THE GEORGE INSTITUTE
for Global Health

Big change: world health
Annual report 2011/2012

Big change now

The time for incremental change to world health has passed – it is the past, an old fashioned view, well-intentioned, but not able to deliver the healthcare revolution we need. It is time to fast forward to better healthcare. **It is time for big change**.

Modest health reform packages to change the 20th century models of high cost, doctor-centred and hospital-focused – will not deliver the care we need in the 21st century nor the radical change required to transform health policies and practices.

So the work of The George Institute for Global Health is about driving big change to world health.

Our projects are specifically designed to provide the evidence for action that will directly change health policy, health practice, drugs and devices. Our work has already changed the healthcare received by millions of people worldwide, but there is much more to do.

5b

Change health, change the world

Five billion people have no reliable access to basic healthcare for the conditions most likely to kill or disable them prematurely.

Who we are

We are advocates for big change and our mission is to improve the health of millions of people worldwide. 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 values

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.

Our partners

Contents

Chair and **Principal Directors'** Report

Becoming a global organization, while continuing to build on our strong Australian base, was a key focus for the organization over the previous year, and indeed the previous three years, as articulated in our strategic plan. Our success in achieving this goal was best exemplified during the year by our ranking as the leading scientific research institution in the world, as measured by the impact of our published work, based on citations of our research. The 2011 report from the independent European agency, SCImago, ranked more than 3,000 research institutions on the basis of their scientific publications from 2005-2009. The George Institute for Global Health was ranked number one in a field largely dominated by North American institutions.

This recognition supports and indeed reinforces our commitment not only to conduct research of the highest quality but also to conduct research that has an impact on policy and practice globally and leads to improvements in the health of millions of people worldwide.

A global organization with four regional offices

During the year we restructured the organization to more clearly distinguish our global "head office" operations from our regional operations. In Australia, Professor Vlado Perkovic was appointed as the inaugural Executive Director of The George Institute for Global Health in Australia, where he brings to this role, not only a distinguished academic career in renal medicine, but also his leadership experience as Executive Director of George Clinical.

Professor Anushka Patel was appointed as the Institute's Chief Scientist, based within the global office, and in this capacity will work with all four regional offices in supporting our global research programme. Anushka brings to this role her experience in heading the Institute's Cardiovascular Division in Australia, as well as her leadership role as Executive Director of The George Institute in India.

Research with a global impact

As outlined in more detail throughout the report, the results of our research, even if conducted in a single region, have global significance. This year, for example, FoodSwitch, an Australian-first smartphone application, developed by Professor Bruce Neal and his team at The George Institute in Australia with support from Bupa, and based on an extensive research data base, was launched to help consumers make healthier food choices and reduce high levels of fat, salt and sugar from their diets. By simply scanning the barcode of Australian packaged foods using a smartphone camera, consumers receive immediate, easy to understand nutritional advice via the FoodSwitch app. Foodswitch has been downloaded more than 230,000 times and as result of the huge interest in its release, is now being trialed across the world.

Major new funding awarded this year, through the Global Alliance for Chronic Disease (GACD), with support from the Australian National Health and Medical Research Council (NHMRC) and the British Medical Research Council will further strengthen our global impact. Funded research projects include an evaluation of a smartphone system called Healthtracker to assist Indian rural healthcare workers detect and manage hypertension and cardiovascular risk; a project aimed at improving blood pressure control in India, using a simplified treatment strategy including a three-in-one blood pressure lowering pill; the development of a national salt reduction program for India; and a multi-site study to explore the barriers to diagnosis and effective treatment of hypertension control in rural India. In China, funding will support a school-based education program to reduce salt intake in children, and a further project will investigate the cost effectiveness of salt reduction interventions in the Pacific Islands. All of these projects involve collaborations across several of our regional offices, and most involve partnerships with external collaborators.

Our teams were also successful in obtaining substantial funding to further grow our research programmes in both stroke and diabetes. In Australia, Professor Craig Anderson and his collaborators were successful in obtaining the highest ever level of funding awarded for a NHMRC project grant in stroke research – The Enhanced Control of Hypertension and Thrombolysis in Stroke Disease (ENCHANTED) study. In China, Professor LI Linong and his team were successful in obtaining funding to undertake not only a comprehensive survey of patients living with type 1 diabetes, but also a study aimed at investigating the use of basal insulin in 20,000 patients with type 2 diabetes.

A financially strong organisation

Our research achievements are built on an increasingly strong financial base with structures and systems responsive to the demands of managing budgets and people across all our offices worldwide. The 2011/2012 year has seen a significant financial improvement for the organisation, with the Institute reporting a solid surplus that will enable us to strengthen our financial reserves.

Our major strategic enterprise, George Clinical, had a particularly successful year and as a consequence was able to make a substantial financial contribution to the Institute, much of which has been used to support the activities of our research programmes worldwide.

During the year we were also successful in raising some modest philanthropic funds, which were used in full to fund our research programmes. As part of our fundraising strategy we hosted for the first time, in Australia, a major event on World Health Day, addressed by the Australian Federal Health Minister, The Hon Tanya Plibersek MP.

A roadmap for the next three years

We undertook a major exercise during the year, involving the Board and senior management across the globe, developing our strategic plan for the coming three years, 2012-2015. As part of this process, we also outlined our vision for the next 10 years and reaffirmed our commitment to our mission and values.

Over the next 10 years we want to continue to produce high quality research that will inform changes in health policy and practice. However, we also want to take a much greater role in ensuring that our research findings are embedded into practice and to this end, we envisage developing social enterprises, particularly focused on delivering safe, effective and affordable healthcare to those who currently have no or limited access to such care.

In order to achieve this 10-year vision, our three-year strategic plan has a particular focus on strengthening our organisation to ensure long-term sustainability. We agreed specific measureable outcomes focused on maximising the impact of our research; growing our existing enterprises and developing new enterprises that generate both social and financial dividends; strengthening our development and communications activities to support our future and raise our profile; and consolidating our governance and management to ensure that we have a robust global operation.

Those who support The George Institute

We were honoured to have Gina Anderson and Will Delaat join our Board of Directors this year. Gina's professional, business, government and community acumen, and particularly her experience in the philanthropic sector, has already proved invaluable. Will's expertise in the pharmaceutical industry and in particular his experience in the development of innovative medicines is highly valued, as the Institute increases its focus on the conduct of research and the development of enterprises focused on innovative approaches to providing effective and affordable healthcare globally.

We also acknowledge the very important contributions of the other members of the Board and its committees and the significant input of the Research Advisory Committee in India. Senior staff were key players in the development of our strategic plan as well as making major contributions to the overall success of the Institute during the year. As always, though, every single member of staff worked as part of the wider team and so we recognize their contributions also.

The next 12 months

In closing, we would like to make reference to our Annual Report cover and the focus on BIG CHANGE as referenced throughout this report. For governments in high, middle and low income countries alike, there is increasing acknowledgement that current health systems are under stress and that without major changes in the way healthcare is delivered, they will not be able to deliver on the promise of safe, effective and accessible healthcare for all who need it. For the Institute, this provides both a challenge and an opportunity.

We are fortunate to have world-class researchers, who think big, who think innovatively and who are able to undertake research to address these challenges. The next 12 months will see the Institute playing a leading role in supporting the need for BIG CHANGE and contributing the evidence-base to drive such change.

