also determine which measure of adiposity exhibits the strongest correlation with fasting plasma glucose and blood pressure. Research staff will estimate the relative risks for the association between measures of adiposity with diabetes and hypertension and examine whether there is regional and/or ethnic heterogeneity in the associations.

Data from 22 contributing studies, with information on approximately 1.5 million people, has been obtained and additional data is being sought. A study protocol has been published. Analyses have commenced and preliminary results presented at international conferences. Further information on this collaboration is highlighted in the box on page 32.

The George Institute worked on this project in collaboration with the International Obesity Task Force, London; Utrecht University; Department of Human Nutrition, The University of Sydney. The Institute would like to acknowledge funding for the study from the International Obesity Task Force, Sanofi-Aventis and The George Foundation.

Institute Investigators:

Rachel Huxley, Mark Woodward, Federica Barzi, Crystal Lee.

PROGRESS Blood Samples Study

PROGRESS aims to ascertain the relationship between a number of risk factors and the risk of secondary cardiovascular disease amongst patients who survived a stroke or transient ischaemic attack. Further details on PROGRESS are included in the **Cardiac and Renal Division** section of this Report.

The George Institute collaborated with The University of Melbourne and the University of Glasgow on this research. The Institute would like to thank the funding agencies US National Institutes of Health; Australian Health Management Group; Pfizer; and NHMRC.

Institute Investigators:

Mark Woodward, Anushka Patel, Bruce Neal, John Chalmers, Stephen MacMahon.



Epidemiology and Biostatistics staff are often asked to give guest lectures at events

PROGRESS Economic Analysis

This study is a cost-benefit analysis of the PROGRESS study. The purpose is to evaluate the economic benefits of the blood pressure-lowering treatment used in PROGRESS, compared to the costs of alternative types of treatment in the UK.

A Markov transition model was used to forecast movements between health states after a stroke, with and without the PROGRESS study treatment. These health states included levels of disability whilst free-living, during hospitalisation and at death. Costs were attached to each state using recent UK health service data. Final results were made available in 2005 and have been submitted for publication in health economics and medical journals.

The George Institute worked in collaboration with the University of St Andrews. The Institute would like to acknowledge the funding agency, Servier.

Institute Investigator:

Mark Woodward.

The Institute's China Program aims to facilitate the adoption of evidence-based approaches to improving health in China.

Through a range of research, policy and training activities developed in consultation with its other Divisions, the Institute's China Program aims to facilitate the adoption of evidence-based approaches to improving health in China. This includes initiating and supporting policy development that ensures clinical and population-based health research is effectively translated into practice.

The China Program strives to build capacity in population and clinical research, through both knowledge and skills transfer, and team building. In 2005, the program continued to adopt research and health policy initiatives in cooperation with academics, healthcare providers, government representatives, international agencies, corporate partners and the community. Significant growth in staff resources was achieved in the Program in 2005, and the number of clinical research sites in China increased from 50 to over 200.

The Second China Health Policy Roundtable was held in China in April 2005. Health policy experts from Australia, Japan, Singapore, the United States, and the United Kingdom joined Chinese health officials in Beijing to share their knowledge of healthcare safety. The policy dialogue focused on several topics including healthcare safety administration, consumer satisfaction and health system responsiveness, as well as regulation and financing in healthcare safety.

Following the Roundtable, the government indicated its intention to establish a national safety body to coordinate the safety and quality agenda for China, drawing on existing resources and partnerships in the health industry. The George Institute is working with the China Ministry of Health to develop models to illustrate how such a body might function.

Dr Lucy Chen Director, China Program

Based in Sydney and Beijing, Dr Lucy Chen currently heads the organisational development of The George Institute in China. A key responsibility of her role is to build alliances and lead the strategic positioning of the Institute's growth in China. She has frequently been commissioned to bring together Chinese health officials with senior officials, senior academics and advisors from the governments of Australia and the UK, and representatives from the United Nations, at forums on China's health system and health-related policy.

Lucy advises and contributes to health sector reform, health planning and policy development at a senior level, including the establishment of management structures for development and implementation of multifaceted projects. She also leads the design of quality systems in primary healthcare settings and rural health service delivery systems in China.



In early September 2005, the Program also planned and participated in a forum on public health education reform. This forum was hosted by The University of Sydney's College of Health Sciences and Peking University's Health Science Center, with support from The George Institute. Participants from the China Ministry of Education and China Ministry of Health, together with seven leading schools of Public Health in China discussed the current state of public health education and the needs of the public health workforce in China. A working group has prepared a summary of recommendations for the China National People's Congress and the State Council.

Another highlight of the Institute's China Program in 2005 was the hosting, together with The University of Sydney's College of Health Sciences, of a visit to Sydney by China's leading health official, Mr GAO Qiang, Minister of Health. The visit was part of the Minister's initiatives to improve health practices in China. To assist with the establishment of a robust public health system in China, Minister GAO examined how governments in Australia finance and support healthcare and how private and public sector health providers contribute to the system. The Minister also delivered a presentation on health service reform at The University of Sydney and met with the NSW Health Minister and key government health personnel to discuss the roles and responsibilities of federal and state bodies in supporting Australia's health system.

The China-Australia Partnership for Health

This unique partnership is a collaborative project between Peking University Health Science Center, The George Institute and The University of Sydney. This collaboration aims to ensure a sustained commitment to the implementation of new clinical and population health research. This research targets the burden of disease and a better understanding of global health issues that are both relevant and transferable to countries with similar demographics and economic growth.



Professor HUANG Jiefu, Vice-Minister, China Ministry of Health at the 2005 China Health Policy Roundtable



China's Minister of Health, Mr GAO Qiang visits The George Institute, Sydney 2005



The second annual China Health Policy Roundtable, China

- The second China Health Policy Roundtable Series was held in April 2005.
- Membership of the China Advisory Board was renewed in August 2005.
- A Public Health Education Reform Forum was held in Beijing, China in September 2005.
- China's Minister of Health, Mr GAO Qiang and his delegation visited Sydney in September 2005.
- The Beijing Lunchtime Seminar Series at Peking University College of Health Science was launched in November 2005.



Top: Vice Chairman, The Standing Committee of The National People's Congress Professor HAN Qide (left), and Vice-Minister, Ministry of Education Professor Wu Qidi (second from right) at the Public Health Education Reform Forum in Beijing.

Bottom: The Public Health Education Reform Forum at Peking University.

Intensive Blood Pressure Reduction in Acute Cerebral Haemorrhage Trial – INTERACT

Details regarding INTERACT can be found in the **Neurological and Mental Health Division** in this Report.

Asia Pacific Cohort Studies Collaboration - APCSC

Information on the APCSC is included in the **Epidemiology and Biostatistics Division** in this Report.

China Salt Substitute Study – CSSS

Details on CSSS can be found in the **Cardiac and Renal Division** of this Report.

Clinical Pathways for Acute Coronary Syndromes in China - CPACS

Information regarding CPACS can be found in the **Cardiac and Renal Division** Report.

Action in Diabetes and Vascular Disease: Preterax and Diamicon MR Controlled Evaluation - ADVANCE

Details on this study can be found in the **Cardiac and Renal Division** in this Report.

China Plant Sterol Trial - CPST

Details on CPST are listed in the **Cardiac and Renal Division** in this Report.

China Seatbelt Intervention

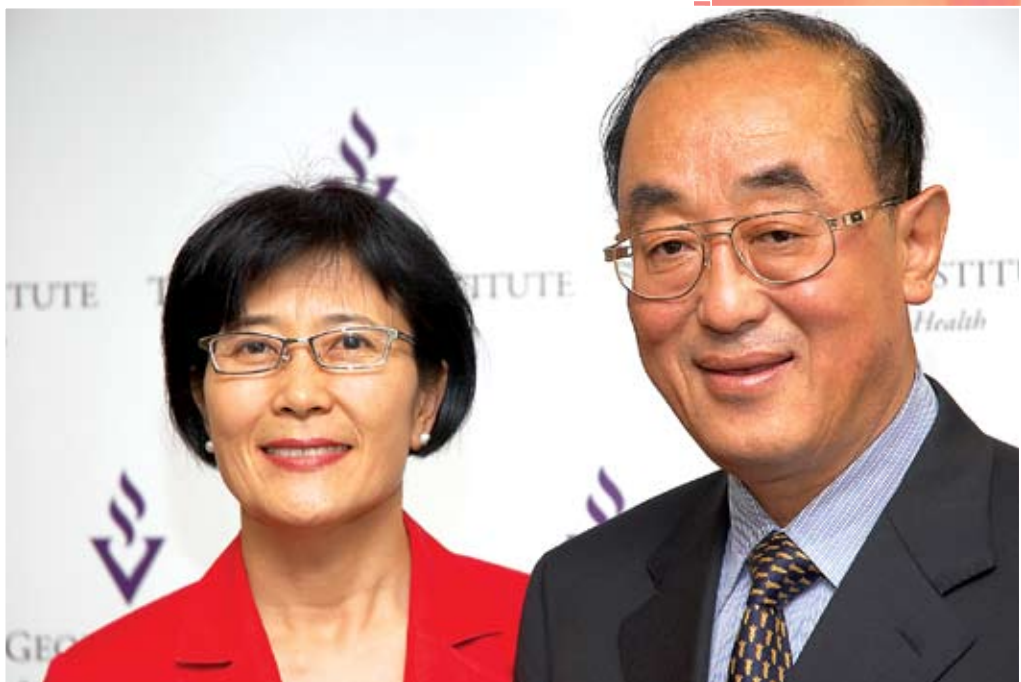
Information on this intervention can be found in the **Injury Prevention and Trauma Care Division** in this Report.

Obesity in Asia Collaboration - OAC

More information can be found in the **Epidemiology and Biostatistics Division** in this Report.

Socio-Economic Burden of Depression

The project aims to investigate knowledge of, and attitudes towards depression and its treatment in Australia and the Asia-Pacific region. Initial discussions between The George Institute and the Mental Health Institute of Peking University Health Science Center took place in April 2005.



A unique and important component of the Institute's work is the translation of research into policy and practice initiatives in the clinical and public health areas.

The management and conduct of research into this process is the remit of the Institute's Policy and Practice Program. Originally established as a Division in 2004, an opportunity arose to review the Institute's approach to policy and practice management in 2005, with senior Institute staff now contributing via a Policy and Practice Working Group. This working group comprises senior research and public affairs staff, as well as visiting scholars with an interest in the program. The working group will develop options for a future direction and focus of the program, including the possibility of developing an international health 'think tank' within the Institute.

The following details ongoing policy work within the Institute during 2005, including new initiatives of the working group:

Policy Research

Dr Stephen Jan joined the program full time in July 2005 as Senior Health Economist, signalling the commitment of the Institute to developing a program of health economics as well as building collaborations with, and capacity in, other Divisions within the Institute. His areas of expertise include economic evaluation, the use of economic evidence in priority setting and the economics of health sector regulation.

The program also hosted a visiting scholar from Johns Hopkins University in 2005. Katherine DeLand is a PhD candidate in international health law and policy, with her research focusing on the Framework Convention on Tobacco Control. This research has facilitated a closer relationship with both the Faculty of Law and the School of Public Health at The University of Sydney. This common interest has led to a proposal for a future China Roundtable focusing on the implementation in China of the Framework Convention for Tobacco Control.

The Policy and Practice Working Group has also agreed to map current activity in translational research and make recommendations as to the ways in which it might be better supported within the Institute. Possible outcomes include the recruitment of staff with experience in health systems research and health delivery research and/or providing training opportunities in order for Institute staff to better undertake such research.

Translating Research into Policy and Practice

Many Divisions within the Institute undertake policy-relevant research, which is noted elsewhere in this Report. To this end, the Policy and Practice Program has endeavoured this year to develop and improve strategies to effectively guide research into the policy arena.

