A DECADE OF DISCOVERY, INNOVATION AND IMPACT
OUR MISSION

IS TO IMPROVE THE HEALTH OF MILLIONS OF PEOPLE WORLDWIDE

OUR VALUES

We will achieve this by:

- Providing the best evidence to guide critical health decisions
- Engaging with decision makers to enact real change
- Targeting global epidemics, particularly of chronic diseases and injury
- Focusing on vulnerable populations in both rich and poor countries

Our HUMANITARIAN COMMITMENT will spur us to tackle the health issues affecting high-risk and disadvantaged people worldwide.

Our focus on EXCELLENCE will produce scientific evidence that is ethical and of the highest quality.

Our CREATIVITY will challenge traditional thinking and provide an impetus for new and innovative solutions to the world’s leading health problems.

Our INTEGRITY will underpin all our work and interactions, including our collaborations with partner organisations worldwide.

Our ‘CAN DO’ approach will produce timely, effective action, even in the face of adversity or other barriers to implementation.

Our emphasis on IMPACT will ensure our work has real consequences for those who are most vulnerable to disease and injury.
The George Institute is a Sydney-based, world-leading research institute with offices in Australia, China, India and the United Kingdom. While focusing on the prevention and management of chronic disease and injury, we also develop innovative health solutions for primary and hospital-based care.

Since its establishment in Australia in 1999, with the support of the University of Sydney’s Medical School, the Institute has made a significant impact on global health.

We have conducted major global applied research projects and innovative community-based programs from our research hubs in Australia, China and India.

In 2009, the Institute celebrates its ten-year anniversary and we are proud of the impact we have had on global health in the last decade. We have:

- Provided global evidence to reduce heart attack, stroke and kidney disease in diabetes patients
- Led global research that has changed practice in the treatment of high blood pressure and stroke
- Identified cost-effective treatments to save lives in intensive care patients globally
- Developed a program to address high rates of chronic disease in Indigenous communities
- Created a world-first survey tracking global investment into treating diseases of the developing world
- Determined that chronic diseases and injuries are the major causes of death in rural India
- Identified risks and strategies to reduce the high death and injury rates among young drivers
- Designed an intervention in China that dramatically increased use of seat belts to improve road safety
- Demonstrated how lower blood pressure helps save dialysis patients’ lives
- Provided vital evidence to improve outcomes for millions of patients with recurring low back pain
2008/2009 HIGHLIGHTS

LOWERING BLOOD PRESSURE SAVES LIVES IN DIALYSIS PATIENTS

A systematic review assessing the effect of blood pressure lowering in patients receiving dialysis treatment found a significant 20% reduction in the risk of death for patients with kidney disease who reduced their blood pressure. Kidney failure patients are at an increased risk of death due to cardiovascular complications and until now no treatments had been clearly proven to reduce this risk. These findings were published in The Lancet and are set to change the way clinicians treat dialysis patients.

RESULTS TO CHANGE HOW CRITICALLY ILL PATIENTS ARE TREATED

The NICE-SUGAR (Normoglycemia in Intensive Care Evaluation and Survival Using Glucose Algorithm Regulation) study, published in The New England Journal of Medicine, found that the common practice of intensively lowering blood glucose in critically ill patients increases the risk of death by 10%. Intensive blood glucose lowering has been widely recommended to control hyperglycemia - a serious and extremely common condition among acutely ill patients. These findings highlight that international clinical guidelines need urgent review.

IDENTIFIED WORLD SPEND ON DISEASES OF DEVELOPING COUNTRIES

The Health Policy Unit at the Institute launched the first year results from the Global Funding of Innovation for Neglected Diseases (G-FINDER) survey of global investment into research and development of new products for neglected diseases. The survey found that over US$2.5 billion was invested in 2007, with almost 80% of these funds contributing to HIV/AIDS, TB, and malaria. The survey also revealed that many significant diseases claiming millions of lives in developing countries remain underfunded. These findings were published in the Public Library of Science (PLoS).

BACK PAIN A RECURRING ISSUE - ARE WE TREATING IT RIGHT?

Back pain is a reoccurring problem in many populations across the world. Musculoskeletal researchers at the Institute have shown that after an episode of back pain resolves, one in four people will experience a recurrence within one year. A prevalent and costly condition, back pain is becoming an increasing public health concern as populations age. Researchers highlight that patients and clinicians should shift their focus to prevention, taking care of their back as they would of their heart by eating correctly and undertaking regular exercise.

GLOBAL FUNDING HELPS ESTABLISH CHINA’S FIRST CHRONIC DISEASE RESEARCH CENTRE

An initiative announced in mid-2009, The George Institute, China has received funding to be the host institute for the first global health initiative designed to tackle the massive health threat of chronic disease in China. The new China International Center for Chronic Disease Prevention will be established to improve prevention and control of cardiovascular health care, stroke, coronary heart disease and other common cardiovascular conditions. The Center is one of 11 centres based in developing countries across the world funded by the National Heart, Lung and Blood Institute of the US National Institutes of Health and UnitedHealth Group.
### STRATEGY AND OPERATIONS

#### Progress against our strategies

The Institute's strategic plan was revised in late 2008, and is designed to guide the Institute's work from 2009 to 2011. Developed in consultation with managers and the Institute’s board, it centres around five key directions that will best help us achieve our mission.

<table>
<thead>
<tr>
<th>STRATEGIC DIRECTION</th>
<th>PROGRESS IN 2008/2009</th>
</tr>
</thead>
</table>
| 1. HIGH-QUALITY, HIGH-IMPACT RESEARCH | - Announced significant global research findings from a number of studies, including in the areas of intensive care management, kidney treatment and a report on neglected disease  
- Experienced a 59% increase in the number of published research papers, including in top-tier publications such as *The Lancet*, the *British Medical Journal* and *The New England Journal of Medicine*  
- Disseminated the results of key research, including 201 conference presentations, an increase of 116%  
- Increased our attention on research programs, with a policy focus on health care delivery and systems both globally and in Australia  
- Secured and commenced a major program grant from Australia’s National Health and Medical Research Council for AU$12 million to combat cardiovascular disease  
- The AWASH salt reduction strategy and model was acknowledged in the Australian Government Preventative Health Taskforce Obesity Review as a model for nutrition campaigns  
- See more details under Discovery (p.15) and Impact (p. 27) |
| 2. FINANCIAL SUSTAINABILITY | - Awarded a total of 24 peer-reviewed grants, an increase of 140% on the previous financial year  
- Awarded a total of 11 research fellowships, an increase of 120% on the previous financial year  
- Maintained a unique, diverse funding model, including peer-reviewed funding, infrastructure, industry and funds generated by strategic enterprises such as George Clinical  
- Relaunched philanthropic activities at the Institute, including establishing a Board Fundraising Committee and hosting several targeted stakeholder events  
- See more details under Financial Report (p. 44) |
| 3. ROBUST OPERATIONS IN CHINA & INDIA | - Secured funding from the National Heart, Lung and Blood Institute of the US National Institutes of Health and UnitedHealth Group for the first Center of Excellence for Chronic Disease Prevention and Control in China  
- Maintained regional-focused research, including country-specific programs investigating cardiovascular risk factors, acute coronary care and injury prevention in China and India  
- Reviewed and strengthened our core academic strategy in India  
- Increased resources so that, collectively, China, India and UK staff represent 36% of the workforce at the Institute |
| 4. STRONG STAKEHOLDER RELATIONSHIPS | - Completed a major stakeholder review in Australia  
- Conducted several key stakeholder events across a range of interest areas, including Indigenous health, nutrition and health policy  
- Commenced a program of government engagement in Australia  
- Increased media coverage of the Institute by 51%  
- Commenced a stakeholder review in China |
| 5. GOVERNANCE & MANAGEMENT APPROPRIATE FOR A GLOBAL ORGANISATION | - Maintained board structure and membership as outlined in the Institute’s constitution  
- Commenced strategic discussions on the future global management structure of the Institute with Senior Executives and Board of Directors  
- Created and convened a number of board committees to oversee key strategically important areas of the Institute (see p. 39 for full list of board committees) |
KEY PERFORMANCE AREAS

Research output: academic publications and presentations

To ensure maximum exposure of research findings, the Institute secured an increased number of publications and presentations in 2008/2009, providing a channel to disseminate research results. During the year research findings were published in The New England Journal of Medicine, the British Medical Journal, the Public Library of Science (PLoS) and The Lancet among others. This publication record is extended and supported by our stakeholder engagement program, working with government and media.

Institute funding sources

The George Institute is an independent not-for-profit organisation. A best practice funding model underpins the Institute’s operations which makes the best use of donor funds as well as producing self-generated income. Strategic enterprises such as George Clinical generate a surplus from mission-related commercial activities which is reinvested into the main work of the Institute. See more on strategic enterprises (p. 13) and our funding sources (p. 48) later in the report.

Staff at the Institute

A total of 238.9 full time equivalent (FTE) staff were employed at the Institute as at 30 June 2009 (304 staff including casuals). Collectively, China, India and the UK represent 36% of the workforce.
STAKEHOLDER REVIEW

Perceptions of The George Institute – a perspective from stakeholders

In 2008, the Institute undertook its first survey of existing and potential key stakeholders in Australia. An international standard for stakeholder engagement (AA1000SES) was used as a guide. This defines stakeholder engagement as driving strategic direction and operational excellence for organisations through learning, innovating and performing.

We conducted nearly 30 qualitative interviews with senior people in Australian Government (State and Federal), trusts and foundations, corporate organisations and academic institutions, and collaborating organisations. A key emphasis in the research and its methodology was the need to include organisations with no current relationship with the Institute and to not be bound by our current stakeholder ‘footprint’.

Findings – funding model, scale of operations, people and culture

Findings highlighted the perceived strengths in the Institute's unique funding model, where the establishment of its mission-related commercial enterprise (George Clinical) was viewed as highly innovative best practice. The Institute's presence in China and India was also regarded as a key, unique strength and one which other Australian organisations may well wish to access. The scope and scale of the operations at the Institute were also positively regarded, and its people, especially its scientific leaders, were viewed as being of the highest quality. The research confirmed the strength of many existing Institute partnerships and collaborations. The culture of the Institute was variously described as innovative, entrepreneurial, creative, ‘can do’ and professional. These were seen as distinguishing traits for an academic institution and ones which were highly valued by stakeholders.

Future

For the future, stakeholders saw the Institute as being in a strong position to tackle the big challenges looming on the health landscape, such as an aging population and preventative health. Some stakeholders predicted that the Institute could become very active in health economics and perhaps even take on the role of a ‘think tank’.

Implications and actions

The Institute has fed the detailed findings from this research into its strategic development process. All senior leaders were presented with the results and a presentation was made to all staff. A number of key activities and programs have been initiated in response to the findings.
This year has also seen the establishment of the Global Alliance for Chronic Disease, an initiative that we strongly support. The Alliance is comprised, at present, of six national health organisations – from Australia, the United Kingdom, the United States, Canada, India and China. With the establishment of this new body, the alignment of The George Institute’s core aims with global health care priorities is closer than it has ever been.

Discovering new treatments and informing health policy

In the past year The George Institute has completed a number of large-scale studies that will have significant impact on the health care of people worldwide. These studies included key results that will impact many communities, including those suffering from the neglected diseases of the world through to critically ill patients in intensive care settings. In particular, we have continued to ensure that our research findings impact on global clinical practice through improvement of guidelines – making treatment easier for practitioners and safer and more effective for patients.

We remain committed to improving health care delivery in resource-poor settings. Our focus on closing the Indigenous health gap in Australia, is driven by our participation in the Kanyini Vascular Collaboration, a significant program aimed at understanding the barriers to vascular care among Indigenous Australians. Other programs are focused on the high injury rates among Indigenous Australians, with an emphasis on improving road safety in both the Indigenous and non-Indigenous populations. In India, our involvement in the Andhra Pradesh Rural Health Initiative has helped identify the major causes of death in this very poor rural community, as well as facilitate the development of programs for prevention.

Importantly, the Institute has been involved in a range of new activities focused on informing public health policy in Australia and internationally. During this year we have engaged directly with governments in Australia, the United Kingdom, China and India, focussing on health challenges in chronic disease and injury prevention. We have also worked closely with the private sector, demonstrated by our leadership of AWASH (the Australian Division of World Action on Salt and Health), where we have encouraged key food industry players in Australia, such as Coles and McDonald’s, to reduce salt levels in foods; the next step is to address with our Chinese colleagues the high salt intake in China.
Leading health care innovation

Across the world, there are ongoing reforms aimed at maintaining or improving the quality of health care services for a sustainable cost. Health systems and delivery research has a major role to play in these reforms. Only through innovative approaches that are informed by the best available research evidence, can health care costs be contained, while effectiveness, quality and safety are increased.

With this aim in mind, the Institute continues to pioneer research models that will assist in generating evidence to inform innovative health care. As part of this approach, we are engaged in discussions with the University of Oxford, in collaboration with the UK National Health Service, to establish a Centre for Health Care Innovation in the UK. This collaborative initiative, involves working with both government and communities to ensure their priorities underpin the research we undertake.

In China, where we have an established research base, we were awarded an international contract to host a new centre for chronic disease prevention and control, in partnership with Peking University Health Science Center. The new chronic disease centre is part of a global initiative, funded by the US National Institutes of Health and UnitedHealth Group, and involves collaborations both internationally and within China.

With chronic diseases accounting for more than three quarters of all deaths in China, the centre will be instrumental in helping to arrest this looming health threat to China's growing economic and social prosperity.

Maintaining a solid organisation

Like many organisations worldwide, the Institute has been affected by the Global Financial Crisis, with 2008/2009 being our most financially challenging year in a decade of operation. Yet we have effectively used this time of international crisis to enhance our financial systems and maintain our focus on funding diversity. The result is that the Institute ended the financial year on solid terms. This highlights the importance of a unique funding model in which the Institute does not rely just on research grants from government or other funding bodies. Our strategic enterprises, such as George Clinical (a global clinical trials management operation, see p. 13), provide independent revenue streams, the surplus of which is invested back into our mission-centric work. Looking forward, George Clinical has a healthy pipeline of new projects with leading companies, providing a sound financial underpinning in both the short and long term.

Our strategic planning process over the past year has been centred on supporting the truly global nature of the organisation in terms of our operations and management structure. Primary among our efforts has been a major update of the strategic plan for the coming three years to support this increased global role; the new plan took effect at the beginning of the 2009 calendar year (see p. 4).