Michael Hawker AM (1)
CHAIR

Professor Stephen MacMahon (2)
PRINCIPAL DIRECTOR

Professor Robyn Norton (3)
PRINCIPAL DIRECTOR

Our research

We look for answers that deliver a big change to the current health system and provide new ways to make healthcare accessible and affordable, delivered in a safe and efficient system. We will educate, equip and re-engineer a new workforce of healthcare practitioners, give people access to low cost medicines that are safe and effective and find new ways to use technology to make healthcare innovation really count by giving communities more control over their healthcare prevention, treatment and medication.

Big action is needed now
to prevent more than 100 million people dying prematurely from preventable causes in the next decade.

250m

There are about **250 million people with diabetes**. Most will die or be disabled by complications of their condition.

Cardiovascular diseases are the leading causes of death in the world.

7b

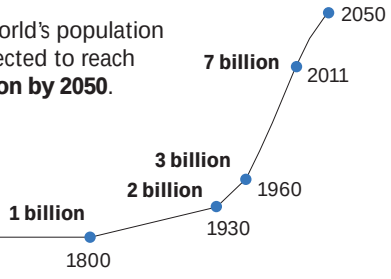
Seven billion people
One mission

5th

Road traffic injuries are projected to rise to the **fifth leading cause of death** globally in 2030.

9b

The world's population is expected to reach **9 billion by 2050**.



Kidney disease complexities drive enduring commitment to find solutions

The complexities of chronic kidney disease, which affects a billion people, has occupied researchers at The George Institute for a decade. Their work holds not only the hope of better treatment, but also new ways of working together to achieve breakthroughs and drive big, lasting change.

Big change:
We found ways to better manage and reduce risk

9,400

In searching for a kidney disease breakthrough, **we initiated the world's largest trial** which included more than 9,400 affected people.

Chronic kidney disease shortens life, reduces quality of life and is expensive to treat. Finding a solution, and innovative ways to treat or prevent this chronic condition and its complications, has been a focus for The George Institute for more than a decade. Our studies have proven that prevention is key, but relatively few treatments have been shown to be effective.

In the last year, our work has included IgA Nephropathy, which affects mostly young adults and occurs when abnormal activity of the immune system causes kidney damage. It is one of the most common causes of kidney failure, but has no specific proven treatment. Following a small pilot study of treatments in Beijing, by Peking University First Hospital, researchers within the Institute with colleagues at Peking University and several international kidney specialist organisations, have worked together to conduct a systematic review examining the effects of steroid treatment for IgA Nephropathy. The review demonstrated that steroid therapy appeared to prevent kidney failure, but with a potential 55% higher risk of adverse events in patients.

According to researchers more extensive investigations were needed to obtain high-quality and reliable data. For this reason, the authors from China, Australia, India, the UK, the USA and Canada commenced planning a global study of high-risk kidney patients, called the Therapeutic Evaluation of STeroids in IgA Nephropathy Global Study (TESTING study). The global study will include 1,300 people from around the world and will follow them for five years, and assess whether steroids safely prevent kidney failure.

The TESTING study randomised its first patient in 2012 and will provide data that will guide the treatment of IgA Nephropathy patients globally when completed. The study will engage with patients via hospitals around the world and will adopt a new collaborative clinical trial model led by international renal experts and leaders in clinical trial conduct. TESTING's model and approach have been acknowledged globally and are already attracting the attention of the International Society of Nephrology.

For patients with kidney disease, TESTING holds hope of better treatments and improved care but patients with established chronic kidney disease are also at risk of cardiovascular disease. People with severe kidney disease are at risk of having a heart attack that is many times higher than people without kidney disease. As part of the war on disease, researchers at the Institute are looking at ways to better manage and reduce this risk.

In searching for a breakthrough, we also initiated the world's largest trial which included more than 9,400 people with kidney disease. The Study of Heart and Renal Protection (SHARP) showed that the combination of two cholesterol lowering drugs prevented almost one in five heart attacks, strokes and operations to open blocked arteries in people with chronic kidney disease.

The results were the first to show definitive evidence of the benefits of cholesterol lowering in combating the exceptionally high rates of cardiovascular diseases suffered by people with chronic kidney disease.

Acknowledging the opportunity to harness these findings and continue to follow this large group of patients, we launched SHARP-ER in 2012.

This work will extend follow-up for another five years, allowing researchers to see if the heart protection benefits persist or perhaps even increase among patients with kidney disease. They will also focus on safety issues and the impact of chronic kidney disease on patients and their families, such as the financial, employment and social implications of the condition.

SHARP is the first study that clearly demonstrated that an intervention reduced the risk of cardiovascular disease among patients with chronic kidney disease. It reduced the risk of heart attack, and these findings are set to translate into global policy and practice in the coming year.

No excuses – time to change health practice

Stroke patients are missing out on vital treatment that reduces the likelihood of a second stroke. Our evidence shows it's time to change how they are treated.

1/2

Our research has shown that **stroke patients are only half as likely to be prescribed the preventative treatment** that may reduce the risk of a repeat event. Our findings provide hard evidence to change health practice – now.

George Cepak has no recollection of the stroke that left him speechless and unable to walk. Four years later, after what seems unending therapy, his speech has returned.

"I didn't know anything had happened until three to four days after; I realised I couldn't talk or move my right side. I knew something was wrong, but it didn't occur to me that it was a stroke."

After 10 days in intensive and high dependency care, George, pictured, was transferred to a rehabilitation centre for six weeks before returning home. He spent hours re-building his mobility, strength and speech. Four years later George can now walk and has reasonable strength in his right side.

For stroke patients like George, it is the care following a stroke that is key to both rehabilitation and medication. Once affected by stroke, patients are at a higher risk of having another stroke or heart attack and this is greater for stroke patients compared to those who suffer from coronary artery disease.

Research published by The George Institute in 2011 has shown that stroke patients are only half as likely to be prescribed the preventative treatment that may reduce the risk of a repeat event, compared to patients who suffer coronary artery disease.

The findings published in the *International Journal of Stroke* showed stroke patients are missing out on vital treatment that could help them avoid a second stroke. The Australian Hypertension and Absolute Risk Study (AusHEART) examined the management and risk perceptions of cardiovascular events in people with established cardiovascular disease in Australia.

There is extensive evidence of the effectiveness of measures that may minimise the risk of further attacks in patients with cardiovascular disease. According to **Dr Emma Heeley**, one of our Senior Research Fellows, the concern is that Australian stroke patients and their clinicians are less likely to take up or prescribe these therapies. This appears to be related to different perceptions of the risk of future cardiovascular events in both stroke patients and their doctors.

Prevention of major chronic conditions must focus on the individuals at the highest risk.

"We have the opportunity to change health practice based on good evidence; it is a compelling case for healthcare practitioners to change the way they treat vulnerable patients," Dr Heeley said.

There are no excuses. We have the hard facts that say change – and change now.

"I knew something was wrong, but it didn't occur to me that it was a stroke."
George Cepak

Findings shake critical care and improve patient outcomes

It takes courage and conviction to challenge current health practice, but it takes real commitment to persist and change what was once global best practice.

"The George Institute has played a huge role in sugar management primarily through NICE-SUGAR. This study will change practice worldwide." **Dr Manoj Saxena**

Results of the NICE-SUGAR (Normoglycemia in Intensive Care Evaluation – Survival Using Glucose Algorithm Regulation) study were published in 2009 and shook the critical care fraternity, revealing unexpected harm from intensive blood glucose control in critically ill patients.

Until our study it was widely believed that intensive blood glucose control, or blood sugar lowering, in critically ill patients was best practice. NICE-SUGAR not only questioned current practice, it proved that intensively lowering blood glucose in critically ill patients increases the relative risk of death by 10%. Researchers immediately called for urgent review of the clinical guidelines.