In 2005, considerable thought and planning was devoted to building and maintaining strategic relationships with key state and federal government departments, as well as business, community and international stakeholders. The goal of this work is to influence policy agendas and further the health-related goals of the Institute.

Initiatives in this area will be pursued in the next 12 months.

The Australian Coalition for Global Health Research

The Australian Coalition for Global Health Research was formally launched at the conclusion of the second roundtable on Global Health Research, held in Canberra on 17 and 18 October 2005. The Coalition is the outcome of two years of intensive planning and development by the Institute and other key bodies.

In 2003, The George Institute, in conjunction with the Australian International Health Institute, at The University of Melbourne, hosted a roundtable meeting on Global Health Research. The following year, the Institute supported the establishment of a planning group which laid the groundwork for the Coalition. This work culminated in the first Roundtable in 2004.

The next steps include follow-up with stakeholders and determining an ongoing structure for the Coalition.

Leadership and Public Debate

An important part of the Institute's Program is to take a leading role in high-level debate on international issues that affect health systems and practices. The Program works with numerous international collaborators, including the China Ministry of Health, and has also taken a key role in facilitating the establishment and launch of an Australian forum advocating the importance of global health research in Australia. More information about the recently launched Australian Coalition for Global Health Research can be found on page 42 of this Report.

The Policy and Practice Program also facilitates the China Health Policy Roundtable Series, which provides a forum for senior Chinese health officials from central and regional areas to discuss health policy issues with key international experts and peers. This series was fostered by a Memorandum of Understanding (MOU) between The George Institute and the Department of International Co-operation of the China Ministry of Health, to hold high level policy discussions each year from 2003 to 2006. Each year, the China Ministry of Health provides several topics from the priorities of their annual work plan, which are then developed by the Institute into the program for each Roundtable, in consultation with an International Reference Group. This group consists of highly regarded and experienced professionals from a wide range of disciplines and countries including the UK, the USA, China, Thailand, Singapore and Australia.

China's Health Minister, Mr GAO Qiang, indicated during his visit to Sydney in September 2005 his intention to renew this three-year MOU with the Institute to support further Roundtables. More information about the Roundtable held in Beijing in April 2005 and the plans for 2006, can be found opposite.

To stimulate discussion on healthcare policy and practice, the Program has continued to support an International Health Evening Seminar Series, in collaboration with other groups such as the Australian Health Policy Institute. These seminars provide an opportunity to highlight important international health policy issues and hear the perspective of many high-profile international and domestic health experts. These seminars also raise the profile of the Institute as a key player in international health. During 2005, seminar topics included:

- Tsunami: Opportunity in Crisis?
- The Growing Challenge of Non-Communicable Disease Control in the Asia-Pacific Region.
- Health Systems and Health Status in Asia: Has Avian Flu had a Positive Impact?
- The Market for Human Organs: The Anatomy of Regulatory Failure.

The Institute is planning further seminars for 2006.

Capacity Building

The Policy and Practice Program is also committed to building capacity in policy research and practice. In partnership with the Australian Health Policy Institute and The University of Sydney's School of Public Health, the Institute developed components for a new Graduate Certificate in Health Policy at The University of Sydney, scheduled to commence in 2006.

Other capacity building activities fostered by the Program include the development and delivery of training programs and the mentoring of researchers, investigators and postgraduate students at the Institute.

China Health Policy Roundtable Series, 2005/06.

The China Health Care Safety Roundtable took place on 15 and 16 April 2005 in Beijing and topics relevant to the development of healthcare safety in China were discussed by both notable international speakers and delegates from the China Ministry of Health.

The following themes were explored:

- National Goal-setting for Healthcare Safety;
- Consumer Satisfaction and Health System Responsiveness;
- Dealing with Incidents, Adverse Events and Errors;
- Regulation and Financing in Healthcare Safety;
- Information Management for Healthcare Safety; and
- Education and Training for Cultural Change.

Appropriate policy options relating to these themes were discussed further in a policy workshop which concluded the two-day meeting. Following this, a report was prepared for consideration by the State Council, reflecting the Chinese government's support for the policy dialogue. The final report and recommendations from this Roundtable were completed by the research group at The George Institute, in consultation with the International Reference Group, and presented to China Ministry of Health in November 2005.

A program for the 2006 Roundtable 'Affordable and Accessible Healthcare Services in China' has been developed and the event is planned for April 2006 in China. Dr CHI Weiwei, a Visiting Policy Fellow at the Institute sponsored by The George Foundation from July to December 2005, undertook the background research to develop this Roundtable.

The Institute would like to acknowledge The George Foundation for its ongoing support of this Series, as well as the generous sponsorship of Merck Sharp & Dohme, the Commonwealth Department of Health and Ageing, the Department of International Relations at Joint Commission International, Health Policy and Management Department, School of Public Health, Yale University and International HISP Ltd, amongst others.

The second half of 2005 saw the establishment of the Centre for Research Management within The George Institute.

The Institute's research portfolio is diverse, and embraces a broad range of programs including:

- randomised clinical trials of new treatment and prevention strategies;
- cluster randomised trials of novel health service interventions; and
- observational studies of the causes and outcomes of disease and injury.

The Institute has several divisions defined by disease or injury (e.g. Cardiac and Renal) or by research methodology (e.g. Epidemiology and Biostatistics). Until now, each of these Divisions has been individually responsible for their own research project management, with central support provided for data management, software development and statistical analysis.

The Centre for Research Management now brings these critical contributors to research management together in a single centre within the Institute.

The change was partially driven by recent growth and the need for future scalability. Currently, more than 20,000 patients are enrolled in, or being recruited to, clinical trials coordinated by the Institute and this number is expected to continue to increase over coming years. The Centre for Research Management will provide the staff, resources and expertise required to manage the growing portfolio with optimal quality and efficiency.

The Data Management team is responsible for all data management activities, from system design to ongoing study data management and reporting, for all the Institute's clinical studies and many other research programs. The Data Management team currently oversees these activities for 12 active research programs and provides expert input to internal and external proposals under development.

The Institute's Information Technology and Programming groups have experienced structural changes this year and are now part of a new group called 'Information Services'.

This group is responsible for internal support and administration of network, development and maintenance of clinical trial and other computer-based systems. The Programming group successfully completed five web-based systems for the Institute during 2005 and are currently working on three new systems.

In 2005, both the IT and Programming group were expanded to support the growing needs of the Institute. Several processes were streamlined during the year to ensure quality output and to satisfy user needs. There was also substantial progress last year towards improving security, backup, disaster recovery methods and the compliance of various systems.

Below: The George Institute Operations Sub-Committee



The Academic Alliance for Clinical Trials

The Academic Alliance for Clinical Trials (AACT) is a collaborative initiative launched by three major clinical research institutions, including The George Institute. Partners in the AACT are the Berman Center (USA) and the Julius Center (the Netherlands) which, along with The George Institute, provide access to a large global network and office base in the United States, Europe, Australia and Asia. Historically, these organisations have collaborated on a series of pivotal trials, and in 2005 formalised their association through a Memorandum of Understanding.

This union brings together a wealth of experience in clinical research combined with a very strong track record, from a global perspective, in trials for the treatment of diabetes and other specialty areas such as hypertension, heart disease, stroke and renal disease.

Worldwide, the Alliance is well-equipped to undertake clinical trials that require extensive skills in project management, data management, software development, biostatistics, economic analyses and experience in providing recommendations to major pharmaceutical companies and regulatory authorities. It offers a range of services including:

- strategic partnerships in which the Alliance contributes to concept development, regulatory submissions, trial design, project planning, study conduct, data analysis and report preparation;
- specialised support services tailored for a particular program or project (e.g. site management, data management, statistical analyses); and
- consultative services on issues such as concept development, study design, regulatory issues and operational management.

This unique alliance between respected academic research centres, that are world leaders in their field, will provide significant advantages for relationships with partners including the pharmaceutical industry and government regulatory agencies, whilst encouraging the innovative use of technologies to maximise reliability and efficiency.

People Strategy and Development Unit

Continued growth in employee numbers has been a feature of the year, presenting some challenges for the Institute.

As the Institute expands, it has been necessary to review the human resources area to ensure that it is appropriately structured and positioned to support this growth. Following an independent review in 2005, the human resources area became the People Strategy and Development Unit to reflect its emphasis on a more strategic approach to staff-resourcing within the Institute and its focus on key areas of recruitment and selection, learning and development, performance management and reward.

Finance and Administration Unit

The Finance and Administration Unit provides financial, contractual and operational guidance and support for all projects undertaken by The George Institute, The George Foundation and George Medica. This includes detailed budgeting and monthly financial reporting for each project, program, division, directors and the board together with relevant reporting of key performance indicators. The growth of the Institute's Beijing office has required the Finance and Administration Unit to provide a higher level of support to this off-shore office.

With the tremendous growth of the Institute over the past year, building and facilities management were a significant part of the responsibilities of the Unit. In mid 2005, additional office space for Institute staff was secured in Sydney's CBD to accommodate expected future growth.

Public Affairs Unit

The Public Affairs Unit is responsible for The George Institute's communications and public relations activities including media interaction, website services, government relations, events, publications and promotional materials. The focus of the Unit is to develop and maintain effective communications with external stakeholders to enhance and nurture the Institute's reputation.

During 2005, the Public Affairs Unit was completely reorganised with the assistance of Jenni Elliott, Executive Director of The George Foundation. There are now more clearly defined roles and specific expertise in each of the key communications areas needed by the Institute.

In the latter half of 2005, the new Unit achieved a number of significant outcomes including:

- substantial media coverage in both domestic and international media (including major Australian dailies, national radio, Australian and foreign TV networks, international science magazines, and major science communication websites);
- upgrading the Institute's website to enhance the usability and availability of information;
- developing relationships with specific media and government personnel; and
- planning and implementing strategies to enhance both the profile of the Institute and its interactions with key stakeholders in the future.

The George Institute's Public Affairs Unit is also networking with other medical research institutes to enhance government, industry and community awareness of the role and value of the work done by these research bodies.



The Institute's website was upgraded in 2005 to enhance usability and availability of information

The Institute is committed to supporting the development of skills and expertise of staff and individuals and organisations working outside of the Institute.

An important role of The George Institute is the development of individual and institutional capacity to address leading health problems, both in Australia and internationally. The Institute is committed to developing the skills and expertise of its entire staff, both academic and non-academic. It is also committed to supporting the development of skills and expertise of both individuals and organisations working outside the Institute. The University of Sydney is a key collaborator in this endeavour.

In the past two years, Peking University Health Science Center (PUHSC) has become an important focus for our capacity development activities. Additionally, the Institute facilitates capacity development in conjunction with its project and research partners. Institute staff also contribute individually to ad hoc capacity building activities both domestically and internationally.

Internally, The George Institute committed additional resources in 2005 to the development of a People Strategy and Development Unit, which has the role of identifying and implementing strategies to support the learning and development needs of all academic and non-academic staff. The Unit also has responsibility for overseeing the learning and development needs of post-graduate students and visiting scholars, in partnership with Division and Program Directors of the Institute.

In 2005, the Institute's staff continued to contribute to human capacity development within The University of Sydney, through their involvement in The University's Medical program, Masters programs with the School of Public Health, and Doctoral level supervision, in association with both the Central Clinical School and the School of Public Health. These contributions are significant and the Institute is committed to continuing these activities.

The George Institute currently coordinates two Masters of Public Health courses through The University of Sydney, including a short course in injury prevention and a web-based course in injury epidemiology, prevention and control. The development of the web-based course was made possible by funding from the Australian Government's Department of Health and Ageing - Public Health Education and Research Program (PHERP). The short course is a two-day practical workshop that examines the global burden of injury and raises several key issues in injury control. In 2005, 25 students completed the course. The web-based injury course is a thirteen-week on-line unit, covering research methods used by injury prevention practitioners and the development, implementation and evaluation of injury prevention programs. In 2005, thirteen students completed this course.