A word of thanks

One of our long-standing Board members, Professor Andrew Coats stepped down from the Board during this period and we would like to acknowledge his significant input and support. We would also like to welcome Professor Stephen Garton, Provost and Deputy Vice-Chancellor at the University of Sydney who has accepted our invitation to join the Board. We would also like to acknowledge the valuable input of the Institute’s Research and Development Advisory Committee, chaired by Professor Terry Dwyer AO. The Committee brings together a range of international experts to review the Institute’s progress in research and development, and met in the latter half of 2008. Their insight, advice and recommendations were widely appreciated by both the Board and senior management (see p. 37).

Finally, we would like to thank The George Institute’s dedicated staff. During the year, some have received well-deserved recognition for their work, including the cardiovascular research team, which was given the prestigious Program Grant Achievement Award for 2008 by Australia’s National Health and Medical Research Council. Yet every single staff member deserves our thanks for their consistently high standard of work and their profound belief that what we do makes a difference in this world.
GLOBAL CHALLENGES, GLOBAL PRESENCE

The George Institute is a global organisation with research hubs in Australia, India, China and the United Kingdom. It was established to address the leading causes of death and disability worldwide – chronic disease and injury.

The challenges caused by chronic disease and injuries are significant and not specific to any one corner of the globe. All communities and countries are facing increasing costs and demands on health systems due to an increasing burden of disease.

Over the last ten years, the Institute has made vital discoveries to help arm the world for this rise in chronic disease and injuries. Over this time, researchers at the Institute have built expertise and knowledge both within Australia, where the Institute was established, and globally through its network of more than 300 international collaborations.

Recognising the particular challenges facing developing countries, the Institute has developed research programs that address the issues in the Asia-Pacific region. In particular, India and China have been a significant focus of the Institute’s work (see p. 11 - 12).

Our activities are also growing in the United Kingdom, where we are working in collaboration with the University of Oxford and the United Kingdom Government on a new model for systematic innovation in health care. This involves researchers, health decision-makers and clinicians. The vision of this initiative is a national centre for health care innovation, to ensure government and community priorities are translated into research that informs strong policy and practice (see p. 24).

58 MILLION PEOPLE DIE each year due to chronic diseases and 1.2 million people are killed from road traffic injuries.

In 2030 the leading causes of death across the world are projected to be heart disease, stroke, HIV/AIDS and chronic obstructive pulmonary disease, and there will be an estimated 40% increase in deaths due to injury.
Partnerships to address the gap in Indigenous health

A new model for improving Indigenous health is needed, as life expectancy among Indigenous Australians is low, and chronic diseases and injuries are on the rise. Indigenous health initiatives that are gaining significant traction are those where Indigenous communities are leading the debate and collaborating with health care professionals.

The documentary Yajilarra tells the story of a group of Aboriginal women from the Marninwarntikura Women’s Resource Centre in remote Western Australia who fought to implement successful alcohol restrictions that have decreased the rates of violence, death and hospitalisation. The George Institute supported the making of this powerful documentary and in 2009 hosted a high-profile screening in Sydney. Following this, the Marninwarntikura Women’s Resource Centre asked the Institute to partner with them to tackle health-related challenges in their community, especially foetal alcohol spectrum disorders. This project is proudly supported by Bellberry Limited.

Kanyini (‘mutual caring’ in Pitjantjatjara) is a research program designed to improve health outcomes for Aboriginal and Torres Strait Islander Australians with chronic disease. Kanyini’s researchers will develop an understanding of the barriers faced when accessing health services and use this knowledge to develop innovative best-practice models and inform Indigenous health care policy. Collaboration is central to the Kanyini program, and we are working with the Baker IDI Heart and Diabetes Institute, Aboriginal communities, Aboriginal Medical Services, government and other organisations. The Institute is also focused on building research capacity by employing and training Indigenous researchers.

Injury prevention: a focus on road safety

Injury prevention research at the Institute is a significant program of work that includes a focus on young drivers (see p.19), Indigenous road safety, heavy vehicle safety and motorcycle clothing to prevent motorcycle-related injury. Projects are designed to develop a better understanding of road risks in Australia and how to make roads a safer environment. The Institute also continues to work closely with governments to guide road safety policy. Working with the Northern Territory Government, the Institute provides strategic advice on development, interpretation and evaluation of road safety policy to help reduce road safety issues experienced in the Territory.

Improving the management of back pain

Musculoskeletal researchers at the Institute are developing and evaluating new approaches to the primary care management of musculoskeletal conditions such as low back pain – a major source of disability and cost within Australia. This research is centred around building a better understanding of the causes and sources of low back pain, defining the clinical course of low back pain, better management of low back pain, identifying mechanisms underlying persistence of symptoms following a whiplash injury, and developing and testing clinical measures of low back pain (see p. 20).

Challenging our lifestyle

With prevention a key focus at the Institute, the Australian Division of World Action on Salt and Health (AWASH) is hosted at the Institute. Managing the ‘Drop the Salt!’ campaign, AWASH is taking steps to reduce Australians’ intake of salt, which increases blood pressure and contributes to chronic disease. In its recent ‘Inquiry into Obesity’ report, the Australian Government’s Standing Committee, made specific reference to the AWASH campaign as an exemplary model for government, industry and academia working together to tackle health challenges.

A strong, sustainable health system for the future

As Australia faces spiralling health spending from rising costs and the ageing population, Australian health reforms must emphasise evidence-based, preventative health care. The Institute has plans to establish a centre for health care innovation that would drive a research agenda linked to the needs of patients and clinicians. See p. 24 for more information on this new initiative.

China’s first Center for Chronic Disease Prevention

The first global health initiative designed to tackle the massive health threat of chronic disease in China was announced in June 2009. The new China International Center for Chronic Disease Prevention, which will be hosted by The George Institute, China, draws together 12 leading national and international institutions to centrally coordinate chronic disease research, fund pilot research programs and provide hands-on research leadership. It is one of 11 centres in developing countries across the world, funded by the National Heart, Lung and Blood Institute of the US National Institutes of Health and UnitedHealth Group.

Several ‘home grown’ chronic disease projects are under way, in collaboration with The George Institute’s global network:

- Clinical Pathways for Acute Coronary Syndrome 2 (CPACS2) aims to establish effective management pathways for acute coronary care in hospitals.
- China Clinical Control of Dyslipidemia (CCCD) aims to raise awareness of dyslipidemia (a disruption in the amount of lipids in the blood) and promote the use of treatment guidelines.
- A Simplified Approach to Managing Cardiovascular Disease in Chinese Communities is a pilot study aiming to find an effective approach to treatment for practitioners to follow.
- China Salt Substitute Study in Tibet (CCCS-Tibet) is examining levels of raised blood pressure in the Tibetan population, and comparing the blood pressure lowering effects of salt substitute vs salt substitute combined with low-dose diuretics.

Preventing injury

As motorisation increases as part of China’s economic development, so too does the rate of road injury and deaths. Improving road safety in China is a long-term project, so it makes sense to start with today’s young drivers. The China Novice Driver Study is examining the effects of training novice drivers in ‘real world’ conditions. If successful, this pilot project may lead to a larger study across China.

With motorcycles making up a huge proportion of vehicles in China, The George Institute, China is involved in a multi-centre study of helmet usage among riders. The focus is on non-standard helmets. Researchers will investigate what proportion of riders use these helmets and how well the use of standard helmets is enforced. Outputs from this project will help inform road safety policy development in China.

Representing international research in India

In India, the Institute is undertaking a number of projects that are part of major global projects. The Population Health Metrics Consortium Project – or GC-13 – is an international study aiming to develop instruments to measure population health. An Indian arm of the study is being conducted by The George Institute, India with funding from the Bill & Melinda Gates Foundation. Now half-way through this six-year study, instruments have been tested in 22 villages in Andhra Pradesh to estimate population mortality rates, disease prevalence, and the coverage of preventive therapies such as vaccination. We have also conducted more than 4,800 verbal autopsies (interviews with families of those who have died) in an effort to understand the key causes of death in the region.

A three-year project (commencing in 2010) will focus on patients with established cardiovascular disease. Called UMPIRE (Use of a Multidrug Pill In Reducing cardiovascular Events), it is an EC-funded study on the prevention of cardiovascular events, and will involve 1,000 patients in India and a further 1,000 in Europe. It will compare usual care with a new polypill-based strategy, which combines proven risk-reduction medicines into one low-cost, easy-to-take pill. Collaborators on the project are the Centre for Chronic Disease Control in New Delhi and the Public Health Foundation of India. See more information on the polypill on p. 24.

Significant discoveries in rural India

The Andhra Pradesh Rural Health Initiative (APRHI), conducted with a number of partners including the Byrraju Foundation, aimed to determine the major causes of mortality and examine the prevalence of cardiovascular risk factors. The project also investigated the effectiveness of health promotion and algorithm-based care (a decision tree for health care providers) on patients with high risk of cardiovascular disease in a rural Indian community. Involving over 40 villages in Andhra Pradesh, the mortality surveillance component showed that cardiovascular diseases were already the leading cause of death in this region, and this was consistent with high levels of cardiovascular risk factors also demonstrated. Analysis of results of a cluster-randomised trial examining the health promotion and algorithm-based interventions is in progress. As well as having great relevance for local rural populations, APRHI has provided groundwork for the India arm of GC-13 (see above).

Another initiative building on APRHI is a pilot feasibility project evaluating the integration of the APRHI algorithm into existing decision support software. This software has been developed for the diagnosis, triage and management of common health problems presenting to primary health care centres in under-resourced settings. This preliminary work will be conducted in partnership with a philanthropic organisation and researchers based in Bangalore.

Health partnerships

In 2008, a Memorandum of Understanding (MoU) for collaboration in research activities was signed between The George Institute, the Sydney Medical School and the Indian Council of Medical Research (ICMR). Planning for initial major activities under this MoU is well underway, including Indo-Australian workshops on diabetes and road traffic injuries to be held in late 2009 and early 2010. The anticipated outcomes of these workshops are detailed, collaborative research proposals, suitable for major funding and addressing common priority areas affecting the health of the populations of both countries.

George Clinical offers all the essential elements required to conduct high-quality clinical research across the world, including world-renowned scientific expertise, accessed through The George Institute.

George Clinical is The George Institute’s commercial research arm, providing contract trial management services for pharmaceutical and medical research organisations across the globe. George Clinical activities provide a financial base for The George Institute while also providing operational activities for large clinical studies conducted by The George Institute. In organisational terms, George Clinical is a separate business enterprise running parallel to and complementing The George Institute. The surplus it generates helps to fund the infrastructure that supports the core work of The George Institute.

Showcasing global trials

George Clinical continues to manage two pivotal outcome trials for international companies. This year has seen the group secure two major new contracts:

- **Asia-Pacific trial management** – A trial of a diabetes/cardiovascular drug for one of the world’s top 10 pharmaceutical companies; the drug is in the final stage before registration. Impressed with The George Institute’s ADVANCE study, the company approached George Clinical to provide the scientific leadership for the trial, and to run the Asia-Pacific component of the study – with up to 1,500 patients to be recruited in India, China, Australia, New Zealand and South-East Asia.

- **Global data management** – The second contract is also for a top 10 pharmaceutical company, and involves a trial of a new diabetes/cardiovascular drug. In addition to trial management in the Asia-Pacific region, George Clinical is providing the global data management solution.

George Clinical is fast becoming a major international player in contract medical research, and is looking to expand further – particularly in Asia – in the coming year.
Knowing the enemy

The Unit’s primary task in 2008 was conducting the G-FINDER (Global Funding of Innovation for Neglected Diseases) survey, providing information that funders need to make effective decisions. G-FINDER is the world’s only comprehensive survey of public, private and philanthropic investment in neglected diseases. It surveys over 150 participating funders globally, and covers more than 30 neglected diseases and 127 neglected disease areas. The initial results were released in February 2009, producing important findings:

- Total investment in neglected disease product development is around US$2.5 billion annually – much more than originally expected.
- Funding comes from three sources: governments (70%), philanthropic organisations (20%) and industry (10%).
- Almost 80% of global funding goes to just three diseases: HIV/AIDS, malaria and tuberculosis.

The survey has been built using US$8.8 million in funding from the Bill & Melinda Gates Foundation. This will cover the survey until 2012, with strong hopes of continuing past this point. While most funders worldwide are now included in the survey, there are additions each year. In the next series of results, for example, the Indian Government will be included. Over the coming year, the Unit will continue to inform public debate on neglected diseases, influencing the allocation of funds and drawing attention to those areas that need special attention.

Finding answers in Africa

It can take African countries years to receive a new drug or vaccine that people need right now. The hold-up comes from lack of capacity in African systems, and in needing to rely on Western drug approval systems unsuited to an African context. With a rethinking of systems to suit African conditions, new drugs could be available to help people in as little as six months. The Health Policy Unit has been commissioned, by the Drugs for Neglected Diseases Initiative, to see how this might be done.

On a similar line, the Unit is investigating how to support health care innovation among African nations – should they manufacture the medicines they need, or import them ready-made, or something in between? To find the answers, the Unit is analysing each element of the process – regulation, intellectual property, taxes and tariffs, medical ethics, finance, community involvement and so on. Only in this way can cost-effective, country-specific solutions be found. These studies will continue into the coming year.
Conducting world-leading research

ADVANCE generated significant findings supporting the lowering of blood glucose levels in treating cardiovascular disease among patients with type 2 diabetes. Yet it was only one of four major international trials on this topic (ADVANCE, ACCORD, VADT and UKPDS), and findings from these trials varied. To provide more comprehensive answers to questions raised, the Institute has established a collaborative initiative involving investigators from all studies. Going forward, this initiative will expand to incorporate other major trials in the area of diabetes management.

ADVANCE-ON is a follow up project that will examine the longer term effects of intensive blood glucose lowering. It was suggested that inconclusive results across the four major studies could be due to insufficient follow-up of patients. With this in mind, ADVANCE-ON will follow all 11,140 patients from ADVANCE over a further five years, with a possible extension to ten years, to see if longer term effects of their intensive treatment become evident. In late 2008, the Institute was awarded an AU$12 million program grant from Australia’s National Health and Medical Research Council. This grant will underpin many of the Institute’s research projects investigating the best ways to prevent and treat cardiovascular disease, kidney disease and other major chronic conditions in Australia, such as stroke.