Fast forward to this year and our researchers have continued to make further progress with sustainable solutions for blood glucose management in intensive care settings. According to Chief Investigator **Professor Simon Finfer**, the focus has switched to improved measurement and monitoring through the development of highly accurate continuous blood glucose monitors.

"This will also allow us to understand how blood glucose 'behaves' in critically ill patients and which treatments other than insulin affect it," he said.

"Since 2009, we have combined the data from all the important trials to better understand how to treat critically ill patients. We believe we can use this information to reduce mortality and improve the health of patients who survive critical illness," he said.

This information provides a compelling case and has seen major international guidelines change to recommend a more conservative (less intense) approach to controlling blood glucose concentration.

Blood glucose increases above normal as part of the body's stress response to acute illness. It is linked with organ failure and death and happens in more than 95% of critically ill patients. The degree to which blood glucose concentration increases is directly linked to the risk of death, but trying to control it too tightly is also harmful. Controlling blood glucose concentration in an intensive care unit (ICU) is akin to walking a tightrope.

The NICE-SUGAR study recruited and studied 6,104 ICU patients in Australia, New Zealand, Canada and the USA for up to 90 days to assess whether the treatment would improve a patient's chance of survival. Due to the large size of the study, experts had powerful information and more compelling evidence. Our results have driven a global change and a better outcome for patients.

Dr Manoj Saxena, pictured, is a physician responsible for a team of ICU specialists at one of Sydney's leading hospitals.

"The George Institute has played a huge role in sugar management primarily through NICE-SUGAR. This study will change practice worldwide. NICE-SUGAR demonstrated clearly that the practice of intensively reducing blood sugars was definitely not helping patients and may in fact be harming them. NICE-SUGAR has not only improved our understanding of how to understand evidence, but also has saved (and will continue to save) many patients' lives, by providing robust and rigorous evidence.

Rigorously conducted clinical research of high quality, like NICE-SUGAR, has global impact on millions of patients, but it is also true that research is a continuous narrative that is being refined to get us ever closer to the truth."

The catastrophic cost of injury

With a population of 85.8 million, Vietnam is one of the most populous countries in the world, but the cost of healthcare is crippling. Our focus is on changing policy and making healthcare affordable and accessible – a basic human right.

US$365

The average cost of being hospitalised in Vietnam after an injury is around **US$365**. This equates to the average six-month income.

"Injuries remain a significant issue in my country and I want to drastically change the system to address this problem."
Ha Nguyen

40%

"Just over a quarter of people in the study experienced catastrophic expenditure due to their injuries, where at least **40%** of their income was spent on medical expenses." **Ha Nguyen**

Ha Nguyen is a PhD student working with The George Institute for Global Health and based in Vietnam.

Every day, injuries claim almost 100 lives and cause hundreds of thousands of hospital admissions.

"Vietnam has experienced a shift from communicable to non-communicable diseases and injuries. Ten years ago, when we conducted the first national survey, injuries were the leading cause of death among children. Injuries also caused the largest number of years of potential life lost, twice larger than those due to non-communicable diseases and six times larger than those due to communicable diseases. To date, injuries remain a significant issue in my country and I want to do something to address this problem. Every day, there are about 40 deaths due to road traffic crashes; every summer hundreds of children are drowned. Increasing efforts in injury prevention are desperately needed and I'm working on this area with an expectation that we can better control this issue in Vietnam."

Since its establishment, The George Institute has been recognised as a leader for its commitment to injury prevention. Globally, injuries claim more lives than heart disease and malaria and are one of the leading, but often neglected, causes of death and disability.

Investigating the impact of injury in his home country of Vietnam, Ha Nguyen revealed the catastrophic costs of recovering from an injury for many families.

"We wanted to confirm the true cost of recovering from an injury in Vietnam where healthcare costs are paid directly from the income of patients and their families," he said. "Just over a quarter of people in the study experienced catastrophic expenditure due to their injuries, where at least 40% of their income was spent on medical expenses and this leads to financial hardship."

Ha reviewed almost 1,000 cases of injuries to find the average cost of being hospitalised around US$365, which equates to an average six-month income. Burns, falls and road traffic injuries were the most common and most costly injuries, due to a longer hospital stay and more severe injuries.

The 2010 Vietnam Living Standard Survey showed that a typical household spends 10% of their non-food expenditure on healthcare. In Ha's study, only 25% were covered by insurance for their treatment costs, and the remainder were forced to pay for direct medical costs. The complete findings were published in *Injury*.

Professor Rebecca Ivers, of The George Institute, said injury was an unrecognised problem in low-income countries, which were generally focused on the high rates of infectious disease they face.

"It is important not to miss injury as a key public health challenge for Vietnam and that is why we conducted this research to clearly show the impact of injury on Vietnamese people," she said.

"If you have a devastating injury and the family has to look after you, there's a potential to push them into poverty."

Ha says the study is fundamental to improving injury rates in Vietnam.

"It's vital that we provide high-quality evidence for the Government to make well-informed decisions to prevent injury and help reduce the costs associated. There are a substantial number of households at risk of impoverishment due to road traffic injury, falls, burns and other injuries."

To help Vietnamese cope with the financial consequences of injury, Professor Ivers and Ha suggest two key focus areas. One is an expanded health insurance scheme and the second is a focus on prevention via programs that aim to reduce the incidence and severity of falls and road crashes. Both would likely result in significant savings for the family as well as society.

Professor Ivers' team will look to adapt this study in India, where data on the burden of injury is also lacking. Ha will further investigate the burden of disability following injury and establish more accurate measurements of the burden of injury for low-income countries, which generally use high-income countries as a benchmark.

"There is a clear need to collect injury outcome data from low and middle-income countries to inform valid estimates of injury burden for local uses and to further improve global burden estimates. These projects will be critical in closing this knowledge gap," Professor Ivers said.

This is the first time accurate injury weightings for low and middle-income countries will be established. The projects will have very important and wide-ranging implications for injury research on a global level and for local health service delivery in India.

We must use technology to improve care

Sometimes change is about how we can bring together all the knowledge we have, in a simple, yet innovative way.

"*Back Pain Choices* is a simple tool that combines all the guidelines I have learnt through my years of practising into a quick reference guide." **Dr Danny Tang**

The first reaction of many people with back pain is to visit their local family physician or general practitioner (GP). While GPs see a lot of people with back pain, they also see an enormous range of other health conditions so staying up to date with each condition is a big challenge. What is more, the latest guidelines for treating each condition can be time consuming to navigate for time-poor GPs.

Around 25% of people in the world experience back pain, which can be debilitating and costly to treat. Doctors must take advantage of technology to provide better patient care. This year researchers at The George Institute launched a simple way for general practitioners to easily access the latest evidence-based treatment guidelines for their lower back pain patients.

A simple online guide, *Back Pain Choices* assists GPs to diagnose and manage back pain. Hosted by the Australian National Prescribing Service, *Back Pain Choices* is the first web-based back pain support tool created for GPs. The guide takes users through a series of four steps.

The GP selects the specific symptoms and is given tailored advice for each patient. A personalised information sheet can be printed for patients to take away, which further explains their individual recommendations.

Back Pain Choices is supported by an algorithm based on lower back pain management recommendations from evidence-based clinical practice guidelines around the world. It synthesises recommendations from evidence based guidelines produced by Australia's National Health and Medical Research Council, the UK's National Institute for Health and Clinical Excellence and guidelines jointly produced by the American Pain Society and American College of Physicians.

Professor Chris Maher said prior research showed a gap in the management of back pain. "Our extensive research in the area has shown what treatments work, so we could provide a solution for the problem."