As a result of contributing to an external review of the University's Masters of International Public Health (MIPH) program in 2005, it is likely that the Institute's role in this program and within the School of Public Health will grow. The review identified the limited, but potentially valuable, relationship that might be developed between the MIPH and The George Institute, particularly with respect to encouraging and developing a stronger research-led program. As a result, the Institute contributed funds to the School of Public Health to help facilitate the recruitment and appointment of two conjoint senior appointments in international public health.

An important step in developing both individual human capacity and strengthening the institutional capacity of PUHSC is the planned growth and restructure of the Institute's office in Beijing from a research-coordinating centre to an academically-driven centre, together with the development of an operational infrastructure that will enable staff to initiate and develop their own research projects and programs.

The Institute has been fortunate to have had the support of the Vice-Chancellor and the Pro-Vice Chancellor of The University of Sydney's College of Health Sciences in developing its relationship with PUHSC. As a consequence, the wider University has collaborated with the Institute in engaging with PUHSC, and in 2005 the two bodies jointly hosted a forum with PUHSC that brought together several leading schools of public health to consider reforms in both medical and public health training in China. This should lead to further collaborations between the Institute, The University of Sydney and the PUHSC in the future.

The utilisation of existing project/research partnerships as an opportunity to facilitate human capacity development has been noted above. Many Institute studies now incorporate training workshops into their work and an increasing number are providing opportunities for training fellowships, especially those projects that are undertaken in China and India. For example, under the Institute's Andhra Pradesh Rural Health Initiative, a comprehensive training program in the past year encompassed some 100 multipurpose primary healthcare workers, 30 social work students, two field coordinators, three local academics, five research assistants and nine physicians in the region.

Within Australia also, capacity building has been a key feature of the Institute's work. For example, in the Renal Program, Dr Alan Cass has been appointed inaugural Chair of the Scientific Committee of the Australasian Kidney Trials Network, which has a key role in helping to shape a clinical trials agenda for the nephrology community. Alan was also a member of the organising committee of the Network's Clinical Trials Education Workshop in Wellington, in September 2005, and facilitated and lectured throughout the Workshop.

Also in the Renal Program, the IMPAKT² project is addressing capacity building in Aboriginal health research, through training and staff development in skills related to community-based health research. Site-based reference groups were established in 2005 to help engage communities by providing guidance to the research program, as well as a focus for feedback on research findings for building capacity in chronic disease management.

In the Epidemiology and Biostatistics Division, courses were delivered in study design, quantitative methods and data analysis in epidemiology in both Australia and Korea during 2005.

² Improving Indigenous Patient Access to Kidney Transplantation

Foundation Activities

The George Foundation secures funds for the Institute's research programs in preventive health, healthcare delivery and health policy development in low and middle-income countries. Established in 2003, and incorporated in 2004, the Foundation is a vehicle for identifying alternative sources of funding which can supplement the Institute's traditional sources of peer-reviewed competitive grants from Federal and State Governments, and from industry groups. Early in 2005, the Foundation achieved tax deductibility in the USA, complementing the Foundation's existing tax deductibility in Australia.

Foundation Grants

The following Foundation grants have been awarded for the 2005/06 financial year:

China Seatbelt Intervention

Further details on the Intervention can be found in the **Injury Prevention and Trauma Care** section of this Report.

China Renal Research Project

Using an established network of Chinese clinical and research collaborators, a multi-centre study of peritoneal versus haemodialysis in the treatment of chronic kidney disease will be undertaken, which will provide key evidence regarding clinical outcomes and cost of service provision to facilitate health planning in China and internationally.

Andhra Pradesh Rural Health Initiative (APRHI)

Information on the Andhra Pradesh Initiative can be found in the **Cardiac and Renal Division's** section of this Report.

China Health Reform Roundtable

Details on the 2005 and 2006 Roundtables are included in both the **Policy and Practice Program** and **China Program** sections of this Report.

Jenni Elliott

Foundation Executive Director

In April 2005, Ms Jenni Elliott was appointed as Executive Director. Jenni has a 12-year career as a fundraising professional. Following her appointment, the Executive Director worked with Foundation Directors on formulating the Foundation's fundraising strategy and a range of policies and procedures that underpin that strategy. The implementation of the fundraising strategy is now underway.



ChinaQUEST Stroke Research Project

This China-based study aims to assess the appropriateness of acute stroke care, secondary prevention and rehabilitation after stroke and to understand factors that contribute to variations in health outcomes after stroke, including the cost-effectiveness of particular models of after-stroke care. This will form the basis of future work to develop, implement and evaluate systems to improve post-acute stroke care in China.

ChinaQUEST Fellowship

A George Foundation Fellowship has been provided to support Dr Alex Headley, a young Australian doctor who was awarded an AusAID Australian Youth Ambassadors for Development Award in 2005, and will coordinate the study in China.

Health Economics Fellowship

The Fellowship provides support for a Chinese health economist working at The George Institute in Sydney for six months during the planning phase of the 2006 China Health Reform Roundtable Symposium.

Muhammadiyah Project Seed Funding

Details of this project appear opposite under **New Foundation Projects**.

Obesity in Asia Collaboration Fellowship

More details on the collaboration can be found in the **Epidemiology and Biostatistics** section of the report.

During the coming year and beyond, The George Foundation aims to develop financial partnerships, alliances and relationships with companies, philanthropic trusts and individual benefactors to support the Institute in conducting research that will have a major impact on reducing the global burden of chronic disease and injury.

Foundation Board Members

- John Chalmers, AC
- Peter Burrows, AO
- Peter Church, OAM
- Michael Courtnall
- Stephen MacMahon
- Robyn Norton

New Foundation Projects

In early 2005, The George Foundation undertook to investigate the possibility of developing a project arising out of the post-tsunami Australian/Indonesian joint reconstruction initiative and to bid for funds from the Australian Government to support the project. Foundation Board member, Mr Peter Church, facilitated an introduction in Indonesia to Muhammadiyah, a moderate Islamic non-profit organisation, committed to the provision of health, education and welfare activities across Indonesia.

As a result of this introduction, a Memorandum of Understanding (MOU) between Muhammadiyah and The George Foundation was signed in Jakarta on 9 May 2005. The thrust of the MOU was to investigate ways in which the Institute and Muhammadiyah could work together to identify post-tsunami projects of priority to the Indonesian Government, as well as to seek funding to support such projects. Subsequently, an expanded MOU was signed at the Muhammadiyah Muktamar (Convention) held in Malang in early July which provided further detail on potential projects. The Foundation Executive Director travelled to Malang to sign this document on behalf of the Institute.

Since that time, Dr Sudibyo Markus, Director of the National Executive Board of Muhammadiyah, and former Director of the Muhammadiyah Department of Health and Community Welfare has twice visited Sydney for further discussions. The Institute's work and a range of projects were discussed during the visits, and also the possibility of a twinning relationship between the Jakarta Islamic Hospitals and an Australian hospital.

Discussions have continued with Muhammadiyah with a view to identifying and finalising appropriate projects.



Executive Director of The George Foundation, Jenni Elliott signs the MOU with Muhammadiyah in Indonesia

Board of Directors for The George Institute

Mr Peter Burrows, AO

A stockbroker and director of Bell Potter Securities, Peter Burrows has chaired a number of listed public companies such as Rabbit Photo, Garratts and China Region Investments. He has served on a number of company boards such as Stocks Convertible Trust plc and the Sydney Stock Exchange.

His past contributions include:

- President of the Medical Foundation at The University of Sydney for twelve years;
- Chair of the Power Institute and Foundation for Art and Visual Culture;
- Chair of the Royal Botanic Gardens Foundation;
- Chair of the CRC for Asthma;
- Fellow of the Senate of The University of Sydney and Chair of its Audit, Remuneration, Finance and Investment committees.

Peter is an Honorary Fellow of The University of Sydney.

Mr Peter Church, OAM

Co-founder and Managing Director of the Asean Focus Group, Peter Church is an international lawyer and corporate adviser. His involvement in business relations between Australia and the South-East Asian region spans more than 35 years. He has authored and edited several books focused on business in Asia.

He has a number of other Asia-related business roles including:

- Special Counsel to Blake, Dawson Waldron;
- Chairman of Thai law firm Bangkok International Associates Limited;
- Member of the global Board of Directors of IMAP (the International Network of M&A Partners);
- Non-executive director of 'Australia Centre' businesses (principally English language schools in Chiang Mai, Thailand and in Medan, Indonesia);
- Member of the Advisory Board of eangelz.com (an Asia-wide networking organisation based in Singapore) and Indonesia's Aksara Foundation (a charitable organisation that promotes dialogue on important social, economic and political issues).

Peter is a former member of the Australian Federal Government's Trade Policy Advisory Council and APEC Committee and a former President of the Australia Indonesia Business Council and Australia ASEAN Business Council.

Professor Andrew Coats

Andrew Coats is Dean of the Faculty of Medicine, The University of Sydney. He has had a distinguished international career in clinical cardiology, with a particular focus on the treatment of chronic heart failure. He took undergraduate studies in medicine at Oxford and Cambridge Universities before completing his general medical and cardiological training in Melbourne. Andrew returned to Oxford to conduct research in his key areas of interest - hypertension, heart failure and cardiovascular physiology.

For more than a decade, Andrew worked at the National Heart and Lung Institute, Imperial College School of Medicine, London overseeing the Department of Clinical Cardiology - Heart Function where he was the first Viscount Royston Professor of Clinical Cardiology. He was Associate Medical Director in charge of research and development for the combined Royal Brompton and Harefield NHS Trust, London. From 1996 to 2000, he was director of Cardiology, before returning to Australia to his current position at The University of Sydney.

Andrew has served in various roles on steering committees of major international cardiovascular trials. In 2003, he was appointed Chair of the NSW Ministerial Council on Medical & Health Research and Chair of the Australian Health Information Council. He has published more than 400 full papers on cardiovascular research.



Peter Burrows



Peter Church



Andrew Coats



Don Green

Mr Don Green

Don Green is a Fellow Chartered Accountant, a Fellow CPA and is a Senior Partner of Ernst & Young Australia, where he leads the Oceania Transaction Tax Practice. He is a Visiting Fellow at the Centre for Studies in Money, Banking and Finance at Macquarie University.

Don played a key role in the establishment of the Friends of the Mater Foundation for the Mater Misericordiae Hospital and is a member of the Foundation's Investment Advisory Committee. He is a Director of the Australian Council for Infrastructure Development and has participated on professional committees of the Institute of Chartered Accounts over a number of years.



Stephen MacMahon

Professor Stephen MacMahon

Stephen MacMahon is a Principal Director of The George Institute for International Health. He is also Professor of Cardiovascular Medicine and Epidemiology at The University of Sydney and Honorary Consultant Epidemiologist at the Royal Prince Alfred Hospital. He also holds honorary professorial appointments at Peking University Health Science Center and The University of Auckland.

Stephen is Chairman of the Foundation Council of the Initiative for Cardiovascular Health Research in Developing Countries (IC Health) – a development of the Global Forum for Health Research and the World Health Organization. He is also a member of the Council of the International Society of Hypertension.



Robyn Norton

Professor Robyn Norton

Robyn Norton is a Principal Director of The George Institute for International Health and Professor of Public Health at The University of Sydney. She holds an Honorary Professorship at the Peking University Health Science Center in Beijing, China, and is an Honorary Consultant Epidemiologist at the Royal Prince Alfred Hospital in Sydney.

Robyn is currently Chair of the Road Traffic Injuries Research Network, an initiative supported by the Global Forum for Health Research, and a member of the Interim Steering Committee for the International Society for Injuries and Violence Prevention. She is also a Board member of the International Society for Child and Adolescent Injury Prevention and a Board member of the journal Injury Prevention.