Informing changes in practice and policy

The George Institute is committed to working with partners in countries that are facing particularly large increases in the burden of cardiovascular disease. CPACS (Clinical Pathways for Acute Coronary Syndromes), completed in 2006, was a study of existing practices in Chinese hospitals for managing acute coronary syndrome. A follow-up study, CPACS 2, is using the data from CPACS to develop, implement and evaluate a clinical pathway for managing this condition – something that has never been done in China. Around 8,000 patients have been recruited to the study.

In conjunction with Australian cardiologists at Concord Hospital, the Institute is working on CONCORDANCE (Cooperative National Registry of Acute Coronary Care, Guideline Adherence, And Clinical Events), a study designed to create a national registry of coronary care. At present, there is poor monitoring of how hospitals care for coronary patients (e.g. how closely treatment guidelines are followed, how long patients are in intensive care). This study aims to create a national register to encourage uniform, high-quality care of patients in hospital. CONCORDANCE will initially be conducted in 15 hospitals in Australia, and will include a focus on Indigenous patients in Darwin, Alice Springs, Coffs Harbour and Dubbo.

Looking forward

ADVANCE-ON – Begin follow-up of patients in early 2010.

CONCORDANCE – Continue recruitment for next 2-3 years.

CPACS 2 – Continue to recruit patients, with anticipated total of 15,000 by 2011.

Electronic Decision Support Tool – Further develop an electronic decision support tool that integrates cardiovascular risk factors with multiple Australian guidelines to provide individualised treatment recommendations (see p. 25).

Polypill – Trial a four-drug polypill for treating cardiovascular disease (see p. 24).
Why do people get kidney disease? Why does it lead to such negative outcomes? What role do lifestyle factors such as obesity and smoking have in chronic disease? And what can we do about it? In addition to answering questions such as these, the Renal and Metabolic Division focuses on prevention strategies for kidney disease and its many complications, and addresses contributing risk factors to chronic disease such as obesity and smoking, previously under-taken by the Nutrition and Lifestyle Division.

Discovering the risks for kidney disease

High-profile studies on kidney disease released in 2008 explored the role of proteinuria as a risk factor for heart disease and stroke. This included a meta-analysis of published studies to reveal proteinuria as a strong and independent risk factor.

Various studies have suggested that increased kidney dialysis may benefit patients. ACTIVE Dialysis is a new controlled study examining whether increasing the number of hours of dialysis (from the standard 18 hours per week to 24 hours and higher) reduces mortality rates among these patients. ACTIVE Dialysis has received funding from Australia’s National Health and Medical Research Council, and recruitment has begun.

An audit of chronic kidney disease among Indigenous Australians

Kidney disease and other chronic conditions are a serious concern in Aboriginal communities. Kanyini is a series of studies and programs that, in early 2009, involved an audit of chronic disease prevention and management in the Indigenous primary care sector (see p. 10).

Researchers also recently released findings of IMPAKT (Improving Indigenous Patient Access to Kidney Transplantation), an interview-based study of Indigenous patients receiving dialysis at more than 20 renal units in urban, rural and remote areas. The research found that many Indigenous patients with kidney disease are confused, frustrated and poorly informed about their illness.

Investigating lifestyle factors and chronic disease

Many people are unaware of the effects of smoking and alcohol consumption on bowel cancer. Research into these effects has found that people who consume large quantities of alcohol (more than seven drinks a week) have a 60% greater risk of developing bowel cancer as compared to non-drinkers. This study should have major implications, as more than half a million people worldwide die each year from bowel cancer.

The Institute also plays a strong public advocacy role in order to educate the public on nutrition and lifestyle matters and inform government policy. In particular, AWASH (the Australian Division of World Action on Salt and Health) has made some major advances in reducing salt in food manufacturing (see p. 28).

LOOKING FORWARD

4CKD/4Nations – Analyse access to care and health outcomes using national registry data sets from Australia, New Zealand, Canada and the US.

Asia Pacific Cohort Studies Collaboration (APCSC) – Continue to develop evidence on determinants of stroke, coronary disease and other important outcomes in Asia-Pacific populations.

Cardiovascular Outcomes in Chronic Kidney Disease – Conduct a suite of systematic reviews to define the effectiveness of a range of interventions.

Erythropoietin Stimulating Agent Triallists’ Collaboration – Define the benefits and harms of this class of agents in people with kidney disease.

Kanyini Vascular Collaboration – Continue evaluating chronic disease management nationally; conduct polypill trial (see p. 10).

Obesity in Asia – Continue to examine links between obesity and cardiovascular risk factors in Asia-Pacific populations.

Randomised Evaluation of Normal vs. Augmented Level of renal replacement therapy in ICU (RENAL) – Finalise this study into effects of varying doses of dialysis.

Study of Heart and Renal Protection (SHARP) – Continue to conduct this randomised controlled trial on cholesterol lowering outcomes in chronic kidney disease, with 9,348 patients worldwide.
Revealing the financial implications of stroke

The Division addresses stroke on many fronts, particularly where it is felt that research has traditionally been lacking. In particular, there has been a focus on building stroke research evidence and expertise in China. The ChinaQUEST (QUality Evaluation of Stroke Care and Treatment) study, released in early 2009, examined the implications of stroke for patients and their families. It found that over 70% of stroke survivors experience a catastrophic impact on their financial situation, with one-third pushed below the poverty line. The results, published recently in the prestigious journal Stroke, support measures such as bolstering health insurance in China.

Promising results set to save lives

ICH (intracerebral haemorrhage) is one of the most serious types of stroke, yet there is uncertainty about the role of surgery in ICH, and in particular the effects of blood pressure lowering in the acute phase. Building on the INTERACT (Intensive Blood Pressure Reduction in Acute Cerebral Haemorrhage Trial) feasibility trial, the Institute has now launched INTERACT2, a randomised controlled trial designed to determine the efficacy of intensive blood pressure lowering during ICH in reducing death and ongoing dependency in 2,800 patients recruited from over 100 sites in multiple countries around the world.

Treating the rise of sleep apnea

SAVE (Sleep Apnea cardioVascular Endpoints) is another China-Australia collaborative study. Its aim is to establish the benefits of treating obstructive sleep apnea (OSA) in patients who are at high risk of cardiovascular events. In collaboration with the Adelaide Institute for Sleep Health, SAVE is investigating the continuous positive airway pressure (CPAP) method of treatment, and will involve over 6,000 patients from Australia, New Zealand, China, India and other countries around the world.

A new collaborative initiative supporting research and practice in sleep medicine – the Centre for Clinical Research Excellence for Interdisciplinary Sleep Health (CCRE) – received funding from Australia’s National Health and Medical Research Council of AU$2.5 million for five years. This initiative has an emphasis on interdisciplinary work, drawing together experts and trainees from a range of fields. The ultimate aim is to translate key research findings into areas such as road safety policy, management of OSA and insomnia, and regulation of shiftwork.

Understanding the impact of epilepsy

Epilepsy places a considerable burden on individuals and their families, yet it is a neglected area of medical research. SEISMIC (Sydney Epilepsy Incidence Study to Measure Illness Consequences) is the first Australian population-based study to examine the epidemiology of epilepsy in this country. This three-year study is examining the impact of epilepsy on quality of life, mental health, household finances and other factors among approximately 500 patients in Sydney. The pilot phase has now been successfully completed, and recruitment continues.
The Injury Division conducts high-quality research into the causes, prevention and treatment of various kinds of injury, taking a public health approach to injury prevention. Most work in the past year has been in two areas – young driver safety and Indigenous road safety. Injury researchers have also developed a program of research in low and middle-income countries including China, India and Vietnam.

Protecting young drivers

DRIVE, a major study of young drivers, provided landmark results in 2009. This study involved surveying 20,822 P-platers in NSW, Australia, linking responses to police records. The first results were published mid-2009, focusing on differences in the likelihood of crashes among young people in urban and rural areas. Rural drivers were found to be more likely to be involved in single (as opposed to multiple) vehicle crashes than urban drivers. The authors recommended measures to reduce single vehicle crashes in rural areas, including controlling speeding and reviewing road design. More results will be released throughout 2009 and 2010.

Investigating road safety for even younger road users, researchers have established a new study for pre-school children. Buckle Up Safely is an educational program designed to increase use of appropriate child restraints in cars and decrease misuse of these restraints. It builds on an existing Roads and Traffic Authority of NSW funded program in Australia, and works not only with children but with parents and pre-school staff.

In keeping with The George Institute, China’s focus, the Division has been working on the China Novice Driver study. This randomised controlled trial of 250 drivers in Beijing is examining the value of training newly licensed drivers in ‘real world’ traffic conditions through a specific training program. If the training is shown to be effective, funding will be sought for a larger trial across China.

World first Indigenous road safety research

There is a dire lack of knowledge about licensing, travel habits and road crashes among Indigenous Australians. The Indigenous Road Safety pilot study aims to address this. It is piloting methods for generating such statistics, with a view to conducting a larger study. Collaborating with Aboriginal communities has been a central part of the process. Researchers are also planning to conduct the first evaluation of alcohol interventions on Indigenous road safety. In March 2009, take-away alcohol restrictions were introduced in Bourke, NSW. The study will evaluate the impact of these restrictions on road-related injuries in the community. This will involve collecting data from police and hospital records, as well as conducting interviews with community members and other key stakeholders.

LOOKING FORWARD

Alcohol Intervention on Indigenous Road Safety – Develop study protocols.

Buckle Up Safely – Develop educational material and recruit participants for randomised trial.

China Novice Driver study – Complete the pilot study, publish results and submit grant proposals for large-scale trial.

DRIVE study – Continue to analyse data and publish results.

GEAR study – Conduct follow-up surveys for this study of motorcycle protective clothing.

Heavy Vehicle study – Develop this new study on effects of fatigue and other factors on heavy vehicle crashes.

Indigenous Road Safety pilot – Focus groups conducted; start conducting a cross-sectional survey.

Northern Territory Road Safety Research – Continue this project to generate strategic road policy advice for the Northern Territory Government.

Policy Pathways – Publish results of this study into the main influences on novice driver policy.

Vietnam studies – Continue two Vietnam-based studies, one on national mortality reporting and one on cost of injury.
Rethinking back pain

The Division published a study in late 2008, in the *British Medical Journal*, on recovery from low back pain. It found that recovery is much slower than previously thought, and even slower for people on compensation for work-related pain. This major study (973 patients) found that while most patients returned to work within three months, nearly one-third had not recovered from their disability and pain by 12 months. With current treatment guidelines presuming shorter recovery periods than this, it is anticipated that the study will shape future guidelines.

Another of the Division’s major initiatives was to provide the first robust evidence on the risk of recurrence of back pain. In a study involving 1,334 patients presenting with acute back pain, it was established that about 25% suffer a recurrence within one year. Again, there are implications for clinical practice, with guidelines typically silent on the problem of recurrence.

Preventing falls in an ageing population

Falls can be devastating for older people, yet there is little reliable evidence on effective methods for reducing falls. A meta-analysis of randomised controlled trials found that exercise can prevent falls, particularly if it includes exercises challenging balance. It is anticipated the study will have direct effects on industry practice and on hospital and aged care admissions. It should prompt aged care service providers to implement falls prevention programs.

Pain and self management through Tai Chi

There has long been anecdotal evidence of Tai Chi’s benefits for arthritis, and a study by the musculoskeletal researchers now confirms elements of what people have thought. The study involved the analysis of data from randomised controlled trials on a range of international databases. While the findings were positive on the benefits of Tai Chi, the researchers found that the data is sparse and derived principally from low-quality studies, and that the positive effects, while evident, were small. Researchers will now investigate the effects of Tai Chi on lower back pain.

Stretching to prevent injury

We all see people stretching prior to sport, but does it really prevent injury? Surprisingly there is little evidence on this issue. The Stretching study set out to test this common belief, and found that stretching does not reduce the overall risk of injury but does reduce specific types of injuries (to muscles, tendons and ligaments). It also found that people who stretch have about 8% less chance of experiencing soreness. The researchers give the following pragmatic advice: “If you like stretching, the findings of this study support the decision to stretch. However, you should not expect large effects of stretching.”
Intensively lowering blood glucose levels in critically ill patients increases the risk of death by 10%

This stark finding is the outcome of NICE-SUGAR (Normoglycemia in Intensive Care Evaluation and Survival Using Glucose Algorithm Regulation), the largest trial of its type ever conducted, with 6,100 patients in Australia, New Zealand and North America. The results, published in early 2009 in The New England Journal of Medicine, highlight an urgent need to review international guidelines for blood pressure lowering in critical care. With the unprecedented size and quality of this study, practitioners should see almost immediate benefits flowing to their patients.

Now that NICE-SUGAR has been completed, the Division is shifting its focus to its next major randomised controlled trial, CHEST (Crystalloid vs Hydroxy-Ethyl Starch Trial). This trial will involve around 7,000 patients, comparing the effects of two intravenous fluid solutions – starch/saline and saline alone – on mortality of critically ill patients. Importantly, the study has been endorsed by the Australian and New Zealand Intensive Care Society (ANZICS) Clinical Trials Group, meaning that findings should have a direct impact on the practices of intensive care specialists in Australia and New Zealand.

Saving lives in intensive care settings

Critical care and trauma researchers at the Institute are involved in a number of follow-up studies of major trials conducted in recent years. Chief among these is SAFE (Saline vs. Albumin Fluid Evaluation), completed in 2007, which has been internationally recognised as a landmark study in intensive care management. Assessing the effects of albumin and saline as resuscitation fluids, researchers have embarked on a number of follow-up studies. These include the SAFE TRIPS (Translating Research Into Practice Study) study, looking at treatment trends across countries. The SAFE Sepsis study is looking at a subgroup of patients who have severe sepsis and assessing what type of resuscitation works best among this group. The SAFE TBI (Traumatic Brain Injury) study results were recently published, confirming that the choice of resuscitation fluids affects the chances of patients with brain injury surviving.

LOOKING FORWARD

CHEST – Begin recruitment of projected 7,000 patients.

China Trauma Collaboration – Continue involvement in this international initiative to establish systematic ways of studying trauma care practice across China.