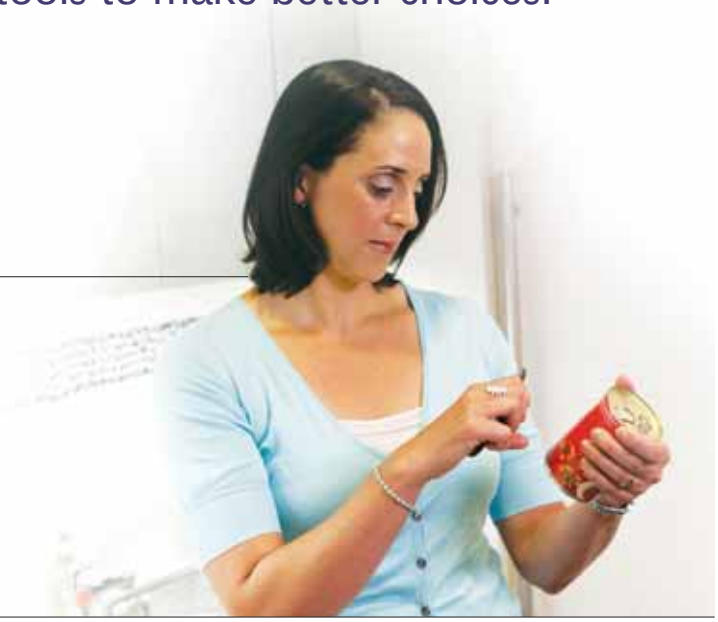
The George Institute worked with GPs to develop the guide, which became available this year. International experts, including those who authored the US, UK and Australian guidelines, were selected to review the guide before it was launched.

Dr Danny Tang is a Sydney-based GP who consults numerous patients with back pain and refers to a series of different guidelines based on the needs of patients. He has been using *Back Pain Choices* and says there are several benefits, including less paper and electronic clutter, improved compliance for patients, and it provides an educational tool for GPs.

"It's a simple tool that combines all the guidelines I have learnt through my years of practising into a quick reference guide. Even though I have treated numerous patients in the past and I am fully cognisant of the management guidelines, it helps with my memory retention to advise patients on some points that I may have forgotten. It's also an extremely useful tool as a motivator for patients to continue to keep active rather than assuming that bed rest is the key to management of their back pain," he said.

Smartphone app drives people power

We know diet plays a role in chronic disease and that poor food decisions can lead to high blood pressure, diabetes and obesity. We've given people the tools to make better choices.



"I'm a mother of three kids so I want to make sure that they have the power to make good choices and they become accustomed to making good choices."
Nicole Livingstone

Better food choices reduces the risk of heart attack and stroke and when applied across the population, have incredibly positive flow-on benefits for struggling healthcare systems.

For these reasons, The George Institute and Bupa – a leading global healthcare organisation – partnered to launch the Healthy Food Initiative in 2012. This program aims to help Australians make healthier food choices. The initiative included the launch of the new smartphone application 'FoodSwitch' that helps consumers navigate confusing nutritional panels, make sense of food claims and develop healthier eating habits.

By simply scanning the barcode on packaged food using a smartphone camera, consumers receive immediate, easy to understand nutritional advice about the product in the form of colour-coded traffic light labels. Since its launch in January this year, FoodSwitch has been downloaded more than 230,000 times and remains in the top 10 health applications in the iTunes store.

Former Olympic swimmer and FoodSwitch ambassador, **Nicole Livingstone**, believes FoodSwitch is great for busy people and families.

"I'm an ambassador for FoodSwitch because I believe in good, healthy nutritional choices," she said. "I'm a mother of three kids as well so I want to make sure that they become accustomed to making good choices."

Senior Director at The George Institute, **Professor Bruce Neal** said it was unfair to ask consumers to grapple with technical and confusing food labels. "Shoppers have a right to be able to see what's best for them at a glance" he said.

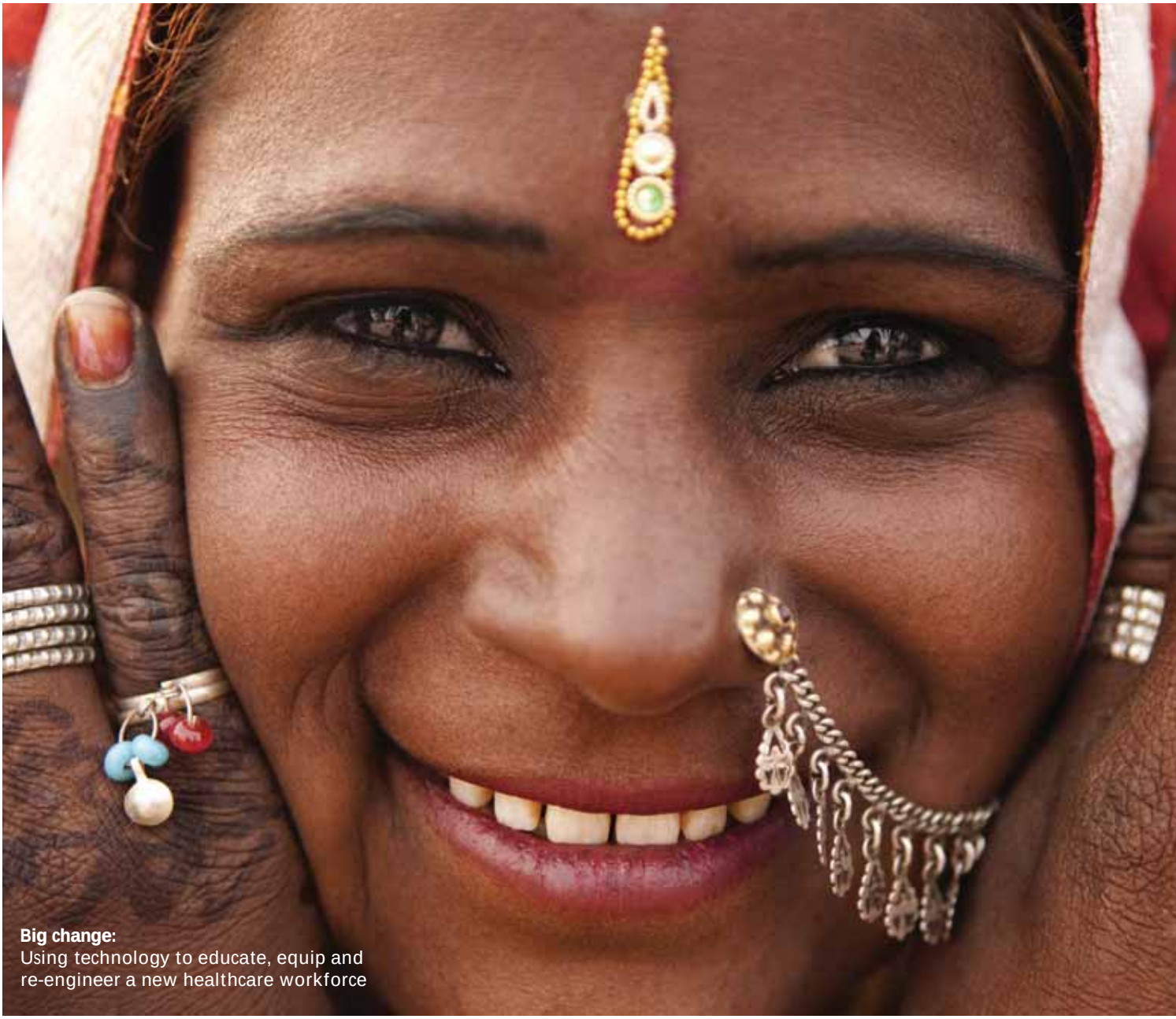
"We've been collecting data about what's in Australian processed foods for a number of years. With FoodSwitch, this information can help consumers make better food choices."