Associate Professor Paul Torzillo, AM (until September 2005)

Paul Torzillo is Senior Respiratory Physician and Intensive Care Physician at the Royal Prince Alfred Hospital in Sydney and Clinical Director for Respiratory and Critical Care Services in Sydney South West Area Health Service. He is also a Clinical Associate Physician in the Department of Medicine at The University of Sydney and played an active role in teaching.

With a long term interest in Aboriginal Health, Paul has worked for Nganampa Health Council in the north-west corner of South Australia since 1984. He is currently the Medical Director of this organisation, and acts as a consultant to both the Commonwealth and Northern Territory governments in the area of Aboriginal health.

Paul has also worked with the World Health Organization's Division of Child and Adolescent Health.



Paul Torzillo

Research and Development Advisory Committee (RADAC)

Professor Judith Whitworth, AC (Chair)

Director, John Curtin School of Medical Research,
Australian National University

Professor Bruce Armstrong, AM

Head, School of Public Health, The University of Sydney

Professor Robert Black

Chairman, Department of International Health,
Johns Hopkins University

Professor Andrew Coats

Dean, Faculty of Medicine, The University of Sydney

Professor Adele Green, AC

Deputy Director, Queensland Institute for Medical Research

Professor Adnan Hyder

Leon Robertson Chair, Bloomberg School of Public Health,
Johns Hopkins University

Professor KE Yang

Executive Vice-President, Peking University Health
Science Center

Professor Stephen Leeder, AO

Director, Australian Health Policy Institute,
The University of Sydney

Professor Terry Nolan

Head, School of Population Health,
The University of Melbourne

Professor Srinath Reddy

Head, Cardiology, All India Institute of Medical Sciences

Professor Andrew Wilson

Head of the Division of Health Systems Policy and Practice,
School of Population Health, University of Queensland

Dr Derek Yach

Professor and Head, Division of Global Health,
Yale School of Public Health

Ex-Officio:

Professor John Chalmers, AC

The George Institute, The University of Sydney

Professor Stephen MacMahon

The George Institute, The University of Sydney

Professor Robyn Norton

The George Institute, The University of Sydney

China Advisory Board

Professor HAN Qide (Chair)

Vice-Chairman of Standing Committee,
China National People's Congress

Dr CAI Jiming

Head of Chinese Preventive Medical Association

Professor GAO Renlin

Director, Chinese Cardiology Association

Professor HUANG Jiefu

Executive Vice-president, Peking University
Health Science Centre

Professor KE Yang (until 2005)

Vice-Minister of Health, China Ministry of Health

Dr KONG Lingzhi

Director, NCD, China Ministry of Health

Dr QI Xiaoqiu (until 2005)

Director General, Department of Disease Control,
China Ministry of Health

Professor REN Minghui

Deputy Director-General, China Ministry of Health

Dr WU Fan (until 2005)

Director, Chronic Disease and Injury, Chinese Center
for Disease Control and Prevention

Professor YANG Gonghuan

Director, National Center for Public Health Surveillance
and Information Services, Chinese Center for Disease
Control and Prevention

Dr ZHANG Zongjiu (until 2005)

Director, Health Care Service (Injury), China Ministry of Health

Dr Henk Bekedam (Observer)

World Health Organization, China

Peer Reviewed Journals

ACROSS Collaborative Group **Carter K**, Anderson N, Jamrozik K, Hankey G, **Anderson C**. Migraine and risk of subarachnoid haemorrhage: a population-based study. *J Clin Neurosci* 2005;12:534-7.

ADVANCE Collaborative Group **Patel A**, Neal B, Chalmers J, **MacMahon S**, Heller S, Pan CY, **Woodward M**, Colman S. ADVANCE - Action in Diabetes and Vascular Disease: patient recruitment and characteristics of the study population at baseline. *Diabet Med* 2005;22:882-8.

Ameratunga S, Hajar M, **Norton R**. Road traffic injuries: confronting disparities to address a global health problem. *Lancet*. In press.

Anderson C. Rationale and design of the cardiac magnetic resonance imaging substudy of the ONTARGET Trial Programme. *J Int Med Res* 2005;33 Suppl 1:41A-48A.

Anderson C, **Carter K**, **Hackett M**, Feigin V, Barber A, Broad JB, et al, for the Auckland Regional Community Stroke (ARCOS) Study Group: trends in stroke incidence in Auckland, New Zealand, during 1981 to 2003. *Stroke* 2005;35:2087-93.

Anderson K, Rieger E, Caterson I. A comparison of maladaptive schemas in treatment-seeking obese adults and normal weight controls. *J Psychosom Res*. In press.

Arima H, Kiyohara Y, Tanizaki Y, Nakabeppu Y, Kubo M, Kato I et al. Angiotensin I-converting enzyme gene polymorphism modifies the smoking-cancer association: the Hisayama Study. *Eur J Cancer Prev*. In press.

Arima H, Nagata M, Fujisaki K, Gushima M, Matsumura K, Fujii K, et al. Graft infection of thoracic aorta due to group C beta-hemolytic streptococcus-a case report. *Angiology* 2005;56:237-41.

Asia Pacific Cohort Studies Collaboration (Writing Committee: Ni Mhurchu C, Prasad V, Nakamura M, **Patel A**, Rodgers A, Lam TH). Body mass index and the risk of diabetes in the Asia Pacific region. *Asia Pac J Clin Nutr*. In press.

Asia Pacific Cohort Studies Collaboration (Writing Committee: **Woodward M**, **Barzi F**, Lam TH, Jamrozik K, Ueshima U, **Patel A**). Coronary risk prediction among individuals with and without diabetes. *Eur J Cardiovasc Prev Rehab*. In press.

Asia Pacific Cohort Studies Collaboration (Writing Committee: **Barzi F**, **Patel A**, **Woodward M**, Lawes CM, Okhubo T, Gu D, et al). A comparison of lipid variables as predictors of cardiovascular disease in the Asia Pacific region. *Ann Epidemiol* 2005;15:405-13.

Asia Pacific Cohort Studies Collaboration (Writing Committee: **Huxley R**, **Woodward M**, **Barzi F**, Woo J, Pan W, **Patel A**). Does sex matter in the associations between classical risk factors and fatal coronary heart disease in populations from the Asia Pacific Region? *J Womens Health* 2005;14:820-38.

Asia Pacific Cohort Studies Collaboration (Writing Committee: **Woodward M**, **Huxley R**, Lam TH, **Barzi F**, Lawes CMM, Ueshima H). A comparison of the associations between risk factors and cardiovascular disease in Asia and Australasia. *Eur J Cardiovasc Prev Rehab* 2005;12:484-91.

Asia Pacific Cohort Studies Collaboration (Writing Committee: **Woodward M**, Lam TH, **Barzi F**, **Patel A**, Gu D, Rodgers A, et al). Smoking, quitting and the risk of cardiovascular disease among women and men in the Asia-Pacific region. *Int J Epidemiol* 2005;34:1036-45.

Auckland Regional Community Stroke (ARCOS) Study Group (Writing Committee: Feigin V, **Carter K**, **Hackett M**, Barber PA, McNaughton H, Dyall L, Chen X, **Anderson C**). Ethnic disparities in the incidence of stroke subtypes: the Auckland Regional Community Stroke (ARCOS) study, 2002-2003. *Lancet Neurology*. In press.

Barzi F, **Woodward M**, Marfisi RM, Tognoni G, Marchioli R, on behalf of GISSI-Prevenzione Investigators. Analysis of the benefits of a Mediterranean diet in the GISSI-Prevenzione study: a case study in imputations of missing values from repeated measurements. *Int J Epidemiol*. In press.

Blood Pressure Lowering Treatment Trialists' Collaboration. (Writing Committee: **Turnbull F**, **Neal B**, **Algert C**, **Chalmers J**, Chapman N, **Woodward M**, **MacMahon S**). Effects of different blood pressure lowering-regimens on major cardiovascular events in individuals with and without diabetes. Results of prospectively designed overviews of randomised trials. *Arch Intern Med*. 2005;165:1410-9.

Blows S, Ameratunga S, **Ivers R**, **Lo SK**, **Norton R**. Risky driving habits and motor vehicle driver injury. *Accid Anal Prev* 2005;37:619-24.

Blows S, **Ivers R**, Chapman S. "Banned from the streets I have paid to use": an analysis of Australian print media coverage of proposals for passenger and night driving restrictions for young drivers. *Inj Prev* 2005;11:304-8.

Blows S, **Ivers R**, Connor J, Ameratunga S, Woodward M, **Norton R**. Marijuana use and car crash injury. *Addiction* 2005;100:605-11.

Blows S, **Ivers R**, Connor J, Ameratunga S, **Woodward M**, **Norton R**. Unlicensed drivers and car crash injury. *Traffic Inj Prev* 2005;6:230-4.

Borghi J, Thapa B, Osrin D, **Jan S**, Morrison J, Tamang S, et al. Economic evaluation of a women's group intervention to improve birth outcomes in rural Nepal. *Lancet*. In press.

Butcher K, Parsons M, MacGregor L, Barber PA, Levi C, Chalk J, et al. Refining the perfusion-diffusion mismatch hypothesis. *Stroke* 2005;36:1153-9.

Campbell D, **Woodward M**, **Chalmers J**, **Colman S**, Jenkins A, Kemp B, **Neal B**, **Patel A**, **MacMahon S**. Prediction of heart failure by amino-terminal pro-B-type natriuretic peptide and C-reactive protein in subjects with cerebrovascular disease. *Hypertension* 2005;45:69-74.

Campbell DJ, **Woodward M**, **Chalmers J**, **Colman S**, Jenkins AJ, Kemp BE, **Neal B**, **Patel A**, **MacMahon S**. Prediction of myocardial infarction by N-terminal-pro-B-type natriuretic peptide, C-reactive protein and renin in subjects with cerebrovascular disease. *Circulation* 2005;112:110-6.

Carrivick P, Lee A, Yau K, **Stevenson M**. Evaluating the effectiveness of a participatory ergonomics approach in reducing the risk and severity of injuries from manual handling. *Ergonomics* 2005;48:907-14.

Cass A. The ethics of research involving Canada's Aboriginal populations. *Can Med Assoc J* 2005;172:979.

Chalmers J. Blood pressure in acute stroke: in search of evidence. *J Hypertens* 2005;23:277-8.

Chan LFP, Chow SMK, **Lo SK**. Preliminary validation of the Chinese version of the Pediatric Quality of Life Inventory. *Int J Rehabil Res* 2005;28:219-27.

Chow C, Amos D, Celermajor DS. Cerebrovascular events in young adults after surgical repair of tetralogy of Fallot. *Cardiol Young* 2005;15:130-2.

Chow CK, Mou D, **Patel A**, Celermajor DS. The role of the 12-Lead ECG as a screening test for cardiac source of embolus. *Heart Lung Circ* 2005;14:242-4.

Chow SMK, **Lo SK**, Cummins RA. Self-perceived quality of life of children and adolescents with physical disabilities in Hong Kong. *Qual Life Res* 2005;14:415-23.

Clayforth C, Fritschi L, **McEvoy S**. Assessing the effectiveness of a mammography screening service. *ANZ J Surg* 2005;75:631-6.

Cunningham J, **Cass A**, Arnold PC. Bridging the treatment gap for Indigenous Australians. *Med J Aust* 2005;182:505-6.

Early Supported Discharge Trialists: **Anderson C**. Services for reducing duration of hospital care for acute stroke patients. *Cochrane Database Syst Rev* 2005;2.

Early Supported Discharge Trialists Collaboration: Langhorne P, Taylor G, Murray G, Dennis M, **Anderson C**, Bautz-Holter E, et al. Early supported discharge services for stroke patients: an individual patient data meta-analysis. *Lancet* 2005;365:501-6.

Feigin V, Ratnasabapathy Y, **Anderson C**. Does blood pressure lowering treatment prevents dementia or cognitive decline in patients with cardiovascular and cerebrovascular disease? *J Neurol Sci* 2005;229-30:151-5.