ITTC (Intensive Insulin Therapy Triallists’ Collaboration) – Follow up findings of NICE-SUGAR with a study of tight glucose control of critically ill patients.

mTBI (mild Traumatic Brain Injury) – Complete this study of injury and recovery following mild TBI in rugby union players.

Point Prevalence Program – Continue this study on evidence-based processes in intensive care units in Australia and New Zealand.

RATTS (Retrospective Analysis of Trauma Transfers) – Continue this study on adherence to trauma bypass protocols by the Ambulance Service of NSW.
The Institute has considerable global reach through its 66 research projects in 47 countries. It maintains a key research focus in Australia, China and India.
CENTRE FOR HEALTH CARE INNOVATION 24
POLYPILL: FOUR IN ONE 24
A NEW WAY TO DIAGNOSE CARDIOVASCULAR PROBLEMS 25
ONLINE INNOVATION FOR PHYSIOTHERAPISTS 26
IMAGE OF INNOVATION TO HELP TREAT HEART DISEASE 26
INNOVATION IN HEALTH ECONOMICS 26

INNOVATION
APPLYING RESEARCH FINDINGS TO ENACT CHANGE
POLYPILL: FOUR IN ONE

Many of the 3.5 million Australians with cardiovascular disease, or otherwise at high risk of future heart attack or stroke, are on medicine regimens that are effective, but potentially costly and confusing. Frequently, the complete appropriate regimen of treatment is not prescribed to such patients, and difficulty in maintaining multiple medications can lead to people not taking prescribed drugs. In fact, about 60% of cardiovascular deaths in the community occur in these patients, suggesting that effective strategies that reduce this treatment ‘gap’ could have a major impact. Yet new effective strategies in this area are lacking.

Reducing cost and complexity

The George Institute is conducting one of the world’s first randomised controlled trials of a polypill, containing four drugs in one pill, for preventing cardiovascular disease. Combining these drugs has two major potential benefits:

- **Reducing cost** – With only one pill to buy, the ongoing financial burden of treatment may be greatly reduced. The polypill also uses reliable, proven generic drugs to reduce the cost of manufacture and therefore further reduce the purchase price. At a patient and national level, this could translate to major cost savings.

- **Reducing complexity** – For patients, the simplicity of taking just one pill may make this treatment simple to take. For practitioners, there may be reduced complexity in drug selection. The availability of all indicated drugs for this patient population in a single polypill may therefore serve to fill some of the gaps in treatment that currently exist.

A total of 1,000 people at multiple centres in Australia will participate in the trial. In keeping with The George Institute’s commitment to improving the health of Indigenous Australians, who have very high rates of cardiovascular disease, more...
than half of the trial group will be drawn from Indigenous communities. Recruitment of patients for the trial is to begin by the end of 2009, and the study will take three years to complete. The George Institute holds great hopes for the potential role of the polypill. While by no means seen as a ‘panacea’ for the prevention of cardiovascular disease, for most disadvantaged communities the prospect of a polypill holds considerable promise for helping people at greatest risk.

A NEW WAY TO DIAGNOSE CARDIOVASCULAR PROBLEMS

In a 10-minute consultation it is often difficult for general practitioners (GPs) to assess and advise a patient on the full range of cardiovascular risk factors that may affect them. There are at least 10 clinical guidelines for GPs to consider for cardiovascular care alone. To help GPs make sense of these multiple elements, The George Institute has piloted an electronic decision support (EDS) tool for improved identification and management of cardiovascular conditions.

The EDS tool works like this: the GP will open the tool as part of their usual medical software, and the tool will automatically extract as much information as possible from the patient’s health record. Following the consultation, the GP can add any new information, then the tool calculates the patient’s overall risk of a heart attack or stroke over the next five years. It also synthesises information from all relevant guidelines to provide tailored management advice specific to the patient’s circumstances.

What makes this tool unique is that it not only assesses the various risk factors but provides direct treatment advice to the GP. Printed in colour with easy-to-follow charts and arrows, the output from the tool also makes it easier for patients to understand their risks and see what action they should take. One of the hidden benefits of the EDS tool is that it can prompt a ‘shift in thinking’ for GPs and patients. Traditionally, if a patient has no observable signs of a risk such as high blood pressure, they would not be treated for this. But this tool brings in many other factors (e.g. smoking, diabetes) to highlight underlying needs (e.g. to address the patient’s blood pressure level).

The EDS tool underwent validation testing at The George Clinic at Royal Prince Alfred Hospital. Following this it was pilot-tested with 200 patients and 21 GPs at three locations in Sydney – eight general practices and three Aboriginal Medical Services. There were some suggestions from GPs for improving the format, but overall the EDS tool was viewed favourably by both GPs and patients. The results of this innovative initiative are to be published in late 2009, and it is anticipated that a larger study will follow.
ONLINE INNOVATION FOR PHYSIOTHERAPISTS

The Physiotherapy Evidence Database (PEDro) was established in 1999 to give immediate access to high quality clinical research about the effects of physiotherapy treatments. PEDro is a searchable database on the internet – www.pedro.org.au – and is used by physiotherapists and other health professionals, health service funders, and consumers.

PEDro differs from all other available evidence databases in that all trials on the database are independently assessed for quality using widely accepted criteria. These ratings are used to quickly guide users to trials that are more likely to be valid and to contain sufficient information to guide clinical practice. The Institute plans to secure funding to continue the innovation of PEDro and its consumer version, Physiotherapy Choices, which are accessed all over the world.

IMAGE OF INNOVATION TO HELP TREAT HEART DISEASE

The Institute is looking at new ways to use ultrasound for treating heart disease. Echocardiography has great potential, including expanding from a two-dimensional image to that of a 3D image, which could produce more effective images for accurate analysis. The aim is to use imaging to develop more direct clinical research and build this into some of the larger studies at the Institute. At this stage, funding has been sought for this major initiative and it is anticipated that in the coming year it will come to fruition. The initiative is planned in partnership with other academic partners.

INNOVATION IN HEALTH ECONOMICS

The George Institute received an AU$1.8million grant from Australia’s National Health and Medical Research Council in late 2008 to fund an innovative health economics program that will bring together a range of collaborators including the School of Public Health at the University of Sydney and the Menzies Centre for Health Policy. The program is designed to build capacity in health economics research and will enable a health economics perspective to be applied to a range of research programs undertaken through these collaborating centres. Four main areas are included:

1. Economic evaluation and utility-based quality of life measurements
2. Health systems development and evaluation
3. Household economic impact of illness
4. Policy engagement

The program started work in early 2009 and will support a number of scholarships in addition to training and development of research fellows at the collaborating centres.
The George Institute is committed to producing high-quality, high-impact research evidence to inform policy, guidelines and practices across the world. In 2008/2009, the Institute completed a series of research programs that will impact on chronic disease and injury treatment and prevention globally.

### IMPACT ON POLICY AND PRACTICE

<table>
<thead>
<tr>
<th>OUTPUT</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INFORMING TREATMENTS FOR PATIENTS WITH TYPE 2 DIABETES</strong></td>
<td>Following the varied results of four major studies on the effects of intensive blood glucose lowering among patients with type 2 diabetes, the Institute has established the CONTROL (Collaborators on Trials of Lowering Glucose) group to provide more comprehensive answers to questions raised and to help inform international guidelines for the treatment of type 2 diabetes. This collaborative initiative involves investigators from the four studies, including the Institute’s flagship study, ADVANCE. An initial meta-analysis of these results are due to be published in Diabetologia in late 2009 and will help inform international guidelines. Within Australia, the Institute is working with the Baker IDI Heart and Diabetes Institute on the National Health and Medical Research Council guidelines for type 2 diabetes. This will include a review of the latest evidence to inform guidelines on lipid and blood pressure management, macrovascular and foot disease. The new guidelines will be released in 2010.</td>
</tr>
<tr>
<td><strong>STRATEGIES FOR REDUCING POPULATION SALT INTAKE</strong></td>
<td>Eating salt is a leading cause of the progressive rise of blood pressure as populations age. High blood pressure is a major contributor to heart disease and stroke worldwide. As part of their ‘Drop the Salt!’ Campaign to reduce salt in foods and work with the Australian food industry, a Food Industry Salt Reduction Strategy was released in July 2008 by AWASH (Australian Division of World Action on Salt and Health). As a direct result, the number of Australian food companies committed to reducing salt in their products has doubled to 20, including Coles, Unilever, Smith’s Snackfood Company, Bakers Delight, McDonald’s, Oporto and Yum! Restaurants which have each developed detailed action plans. Following extensive media coverage on salt in fast foods generated by AWASH, Yum! Restaurants in Australia (KFC and Pizza Hut) has cited AWASH as the reason for a 10% reduction in the salt content across its products. See p. 17 for more information on AWASH.</td>
</tr>
<tr>
<td><strong>SALINE OR ALBUMIN FOR FLUID RESUSCITATION IN PATIENTS WITH TRAUMATIC BRAIN INJURY</strong></td>
<td>Results of the landmark intensive care research study, SAFE TBI, showed that the choice of resuscitation fluids affects the chance of patients with brain injury surviving. These findings (reported in 2007) will form the development (in late 2009) of a clinical algorithm for the management of severe brain injury as part of the International Brain Trauma Foundation, a global organisation that improves the outcome of Traumatic Brain Injury (TBI) patients by producing international guidelines.</td>
</tr>
<tr>
<td><strong>INTENSIVE BLOOD GLUCOSE MANAGEMENT IN INTENSIVE CARE PATIENTS</strong></td>
<td>Recent results, published in The New England Journal of Medicine of the large intensive care study NICE-SUGAR showed intensively lowering blood glucose levels in critically ill patients increases the risk of death by 10%. These results call for an urgent review of international guidelines for blood pressure lowering, and will form the basis of recommendations for the review of clinical guidelines and management strategies in 2010 for several specialist groups, including the International Brain Trauma Foundation.</td>
</tr>
<tr>
<td><strong>GUIDELINES FOR THE ASSESSMENT OF ABSOLUTE CARDIOVASCULAR DISEASE RISK</strong></td>
<td>Researchers provided input into absolute risk assessment guidelines in Australia, for use by general practitioners, Aboriginal health workers, other primary care health professionals and physicians, when assessing the risk of cardiovascular disease in adults without known cardiovascular disease. The recommendations to the National Vascular Disease Prevention Alliance are intended to provide health system policy makers with the best available evidence on the assessment of absolute cardiovascular risk, as a basis for population health policy.</td>
</tr>
</tbody>
</table>
Injury research experts at the Institute are part of the expert advisory panel providing advice to the World Health Organization’s Director General on injury-related issues. In 2009 the World Report on Child Injury Prevention included key evidence for the effectiveness of isolation pool fencing. This particularly highlighted research showing an almost 2-fold increased risk of a child drowning in a 3-sided versus 4-sided fenced swimming pool. Recommendations included legislation, regulations and enforcement of four-sided pool fencing.

The first series of results from the largest study of young drivers ever undertaken, the DRIVE study, were released in mid-2009. These results found that there were significant crash differences between rural and urban drivers. Rural drivers were found to be more likely to be involved in a single vehicle crash than urban drivers. Single vehicle crashes are more likely to result in serious injury and fatality. The authors recommend that interventions to reduce single vehicle crashes should aim to address key issues affecting such crashes, including speeding and specific aspects of road geometry. These results will inform future young driver intervention and policy development.

Compiled in conjunction with Prince of Wales Hospital and the Prince of Wales Medical Research Institute, this report shows the benefits of exercise in preventing falls in older populations. The report recommends highly challenging balance training to prevent falls in community settings, and details what an effective program should entail. This report was prepared for the Sax Institute which aims to build partnerships between researchers, health policy and service delivery agencies for better health in NSW, Australia.

Specific chapters of the Australian Falls Prevention Guidelines are under review from musculoskeletal researchers at the Institute to incorporate the latest evidence and practice. The guidelines are designed to inform clinical practice and assist hospitals and residential aged care facilities develop and implement practices to reduce falls and the harm sustained in falls. The updated guidelines and support materials are expected to be available by late 2009 from the Australian Commission on Safety and Quality in Health Care Falls Guidelines.
GOVERNMENT RECOMMENDATIONS

The Institute also submitted several policy and practice recommendations to health, medical, science and research related government departments in Australia.

<table>
<thead>
<tr>
<th>RECOMMENDATION MADE TO</th>
<th>REPORT TITLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRALIAN DEPARTMENT OF INNOVATION, INDUSTRY, SCIENCE AND RESEARCH</td>
<td>Recommendation on the Review of the National Innovation System</td>
<td>Recognising that the architecture of Australia’s existing national innovation system is now a generation old, the Institute welcomed the consideration of medical research as a key strength and source of innovation within Australia. Recommendations included increasing funding of research, research training and research infrastructure to support Australia’s medical research institutes. Submitted September 2008.</td>
</tr>
<tr>
<td>AUSTRALIAN GOVERNMENT PREVENTATIVE HEALTH TASKFORCE</td>
<td>Recommendation on the discussion paper Australia: The Healthiest Country by 2020</td>
<td>The Institute prepared two submissions regarding this discussion paper. The first outlined the role of obesity and its relationship as a risk factor for major chronic diseases, emphasising the need for reliable, large-scale evidence about the efficacy and safety of the strategies for population-wide weight loss. The second highlighted the need for an effective national strategy for the control of population blood pressure, particularly that of salt reduction. This recommendation called on the Taskforce to urgently add dietary salt reduction for the prevention of blood pressure-related diseases to its list of priorities, and to seek the financial support required to implement an effective centralised salt reduction program. Submitted January 2009.</td>
</tr>
<tr>
<td>AUSTRALIAN GOVERNMENT PREVENTATIVE HEALTH TASKFORCE</td>
<td>Recommendation on the Preventative Health Taskforce: Towards a National Primary Health Care Strategy</td>
<td>Australia’s first National Primary Health Care Strategy was tabled for discussion in early 2009. In response to this, the Institute recommended that serious consideration should be given to establishing a national health care innovation initiative. Such a centre would provide the expertise and infrastructure necessary to deliver timely and reliable evidence to guide health care policy development and support its appropriate implementation (see p. 24). Submitted February 2009.</td>
</tr>
<tr>
<td>AUSTRALIAN GOVERNMENT NATIONAL HEALTH AND HOSPITAL REFORM COMMISSION</td>
<td>Recommendation on the National Health and Hospital Reform: A Healthier Future for All Australians</td>
<td>Recommendations on developing a long-term health reform plan for Australia included adopting a rigorous research framework to provide decision-makers with irrefutable evidence about the impact of policy change on critical outcomes such as death, disability and hospital utilisation. The submission highlighted that health reforms should be accompanied by a new research framework that will ensure that the effects of reform are reliably measured. Submitted March 2009.</td>
</tr>
</tbody>
</table>
The George Institute as at 30 June 2009