Perhaps the most fascinating feature of FoodSwitch is the "people power" element. Launched with 15,000 products in the database, users were invited to send photos of missing products. Within two days, customers had scanned and sent in an additional 15,000 products, making the FoodSwitch database practically complete.

Now being trialed in India, Costa Rica and Venezuela, the new crowd-sourcing approach is a radical change for researchers looking for low-cost ways to monitor the practices of food manufacturers in their own countries. In Australia we continue to receive about 200 photos a day meaning the database is always absolutely up-to-date. The application will soon be launched into the New Zealand market and a clinical version targeting high blood pressure will be released in Australia later this year.

Healthcare in India: people and technology

Investing in accessible and affordable healthcare might seem a risk to some, yet a program to extend the network of healthcare practitioners taps into some of the community's greatest carers, curers and healers – and why not?



Big change:
Using technology to educate, equip and re-engineer a new healthcare workforce

The Rural Healthcare Program takes an integrated approach to primary healthcare, not only re-engineering the workforce, but also adopting effective and affordable drugs such as the polypill.

Rural India is facing a grave challenge. With 500,000 doctors, but a need for three million to adequately provide essential healthcare, the country is confronted with a major public health problem – and the potential human consequences are profound.

Under conditions where health systems are poorly equipped to deal with the rise of cardiovascular disease, innovative ideas are desperately needed to improve even basic healthcare. Conventional approaches will not work for the burden of disease that exists in India. What is required is a major paradigm shift in the provision of primary healthcare. In 2012, The George Institute, India, revealed a significant program that could hold the key to providing improved services, reduced healthcare costs and prevention of death and disease.

The Rural Healthcare Program received a boost this year thanks to funding from the Global Alliance for Chronic Disease. The program takes an integrated approach to primary healthcare, not only re-engineering the workforce, but also adopting effective and affordable drugs such as the polypill, and testing innovative healthcare technology via smartphones.

The George Institute is looking to smartphones as a possible answer for India's problems. A pilot study, called HealthTracker India was launched this year and will use affordable smartphone technology to improve screening and treating cardiovascular risk factors and build local capacity.

HealthTracker India seeks to work with around 250,000 Accredited Social Health Activists (ASHAs) working in India's health system. They are not doctors, but are trained female community health workers based in rural villages throughout the country and are part of the Indian Government's National Rural Health Mission. **Associate Professor David Peiris** believes expansion of the ASHAs' role to provide essential primary healthcare for preventable conditions could be the start of significant inroads to tackling chronic disease in India.

The intelligent smartphone application will guide ASHAs through a series of questions to assess a patient's blood pressure, blood glucose, weight and height. The ASHA will enter answers into HealthTracker, which then calculates a comprehensive risk profile that is uploaded to a secure electronic health record. High-risk individuals are then referred to a doctor who follows a management plan for the patient's long-term care. The guide is based on the best available evidence in cardiovascular care and combines a technological solution with innovative strategies to empower the local health workforce. The pilot findings will be used to inform a large-scale trial in rural India. The Institute's goal is to provide rigorous evidence on a strategy that may lead to better healthcare for under-served populations in low and middle-income countries.

"We are looking at an integrated platform for primary healthcare. In addition to non-communicable diseases, we still need to cater for infectious diseases, as well as maternal and child health conditions. We are trying to develop a platform that can take into account all common conditions that are seen in Indian rural settings."

Associate Professor Peiris is leading this project with **Professor Anushka Patel**, Executive Director of The George Institute, India.

The broad strategy is also being adapted and evaluated across China with The George Institute, China. Both countries face considerable rural health challenges and the Institute hopes to use the programs to help develop broadly generalisable rural healthcare frameworks for low and middle-income countries.

Mary Janasi is an Accredited Social Health Activitist (ASHA) in the Kumdavalli village in West Godavari district of Andhra Pradesh.

"I regularly visit houses to register mothers for antenatal care and postnatal follow-up. There is significant increase in cases of people who have high blood pressure, high sugar and heart diseases. Chronic disease management is very important. If someone has high blood pressure, high sugar and heart problems they cannot do their regular work activities perfectly and they may suffer with long illness, be bed ridden or may die early. But people are unaware of its importance. They discontinue the medication due to lack of money."

"Using smartphones for accessing the risk factors of blood pressure and sugar is very good. We will be testing the risk factor status of each individual at their door step through screening. There is definitely a chance of improving awareness in the public for the treatment of high blood pressure and high sugar. In addition, as people will know their heart condition at an early stage, some may follow strict preventive methods to avoid heart diseases."

Mobile phones making healthcare happen

Old-fashioned good advice combined with technology can change behaviour to prevent chronic disease. In the UK, our research had great results with a variation on 'phone-a-friend'.

24/7

'txt2stop' trial participant, Fergus Joel, likened the messages to **a 24/7 friend** providing encouragement and useful advice.

In July 2011, *The Lancet* published results of an innovative intervention that simply tapped into the highly accessible communications channel of text messaging. Results showed major health benefits of targeted text messages for the millions of smokers worldwide that wanted to stop smoking.

The study, known as 'txt2stop' involved sending targeted text messages to 5,800 smokers in the UK. The intervention doubled quit rates after six months and is now being rolled out by the NHS in the United Kingdom, the Department of Health and Human Services in the USA and other health authorities.

The simple and smart approach developed by The George Institute's **Professor Anthony Rodgers** was tested in the United Kingdom, following a successful trial in New Zealand. Led by the London School of Hygiene and Tropical Medicine, participants received personalised messages to coach them through periods of craving, any lapses and concerns about quitting. The messages were carefully developed and tailored for participants, and based on latest behavioural psychology principles. There were a number of other components to facilitate distraction and a social networking component among quitters.

Motivated to quit smoking for his two young children, **Fergus Joel**, 36, successfully gave up his 20-a-day habit thanks to the txt2stop study, and feels much healthier as a result. Fergus likened the text messages to a 24/7 friend providing encouragement and useful advice, which spurred him on during moments of weakness.

Fergus started smoking in 2000 and would regularly light up three or four cigarettes before his morning coffee until he gave up during the 'txt2stop' program.

"The messages really helped me. I'd tried to give up before, but it's tough to keep up the willpower. At the end of the day, I've got two children, and I don't want them to see their daddy as a smoker. The thing that motivated me was my children, but it was also for my health as well. I feel much fitter now – I can run about with the children, I can taste my food much better, I can smell the air, it's just brilliant. It's been two years now and I'm very happy I've come this far."

Researchers are excited to have developed a program that has not only demonstrated some of the best smoking cessation results, but has great hope for young smokers. "We started work in this area a decade ago and there are now lots of other e-health and m-health smoking cessation programs, but this is one of the very few shown to be effective in clinical trials that are as rigorous as those that would be conducted for a smoking cessation drug," Professor Rodgers said.

In 2011, mobile phone data traffic doubled and it is estimated that by 2016 there will be over 10 billion mobile phones. This setting provides an incredible opportunity for healthcare across the world.

The George Institute is now conducting the first rigorous, high-quality trial to test how the health benefits of simple text message reminders can reduce cardiovascular risk among patients.

The TEXT ME (tobacco, exercise and diet messages) trial began in September 2011 and will continue over the next 18 months.