Feigin VL, Rinkel GJE, Lawes CMM, Algra A, Bennett DA, van Gijn JS, **Anderson C**. Risk factors for subarachnoid haemorrhage: an updated systematic review of epidemiological studies. *Stroke* 2005;36:2773-80.

Fezeu L, Minkoulou E, Balkau B, **Kengne AP**, Awah P, Unwin N, Alberti GK, Mbanya JC. Association between socioeconomic status and adiposity in urban Cameroon. *Int J Epidemiol*. In press.

FIELD Vascular Study Investigators: Keech A, Grieve SM, **Patel A**, Griffiths K, Skilton M, Watts GF, et al. Urinary albumin levels in the normal range determine arterial wall thickness in adults with Type 2 diabetes: a FIELD substudy *Diabet Med* 2005;22:1558-65.

Fransen M, Wilmshire B, Winstanley J, **Woodward M**, Grunstein R, Ameratunga S, **Norton R**. Shift work and work injury in the New Zealand Blood Donors' Health Study. *Occup Environ Med*. In press.

Hackett M, **Anderson C**. Predictors of depression following stroke: a systematic review of observational studies. *Stroke* 2005;36:2296-301.

Hackett M, **Anderson C**. Treatment options for post-stroke depression in the elderly. *Aging Health* 2005;1:95-105.

Hackett M, **Anderson C**, House AO. Management of depression after stroke: a systematic review of pharmacological therapies. *Stroke* 2005;36:1098-103.

Hackett M, Yapa CM, Parag V, **Anderson C**. The frequency of depression after stroke: a systematic review of observational studies. *Stroke* 2005;36:1330-40.

Hardie K, Hankey GJ, Jamrozik K, Broadhurst RJ, **Anderson C**. Trends in five-year survival and recurrent strokes after first-ever stroke in the Perth Community Stroke Study. *Cerebrovas Dis* 2005;19:179-85.

Harvey JM, Sterrett GF, **McEvoy S**. Pathology reporting of breast cancer: trends in 1989-1999, following the introduction of mammographic screening in Western Australia. *Pathology* 2005;37:341-6.

Huxley R, **Barzi F**, **Woodward M**. Excess risk of fatal coronary heart disease associated with diabetes in men and women: a meta-analysis of 37 prospective cohort studies. *BMJ*. In press.

Huxley R, Ansary-Moghaddam A, Berrington de Gonzalez A, **Barzi F**, **Woodward M**. Type-II diabetes and pancreatic cancer: a meta-analysis of 36 studies. *Br J Cancer* 2005;92:2076-83.

Ingram DM, **McEvoy S**, Byrne MJ, Fritschi L, Joseph DJ, Jamrozik K. Surgical caseload and outcomes for women with invasive breast cancer treated in Western Australia. *Breast* 2005;14:11-7.

InterASIA Collaborative Group: **Patel A**, **Woodward M**, Stolk R, Suriyawongpaisal P, **Neal B**. Serum lipid levels in urban and rural population and the prevalence of dyslipidaemia in Thailand – are the NCEP III guidelines appropriate? *J Med Assoc Thai* 2005;88:1242-50.

Ivers R, **Kardamanidis K**, **Lo S**, **Blows S**, **Zhang J**, **Stevenson M**. Motorcycle rider training for preventing road traffic crashes. [Protocol]. *Cochrane Database Syst Rev* 2005;2.

Jan S, Bian Y, Jumpa M, Meng Q, Nyazema N, Prakongsai P, et al. Dual job holding by public sector health professionals in highly resourced-constrained settings: problem or solution? *Bull World Health Organ* 2005;83:771-5.

Kadir Ish A, Umar R, Midi HB, Haron K, **Stevenson M**, Hariza A. Mode choice model for vulnerable motorcyclists in Malaysia. *Traffic Inj Prev*. In press.

Kengne A, Amoah AG, Mbanya JC. Cardiovascular complications of diabetes mellitus in sub-Saharan Africa. *Circulation* 2005;112:3592-601.

Lam LT, **Norton R**, Connor J, Ameratunga S. Suicidal ideation, antidepressive medication and car crash injury. *Accid Anal Prev* 2005;37:335-9.

Lee A, Wang SK, Yau K, **Stevenson M**, Carrivick P. Modelling bivariate count series with excess zeros. *Math Biosci* 2005;196:226-37.

Lee EWC, Chung MMH, Li APS, **Lo SK**. Construct validity of the Chinese version of the disabilities of the arm, shoulder and hand questionnaire (DASH-HKPWH). *J Hand Surg* 2005;30:29-34.

Lin JH, Tsai AYJ, **Lo SK**, Chang JJ, Huang MH. Predicting the grade of disability 1 year after stroke following rehabilitation. *Kaohsiung J Med Sci* 2005;21:212-9.

Loh PS, **Butcher K**, Parsons M, Desmond P, Tress B, Davis S. ADC thresholds do not predict the response to acute stroke thrombolysis. *Stroke* 2005;36:2626-31.

MacMahon S, **Neal B**, Rodgers A. Hypertension - time to move on. *Lancet* 2005;365:1108-9.

Makamto SC, Oben JE, Ngondi JL, Fezeu KLL, **Kengne AP**, Mbanya JC. Dietary control and lipid profiles of Type 2 diabetes mellitus patients in Yaounde, Cameroon. *Pak J of Nutr* 2005;4:282-6.

Matsumura K, Fujii K, Kansui Y, **Arima H**. Prolongation of the QT interval in primary aldosteronism. *Clin Exp Pharmacol Physiol* 2005;32:66-9.

McEvoy S, Plant AJ, Pearman J, Christiansen K. Risk factors for the acquisition of vancomycin-resistant enterococci during a single-strain outbreak at a major Australian teaching hospital. *J Hosp Infect*. In press.

McEvoy S, Stevenson M, McCartt AT, **Woodward M**, Haworth C, Palamara P, et al. Role of mobile phones in motor vehicle crashes resulting in hospital attendance: a case-crossover study. *BMJ* 2005;331:428-30.

Muraleedharan VR, **Jan S**, Ram Prasad S. The trade in human organs in Tamil Nadu: the anatomy of regulatory failure. *Health Econ Policy Law*. In press.

Naylor J, Harmer A, **Fransen M**, Crosbie J. Status of physiotherapy rehabilitation following total knee replacement in Australia. *Physiother Res Int*. In press.

Neal B. Physical activity but no cholesterol-lowering for the elderly: probably not. *J Hypertens* 2005;23:1785-6.

Obesity in Asia Collaboration: **Huxley R, Barzi F, Stolk R**, Caterson I, Gill T, Lam TH, Omari A, **Woodward M**. Ethnic comparisons of obesity in the Asia-Pacific region: protocol for a collaborative overview of cross-sectional studies. *Obes Review* 2005;6:193-8.

Ohta Y, Fujii K, **Arima H**, Matsumura K, Tsuchihashi T, Tokumoto M, et al. Increased renal resistive index in atherosclerosis and diabetic nephropathy assessed by Doppler sonography. *J Hypertens* 2005;23:1905-11.

Patel A, Chalmers J, Poulter N. ADVANCE: Action in diabetes and vascular disease – current status. *J Hum Hypertens* 2005;19(Suppl 1):S27-32.

Patel A, Huang K C, Janus E, Gill T, **Neal B**, Suriyawongpaisal P, Wong E, **Woodward M**, et al. Is a single definition of the metabolic syndrome appropriate? A comparative study of the USA and Asia. *Atherosclerosis*. In press.

Patel A, Woodward M, Campbell DJ, Sullivan DR, **Colman S, Chalmers J, Neal B, MacMahon S**. Plasma lipids predict myocardial infarction, but not stroke, in patients with established cerebrovascular disease. *Eur Heart J* 2005;26:1910-5.

PROGRESS Collaborative Group: **Arima H**, Hart RG, **Colman S, Anderson C**, Rogers A, **Woodward M, MacMahon S, Neal B**. Perindopril-based blood pressure lowering reduces major vascular events in patients with atrial fibrillation and prior stroke or TIA. *Stroke* 2005;36:2164-9.

PROGRESS MRI Substudy Investigators and the PROGRESS Collaborative Group: Dufouil C, **Chalmers J**, Coskun O, Besancon V, Boussier MG, Guillon P, **MacMahon S**, Mazoyer B, **Neal B, Woodward M**, et al. Effects of blood pressure lowering on cerebral white matter hyperintensities in patients with stroke. The PROGRESS MRI Substudy. *Circulation* 2005;112:1644-50.

Prosser J, **Butcher K**, Parsons M, Allport L, Tress B, Davis S. Clinical-diffusion mismatch predicts the putative penumbra with high specificity. *Stroke* 2005;36:1700-4.

Roberts CL, **Algert C**, Cameron CA, Torvaldsen S. A meta-analysis of upright positions in the second stage to reduce instrumental deliveries in women with epidural analgesia. *Acta Obstet Gynecol Scand* 2005;84:794-8.

Roberts C, **Algert C**, Morris J, Ford J, Henderson-Smart D. Hypertensive disorders in pregnancy: a population-based study. *Med J Aust* 2005;182:332-5.

Robins J, **Woodward M**, Lowe G, McCaul P, Cheyne H, Walker JJ. First trimester maternal blood rheology and pregnancy induced hypertension. *J Obstet Gynaecol* 2005;25:746-50.

Russell AP, Matthijs K, Hesselink C, **Lo SK**, Schrauwen P. Regulation of metabolic transcriptional co-activators and transcription factors with acute exercise. *FASEB J* 2005;19:986-8.

Senior H, **Anderson CS**, Chen M, Haydon R, Walker D, Fourie D, et al. Management of hypertension in the oldest old: a study in primary care in New Zealand. *Age Ageing*. In press.

Stevenson M. Building safer environments: injury, safety and our surroundings (editorial). *Inj Prev*. In press.

Stevenson M. Steering in the right direction? Young drivers and road trauma. *Med J Aust* 2005;182:102-3.

Stevenson M, Cercarelli LR, Lee AH, Rimajova M. Estimating population-based injury prevention practices. *J Inj Contr Saf Promot*. In press.

Stevenson M, McClure R. Use of ecological study designs for injury prevention. *Inj Prev* 2005;11:2-4.

Stolk RP, Suriyawongpaisal P, Aekplakorn W, **Woodward M, Neal B**. Fat distribution is strongly associated with plasma glucose levels and diabetes in Thai Adults - the InterASIA study. *Diabetologia* 2005;48:657-60.

Stretton C, Latham N, **Carter K**, Lee A, **Anderson C**. Determinants of physical health in frail older people: the importance of self-efficacy. *Clin Rehabil*. In press.

The NICE – SUGAR Study Investigators. Writing Committee: Finfer S, Bellomo R, Chittock D, Cook D, **Crompton L**, Dhingra V, Dodek P, Foster D, Hebert P, Henderson W, Heyland D, **McEvoy S**, McArthur C, Mitchell I, Myburgh J, **Norton R**, et al. The Normoglycemia in Intensive Care Evaluation (NICE) (ISRCTN04968275) and Survival Using Glucose Algorithm Regulation (SUGAR) Study: Development, design and conduct of an international multi-center, open label, randomized controlled trial of two target ranges for glycemic control in intensive care unit patients. *Am J Respir Crit Care Med* online supplement 2005. <http://ajrccm.atsjournals.org/cgi/content/full/172/11/1358/DC1>

Tawk HM, Vickery K, Bisset L, **Lo SK**, Cossart YE. Infection in Endoscopy Study Group. The significance of transfusion in the past as a risk for current hepatitis B and hepatitis C infection: a study in endoscopy patients. *Transfusion*. 2005;45:807-13.

Tunstall-Pedoe H, Connaghan J, **Woodward M**, Tolonen H, Kuulasma K. Was medication responsible for the falling blood pressure observed in population surveys of the WHO MONICA Project mid-1980's to mid-1990's? *BMJ*. In press.