**RESEARCH AND DEVELOPMENT**
- **Research**
  - Mark Stevenson
    - Senior Director
  - Bruce Neal
    - Senior Director

**PROFESSORIAL UNIT**
- John Chalmers
  - Senior Director

**REGIONAL CENTRES**
- **The George Institute, India**
  - Anushka Patel
    - Acting Executive Director
- **The George Institute, China**
  - WU Yangfeng
    - Executive Director

**INFRASTRUCTURE AND RESOURCES**
- **People**
  - Strategy & Administration
    - Rick Brown
      - Director
  - Information Services
    - Samee Pandey
      - Director
- **Operations**
  - Richard Fisher
    - Acting Chief Operating Officer
  - Marketing & Communications
    - Jane Austin
      - Senior Director
- **Health Policy**
  - Mary Moran
    - CEO
- **George Clinical**
  - Graham Lawrence
    - CEO

**MUSCULOSKELETAL**
- Chris Maher
  - Director

**INJURY**
- Rebecca Ivers
  - Director

**CRITICAL CARE & TRAUMA**
- John Myburgh
  - Director

**CARDIOVASCULAR**
- Fiona Turnbull
  - Acting Director

**NEUROLOGICAL & MENTAL HEALTH**
- Craig Anderson
  - Director

**RENAL & METABOLIC**
- Alan Cass
  - Co-Director
  - Vlado Perkovic
    - Co-Director

**INFRASTRUCTURE & RESOURCES**
- A Sunder Rajan
  - Head

**RESEARCH & DEVELOPMENT**
- TBA

**CENTRE FOR RESEARCH MANAGEMENT**
- TBA
THE GEORGE INSTITUTE’S ACADEMIC LEADERS

The Institute’s academic leadership is core to its success. Apart from its established leaders (see below), many of whom are globally recognised, the Institute is an ‘incubator’ for the leading scientists of the future.

PRINCIPAL DIRECTOR Professor Stephen MacMahon

Stephen is Professor of Cardiovascular Medicine and Epidemiology at the University of Sydney and Honorary Consultant Epidemiologist at the Royal Prince Alfred Hospital in Sydney. He has led many pivotal studies of new treatments for cardiovascular disease, diabetes and other common conditions. Stephen has published more than 250 scientific papers in many of the world’s most prestigious journals including *The New England Journal of Medicine* and *The Lancet*. He holds Honorary Professorships at Peking University Health Science Center and the University of Auckland Faculty of Medicine and Health Sciences.

PRINCIPAL DIRECTOR Professor Robyn Norton

Robyn is Professor of Public Health and Associate Dean (Global Health) within the Faculties of Health at the University of Sydney. She holds an Honorary Professorship at Peking University Health Science Center, and is an Honorary Consultant Epidemiologist at the Royal Prince Alfred Hospital. Robyn is Chair of the Road Traffic Injuries Research Network (RTIRN), an initiative supported by the Global Forum for Health Research, the World Health Organization and the World Bank.

SENIOR DIRECTOR Professor John Chalmers AC

John is Head of the Professorial Unit at The George Institute and Emeritus Professor of Medicine at the University of Sydney and Flinders University. His ground-breaking research on the role of the brain in the development of hypertension helped establish Flinders as a leading international centre in hypertension research and neuroscience. His later studies on high blood pressure and the prevention of heart attack and stroke have influenced the treatment of countless patients worldwide. His work has been recognised through admission to the Australian Academy of Science, and awarding of the Wellcome Medal, the Volhard Medal of the International Society of Hypertension, and the Zanchetti Award of the European Society of Hypertension.

SENIOR DIRECTOR Professor Bruce Neal

Bruce is Professor of Medicine at the University of Sydney and Chair of the Australian Division of World Action on Salt and Health (AWASH). Bruce completed his medical training at Bristol University, UK and prior to working at the Institute in 1999, he worked as an epidemiologist at the Clinical Trials Research Unit in Auckland, New Zealand. Bruce is a Fellow of the UK Royal College of Physicians and the American Heart Association. He is also a member of the Executive Council of the High Blood Pressure Research Council of Australia and the Council of the International Society of Cardiovascular Disease Epidemiology and Prevention.

SENIOR DIRECTOR Professor Mark Stevenson

Mark is a Professor in the Sydney Medical School at the University of Sydney, a National Health and Medical Research Council Fellow and an Honorary Professor at the Peking University Health Science Center. A world leader in his field, Mark has extensive research experience in road trauma and public health. Mark regularly advises on issues such as driver distraction, childhood injury and road safety in low and middle-income countries, including advising WHO, UNICEF and the Swedish International Development Agency. Mark is a member of the Australasian Trauma Society and a Lifetime Fellow of the Australasian College of Road Safety.
EXECUTIVE DIRECTOR, THE GEORGE INSTITUTE, CHINA
Professor WU Yangfeng

Yangfeng is the Executive Associate Director of the Clinical Research Institute at Peking University Health Science Center and Professor of Epidemiology at the Department of Epidemiology and Biostatistics at the Peking University School of Public Health. Professor WU has made valuable contributions reducing the impact of cardiovascular disease in the region thanks to his previous work at the Cardiovascular Institute, Fu Wai Hospital, and the WHO Collaboration Center in Cardiovascular Disease Prevention, Control and Research in China, and his current work at Peking University.

HEAD, RESEARCH AND DEVELOPMENT, THE GEORGE INSTITUTE, CHINA
Professor YAN Lijing

Lijing is a cardiovascular epidemiologist with a background in demography and health economics. She is also an Adjunct Associate Professor at the Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, and the Health Economics and Management Institute, Guanghua School of Management, Peking University, Beijing. Lijing has worked extensively in the areas of chronic disease prevention and control, economic evaluations in health care, and integrated health management, and is lead author of over 20 peer-reviewed journal publications. She is also the principal investigator or co-investigator on several research projects funded by the National Institutes of Health, USA, the National Natural Sciences Foundation of China, and the Ford Foundation.

ACTING EXECUTIVE DIRECTOR, THE GEORGE INSTITUTE, INDIA
Associate Professor Anushka Patel

Anushka is Associate Professor with the Sydney Medical School at the University of Sydney and a Staff Specialist in the Department of Cardiology at Royal Prince Alfred Hospital. She completed her undergraduate medical training at the University of Queensland in 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 a PhD in Medicine from the University of Sydney. Anushka also currently holds a five-year National Heart Foundation of Australia Career Development Fellowship.

ACTING DIRECTOR, CARDIOVASCULAR
Dr Fiona Turnbull

Fiona is a Senior Lecturer with the Sydney Medical School at the University of Sydney. She completed her undergraduate medical training at the University of Otago in 1992 and her training in public health medicine (leading to Fellowship of the Australasian Faculty of Public Health Medicine) in 2002. She has an MPH (Hons) and a PhD in Medicine from the University of Sydney. Fiona currently holds a National Heart Foundation of Australia Post-Doctoral Fellowship.

CO-DIRECTOR, RENAL AND METABOLIC
Professor Alan Cass

Alan is Professor and Director of the Poche Centre for Indigenous Health in the Faculty of Medicine at the University of Sydney. He is also the Inaugural Chair of the Scientific Committee of the Australasian Kidney Trials Network and a leading proponent of academic collaboration in clinical research in kidney disease. Alan is particularly passionate about Aboriginal health and works actively with governments to develop strategies to improve access to renal services, and to improve health outcomes for people with kidney disease. Alan is an advocate for rigorous quantitative and qualitative methods in health services research to foster the development, implementation and evaluation of strategies to address the growing burden of complex chronic diseases.
CO-DIRECTOR, RENAL AND METABOLIC  
Associate Professor Vlado Perkovic

Vlado is a part-time Staff Specialist in Nephrology at the Royal North Shore Hospital and Associate Professor of Renal Medicine at the University of Sydney. He is involved in large-scale clinical trials and meta-analyses in kidney disease. He convenes the CARI Cardiovascular Guidelines Group, and is Deputy Chair of the Scientific Committee of the Australasian Kidney Trials Network. His major research interest is in understanding both the cardiovascular risk associated with chronic kidney disease and the impact of interventions that might mitigate this risk.

DIRECTOR, NEUROLOGICAL AND MENTAL HEALTH  
Professor Craig Anderson

Craig is Professor of Stroke Medicine and Clinical Neuroscience in the Sydney Medical School at the University of Sydney and the Institute of Neurosciences of Royal Prince Alfred Hospital. Having led several major international stroke studies, Craig is widely acknowledged as a leader in his field. He was recently awarded the Royal Prince Alfred Research Medal for Excellence in Research. Craig is a member of several specialist societies, an Editor for the Cochrane Stroke Group, and 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, and is on the Steering Committee for several large-scale research projects.

DIRECTOR, INJURY  Associate Professor Rebecca Ivers

Rebecca is an Associate Professor at the University of Sydney, and directs a research program which is centred on injury prevention, with a strong focus on prevention of road traffic injury. She has published widely in the field of road traffic injury, and has recently been awarded a NSW Young Tall Poppy Award in Science and an Achievement Award from the National Health and Medical Research Council of Australia for her road safety research. She is an investigator on studies in a diverse range of areas, including novice drivers, Indigenous road injury, heavy vehicle crashes and motorcycle safety in Australia, as well as projects aimed at preventing injury in China, India and Vietnam.

DIRECTOR, MUSCULOSKELETAL  Professor Chris Maher

Chris is Professor in the Sydney Medical School at the University of Sydney. He also holds a National Health and Medical Research Council of Australia Senior Research Fellowship. Chris leads a program of research focusing on the management of musculoskeletal conditions in primary care and community settings. This research is characterised by innovation, an interdisciplinary approach and an emphasis on simple treatments delivered well. Particularly committed to knowledge translation and health literacy, Chris has worked with local and international colleagues to develop information technologies that deliver the best research evidence to clinicians and health consumers.

DIRECTOR, CRITICAL CARE AND TRAUMA  Professor John Myburgh

John is a Professor of Medicine at The University of New South Wales, an Honorary Adjunct Professor in the Department of Epidemiology and Preventive Medicine at Monash University, and Honorary Professor at the University of Sydney. He is lead clinician for research and senior consultant physician in the Department of Intensive Care Medicine at the St George Hospital, Sydney. He is a foundation member and current Chairman of the Clinical Trials Group of the Australian and New Zealand Intensive Care Society. He is also treasurer, research officer and senior fellowship examiner in the Joint Faculty of Intensive Care Medicine.
The Centre for Research Management (CRM) is the ‘engine’ of project, data and statistical management for all George Institute and George Clinical studies. Managing more than ten extensive trials at any one time – at various stages of development – the CRM is responsible for complex balancing of priorities and strict application of operational and quality control standards. The key to success for the CRM is in taking ‘ownership’ of the trials in partnership with the Institute’s expert researchers. CRM staff make research ideas come to fruition, and ensure that standard operating procedures meet the highest of international standards.

Within the CRM, the project management team provides expertise and guidance for research projects across the Institute, including the coordination of resources. The statistics team provides advice and training while conducting methodological research, and concentrates on improving quality control and standardising procedures. The data management team has developed standard operating procedures for the management of data for research projects to assure quality and ensure that studies are conducted according to best practice. Going forward, the CRM will undergo a realignment of service plans as part of the global transition of operations at the Institute.

Finance
The Finance Division provides financial, contractual and operational guidance for all areas of the Institute, both academic and commercial. The Division provides accurate and timely financial information to enable Division Directors and Senior Executives to make commercially sound decisions. During the past year, the Finance team guided the Institute through a robust and rigorous budget process, and the performance of all Divisions of the Institute is currently measured against that budget.

A financial summary and report appears from p. 44.

Information Services
The Information Services Division ensures that the most valuable, professional and relevant information technology services are provided to the Institute. The team provides and maintains appropriate IT infrastructure systems and services to best support business and research needs.

Over the past year, the Division reviewed the implementation of systems to optimise network infrastructure and improve monitoring. It focused on server virtualisation to achieve a range of benefits, including cost reduction and efficiencies in maintenance and management. The service delivery for IT support was streamlined through a range of measures such as creation of an online knowledge base for staff, and high availability of business critical and clinical information systems was ensured by establishing disaster recovery strategies.

People Strategy and Administration
The aim of the People Strategy Division is to support and nurture a highly skilled and motivated team. Over the last 12 months, staff measures continued to be mainly positive. The Division made considerable input into the management of changes to the Centre for Research Management. This included structural, system and process changes and resulted in improved definition and clarity of roles and expectations of the way the Centre operates. The transition also included the introduction of a competency framework, standardisation of systems and identification of learning needs for our people.

Administration is responsible for a range of organisation support services, including management of reception sites, facilities and preferred suppliers for the Institute.

Marketing and Communications
Charged with building the Institute’s profile with a range of stakeholders, the Marketing and Communications Division manages strategic communications, government relations, online communications, graphic design, internal communications, media relations, philanthropy and corporate partnerships.