Researchers will focus on whether messages promoting healthy behaviour, improved mood and lifestyle change are effective ways of preventing further attacks and increasing compliance with cardiac medication. To date no known studies have evaluated the acceptability, feasibility and efficacy of a text message-delivered intervention for addressing multiple cardiovascular risk factors in people with established disease.

China team research breakthrough

The link between poor diets and heart disease is well established. For many practitioners, a simple test of a patient's lipids, or cholesterol levels, can give a clear indication of the patient's risk of heart disease.

Until early 2012, health practitioners across the world were not clear about the importance of historic lipid tests and whether older tests were more or less important than current tests.

To answer this question, **Professor WU Yangfeng**, Executive Director of The George Institute, China, worked with colleagues at Peking University School of Public Health and Cardiovascular Institute, Fu Wai Hospital.

"We assessed over 1,100 patients in China using ultrasound technique. We analysed the association between pre-clinical development of cardiovascular disease and blood cholesterol levels and compared the results from a long-term cholesterol test conducted nine years ago to a more recent test."

"The results were very clear – both tests of cholesterol had a strong link to pre-clinical cardiovascular disease, but the measurement from nine years ago had a stronger association," Professor Wu said.

Led by The George Institute, China, this research provided the first real data showing the benefits of keeping cholesterol levels normal over a long period of time. Researchers are now calling for life time monitoring of cholesterol to prevent heart disease, giving patients a chance to intervene with improved diet, physical activity or medication before it is too late.

"For disadvantaged populations in fast economic transition, such as China and India, these results highlight the importance of promoting the concept of good nutrition and healthy diet to prevent cardiovascular disease."

Researchers will now disseminate these results to a wide range of stakeholders, including policy makers, who according to Professor Wu must consider the effect and cost-effectiveness of interventions to address high cholesterol.

"Interventions focused on changing lifestyle can be low cost, but result in long-term impact in lowering cholesterol. Health insurance policies should encourage a healthy lifestyle rather than occasional use of drugs for cholesterol lowering. Policies also need to encourage regular checkups of cholesterol to inform individuals who need early intervention."

In China, around 40% of deaths are due to cardiovascular disease and about three million Chinese are developing cardiovascular disease annually. It is vital that physicians and governments actively manage cholesterol to address such a wave of ill health.

Working together to improve healthcare

Working in partnership with local communities on the most complex healthcare issues allow all parties to own the solution – not just the problem.

Big change:
In 2012, the Outback Vascular Health Service was presented with the NSW Award for Closing the Gap in Aboriginal Health through Excellence in Chronic Care

650+

Detailed clinical audits of more than **650** patients on chronic disease plans have been undertaken to prioritise people for review by the kidney, diabetes and cardiac specialists.

For people living in remote Australia, access to vital healthcare proves challenging due to large distances and lack of available specialist care. This is particularly true for people with chronic conditions who require ongoing management.

The innovative Outback Vascular Health Service (OVHS) is designed to harness the best possible healthcare for patients living with chronic disease in remote New South Wales in Australia.

In 2012, the service was presented the NSW Award for Closing the Gap in Aboriginal Health through Excellence in Chronic Care. The award acknowledged the OVHS for its innovative model of care drawing on the expertise of The George Institute, the local Aboriginal health service, Maari Ma Health Aboriginal Corporation, and the Royal Prince Alfred Hospital with all three working closely together to improve the health of Aboriginal people in the Far West. These skills are pooled to provide ready access in remote areas to health specialists, regular education sessions for health providers and access to metropolitan specialists who are 'beamed' into the remote centres via telephone and video conferencing for case management support.

Professor Alan Cass at The George Institute said the service involves a cross-disciplinary approach to complex chronic disease.

"We focus on building the capacity and knowledge of local primary care services through active partnership in clinical care and regular education sessions," he said.

"We also integrate service provision with rigorous health services research to build an evidence base about what works to deliver better health for Aboriginal Australians."

Bob Davis, CEO of Maari Ma Health, said the model was showing great success.

"Having worked for many years in Aboriginal health, I've never seen such a well-integrated model of specialist services in the primary health care setting. Not only does this mean significant savings for our clients because they don't have to travel, this model is a wonderful learning environment for all of our health staff working side by side with specialists."

The service is focused on the biggest disease concerns in the area, including the management of diabetes, heart disease and kidney disease. Working with the local GPs and healthcare professionals, the service partners are specifically looking at ways to prevent these conditions along with early intervention.

Between November 2009 and March 2012, 270 people attended 537 specialist appointments in Broken Hill, Menindee, Wilcannia and Ivanhoe. Detailed clinical audits of more than 650 patients on chronic disease plans have been undertaken to prioritise people for review by the kidney, diabetes and cardiac specialists.

Researchers continually evaluate the service to ensure its services meet quantitative and qualitative goals. All partners are committed to a sustainable service model that can be applicable in other rural and remote areas.

40

In more than 40 low-income and middle-income countries **generic medicines** are available in only 42% of health facilities in the public sector and 64% of facilities in the private sector.

Our investment

The best research needs to be reinforced by the best business principles. The George Institute recognises the need to have versatile funding sources in order to sustain high-quality research designed to improve the lives of millions and revolutionise healthcare. Our strategic enterprises, George Clinical and George Ventures, ensure financial sustainability and the long-term viability of the organisation.

11,000

Largest clinical trial in diabetes – ADVANCE – covered 20 countries and involved more than 11,000 patients.

4:1

Polypill success

The world's first international polypill trial has shown that a 4-in-1 combination pill can halve predicted heart disease and stroke risk.

2013

The polypill will be available in India in 2013 and then elsewhere within a year or two, after regulatory approvals are obtained.

George Clinical

Diseases that dominate the 21st century need a 21st century approach in the way we design and conduct clinical trials. To meet this need, George Clinical is primarily focused on large-scale studies with high-impact outcomes, particularly where smaller pre-registration trials need to be expanded to larger populations.

Growing prevalence of **air pollution** in developing countries.

Chronic obstructive pulmonary disease, one of the world's leading causes of death.

Smoking

If successful, will lead to an **affordable, accessible** and easily administered treatment.

Involving **2,400 patients** in India and China over five years.

2,400

George Clinical-managed TASC Study to compare affordable treatments.

Having confidence that proven treatments will work in 'the real world' is a high priority for healthcare organisations, especially in low and middle-income countries where there is a large burden of chronic disease.

Established in 2005, George Clinical has undertaken numerous large-scale, high-impact clinical trials that have informed healthcare policy across the world. As a division of The George Institute, George Clinical not only conducts trials to provide evidence to support new treatments, but also operates commercially to make a financial contribution towards the academic research and mission of The George Institute.

George Clinical provides clinical trial management for commercial entities and medical research organisations as well as for The George Institute. George Clinical is able to leverage input from some of the best research leaders in the world at The George Institute and offers scientific expertise along with quality operations for the delivery of clinical trials. George Clinical has grown to a team of 150 employees in Australia, China, India and Asia, and partners to conduct global studies.

An in-house clinical research organisation such as George Clinical also provides a quality framework for clinical trial management across the entire Institute. Operating within strict, high-quality boundaries determined by regulatory agencies and international guidelines means that skills and expertise can be applied more broadly for the benefit of the Institute.

George Clinical has a well-established record of clinical trial management in chronic disease and is currently undertaking three large global studies to assess the impact of different treatments on cardiovascular and kidney disease outcomes in diabetic patients. This year, George Clinical expanded this remit to include respiratory disease and in particular chronic obstructive pulmonary disease (COPD), one of the world's leading causes of death. Caused primarily by cigarette smoking, the disease is also growing in prevalence due to indoor and outdoor air pollution in developing countries.