Tunstall-Pedoe H, **Woodward M**. By neglecting deprivation, cardiovascular risk scoring will exacerbate social gradients in disease. *Heart*. In press.

Turnbull F. Managing cardiovascular risk factors: the gap between evidence and practice. *PLoS Med* 2005;2:e131.

Valuri G, **Stevenson M**, Finch C, Hamer P, Elliott B. The validity of a 4-week self-recall of sports injuries. *Inj Prev* 2005;11:135-7.

Walker DG, **Jan S**. How do we determine whether community health workers are cost-effective? Some core methodical issues. *J Community Health* 2005;30:221-9.

Wermer MJH, van der Schaaf IC, Van Nunen P, Bossuyt PMM, Anderson C, Rinkel GJE. Psychosocial impact of screening for intracranial aneurysms in relatives with familial subarachnoid hemorrhage. *Stroke* 2005;36:836-40.

White S, Cass A, Atkins RC, Chadban SJ. Chronic kidney disease in the general population. *Adv Chronic Kidney Dis* 2005;12:5-13.

White J, Patel V, Herrman H. Mental health research in low and middle-income countries: role of research institutions. *Aust N Z J Psychiatry* 2005;39:202

Wong E, Patel A, Jayasinghe R. Transient global amnesia as a complication of coronary angiography and angioplasty. *Intern Med J* 2005;35:435-6.

Woodward M, Lowe GD, Campbell DJ, Colman S, Rumley A, Chalmers J, Neal B, Patel A, Jenkins AJ, Kemp BE, MacMahon S. Associations of inflammatory and hemostatic variables with the risk of recurrent stroke: a nested case control study. *Stroke* 2005;36:2143-7.

Books/Book Chapters

Anderson C. Cardiovascular management and the prevention of cognitive decline. In: Opie LH, Yellon DM, eds. *Cardiology at the Limits VII*. Cape Town: University of Cape Town Press. In press.

Butcher K, Markus R. The penumbra and intracerebral haemorrhage. Chapter 21. In: Donnan G, Baron JC, Sharp F, eds. *The Ischaemic Penumbra: History, Current Status and Implications for Therapy*. New York: Marcel Dekker. In press.

Butcher K, Davis S. Magnetic Resonance Imaging. Chapter 12. In: Carhuapoma J, Mayer S, Hanley D, eds. *Textbook of Intracerebral Hemorrhage*. Boston: Cambridge University Press. In press.

Chalmers J, Turnbull F. Blood pressure lowering in patients with prior stroke. Chapter 16. In: Mohler ER, Townsend RR, eds. *Advanced therapy in hypertension and vascular disease*. Ontario: BC Decker. In press.

Chapman N, Anderson C, Chalmers J. Cerebrovascular disease in hypertension. Section 6, Chapter 33. In: Black H, Elliott W. eds. *Clinical hypertension: a companion to Braunwald's heart disease*. Amsterdam: Elsevier. In press.

Currie R. Coordinating an international clinical trial. Chapter 7. In: Omae T, ed. *How to conduct large-scale clinical trials in Japan*. Tokyo: Nihon-Iji-Shinpo. In press.

Jan S, Kumaranayake L, Roberts J, Hanson K. *Economic analysis for management and policy*. Maidenhead: Open University Press; 2005.

Norton R, Hyder A, Bishai D, Peden M. Unintentional injuries. Chapter 31. In: Alleyne G, Breman J, Claeson M, Evans D, Jamison D, Jha P, et al, eds. *Disease control priorities in developing countries*. New York: Oxford University Press

Norton R, Hyder A, Gururaj G. Unintentional injuries and violence. Chapter 7. In: Merson MH, Black RE, Mills A. eds. *International public health: diseases, programs, systems and policies*. Sudbury: Jones and Bartlett. In press.

Turnbull F, Neal B. Meta-analyses of Hypertension Trials. Chapter 26. In: Black H, Elliott W, eds. *Clinical hypertension: a Companion to Braunwald's Heart Disease*. Amsterdam: Elsevier. In press.

Woodward M. Everitt BS, Palmer C, eds. *Encyclopaedic companion to medical statistics*. London: Hodder Arnold. In press.

Reports to Government and Non Government Organisations

Cass A, Chadban S, Craig J, Howard K, McDonald S, Salkeld G, et al. *The economic impact of end-stage kidney disease in Australia. Part I of the 'Study of the economic impact of the burden of kidney and urinary tract disease in Australia'*. Kidney Health, Australia; September 2005.

Clapham K, Khavarpour F, Ivers R, Stevenson M. *An evaluation of the Lismore Driver Education Program 'On the road'*. Attorney General's Department of NSW; November 2005.

Davies P, *Helping China address key health issues*. Submission to the Senate Enquiry into Australia – China relations on behalf of The George Institute for International Health; September 2005.

National Health Priority Action Council. *National service improvement framework for Heart Stroke and Vascular Disease*. Prepared under the guidance of expert panel – Beilby J, Boyden A, Carey-Hazell K, Chalmers J, Jennings G, Levi C, et al. Approved by the Australian Health Ministers Conference; November 2005.

National Health Priority Action Council. Chalmers J. *National Chronic Diseases Strategy*. Approved by the Australian Health Ministers Conference, November 2005.

Pearse J, McDonald A, Cass A. *Cross-national perspectives on patient safety*. Background paper to the China Health Policy Roundtable 2005. The George Institute for International Health; November 2005.

Pearse J, McDonald A, Cass A, Chen L. *Report of the China Health Care Safety Roundtable: A report to the China Ministry of Health*. The George Institute for International Health; April 2005.

Royal Australasian College of Physicians (Taskforce on Equity and Health, Cass A chair) *Inequity and health – a call to action. Addressing health and socioeconomic inequality in Australia*. Royal College of Physicians; March 2005.

Conference Proceedings/Abstracts

Allport L, Baird T, **Butcher K**, MacGregor L, Coleman P, Davis S. Glucose is persistently elevated in acute stroke patients. Proceedings of the XVIII World Congress of Neurology. Sydney, Australia, November 2005. *J Neurol Sci* 2005;238(Suppl 1):S61.

Butcher K, Parsons M, Allport L, Lee SB, Barber PA, Tress B, et al. MRI ASPECTS (Alberta Stroke Program Early CT Scores) Predicts PWI-DWI mismatch with good inter-rater reliability. Proceedings of the XVIII World Congress of Neurology. Sydney, Australia, November 2005. *J Neurol Sci* 2005;238(Suppl 1):S58.

Butcher K, Parsons M, Allport L, Prosser J, Tress B, Donnan G, et al. Refining and Testing the Perfusion-Diffusion Mismatch Hypothesis. International Congress Series 2005. In Press.

Butcher K, Parsons MW, MacGregor L, Lee SB, Tress B, Donnan G, et al. MRI ASPECTS (Alberta Stroke Program Early CT Scores) Predict perfusion-diffusion mismatch. Proceedings of the 14th European Stroke Conference. Bologna, Italy, May 2005. *Cerebrovasc Dis* 2005; 19 (Suppl 2):S71.

Campbell DJ, **Chalmers J**, Colman S, Jenkins A, Kemp BE, **MacMahon S**, Neal B, Patel A, **Woodward M**. Amino-terminal pro-B-type natriuretic peptide (NT- proBNP): a risk factor for most seasons. Proceedings of Fifty-third Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand. Perth, Australia, June 2005. *Heart Lung Circ* 2005;14 (Suppl 1):S147.

Carter K. Continued improvements in short-term survival after stroke: experience from population-based studies in Auckland, New Zealand over 20 years. Proceedings of the 14th European Stroke Conference. Bologna, Italy, May 2005. *Cerebrovasc Dis* 2005;19 (Suppl 2):S2.

Hackett M, Yapa C, Parag V, **Anderson C**. Frequency and management of post-stroke depression: a systematic review of observational studies. Proceedings of the XVIII World Congress of Neurology. Sydney, Australia, November 2005. *J Neurol Sci* 2005;238 (Suppl 1):S61.

Hackett M, Yapa CM, Parag V, **Anderson C**. The frequency of depressive symptoms following stroke: a systematic review of observational studies. 14th European Stroke Conference. Bologna, Italy, May 2005. *Cerebrovasc Dis* 2005;19 (Suppl 2):S55.

Loh P, Lovell A, Desmond P, **Butcher K**, MacGregor L, Tress B et al. Peri-infarct anisotropic diffusion and perfusion are depressed in chronic stroke. 14th European Stroke Conference. Bologna, Italy, May 2005. *Cerebrovasc Dis* 2005;19 (Suppl 2):S152.

PROGRESS Collaborative Group: **Arima H**, Hart RG, Colman S, **Chalmers J**, **Anderson C**, **Rodgers A**, **Woodward M**, **MacMahon S**, Neal B. Perindopril-based blood pressure lowering reduces major vascular events in patients with atrial fibrillation and prior stroke or TIA. 130th American Neurological Association. San Diego, USA, September 2005. *Ann Neurol* 2005;58 (Suppl 9):S9.

Conference Presentations

Craig Anderson

Cost effectiveness of therapy. XVIII World Congress of Neurology. Sydney, Australia, November 2005.

Blood pressure management in stroke. Stroke Units heads meeting in conjunction with the Australian College of Emergency Medicine meeting. Melbourne, Australia, November 2005.

Anti-hypertensives: why is this of particular interest to neurologists in Asia? 1st Asia-Pacific Stroke Workshop. Singapore, September 2005.

Sex differences in treatment and service use. Stroke Society of Australasia, Annual Scientific Meeting. Melbourne, Australia, September 2005.

Cardiovascular management and the prevention of cognitive decline. Cardiology at the Limits. Cape Town, South Africa, April 2005.

Alireza Ansari Moghaddam

The effects of smoking cessation on lung cancer mortality in Asia. The 17th World Congress of Epidemiology. Bangkok, Thailand, August 2005.

Hisatomi Arima

Lower target blood pressures would likely be safe and effective for the prevention of recurrent cerebrovascular disease. Stroke Society of Australasia, Annual Scientific Meeting. Melbourne, Australia, September 2005.

Federica Barzi

The impact of cigarette smoking on cardiovascular disease among women and men in the Asia-Pacific region. 17th International Congress for Environmental Epidemiology. Johannesburg, South Africa, September 2005.

Evidence of a greater relative risk for coronary heart disease from heavy smoking amongst women in the Asia Pacific Cohort Studies Collaboration. American Heart Association. Orlando, Florida, USA, February 2005.

Ken Butcher

MR ASPECTS (Alberta Stroke Program Early CT Score) predicts PWI-DWI mismatch with good inter-rater reliability. XVIII World Congress of Neurology. Sydney, Australia, November 2005.

Refining and testing the perfusion-diffusion mismatch hypothesis. Functional and Molecular Imaging of Stroke and Dementia International Symposium. Kyoto, Japan, October 2005.

Can you pick the stroke? Challenging CT cases. Stroke Society of Australasia, Annual Scientific Meeting. Melbourne, Australia, September 2005.

Echolaran imaging thrombolysis evaluation trial update. 4th International Symposium on CT and MR Brain Perfusion. Chicago, USA, September 2005.

MRI and the ischemic penumbra. 4th International Symposium on CT and MR Brain Perfusion. Chicago, USA, September 2005.

Refining the PWI-DWI hypothesis. 4th International Symposium on CT and MR Brain Perfusion. Chicago, USA, September 2005.

Predict Perfusion-Diffusion Mismatch. 14th European Stroke Conference. Bologna, Italy, July 2005.

Kristie Carter

Trends in ethnic disparities of stroke in Auckland New Zealand, 1981-2003. New Zealand Rehabilitation Association. Auckland, New Zealand, November 2005.

Stroke: can we explain any improvements in stroke survival? Results from population-based incidence studies in Auckland, New Zealand over 20 years. Stroke Society of Australasia, Annual Scientific Meeting. Melbourne, Australia, September 2005.