During 2008/2009, the Division completed a major stakeholder review, the results of which continue to inform a number of strategies for the Institute (see p. 6). A comprehensive government relations plan was put into action, in addition to reigniting the philanthropic activities at the Institute, which included a number of stakeholder events.
# AWARDS AND ACHIEVEMENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Award/Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRAIG ANDERSON</td>
<td>Royal Prince Alfred Research Medal for Excellence in Research</td>
</tr>
<tr>
<td>HISATOMI ARIMA</td>
<td>University of Sydney Post-Doctoral Research Fellowship</td>
</tr>
<tr>
<td>ALAN CASS</td>
<td>Appointed to NSW Aboriginal and Population Health Priority Taskforce</td>
</tr>
<tr>
<td>JOHN CHALMERS</td>
<td>Alberto Zanchetti Life Achievement Award of the European Society of Hypertension</td>
</tr>
<tr>
<td></td>
<td>Heart Foundation Research Medal for lifetime contribution to cardiovascular research</td>
</tr>
<tr>
<td>LIZ DE ROME</td>
<td>Appointed to the US Transportation Research Board Committee on Motorcycles</td>
</tr>
<tr>
<td></td>
<td>Elected to the National Executive Committee of the Australasian College of Road Safety</td>
</tr>
<tr>
<td>WEI DU</td>
<td>NHMRC Australia-China Exchange (Postdoctoral) Fellowship</td>
</tr>
<tr>
<td>YASMEEN EL MASRY</td>
<td>Australian Postgraduate Awards Scholarship</td>
</tr>
<tr>
<td>JANE ELKINGTON</td>
<td>Appointed Vice-President of Youthsafe</td>
</tr>
<tr>
<td>MARTIN GALLAGHER</td>
<td>Australian Harkness Fellowship in Healthcare Policy</td>
</tr>
<tr>
<td></td>
<td>Appointed to NHMRC Guidelines Advisory Committee</td>
</tr>
<tr>
<td>RACHEL HUXLEY</td>
<td>Heart Foundation Career Development Award</td>
</tr>
<tr>
<td></td>
<td>Inaugural Cardiovascular Research Network Career Development Fellowship</td>
</tr>
<tr>
<td>REBECCA IVERS</td>
<td>NSW Young Tall Poppy Award</td>
</tr>
<tr>
<td>JAGNOOR JAGNOOR</td>
<td>Endeavour Research Fellowship</td>
</tr>
<tr>
<td>STEPHEN JAN</td>
<td>Appointed to NSW Aboriginal and Population Health Priority Taskforce</td>
</tr>
<tr>
<td>NICOLE LI</td>
<td>Fogarty International Clinical Research Fellowship</td>
</tr>
<tr>
<td>CHRISTINE LIN</td>
<td>Australian Academy of Science NHMRC Award (Early Career Researchers Program)</td>
</tr>
<tr>
<td>STEPHEN MACMAHON</td>
<td>Accepted the NHMRC Achievement Award for the Most Outstanding Program</td>
</tr>
<tr>
<td></td>
<td>Grant on behalf of The George Institute</td>
</tr>
<tr>
<td>DAVID PEIRIS</td>
<td>Cross Cultural Public Health Research Award, University of Sydney</td>
</tr>
<tr>
<td>ANTHONY RODGERS</td>
<td>Professoral Fellowship, University of Sydney New Appointments Scheme</td>
</tr>
<tr>
<td>CATHIE SHER RINGTON</td>
<td>Australasian Journal on Ageing Book Award</td>
</tr>
<tr>
<td>MARK STEVENSON</td>
<td>Australasian College of Road Safety Lifetime Fellowship</td>
</tr>
<tr>
<td>ANNE TIEDEMANN</td>
<td>NHMRC Training (Postdoctoral) Fellowship</td>
</tr>
<tr>
<td>NGUYEN TRONG HA</td>
<td>University of Sydney International Scholarship</td>
</tr>
<tr>
<td>FIONA TURNBULL</td>
<td>International Society of Hypertension AstraZeneca Award</td>
</tr>
<tr>
<td></td>
<td>Heart Foundation Postdoctoral Fellowship</td>
</tr>
<tr>
<td>JADE WEI</td>
<td>Australian Postgraduate Award</td>
</tr>
<tr>
<td>WU YANGFENG</td>
<td>Appointed as Editorial Committee Member for Biomedical and Environmental Sciences Journal</td>
</tr>
<tr>
<td>SOPHIA ZOUNGAS</td>
<td>Royal Australasian College of Physicians Diabetes Australia Fellowship</td>
</tr>
</tbody>
</table>
GOVERNANCE AND MANAGEMENT

Role of the board and management

The primary role of the board is to protect and promote the objectives and interests of The George Institute and its stakeholders. To achieve this, the board considers the nature and range of Institute activities, ensuring that key stakeholder interests, including ethical, social and cultural considerations, are addressed. The board is responsible for the overall governance of the Institute, including its strategic direction, risk management and monitoring of financial and other reporting.

As outlined in the Institute’s Constitution, the minimum number of directors of the board is five. The board observes the requirements of the Australian Commonwealth Corporations Act 2001 and the additional obligations resulting from the Institute’s charitable status. As a research and academic organisation, the board values and promotes scholarship, academic freedom and scientific integrity.

BOARD OF DIRECTORS

DR JOHN YU AC – Chair

John Yu has had a distinguished career in paediatric medicine and a strong commitment to community affairs. His previous positions include Chief Executive of the New Children’s Hospital at Westmead, staff physician at the Royal Alexandria Hospital for Children, Chancellor of the University of New South Wales and Deputy Chancellor of the University of Western Sydney. Dr Yu has served on many management boards and charitable organisations and is currently Chair of both VisAsia Council at the Art Gallery of New South Wales and the Centre for Asian Art and Archaeology at the University of Sydney. Dr Yu has served on many management boards and charitable organisations and is currently Chair of both VisAsia Council at the Art Gallery of New South Wales and the Centre for Asian Art and Archaeology at the University of Sydney. Dr Yu was appointed a Member of the Order of Australia in 1989 for services to medicine. In 2001 he was awarded the Centenary Medal and made a Companion of the Order of Australia. He was named Australian of the Year in 1996. John joined the board as Chair in September 2006.

ELSA ATKIN

Elsa Atkin is a company director and a cultural management consultant. She recently retired after previous roles as Executive Director of the National Trust of Australia (NSW), Deputy Director of the Evatt Foundation, and a senior manager at the Australian Broadcasting Corporation. Currently she sits on several boards, including those of Symphony Australia and the Library Council of NSW. She was made an Australia Day Ambassador (1998–2000) and Honorary Life Member of the National Trust in 2005. Elsa joined the board in July 2007.

JOANNA CAPON OAM

Joanna Capon is a member of the Australia China Council, the Advisory Council of the Children’s Hospital at Westmead and the hospital’s Health Care Quality Council and Governance Committee. She is also Chair of Operation Art, a board member of Museums and Galleries NSW, and a member of the Editorial Advisory Board of Art and Australia. Joanna is an art historian, industrial archaeologist, curator and writer. She was awarded the Medal of the Order of Australia in 2002 for services to the community. Joanna joined the board in March 2007.
PETER CHURCH OAM

Peter Church is Group Chairman of AFG Venture Group, a corporate advisory/investment banking firm. Previously he was the Regional Managing Partner for Asia of the Australian law firm Freehills. His involvement in business relations between Australia and the South-East Asian region spans more than 35 years, for which he was awarded the Medal of the Order of Australia in 1994. His other current directorships include Special Counsel to the Australian law firm Blake Dawson and Chairman of Bangkok International Associates Limited and Indonesia’s Aksara Foundation. Peter joined the board in June 2004.

PROFESSOR ANDREW COATS

Andrew Coats was previously Deputy Vice-Chancellor (Community) and Dean, Faculty of Medicine at 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. Prior to his appointment as Dean, Andrew was Viscount Royston Professor of Cardiology, National Heart and Lung Institute, Imperial College School of Medicine, London, and Associate Medical Director, Royal Brompton and Harefield NHS Trust, London. Andrew joined the board in June 2004 and resigned in May 2009 to return to the United Kingdom.

DON GREEN

Don Green is a Fellow Chartered Accountant, a Fellow CPA, and a Senior Partner of Ernst & Young Australia, where he leads the Oceania Transaction Tax practice. He has held Asia-Pacific leadership roles of his firm’s Financial Markets and Japanese Business programs, and is currently Chair of the Taxation Taskforce of Infrastructure Partnerships Australia. Over a number of years, Don has been Director or Committee Chair of the Friends of the Mater Foundation for the Mater Misericordiae Hospital, the Australian Council for Infrastructure Development, and the Institute of Chartered Accountants in Australia. Don joined the board in May 2003.

PROFESSOR STEPHEN MACMAHON, PRINCIPAL DIRECTOR

Stephen MacMahon is Professor of Cardiovascular Medicine and Epidemiology at the University of Sydney and Honorary Consultant Epidemiologist at the Royal Prince Alfred Hospital in Sydney (see full biography on p. 32).

PROFESSOR ROBYN NORTON, PRINCIPAL DIRECTOR

Robyn Norton is Professor of Public Health and Associate Dean (Global Health) within the Faculties of Health at the University of Sydney (see full biography on p. 32).

JASON YAT-SEN LI

Jason Yat-sen Li is Managing Director of RI Group China Ltd, an investment banking and private equity firm based in Beijing. Previously he was Head of China Strategy and Senior Manager, Sustainable Development for Insurance Australia Group, and worked as a lawyer for the United Nations International Criminal Tribunal for the former Yugoslavia in The Hague, Netherlands. He was a recipient of the Eisenhower Fellowship in 2002, as well as the Hauser Global Fellowship to New York University Law School in 2000. He is currently a director of The Sydney Institute and a Governor of The Smith Family. Jason has been a member of the board since June 2007.
# BOARD COMMITTEES

To assist the execution of its responsibilities, the board has established a number of board committees. The outcomes of board committee meetings are reported to the board of directors following each committee meeting.

<table>
<thead>
<tr>
<th>BOARD COMMITTEE</th>
<th>DESCRIPTION</th>
<th>MEMBERSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINANCE, RISK AND AUDIT COMMITTEE</td>
<td>Oversees all financial matters, including budget, audit and risk management matters. Meets quarterly.</td>
<td>Don Green (Chair)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stephen MacMahon</td>
</tr>
<tr>
<td>FUNDRAISING COMMITTEE</td>
<td>Provides strategic direction on philanthropic plans and activities. Meets as required.</td>
<td>Elsa Atkin (Chair)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jane Austin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joanna Capon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stephen MacMahon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>John Yu</td>
</tr>
<tr>
<td>REMUNERATION COMMITTEE</td>
<td>Reviews remuneration for senior employees of the Institute. Meets annually.</td>
<td>John Yu (Chair)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Don Green</td>
</tr>
<tr>
<td>GEORGE CLINICAL COMMITTEE</td>
<td>Provides strategic direction on commercial plans and activities. Meets quarterly.</td>
<td>Peter Church (Chair)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Don Green</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Graham Lawrence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stephen MacMahon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bruce Neal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jason Yat-sen Li</td>
</tr>
<tr>
<td>THE GEORGE INSTITUTE, CHINA COMMITTEE</td>
<td>Oversees operations and research in China. Meetings conducted biannually.</td>
<td>John Yu (Chair)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joanna Capon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Robyn Norton</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mark Stevenson</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WU Yangfeng</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jason Yat-sen Li</td>
</tr>
<tr>
<td>THE GEORGE INSTITUTE, INDIA COMMITTEE</td>
<td>Oversees operations and research in India. Meetings conducted biannually.</td>
<td>Peter Church</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bruce Neal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Robyn Norton</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anushka Patel (Chair vacant)</td>
</tr>
</tbody>
</table>

# RESEARCH COMMITTEE

The Institute’s Constitution requires the establishment of a Research Committee with a minimum of five members, the majority of whom need to ‘demonstrate the proven ability to direct a research program as evidenced by their academic qualifications and their professional appointments’.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>MEMBERSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>John Yu (Chair)</td>
</tr>
<tr>
<td></td>
<td>Andrew Coats (resigned 5 May 2009)</td>
</tr>
<tr>
<td></td>
<td>Don Green</td>
</tr>
<tr>
<td></td>
<td>Stephen MacMahon</td>
</tr>
<tr>
<td></td>
<td>Robyn Norton</td>
</tr>
</tbody>
</table>
In order to provide the Institute with advice on future research directions, a Research and Development Advisory Committee (RADAC) has been established. Its membership consists of international health research and development practitioners.

RADAC is an independent body which meets approximately every two years to provide an independent assessment of the scope, content and quality of The George Institute’s research and development activities within the context of the Institute’s mission and strategic plan. The Committee also provides advice in relation to current, medium and long-term issues facing The George Institute.

**2008 RADAC MEETING**

In October 2008 RADAC met to discuss the Institute’s research activities. The program included an open symposium showcasing our research, followed by a closed session for RADAC members and senior staff from the Institute. In a report to the Institute’s board of directors, RADAC stated that it was:

‘Impressed by the strength and quality of the Institute’s Research and Development program, its improved capacity building program, its mentoring program and the calibre of its research staff. RADAC commends the Institute on the excellent level of growth and program maturation since the last RADAC meeting in 2005’.

In addition to acknowledging the key strengths of the Institute, including its focus on health policy, translation of research, building capacity and a developing Indigenous health program, RADAC made the following key recommendations:

<table>
<thead>
<tr>
<th>KEY ISSUE</th>
<th>RECOMMENDATION</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISSION STATEMENT AND ROLE IN THE DEVELOPING WORLD</td>
<td>RADAC recommended that the current mission statement of the Institute should be strengthened and clarified.</td>
<td>Reflecting similar feedback to the Institute’s stakeholder review, the Institute subsequently undertook a review of its mission and fine-tuned the wording (see p. 1).</td>
</tr>
<tr>
<td>INFORMATION SYSTEM UPGRADE</td>
<td>RADAC recommended that the Institute’s documentation and information on capacity, budget and research performance be upgraded.</td>
<td>The Institute has commenced the process of further developing and implementing various metrics and indices against which the research performance of the Institute staff can be measured.</td>
</tr>
<tr>
<td>RELATIONSHIPS WITH UNIVERSITIES</td>
<td>RADAC recommended that the Institute build closer relationships with a broad range of universities.</td>
<td>Building on an already established list of collaborations with several key universities throughout the world, the Institute will continue to nurture these relationships and will develop new partnerships to help support major programs of research.</td>
</tr>
</tbody>
</table>
## INSTITUTE MANAGEMENT

Principal Directors, Professor Stephen MacMahon and Professor Robyn Norton are responsible for overseeing the strategic plan of the Institute and receive advice from the Senior Executive Group. Responsibility for the operation and administration of the Institute is delegated to the Senior Executive Group and the Institute Management Group.