For patients with COPD, breathlessness and sometimes acute exacerbations that require hospital admission are not unusual. Treatments are available, but are expensive. They include short and long-acting bronchodilators and, in more severe cases, inhaled corticosteroids (ICS).

George Clinical will manage the TASC (Theophylline and Steroids in COPD) Study, a study of low-dose corticosteroids and theophylline in the treatment of Chronic Obstructive Pulmonary Disease, to compare affordable treatments, and with the aim of reducing exacerbations in patients with COPD. Academically-led, the TASC Study was developed to demonstrate that low-dose theophylline given together with low dose corticosteroids, both given orally, can reduce the rate of exacerbations in COPD. Both drugs are off-patent and are available cheaply in developing countries.

Involving 2,400 patients in India and China, the TASC Study will run for five years and if successful, will lead to an affordable, accessible and easily administered treatment for COPD.

George Ventures

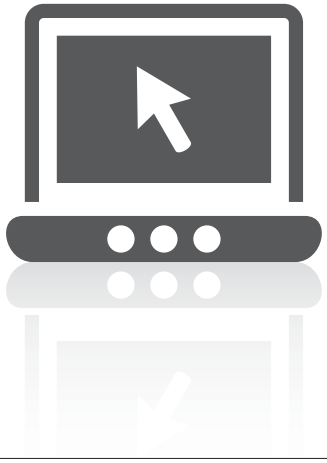
George Ventures aims to create health enterprises that provide affordable, high-quality services and products that will help meet the mission of The George Institute, and also create financial returns. In doing so it provides an opportunity for impact investing, where investors seek social or environmental returns as well as financial ones from their investment.

$500b

Impact investments are expected to exceed $500 billion globally by 2019.

George Ventures aims to improve healthcare where health services and products have long been lacking.

'**Frugal innovation**' can help plug gaps in healthcare in settings where government resources are insufficient or absent.



Impact investments are expected to exceed $500 billion globally by 2019. Impact investing has the potential to revitalise the global health landscape over the next decade, improving not only the health and welfare of the underprivileged, but also the sustainability of organisations focused in the area.

The vast majority of the world's population affected by poor health live in countries in which government expenditure on health is very low, and most health expenditure is out-of-pocket. Major illnesses can often be financially crippling for a whole family. Therefore the need for ultra-affordable healthcare products and services is more important than adopting healthcare models that have underperformed in developed countries despite considerable expenditure.

What's needed is a new paradigm – products and services demonstrating 'frugal innovation' that can help plug health gaps in settings where government resources are insufficient or absent.

This business model that is designed to achieve social and health goals underpinned by financial returns, is starting to gain momentum around the world. Impact investment is about creating financial returns to fulfill a social mission.

To ensure long-term sustainability of The Institute, while aspiring to improve the lives of millions, George Ventures is harnessing the impact investment and social entrepreneur markets to achieve the global health goal of The George Institute.

George Ventures aims to improve healthcare where health services and products have long been lacking. Through impact investment, self-sustaining businesses have the power to make medicines more affordable and importantly treating the major health issues in a scalable, meaningful manner.

While impact investing is relatively new in the health space, successes have been demonstrated in other areas, such as microfinance and clean tech.

Investment fund for future health

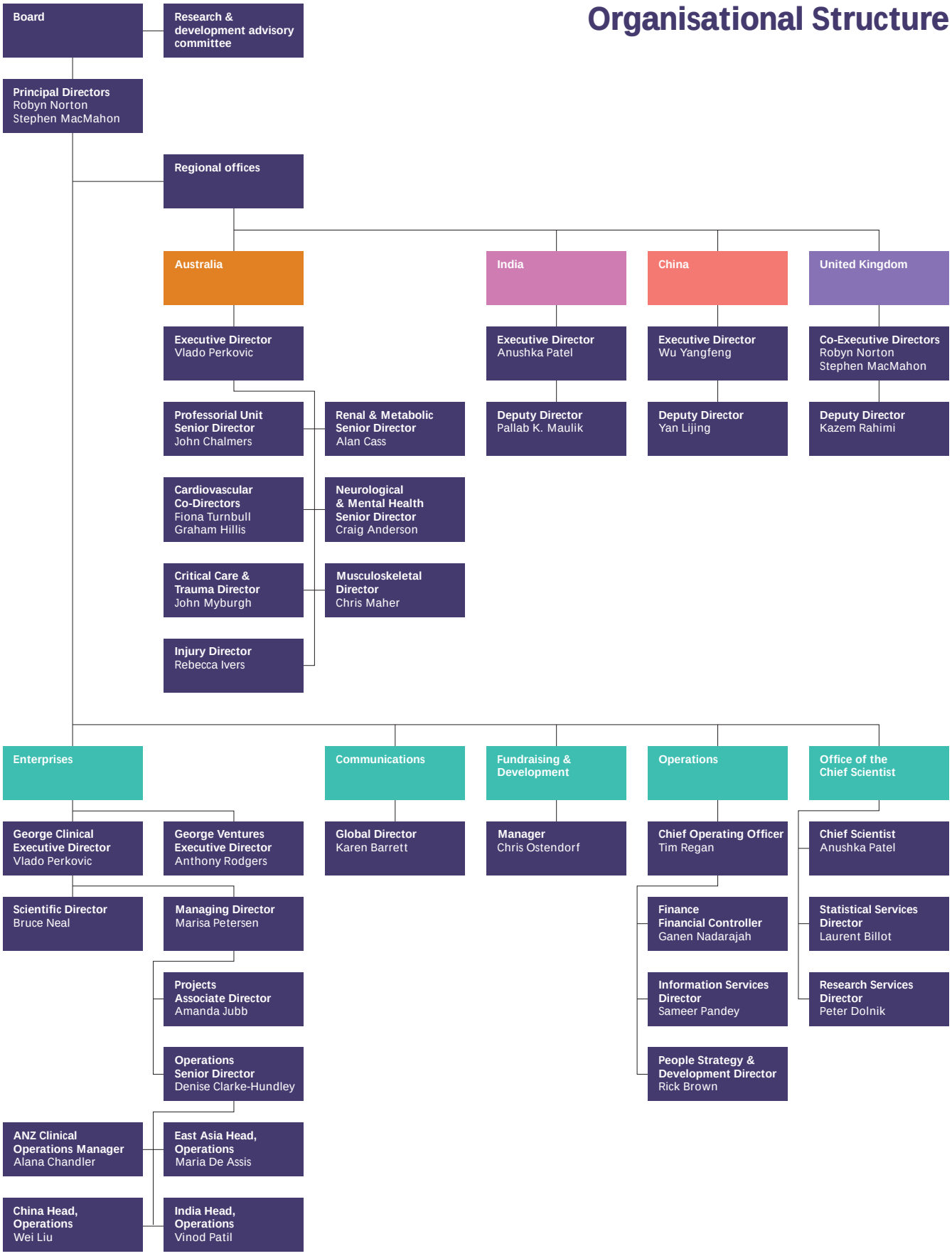
There is an enormous gap in the funding of affordable, practical technologies for the health problems affecting low-income countries. George Ventures is creating an impact investing health fund, in conjunction with a team of experienced investors, the University of Oxford and responsAbility, the leading global impact investment asset manager. The fund will invest in transformative healthcare companies that combine technological innovation with cost-disruptive manufacturing and distribution strategies to make medical products and services affordable and accessible to those who can least afford it. Investors will be of two main types. First, companies developing innovative medical devices, diagnostics and therapeutics designed specifically for developing countries, with pricing for affordability. Second, healthcare delivery services that maximise access to underserved populations, in the lower to middle-income segments.