Continued improvements in short-term survival after stroke: experience from population-based studies in Auckland, New Zealand. 14th European Stroke Conference. Bologna, Italy, May 2005.

Alan Cass

The economic burden of chronic kidney disease. NSW Renal Services Network Workshop on Prevention of Chronic Kidney Disease. Sydney, Australia, December 2005.

Sharing the true stories - improving communication between Aboriginal patients and health carers. NSW Aboriginal Chronic Care Forum. Sydney, Australia, December 2005.

How might research be translated to improved access and health outcomes for Indigenous Australians with end-kidney disease. NSW Aboriginal Health Research Conference. Sydney, Australia, October 2005.

Sharpening the impact of Aboriginal health research. NSW Aboriginal Health Research Conference. Sydney, Australia, October 2005.

Transplants at the end of the galaxy - health system barriers for remote and isolated patients. 3rd Annual NSW All Organs Transplant Symposium. Port Macquarie, Australia, October 2005.

Chronic kidney disease epidemiology in Australia - highlighting the excess burden of disease among Indigenous Australians. Rural Health Education Foundation Satellite Broadcast. Sydney, Australia, August 2005.

Cardiovascular disease in end-stage kidney disease. ASEAN Cardiovascular and Lipid Forum. Melbourne, Australia, June 2005.

Exploring the burden of chronic kidney disease in Australia. Kidney Health Australia National Consumer Participation Council. Hobart, Australia, May 2005.

Kidney disease in disadvantaged populations. Kidney Health Australia National Chronic Kidney Disease Strategy Workshop. Sydney, Australia, March 2005.

John Chalmers

Blood pressure - independent effects of drugs inhibiting the renin-angiotensin system. 4th Meeting of the French and Italian Societies of Hypertension. Turin, Italy, September/October 2005.

What will ADVANCE tell us that we don't already know? 4th Meeting of the French and Italian Societies of Hypertension. Turin, Italy, September/October 2005.

Lower target blood pressures would likely be safe and effective for the prevention of recurrent cerebrovascular disease. Stroke Society of Australasia, Annual Scientific Meeting. Melbourne, Australia, September 2005.

Diuretics, friend or foe. 3rd World Congress of Nephrology, Satellite Symposium on Hypertension and the Kidney. Perth, Australasia, July 2005.

Diuretics; a modern treatment option? Symposium on Treatment of Hypertension. 3rd World Congress of Nephrology. Singapore, June 2005.

Choice of antihypertensive. 3rd World Congress of Nephrology. Singapore, June 2005.

ADVANCE - Rationale, study design and current status. Hospital La Salpetriere, Paris, France, June 2005.

ADREM - Evaluating the effects of blood pressure and glucose lowering on vascular retinal disorders in patients with Type 2 diabetes mellitus. 15th European Society of Hypertension Annual Scientific Meeting. Milan, Italy, June 2005.

ADVANCE Study: run-in data. 15th European Society of Hypertension Annual Scientific Meeting. Milan, Italy, June 2005.

Effects of low dose perindopril-indapamide combination on blood pressure in Type 2 diabetes: the ADVANCE trial run-in phase. 15th European Society of Hypertension Annual Scientific Meeting. Milan, Italy, June 2005.

Amino-terminal pro-B-type natriuretic peptide (NT-proBNP): a risk factor for most seasons. Fifty-third Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand. Perth, Australia, June 2005.

Lucy Chen

How to bridge policy and practice issues between international experts and the Government of China. China - Australia Hospital Management Forum. Sydney, Australia, November 2005.

Bridging opportunities between Chinese government and international organisations. Australia-China Business Connection (ACBC) Australia-China Management International Forum. Ministry of Health, China; Australian Consulate-General in Shanghai; Shanghai Health Bureau. Brisbane, Australia, November 2005.

Clara Chow

Field Studies in rural India demonstrate a surprisingly high prevalence of cardiovascular risk and disease. Cardiac Society of Australia and New Zealand (CSANZ) Annual Scientific Meeting. Perth, Australia, August 2005.

Kathleen Clapham

Building resilience to prevent injury among urban Indigenous children and youth in NSW Injury Prevention. Network of Aotearoa New Zealand. Wellington, New Zealand, November 2005.

Building resilience to prevent injury among Indigenous children and youth. Public Health Association Annual Conference. Perth, Australia, September 2005.

Marlene Fransen

Knee replacement surgery. Evaluating rehabilitation management strategies. Australian Health Insurance Association meeting. Melbourne, Australia, November 2005.

Osteoarthritis. Future directions for physiotherapy. National Neurology and Gerontology Groups, Australian Physiotherapy Association. Melbourne, Australia, November 2005.

Martin Gallagher

Variability in iron management guideline implementation in haemodialysis units in Australia. ANZSN Annual Scientific Meeting. Wellington, New Zealand, September 2005.

Maree Hackett

Frequency and management of post-stroke depression: a systematic review of observational studies. XVIII World Congress of Neurology. Sydney, Australia, November 2005.

The frequency of depressive symptoms following stroke: a systematic review of observational studies. 14th European Stroke Conference. Bologna, Italy, May 2005.

Predictors of depression following stroke: a systematic review of observational studies. Stroke Society of Australasia, Annual Scientific Meeting. Melbourne, Australia, September 2005.

Depression associated with stroke: its importance and response to drug treatments. Treating emotional disorders associated with physical illness. International Health Evening Seminar Series, The George Institute for International Health. Sydney, Australia, May 2005.

Current evidence in the management of depression associated in stroke. Co-morbidity of stroke and mental illness symposium. Beijing, China, April 2005.

Rachel Huxley

The growing burden of overweight and obesity in the Asia-Pacific Region. The 17th World Congress of Epidemiology. Bangkok, Thailand, August 2005.

Is impaired fetal growth a determinant of subsequent renal disease? 3rd World Congress of Nephrology. Singapore, June 2005.

Does sex matter in the associations between classical risk factors and fatal coronary heart disease? 6th International Conference on Preventive Cardiology. Iguassu Falls, Brazil, May 2005.

Exploration of the fetal origins hypothesis: does impaired fetal growth materially influence subsequent blood cholesterol levels? 6th International Conference on Preventive Cardiology. Iguassu Falls, Brazil, May 2005.

Overweight & obesity: will they be the main barriers of CVD prevention in the 21st Century? "Facilitating policy change for CVD prevention". Preventive Cardiology. Iguassu Falls, Brazil, May 2005.

Rebecca Ivers

Prevention of road traffic injury. Seminar Series, Beijing Institute of Technology. Beijing, China, November 2005.

Injury, our future challenge. Seminar Series, China Australia Partnership for Health, Peking University. Beijing, China, November 2005.

Risk factors for injury in young drivers: a prospective cohort study. 17th World Congress of Epidemiology. Bangkok, Thailand, August 2005.

Stephen Jan

The trade in human organs in Tamil Nadu: the anatomy of regulatory failure. The Australian Health Policy Institute, The University of Sydney and The George Institute for International Health. Sydney, Australia, September 2005.

The trade in human organs in Tamil Nadu: the anatomy of regulatory failure. Australian & New Zealand Health Economics Conference. Auckland, New Zealand, September 2005.

Rohina Joshi

Cardiovascular disease now a leading cause of death in rural India. 9th Annual Meeting, Global Forum of Health Research. Mumbai, India, September 2005.

Chronic disease mortality in rural Andhra Pradesh. 17th World Congress of Epidemiology. Bangkok, Thailand, August 2005.

Crystal Lee

Ethnic comparisons of obesity and cardiovascular risk factors in the Asia-Pacific Region. Research in Progress Seminar, School of Public Health, University of Sydney. Sydney, Australia, September 2005.

Stephen MacMahon

Epidemiological Outlook. Cardiovascular Risk Management: Bayer's Expertise in a Complex Area. International BHC Press Seminar. Cologne, Germany, November 2005.

Epidemiology and prevention of cardiovascular disease. 7th International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV. Dublin, Ireland, November 2005.

Role of observational epidemiology in clinical trials. 10th International Symposium on Long-term Clinical Trials, Advanced Issues in the Design and Conduct of Randomised Clinical Trials. Oxford, UK, September 2005.

Calcium antagonist story. 15th European Society of Hypertension Annual Scientific Meeting plenary session: Facts and fallacies in the history of antihypertensive treatment. Milan, Italy, June 2005.

Population trends in cardiovascular risk factors: new insights. 15th European Society of Hypertension Annual Scientific Meeting combined symposium: The increasing incidence of cardiovascular disease: new paradigms for improved risk factor management. Milan, Italy, June 2005.

Differences in outcome claims for different drug classes? Cardio-Renal Advisory Committee Meeting. Washington, USA, June 2005.

General claims for anti-hypertension drugs. Cardio-Renal Advisory Committee Meeting. Washington, USA, June 2005.

Alexandra Martiniuk

A cluster randomized trial to evaluate an epilepsy education program. XVIII World Congress of Neurology. Sydney, Australia, November 2005.

The Solomon Islands and Rotary International. University of New South Wales. Sydney, Australia, November 2005.

The challenge of stroke in the Asia-Pacific region. 36th Australian Public Health Conference. Perth, Australia, September 2005.

A cluster randomized trial of a Grade 5 Epilepsy Education Program. 17th World Congress of Epidemiology. Bangkok, Thailand, August 2005.

Stroke prevalence and risk factors in the WHO Western Pacific and South-East Asian regions. 17th World Congress of Epidemiology. Bangkok, Thailand, August 2005.

The London Epilepsy Support Centre epilepsy education programs and evaluation. International Epilepsy Conference. Paris, France, August 2005.

The health of the Inuit in Northern Canada. The University of New South Wales. Sydney, Australia, July 2005.

Kylie Monro

Global health research coalitions in other countries. Australian Coalition for Global Health Research Second Biennial Roundtable. Canberra, Australia, October 2005.

National audit of global health research. Australian Coalition for Global Health Research Second Biennial Roundtable. Canberra, Australia, October 2005.

Susanne Mouwen

Research activities in injury prevention and trauma care at The George Institute. Trauma Research Seminar, NSW Institute of Trauma and Injury Management (ITIM). Sydney, Australia, October 2005.

From social work to public health research in trauma care at The George Institute. Allied Health and Rehabilitation Trauma Seminar, Institute of Trauma and Injury Management (ITIM). Sydney, Australia, September 2005.

Bruce Neal

Blood Pressure Lowering Treatment trialists Collaboration. 15th European Society of Hypertension Annual Scientific Meeting. Milan, Italy, June 2005.

Preventing cardiovascular disease and heart failure - the practical implications of epidemiology. Queensland Heart Failure Meeting. Sydney, Australia, June 2005.

Community Interventions and Salt Reduction Harvard Workshop: Exploring Potential Interventions for Reducing Disability from Chronic Disease. Boston, USA, April 2005.

Possibility of nation wide prevention of hypertension through a low-sodium high-potassium salt substitute. China Ministry of Health Meeting. Beijing, China, March 2005.

Robyn Norton

Injuries: a neglected global issue. Inaugural Nossal Institute Global Health Forum. Melbourne, Australia, December 2005.

Proposed structure and role of ACGHR. Australian Coalition for Global Health Research Second Biennial Roundtable. Canberra, Australia, October 2005.

Public health curriculum development at The University of Sydney. Public Health Education Reform Forum. Beijing, China, September 2005.

Road traffic injuries and poverty: a research challenge. 9th Annual Meeting, Global Forum for Health Research. Mumbai, India, September 2005.

Road traffic injuries: a public health challenge. Public Health Approach to Injury Prevention Symposium. Beijing, China, June 2005.

Emerging road safety problems in developing nations. IPWEA NSW Annual Conference. Sydney, Australia, May 2005.

Integrating trauma research into clinical practice. Trauma 2005. Whistler, Canada, April 2005.