### SENIOR EXECUTIVE GROUP

<table>
<thead>
<tr>
<th>MANAGEMENT COMMITTEE</th>
<th>DESCRIPTION</th>
<th>MEMBERSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SENIOR EXECUTIVE GROUP</td>
<td>Provides recommendations and advice to the Principal Directors on matters of strategic or operational importance. Meets fortnightly.</td>
<td>Jane Austin, Ross Bidencope (until February 2009), John Chalmers, Lalit Dandona (until March 2009), Graham Lawrence, Stephen MacMahon, Bruce Neal, Robyn Norton, Mark Stevenson</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MANAGEMENT COMMITTEE</th>
<th>DESCRIPTION</th>
<th>MEMBERSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTITUTE MANAGEMENT GROUP</td>
<td>The Institute also consults widely with Institute Directors, who lead and manage major Institute programs. Members of the Senior Executive Group are involved in Institute Management Group activities (see p. 32 for a list of Academic Directors).</td>
<td>Craig Anderson, Laurent Billot, Rick Brown, Alan Cass, Joanna Cole, Rakhi Dandona (until June 2009), Peter Dolnik, Samantha Flynn, Javier Guzman, Rachel Huxley, Rebecca Ivers, Rachel Kerry, Chris Maher, Mary Moran, John Myburgh, Sameer Pandey, Anushka Patel, Vlado Perkovic, A Sunder Rajan, Anthony Rodgers, Cheryl Townsend, Fiona Turnbull, WU Yangfeng, Susan Xie, YAN Lijing</td>
</tr>
</tbody>
</table>
2008/2009 COLLABORATORS
## Financial summary

The 2008/2009 financial year has been a challenging period across the world, and the Institute also felt the impact of the economic environment, reporting a consolidated loss of $1.7 million for the year. This included a $1.5 million loss on the write-down to market value of the investment portfolio. Nevertheless the Institute finished the year strongly and delivered an operating cash surplus of $4.2 million, as a result of improved controls over expenditure, invoicing and collection of debts. The cash balance improved to $13.6 million at 30 June 2009, and together with listed investments of $6.2 million, provides a satisfactory financial backing to our activities.

The balance sheet on page 45 outlines the Institute’s total assets and liabilities as at 30 June 2009. Total liabilities of the Institute includes $19.5 million of ‘unearned revenue’ which reflects cash received in advance from funders. This is recognised as ‘earned revenue’ when project activities are completed.

Although the economic environment curtailed some of our initiatives, the Institute still achieved growth of 10% in 2008/2009. Following the year end the Institute secured a number of new major projects.

Since the end of the financial year the Institute has seen a recovery in the value of its investment portfolio thus adding to future financial security. The following pages include the audit report, balance sheet, income statement and cash flow statement for The George Institute for International Health and its controlled entities for the year ended 30 June 2009.

All $ references are to Australian Dollars.

---

### Income

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-reviewed</td>
<td>$7.2m</td>
</tr>
<tr>
<td>Industry commercial</td>
<td>$25.5m</td>
</tr>
<tr>
<td>Industry and other non-commercial</td>
<td>$6.3m</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>$2.5m</td>
</tr>
</tbody>
</table>

### Expenses

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other expenses</td>
<td>$22m</td>
</tr>
<tr>
<td>Employee related expenses</td>
<td>$19.1m</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$0.6m</td>
</tr>
<tr>
<td>Loss on investments</td>
<td>$1.5m</td>
</tr>
</tbody>
</table>
### BALANCE SHEET

The George Institute for International Health and controlled entities balance sheet as at 30 June 2009

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>13,568,672</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>6,875,138</td>
</tr>
<tr>
<td>Other current assets</td>
<td>275,216</td>
</tr>
<tr>
<td><strong>TOTAL CURRENT ASSETS</strong></td>
<td>20,719,026</td>
</tr>
<tr>
<td><strong>NON-CURRENT ASSETS</strong></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>1,862,120</td>
</tr>
<tr>
<td>Investment property</td>
<td>6,207,057</td>
</tr>
<tr>
<td>Intangibles</td>
<td>57,148</td>
</tr>
<tr>
<td><strong>TOTAL NON-CURRENT ASSETS</strong></td>
<td>8,126,325</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td>28,845,351</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIABILITIES</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT LIABILITIES</strong></td>
<td></td>
</tr>
<tr>
<td>Trade and other payables</td>
<td>2,402,413</td>
</tr>
<tr>
<td>Short-term provisions</td>
<td>21,342,215</td>
</tr>
<tr>
<td>Other</td>
<td>54,450</td>
</tr>
<tr>
<td><strong>TOTAL CURRENT LIABILITIES</strong></td>
<td>23,799,078</td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES</strong></td>
<td>23,799,078</td>
</tr>
<tr>
<td><strong>NET ASSETS</strong></td>
<td>5,046,273</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQUITY</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained profits</td>
<td>5,046,273</td>
</tr>
<tr>
<td><strong>TOTAL EQUITY</strong></td>
<td>5,046,273</td>
</tr>
</tbody>
</table>

Notes for full financial consolidated report are available, contact The George Institute Director of Finance on +61 2 9657 0300 or info@george.org.au
## INCOME STATEMENT

The George Institute for International Health and controlled entities income statement for the year ended 30 June 2009

<table>
<thead>
<tr>
<th>Description</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$41,507,258</td>
</tr>
<tr>
<td>Other income</td>
<td>$12,318</td>
</tr>
<tr>
<td>Employee benefits expense</td>
<td>($19,126,399)</td>
</tr>
<tr>
<td>Depreciation and amortisation expenses</td>
<td>($552,065)</td>
</tr>
<tr>
<td>Other expenses</td>
<td>($23,496,952)</td>
</tr>
<tr>
<td><strong>Profit (loss) before income tax expense</strong></td>
<td>($1,655,840)</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>-</td>
</tr>
<tr>
<td><strong>Profit (loss) attributable to members of the company</strong></td>
<td>($1,655,840)</td>
</tr>
</tbody>
</table>

## CASH FLOW STATEMENT

The George Institute for International Health and controlled entities cash flow statement for the year ended 30 June 2009

<table>
<thead>
<tr>
<th>Description</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash flows from operating activities</strong></td>
<td>$4,489,318</td>
</tr>
<tr>
<td><strong>Net cash provided by operating activities</strong></td>
<td>$4,489,318</td>
</tr>
<tr>
<td><strong>Cash flows from investing activities</strong></td>
<td></td>
</tr>
<tr>
<td>Purchases of investments</td>
<td>($6,896,647)</td>
</tr>
<tr>
<td>Sales of investments</td>
<td>$7,579,329</td>
</tr>
<tr>
<td>Cash management</td>
<td>($51,151)</td>
</tr>
<tr>
<td>Proceeds of sale of property plant &amp; equipment</td>
<td>$896,132</td>
</tr>
<tr>
<td>Purchases of property plant &amp; equipment</td>
<td>$12,318</td>
</tr>
<tr>
<td><strong>Net cash provided by investing activities</strong></td>
<td>($252,283)</td>
</tr>
<tr>
<td>Net increase in cash held</td>
<td>$4,237,035</td>
</tr>
<tr>
<td>Cash at beginning of financial year</td>
<td>$9,331,637</td>
</tr>
<tr>
<td><strong>Cash at end of financial year</strong></td>
<td>$13,568,672</td>
</tr>
</tbody>
</table>

Notes for full financial consolidated report are available, contact The George Institute Director of Finance on +61 2 9657 0300 or info@george.org.au
Independent audit report to the members of The George Institute for International Health and Controlled Entities

We have audited the accompanying financial report, being a special purpose financial report, of The George Institute for International Health and Controlled Entities (the company) as set out in Note 14, which comprises the balance sheet as at 30 June 2009 and the income statement, statement of changes in equity and cash flow statement for the year ended on that date, a summary of significant accounting policies and other explanatory notes and the directors’ declaration.

We are not the auditors of The George Institute, China or The George Institute, India. An unqualified audit report has been issued by the auditors of these entities.

Director’s Responsibility for the Financial Report

The directors of the company are responsible for the preparation and fair presentation of the financial report and have determined that the accounting policies described in Note 1 to the financial statements, which form part of the financial report, are appropriate to meet the requirements of the Corporations Act 2001 and are appropriate to meet the needs of the members. The director’s responsibility also includes designing, implementing and maintaining internal control relevant to the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditor’s Responsibility

Our responsibility is to express an opinion on the financial report based on our audit. No opinion is expressed as to whether the accounting policies used, as described in note 1, are appropriate to meet the needs of the member. We conducted our audit in accordance with Australian Auditing Standards. These Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

Our audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor’s judgment, including the assessment of the risks or material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity’s preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity’s internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial report.

The financial report has been prepared for distribution to the member for the purpose of fulfilling the director’s financial reporting under the Corporations Act 2001. We disclaim any assumption of responsibility for any reliance on this report or on the financial report to which it relates to any person other than the members, or for any purpose other than that for which it was prepared.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Independence

In conducting our audit, we have complied with the independence requirements of the Corporations Act 2001. We confirm that the independence declaration required by the Corporations Act 2001, provided to the directors of The George Institute for International Health and Controlled Entities previously, would be in the same terms if provided to the directors as at the date of this auditor’s report.

Auditor’s Opinion

In our opinion the financial report of The George Institute for International Health and Controlled Entities is in accordance with the Corporations Act 2001 including:

a) giving a true and fair view of the company’s financial position as at 30 June 2009 and of its performance for the year ended on that date in accordance with the accounting policies described in Note 1; and

b) complying with Australian Accounting Standards to the extent described in Note 1 and the Corporations Regulations 2001.

PETER DOUGLAS WOODHEAD
Wearne & Co Audit Pty Limited
Dated: 03.11.2009

Notes for full financial consolidated report are available, contact The George Institute Director of Finance on +61 2 9657 0300 or info@george.org.au
## FUNDING SOURCES 2008/2009

<table>
<thead>
<tr>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide Institute for Sleep Health, Australia</td>
</tr>
<tr>
<td>Allergan Australia Pty Ltd</td>
</tr>
<tr>
<td>Amgen Australia</td>
</tr>
<tr>
<td>Auckland City Hospital, New Zealand</td>
</tr>
<tr>
<td>Auckland Uniservices Limited, New Zealand</td>
</tr>
<tr>
<td>AusAid, Australia</td>
</tr>
<tr>
<td>Australian and New Zealand Intensive Care Society Research Centre</td>
</tr>
<tr>
<td>Australian Food and Grocery Council</td>
</tr>
<tr>
<td>Australian Kidney Trial Network</td>
</tr>
<tr>
<td>Australian Physiotherapy Association</td>
</tr>
<tr>
<td>Australian Research Council</td>
</tr>
<tr>
<td>Australian Transport Safety Bureau</td>
</tr>
<tr>
<td>Barwon Darling Alliance, Australia</td>
</tr>
<tr>
<td>Baxter Health Corporation, Australia</td>
</tr>
<tr>
<td>Bellberry Limited</td>
</tr>
<tr>
<td>Bill &amp; Melinda Gates Foundation</td>
</tr>
<tr>
<td>Canadian Physiotherapy Association</td>
</tr>
<tr>
<td>Commonwealth Department of Health and Ageing, Australia</td>
</tr>
<tr>
<td>Concord Hospital, Australia</td>
</tr>
<tr>
<td>Council on Health Research for Development, Australia</td>
</tr>
<tr>
<td>Danske Fysioterapeuter (Association of Danish Physiotherapists), Denmark</td>
</tr>
<tr>
<td>Department of Health, UK</td>
</tr>
<tr>
<td>Department of Planning and Infrastructure, Northern Territory Government, Australia</td>
</tr>
<tr>
<td>Diabetes Australia Research Trust</td>
</tr>
<tr>
<td>Drugs for Neglected Diseases Initiative (DNDi)</td>
</tr>
<tr>
<td>Eisai Global Clinical Development, USA</td>
</tr>
<tr>
<td>FIA Foundation for the Automobile and Society, UK</td>
</tr>
<tr>
<td>Fresenius Kabi, Germany</td>
</tr>
<tr>
<td>Genzyme Australasia</td>
</tr>
<tr>
<td>Government of Canada</td>
</tr>
<tr>
<td>Hamilton Health Sciences, Canada</td>
</tr>
<tr>
<td>HCF Health and Medical Research Foundation, Australia</td>
</tr>
<tr>
<td>High Blood Pressure Research Council, Australia</td>
</tr>
<tr>
<td>Intensive Care Foundation, Australia</td>
</tr>
<tr>
<td>Johnson &amp; Johnson Pharmaceutical Research &amp; Development LLC, USA</td>
</tr>
<tr>
<td>Koninklijk Nederlands Genootschap voor Fysiotherapie, The Netherlands</td>
</tr>
<tr>
<td>Les Laboratoires Servier, France</td>
</tr>
<tr>
<td>MFB Foundation, Australia</td>
</tr>
<tr>
<td>Motor Accidents Authority of NSW, Australia</td>
</tr>
<tr>
<td>Mr Bruce Arnott, personal donation</td>
</tr>
<tr>
<td>Multiple Sclerosis Research Australia</td>
</tr>
<tr>
<td>National Health and Medical Research Council, Australia</td>
</tr>
<tr>
<td>National Heart Foundation, Australia</td>
</tr>
<tr>
<td>National Stroke Foundation, Australia</td>
</tr>
<tr>
<td>National Stroke Research Institute, Australia</td>
</tr>
<tr>
<td>National Transport Commission, Australia</td>
</tr>
<tr>
<td>National Trauma Research Institute, Australia</td>
</tr>
<tr>
<td>New Zealand Society of Physiotherapists</td>
</tr>
<tr>
<td>Northern Territory Department of Education and Training, Australia</td>
</tr>
<tr>
<td>Novartis</td>
</tr>
<tr>
<td>NRMA-.ACT Road Safety Trust NRMA Motoring and Services Ltd, Australia</td>
</tr>
<tr>
<td>NSW Department of Health, Australia</td>
</tr>
<tr>
<td>NSW Office for Science and Medical Research, Australia</td>
</tr>
<tr>
<td>NSW Sporting Injuries Committee, Australia</td>
</tr>
<tr>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>Oxford Health Alliance, UK</td>
</tr>
<tr>
<td>Physio Austria</td>
</tr>
<tr>
<td>Physiotherapists Registration Board of Victoria, Australia</td>
</tr>
<tr>
<td>Physiotherapy Association of Switzerland</td>
</tr>
<tr>
<td>Physiotherapy Research Foundation, Australia</td>
</tr>
<tr>
<td>Queensland Department of Health, Australia</td>
</tr>
<tr>
<td>Queensland Transport, Australia</td>
</tr>
<tr>
<td>Roads and Traffic Authority of NSW, Australia</td>
</tr>
<tr>
<td>Royal Prince Alfred Hospital, Australia</td>
</tr>
<tr>
<td>Sanofi Aventis Healthcare Pty Ltd, Australia</td>
</tr>
<tr>
<td>Suomen Fysioterapeutit-Finlands Fysioterapeut ry, Finland</td>
</tr>
<tr>
<td>Swann Insurance (Aust) Pty Ltd, Australia</td>
</tr>
<tr>
<td>The Motor Accident Insurance Commission, Australia</td>
</tr>
<tr>
<td>The Royal Australasian College of Physicians</td>
</tr>
<tr>
<td>The Sax Institute, Australia</td>
</tr>
<tr>
<td>The University of Melbourne, Australia</td>
</tr>
<tr>
<td>The University of New South Wales, Australia</td>
</tr>
<tr>
<td>The University of Queensland, Australia</td>
</tr>
<tr>
<td>The University of Sydney, Australia</td>
</tr>
<tr>
<td>Transport Accident Commission, Australia</td>
</tr>
<tr>
<td>University of Cincinnati, USA</td>
</tr>
<tr>
<td>University of Oxford, UK</td>
</tr>
<tr>
<td>Wellcome Trust, UK</td>
</tr>
<tr>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Acute cerebral haemorrhage Bleeding from a blood vessel in the brain.