Addressing the global burden of injuries. The 14th Annual IHMEC Conference. San Francisco, USA, April 2005.

A perspective of trauma across the globe: What's happening in Asia? Austrama 2005. Sydney, Australia, February 2005.

Anushka Patel

Is all hypertension created equal? Royal Prince Alfred Hospital /Pfizer Cardiology Update Meeting for Rural Physicians. Sydney, Australia, November 2005.

Management of acute coronary events in China - preliminary results of a prospective survey. Launch of the World Heart Federation BRIG Project. Beijing, China, September 2005.

ACS management - lessons learnt from developing countries. IC Health Workshop on Research Priorities for the Management of Acute Coronary Syndromes in Low-resource Settings. New Delhi, India, August 2005.

Common trial problems - no pilot study, no treatment difference, and no adjustment for non-compliance. Clinical Trials Symposium. 53rd Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand. Perth, Australia, August 2005.

New diagnostic tests for acute cardiac disease. Cardiovascular Lipid Weekend. Surfers Paradise, Australia, July 2005.

What do clinicians need to know about cardiovascular risk? 6th International Conference on Preventive Cardiology. Iguassu Falls, Brazil, May 2005.

The cardiovascular protective effects of statins are due mainly to non-lipid effects (Debate - Against). 6th International Conference on Preventive Cardiology. Iguassu Falls, Brazil, May 2005.

Cardiovascular risk assessment. Australian Doctor / Coppleston Committee (The University of Sydney) Internal Medicine Update for GPs. Sydney, Australia, April 2005.

Mark Stevenson

Helmet use among motorcyclists in the Hai Duong Province of Vietnam. 1st National Scientific Conference on Injury Prevention and Control. Hanoi, Vietnam, November 2005.

Injury in Vietnam: a cross-sectional household survey. 17th World Congress of Epidemiology. Bangkok, Thailand, August 2005.

The scientific basis of injury prevention and control. Pre-Conference to the First European Conference on Injury Prevention and Safety Promotion. Evia, Greece, April 2005.

Injuries are no accident: principles of injury prevention. Austrama Conference. Sydney, Australia, February 2005.

Pool fencing saves lives. Austrama Conference. Sydney, Australia, February 2005.

Fiona Turnbull

Comparative effects of ACE-I and ARB on stroke, coronary heart disease and heart failure. Plenary session, 15th European Society of Hypertension Annual Scientific Meeting. Milan, Italy, June 2005.

Blood pressure lowering and independent drug effects: compelling new evidence from the Blood Pressure Trialists' Collaboration. Investigator-initiated satellite symposium, 15th European Society of Hypertension Annual Scientific Meeting. Milan, Italy, June 2005.

What matters is how much blood pressure is lowered (Antihypertensive treatment benefit is mostly explained by blood pressure lowering). 2nd Global Cardiovascular Clinical Trialists Forum. Cannes, France, April 2005.

Mark Woodward

Determinants of cardiovascular diseases in the Asia Pacific Region - The Asia Pacific Cohorts Studies Collaboration. 7th Annual Scientific Meeting of the Hong Kong Epidemiological Association. Hong Kong, November 2005.

Epidemiology of CVD risk factors in the Asia Pacific region. Praram 9 Hospital. Bangkok, Thailand, October 2005.

Diabetes: how big is the problem in the Asia Pacific region? 3rd World Congress of Nephrology. Singapore, June 2005.

The effects of different blood pressure lowering regimens on major cardiovascular events in important patient subgroups. 6th International Conference on Preventive Cardiology. Iguassu Falls, Brazil, May 2005.

Kate Anderson

ACSANZ (Association for Canadian Studies in Australia and New Zealand) Postgraduate Travel Award

Kristie Carter

The University of Auckland Graduate Research Fund Grant

Alan Cass

Don and Lorraine Jacquot Research Establishment Award, Royal Australasian College of Physicians

John Chalmers Post-Doctoral Award, The George Foundation for International Health

Marlene Fransen

NHMRC Career Development Award

Maree Hackett

The University of Auckland Graduate Research Fund Grant

World Congress of Neurology Bursary

NHMRC Public Health (Australia) Fellowship

Alex Headley

Australian Youth Ambassador Scholarship, AusAID

George Foundation Fellowship

Crystal Lee

NHMRC Public Health Scholarship

Nicole Li

NHMRC Public Health Scholarship

Stephen Li

GOLD AWARD, The C&R I-CAT study component in the Familial Hypercholesterolaemia Clinical Support Service NSW, NSW Premier's Public Sector Awards

Anushka Patel

John Chalmers Post-Doctoral Award, The George Foundation for International Health

Cottrell Fellowship, Royal Australasian College of Physicians

Foundation for High Blood Pressure Research Fellowship, Royal Australasian College of Physicians

National Heart Foundation of Australia Career Development Fellowship

Directors' Office

Stephen MacMahon

Principal Director
Professor of Cardiovascular Medicine and Epidemiology,
The University of Sydney

Robyn Norton

Principal Director
Professor of Public Health,
The University of Sydney

Tara Doris

Executive Assistant to Professor MacMahon

Graham Lawrence

Director, Commercial Development

Kristina McDaid

Executive Assistant to Professor Norton

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Vlado Perkovic

Associate Director, Clinical Research

Research Advisory Unit

John Chalmers

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Emeritus Professor of Medicine,
The University of Sydney

Christine Bent

Personal Assistant to Professor Chalmers

The George Foundation for International Health

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The University of Sydney

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Senior Lecturer, The University of Sydney

Anushka Patel

Head of Cardiac Program

Charles Algert

Research Fellow

David Ali

Senior Project Manager

Kate Anderson

Research Fellow

Hisatomi Arima

Visiting Scholar

Andrea Avolio

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Magnolia Cardona

Senior Epidemiologist and Program Manager

Ana Carreras

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Research Scholar

Rochelle Currie

Head of Project Management

Samantha Flynn

Senior Project Manager

Martin Gallagher

Senior Research Fellow

Kylie Gibson

Study Monitor

Jane Goddard

Project Monitor

HAN Dorothy

Senior Project Manager (Beijing Office)

Lyndal Hones (until May 2005)

Project Monitor

Sally Hough

Endpoint Coordinator

HUANG Amy

Research Scholar

Rohina Joshi

Research Fellow

Andre Pascal Kengne

Research Fellow

Nicola Lewis

Project Manager

Nicole Li

Research Fellow

Stephen Li

Research Scholar

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Personal Assistant to Associate Professor Neal

Helen Monaghan

Senior Project Manager

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Study Monitor

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Abdulrahman Alzahem
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Senior Lecturer, The University of Sydney

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Viraji Kumarasinghe
Study Monitor

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Suzanne McEvoy
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Susanne Mouwen
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Sadnana Raju
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ZHANG Junhua (until June 2005)
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ZHOU Ying
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Professor of Stroke Medicine and Clinical Neuroscience,
The University of Sydney

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Senior Project Manager

Maree Hackett
Research Scholar

Alex Headley
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Sarah Homewood
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Shaheenul Islam
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Zehra Memon
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MING Cai
Visiting WHO Fellowship Placement

Robyn Secomb
Stroke Research Nurse

Robyn Smith
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Professor of Biostatistics,
The University of Sydney

Evangelie Barton
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Sam Colman (until April 2005)
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Rachel Huxley
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Senior Lecturer, The University of Sydney

Crystal Lee
Research Scholar

Alexandra Martiniuk
Senior Research Fellow

Alireza Ansari Moghaddam
Research Scholar

Yoshitaka Murakami (until February 2005)
Visiting Fellow

SING Kai Lo (until February 2005)
Senior Biostatistician
Associate Professor, The University of Sydney

YANG Xiaoguang (until March 2005)
Visiting Scholar

China Program

Lucy Chen
Director

Sue Brownhill (until August 2005)
China Program Coordinator

HAN Dorothy
Senior Project Manager (Beijing Office)

Alex Headley
Australian Youth Ambassador (Beijing Office)

LIN Wendy
Office Assistant (Beijing Office)

LIU Lili (until November 2005)
Senior Operations Manager (Beijing Office)

Lyndi Ma
China Program Coordinator

YE Rong
Administration Assistant

YU James
Research Fellow (Beijing Office)

ZHANG Jean
Project Officer (Beijing Office)

ZHANG Junhua (until June 2005)
Senior Research Fellow (Beijing Office)

ZHOU Ying
Project Officer (Beijing Office)

Policy and Practice Program

Lucy Chen
Senior Policy Fellow

CHI Weiwei
Policy Fellow

Katherine DeLand (until November 2005)
Visiting Scholar

Stephen Jan
Senior Health Economist

Alina McDonald
Research Officer

Margaret Tayar (until June 2005)
Capacity Development Coordinator

Centre for Research Management

Joanne Andrews
Chief of Research Operations

Rochelle Currie
Head of Project Management

Kathleen Jayne
Head of Data Management

Sameer Pandey
Head of Information Services

Pradeep Baisani
Database Administrator / Developer

Rob Blascetta
IT Helpdesk Analyst

Teodoro Debulo
Programmer/Systems Administrator

Ankur Desai
IT Helpdesk Analyst

Suzanne Ryan
Clinical Data Manager

Manuela Schmidt
Clinical Data Manager

Gemma Starzec
Clinical Data Manager

Balamurali Vijayan
Database Administrator/Developer

George Vukas
Systems and Network Administrator

People Strategy and Development Unit

Rick Brown
People Strategy and Development Manager

Aylin Dulagil
Recruitment Consultant

Kristy Eagleton (until July 2005)
Human Resources Administrator

Sarah Reid
Learning & Development Consultant

Karen Sellar (until July 2005)
Human Resources Manager

Lydia Venetis
People Strategy and Development Coordinator

Public Affairs Unit

Paul Davies

Public Affairs Manager

Don Atkinson

Assistant Graphic Designer

Evangelie Barton

Event Coordinator

Emma Eyles

Public Affairs Officer

Victoria Hollick (until August 2005)

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Jodie Lewin (until August 2005)

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Beverley Mullane

Graphic Designer

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Melanie Parkinson

Website Officer

Sue White (until February 2005)

Public Affairs Manager

Finance and Administration Unit

Ross Bidecove

Chief Financial Officer

Kerrith Sowden

Finance and Administration Manager

Sarah Allen

Receptionist, Kent Street

Josephine Bender

Kitchen Attendant, Kent Street

Claire Coulter

Kitchen Attendant, KGV

Juanita Datu (until August 2005)

Accountant

Damian Estrella (until September 2005)

Administration Trainee

Joshua Fathers

Management Accountant

Diana Hachem

Receptionist, KGV

Karen Hayward

Administration Coordinator

Hunter Jiang

Assistant Accountant

Trang Le

Accounts Payable Clerk

James Scott

Accountant

Honorary Scholars

Tony Adams

Senior Fellow
Policy & Practice

Robert Bernstein

Senior Fellow
Policy & Practice

Samath D Dharmaratne

Senior Fellow
Injury Prevention & Trauma Care

Simon Finfer

Professorial Fellow
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Helen Herrman

Honorary Professorial Fellow
Neurological & Mental Health

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Kyp Kypri

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Anthony Rodgers

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Robert Timmons

Senior Fellow
Policy & Practice

Financial Summary as at 30 June 2005

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Revenue and Expenditure for Financial Year 2004/05.

REVENUE	AUD\$
Peer Reviewed Grants:	
NHMRC	1,344,340
Other Peer Reviewed Grants	935,341
	2,279,681
Other Grants:	
ADVANCE	17,232,122
SHARP	2,834,633
Other Project Funding	1,280,124
	21,346,879
Infrastructure Grants	3,276,110
Other Revenue	1,244,133
Total Revenue	28,146,803
EXPENDITURE	
Projects	20,086,488
Infrastructure	6,993,588
Total Expenditure	27,080,076



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The University of Sydney