Acute coronary syndromes (ACS) Severe heart conditions.

Albumin A protein in the blood.

Biostatistics Statistical information and techniques used with reference to health studies and social problems.

Cardiovascular disease Conditions of the circulatory system, particularly the heart, brain and kidneys.

Chronic disease Disease of a long duration.

Chronic obstructive pulmonary disease (COPD) A long-lasting obstruction of the airways that occurs with chronic bronchitis, emphysema, or both.

Contracture Connective tissue producing shortening and resulting in deformity of a joint.

Crystalloid Resuscitation fluid.

Dialysis Renal replacement therapy, life-supporting treatments for renal failure.

Diamicron MR Glucose lowering treatment for people with diabetes.

Dyslipidemia Abnormal concentrations of lipids in the blood.

Echocardiography The use of ultrasound to investigate and display the action of the heart as it beats.

Electronic decision support (EDS) Electronic tool designed to provide consistent advice and standardised treatment based on evidence.

Epidemiology Study of the distribution and determinants of disease in populations.

Glucose Simple sugar containing six carbon atoms; an important source of energy.

Haemorrhage Bleeding.

Hydroxy-ethyl Resuscitation fluid.

Hyperglycemia High blood sugar.

Hypertension High blood pressure.

Intranasal Within the nose.

Ischaemia Inadequate flow of blood to a part of the body, caused by constriction or blockage of the blood vessels supplying it.

Lipids Fats.

Neglected diseases Infectious diseases that thrive in impoverished settings.

Neurological Disorders that affect the central nervous system.

Normoglycaemia Normal blood glucose concentration.

Obstructive sleep apnea Condition in which airflow from the nose and mouth to the lungs is restricted during sleep.

Polypill Several medications in one, fixed-dose tablet.

Preterax Blood pressure lowering drug.

Proteinuria The presence of protein in the urine.

Randomised controlled trial Random allocation of different interventions or treatments to subjects in a study to ensure that known and unknown confounding factors are evenly distributed between treatment groups.

Renal replacement therapy Life supporting treatments for renal failure.

Resuscitation fluids Fluids used in the treatment of patients with low blood pressure.

Saline Solution containing 0.9% sodium chloride used to replace fluid by intravenous infusion.

Sleeping sickness Disease of tropical Africa caused by the presence of parasitic protozoans in the blood.

Vascular Relating to or supplied with blood vessels.
PEER-REVIEWED JOURNALS


Allen NE, Canning CG, Sherrington C, Fung VSC. Bradykinesia, muscle weakness and reduced muscle power in Parkinson’s disease. Movement Disorders. 2009;[Published online on 7 May 2009].


Anderson K, Devitt J, Cunningham J, Preece C, Cass A. All they said was my kidneys were dead: Indigenous Australian patients’ understanding of their chronic kidney disease. Medical Journal of Australia. 2008;189:499-503.


Gallagher M. 2008;8:CD004376.

Fransen M. 1109-17.

controlled trials.


Heerspink H, Ninomiya T, Zoungas S, de Zeeuw D, Grobbee D, Jardine M, Gallagher M, Roberts M, Cass...


Herbert R. Stretching before or after physical activity does not reduce muscle soreness or injury risk. Kiniesitherapie, la Revue. 2008;38:40.


Joshi R, Chow CK, Raju PK, Reddy S, MacMahon S, Lopez AD, Neal B. Fatal and non-fatal cardiovascular disease and the use of therapies for secondary prevention...


Patel A. Cardiovascular risk – who should we treat and how much should we stratify. Heart. 2009;95(10):783-4.


1 JULY 2008 – 30 JUNE 2009


Stanton TR, Latimer J, Maher CG. Patients with musculoskeletal pain and healthy controls. Disability and Rehabilitation. 2009;[Epub ahead of print].


Wu Y, Huxley R, Li M, Ma J. The growing burden of overweight and obesity in contemporary China. CVD Prevention and Control. 2009;[Epub ahead of print].


BOOK/BOOK


CONFERENCE PRESENTATIONS

Craig Anderson

Ethical challenges in obstructive sleep apnea treatment trials. 23rd Annual Meeting of the Associated Professional Sleep Societies, LLC. Seattle, USA, June 2009.


How to get involved in international clinical trials. 6th China Forum of Cerebrovascular Diseases. Beijing, China, April 2009.


What is the state of stroke research in Asia and how can it be optimised? The Lancet Asia Medical Forum. Beijing, China, November 2008.


Large-scale priority-driven research projects that build regional capacity with a particular emphasis in China and India. The George Institute Research and Development Advisory Committee (RADAC) Symposium. Sydney, Australia, October 2008.


Fredrica Barzi


Soufiane Boufous

Caroline Broderick

Alan Cass
All they said was my kidneys were dead: Indigenous Australian kidney disease patients’ understanding of their health and illness and perspectives on their interactions with the healthcare system. American Nephrology Association Annual Scientific Meeting. San Francisco, USA, November 2008.
Closing the gap: addressing the burden of complex chronic disease among Indigenous Australians. NSW Rural Doctors Network Annual Scientific Meeting. Sydney, Australia, November 2008.
Working with populations in which there is disadvantage and inequity. The George Institute Research and Development Advisory Committee (RADAC) Symposium. Sydney, Australia, October 2008.
The IMPAKT Study: That door is closed. 22nd International Congress of the Transplantation Society. Sydney, Australia, August 2008.

John Chalmers
Results from ADVANCE: including the link between cognition and cardiovascular events. La Salpetriere Hospital. Paris, France, June 2009.
Combination of blood pressure lowering drugs for better CVD protection. Satellite Symposium of the 19th European Meeting on Hypertension. Camogli, Italy, June 2009.
The effects of a fixed combination of perindopril and indapamide in patients with type 2 diabetes mellitus according to baseline cardiovascular risk in the ADVANCE trial. 19th European Meeting on Hypertension. Milan, Italy, June 2009.
The fixed combination of perindopril and indapamide has a greater effect on cardiovascular outcomes in patients with type 2 diabetes and albuminuria. 19th European Meeting on Hypertension. Milan, Italy, June 2009.
Rational choice of drugs to lower blood pressure: evidence from clinical trials and from the Blood Pressure Lowering Treatment Trialists’ Collaboration. 8th National Educational Conference of the Polish Society of Internal Medicine “Advances in internal medicine – INTERNA 2009” Warsaw, Poland, April 2009.
A factorial, randomised trial of blood pressure lowering and intensive glucose control in type 2 diabetes: new results from ADVANCE. Mexican National Congress of Internal Medicine. Vera Cruz, Mexico, November 2008.
Tom Chen

Clara Chow
Development of method to systematically evaluate the community built environment using photos - Environmental Profile of a Community (EPOCH). Hamilton Health Research in the City Conference. Hamilton, Canada, February 2009.

Leonardo Costa


Leonie Crampton
Good clinical practice. ALTITUDE study investigator meeting. Beijing, China, July 2008.

Lalit Dandona
Methods to understand and track HIV epidemics and measure results: epidemicology estimates and how accurate they are. XVII International AIDS Conference. Mexico City, Mexico, August 2008.


Rakhi Dandona


Joanna Diong

Elizabeth Dunford

Javier Guzman


Maree Hackett


Amanda Hall

Emma Heeley


Nicholas Henschke
Rob Herbert

Stephane Heritier

Stephanie Hollis

Rachel Huxley
How many cardiovascular deaths could be avoided in Australia through small reductions in mean population cholesterol? Dieticians Association Australia. Gold Coast, Australia, July 2008.

Suzanne Ingram

Meg Jardine

Rohina Joshi

Steve Kamper
Trial methodology and patient characteristics did not influence the size of placebo effects on pain in randomized controlled trials. International Association for the Study of Pain Symposium on the Placebo Effect. Copenhagen, Denmark, August 2008.

Lisa Keay

Andre Pascal Kengne

Likhim Kwah
Christine Lin
Brain imaging of clinical pain: where are we and where are we headed? 29th Annual Scientific Meeting of the Australian Pain Society. Sydney, Australia, April 2009.

Serigne Lo

Luciana Macedo

Stephen MacMahon

Chris Maher

Update on diagnostic triage, accuracy of clinical assessment to screen for serious pathology and identify the tissue source of LBP. Annual Scientific Meeting of the Hong Kong Pain Society. Hong Kong, October 2008.

Use and interpretation of outcome measures in clinical management of LBP and research on LBP. Annual Scientific Meeting of the Hong Kong Pain Society. Hong Kong, October 2008.

Overview of different clinical classification systems to guide the management of LBP. Annual Scientific Meeting of the Hong Kong Pain Society. Hong Kong, October 2008.

An overview of the evidence on interventions to prevent low back pain. Annual Scientific Meeting of the Hong Kong Pain Society. Hong Kong, October 2008.

Update on primary care management of low back pain. Annual Scientific Meeting of the Hong Kong Pain Society. Hong Kong, October 2008.

We all use the word evidence, but what do we mean and what is the significance? Australian Physiotherapy Association NSW Branch Symposium. Sydney, Australia, October 2008.


Primary care management of low back pain. Peking University Health Science Center. Beijing, China, October 2008.


Alex Martiniuk
Epilepsy attitudes and knowledge of youth. 28th International Epilepsy Congress. Budapest, Hungary, June 2009.


James McAuley

Mary Moran
International Health – A Challenge for Australia, Australia’s role in fighting neglected diseases. The XXV World Congress of Pathology and Laboratory Medicine. Sydney, Australia, March 2009.


Anne Moseley

John Myburgh


What does a clinical trials group contribute to intensive care research? Asia Pacific Critical Care Congress & Australian and New Zealand Intensive Care Society Annual Scientific Meeting. Sydney, Australia, October 2008.


Bruce Neal

Salt, a neglected risk factor. 5th World Congress of Paediatric Cardiology and Cardiac Surgery. Cairns, Australia, June 2009.


How the UK experience has influenced other countries (Australia). Sodium reduction policies and strategies in the Americas, Pan American Health Organization. Miami, USA, January 2009.


Sodium reduction policies and strategies in Australia. Sydney, Australia, February 2009.


Hypertension in the Asian-Pacific Region. 31st Annual Scientific Meeting of the Japanese Society of Hypertension. Sapporo, Japan, October 2008.


Do we really need outcome adjudication in clinical trials? 56th Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand. Adelaide, Australia, August 2008.


The results of the ADVANCE study glucose lowering comparison. Tokhu University. Sendai, Japan, July 2008.


Robyn Norton


Study designs for assessing risk factors and effectiveness of interventions for MC injuries. Motorcycle Crashes and


Anushka Patel


The real deal on tight glucose control. NSW Cardiac Retreat. Leura, Australia, October 2008.


Rob Smeets


What is the influence of the fear-avoidance model on the reduced aerobic fitness in chronic low back pain? 12th World Congress on Pain. Glasgow, UK, August 2008.

A rehabilitation medicine point of view regarding the fear-avoidance model during multidisciplinary forum on difficult cases or conditions: To fear or not to fear. Pain, Mind, and Movement II, Satellite Symposium of The Irish Pain Society. 12th World Congress on Pain. Dublin, Ireland, August 2008.

Tasha Stanton

Mark Stevenson

Steve Su

Colman Taylor

Jacqui Webster


Mark Woodward

Yangfeng Wu
The epidemic and consideration of dislipidemia control rate for Chinese who are at high and extremely high risk of CHD. Lingnan Congress of Cardiology. Guangzhou, China, April 2009.
Regional challenges and opportunities in cardiovascular research - Towards a new order in cardiovascular medicine re-engineering through global collaboration. European Society of Cardiology Congress. Munich, Germany, August 2008.

Du Xin

Sophia Zoungas
THE GEORGE INSTITUTE
for International Health

THE GEORGE INSTITUTE
Postal address
PO Box M201
Missenden Road
NSW 2050 AUSTRALIA

Head office
Level 7, 341 George Street
Sydney NSW
AUSTRALIA
Telephone +61 2 9657 0300
Facsimile +61 2 9657 0301

Hospital
Level 10, King George V Building
Royal Prince Alfred Hospital
Missenden Road
Camperdown Sydney NSW
AUSTRALIA

The George Institute, China
Room 1302, Tower B, Horizon Tower
No. 6 Zhichun Road, Haidian District
Beijing 100088
CHINA
Telephone +86 10 8280 0577
Facsimile +86 10 8280 0177

The George Institute, India
839C, Road No. 44A, Jubilee Hills
Hyderabad 500033
INDIA
Telephone +91 40 2355 8091
Facsimile +91 40 2354 1980

United Kingdom
London International Development Centre (LIDC)
36 Gordon Square
London WC1H 0PD
UNITED KINGDOM
Telephone +44 203 073 8322
Facsimile +44 781 491 9527
www.thegeorgeinstitute.org

This report has been printed on Mega Recycled, an environmentally responsible paper made with 50% certified recycled fibre and 50% virgin fibre from plantation forests. Produced in a facility that operates under world’s best practice ISO14001 Environment Management System.

ISSN 1837-6576 (Print)
ISSN 1837-6584 (Online)