Our people

We are committed to attracting, developing, rewarding and retaining the best people in their field to conduct and support innovative and high impact research. Our Board of Directors is comprised of health, academic and business professionals from Australia, the UK and Asia.

With 320 people spread across locations in **China**, **India**, **Australia** and the **UK**, we are a growing – global – organisation.

Organisational Structure



Board of Directors


3


1


2


4

The George Institute for Global Health Board of Directors is charged with setting the strategic direction of The Institute, and overseeing and monitoring its performance against agreed objectives.

The Board protects and promotes the goals of the organisation, ensuring robust governance and management. Its membership includes academic and business leaders who are considerate of the ethical, social and cultural interests of our wide range of stakeholders.

The Board supports key academic organisational values including scholarship, academic freedom and scientific integrity while overseeing compliance with the Commonwealth of Australia *Corporations Act 2001*.

Michael Hawker AM (1)
CHAIR

Michael Hawker is an international businessman and company director. He is a Non-Executive Director of Aviva Plc (UK), Macquarie Group Limited and Macquarie Bank Limited. Michael is also Chair of the Australian Rugby Union and a Member of the Executive Committee of the International Rugby Board. In addition, Michael is a member of the Advisory Council at General Enterprise Management Services International Limited (GEMS), the Hong Kong-based private equity firm, and a Member and previous Chair of the Board of Trustees of the Giant Steps Foundation. He has more than 27 years experience in the banking and insurance industry in both executive and non-executive roles, in Europe, Asia and Australia, and for seven years was CEO and Managing Director of Insurance Australia Group Limited, Australia's largest general insurance company. He has chaired the Insurance Council of Australia, and been a member of the Financial Sector Advisory Council providing advice to the Australian Treasurer on the Financial Sector. Michael is former Chair of the Australian Financial Markets Association and former Board Member of The Geneva Association. He is a Senior Fellow of the Financial Services Institute of Australia and a Fellow of the Australian Institute of Company Directors. Michael founded the Australian Business and Community Network (ABCN), and in 2010 was made a Member of the Order of Australia. He joined the Board in February 2011.

Gina Anderson (2)

Gina brings 10 years of experience as a director serving in both non-executive and executive director capacities. She is currently Chair of Women's Community Shelters Limited, a Philanthropy Fellow at the Centre for Social Impact at the University of New South Wales and a Member of City of Sydney Appeals Committee of the Salvation Army. Gina was Executive Director and Chief Executive Officer of Philanthropy Australia from 2005 to 2010, where she managed significant growth in profile, membership and revenue mix for the national peak body. Her previous roles at St Hilliers and Westpac included senior general management, corporate affairs, human resources and executive responsibilities. From 1992 to 1995 Gina was Personal Assistant to HRH The Crown Prince of Jordan and was responsible for the preparation and production of the *Treaty of Peace between the Hashemite Kingdom of Jordan and the State of Israel* for both countries. Gina is a former Non-Executive Director of Father Chris Riley's Youth Off The Streets and Landcare Australia Limited, and was a participant in the 2008 Australia 2020 Summit. Gina is regularly invited as a speaker both in Australia and internationally. Gina joined the Board in February 2012.

Elsa Atkin (3)

Elsa Atkin is a company director and a management professional. She is the former Executive Director of the National Trust of Australia (NSW), and was previously Deputy Director of the Evatt Foundation, and a senior executive at the Australian Broadcasting Corporation. Elsa is keen to bring her extensive experience in management acquired in roles as CEO and Board Director across diverse fields, including the not-for-profit sector, change management, advocacy, and media and corporate relations, to help in overseeing the growth of The George Institute for Global Health. She has served on a variety of government and non-government boards, including Symphony Australia, University of Western Sydney (Nepean Campus), and the Heritage Council and currently sits on the NSW Library Council. She was appointed an Australia Day Ambassador (1998–2000), Honorary Life Member of the National Trust in 2005 and the 2010/2011 North Sydney Citizen of the Year. Elsa joined the Board in July 2007.

Joanna Capon OAM (4)

Joanna Capon is a Board Member of the Sydney Children's Hospital Network (Randwick and Westmead) and a Member of the Health Care Quality Committee of the Sydney Children's Hospital Network. She is also Chair of Operation Art and a member of the Editorial Advisory Board of Art and Australia. She is a former Board Member of Museums & Galleries NSW and the Australia-China Council. Joanna is an art historian, industrial archaeologist, curator and writer. She was awarded the Order of Australia Medal in 2002 for services to the community. Joanna joined the Board in March 2007.


5


7


9


6


8


10

Peter Church OAM (5)

Peter Church is Group Chairman of AFG Venture Group, a corporate advisory/ investment banking firm, and is based in Singapore. 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 English law firm Stephenson Harwood, Chair of Bangkok International Associates Limited, Chair of Indochina Starfish Foundation Australia, Director of OM Holdings Limited, and Director of Singapore International Chamber of Commerce. Peter is also Chair of the Asia Pacific Business Advisory Group, International Award for Young People/ Duke of Edinburgh Award, and a member of the Advisory Board of Aksara Foundation, Indonesia. Peter joined the Board in June 2004.

Will Delaat AM (6)

Will Delaat is Chair of a Sydney-based biotech company, EnGeneIC Ltd and Non-Executive Director of Pharmaxis Pty Ltd. He is also on the boards of two not-for-profit organisations, Fragile X Association of Australia and National Return of Unwanted Medicines Ltd. Will is former Independent Chair of Medicines Australia, former Chair of Pharmaceuticals Industry Council, and former Non-Executive Director of iNova Pharmaceuticals. During his tenure as Chair of Medicines Australia, Will co-chaired the taskforce, which implemented the pharmaceutical provisions of the Australia-US Free Trade Agreement. He was also appointed by the Federal Health Minister in 2007 to co-chair the Access to Medicines Working Group following the Government's PBS reform agenda. Will has over 35 years experience in the pharmaceutical industry, having held a variety of roles both in Europe and Australia, and across three different multinational companies, including AstraZeneca. For 11 years (1997-2008) Will was Managing Director of Merck Sharp & Dohme (MSD) Australia and MSD's Regional Director for Australia and New Zealand. He was made a Member of the Order of Australia in 2012. Will joined the Board in February 2012.

Don Green (7)

Don Green is a Fellow Chartered Accountant, a Fellow CPA, a Fellow of the Taxation Institute of Australia 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. For many years, Don was a visiting Fellow at the Centre of Money, Banking and Finance, Macquarie University, where he lectured in the Master of Applied Finance program. Don joined the Board in May 2003.

Jason Yat-sen Li (8)

Jason Yat-sen Li is Managing Director of Yatsen Associates Ltd, a corporate advisory and investment firm based in Beijing. Previously he was Head of China Strategy and Senior Manager, Sustainable Development for Insurance Australia Group, a solicitor with Corrs Chambers Westgarth, and he 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. Jason is a Director of the China Australia Chamber of Commerce, a Governing Member of The Smith Family and a member of the Australian Government's Wanwu Advisory Panel on Clean Technology. He was appointed a Young Global Leader by the World Economic Forum in Davos, Switzerland in 2009. Jason joined the Board in June 2007.

Professor Stephen MacMahon (9)
PRINCIPAL DIRECTOR

Stephen MacMahon is one of the founders of The George Institute for Global Health and an architect of its global expansion. He currently holds positions as Principal Director of The George Institute for Global Health (worldwide) and Executive Director of the George Centre for Healthcare Innovation at the University of Oxford (see full biography on page 34).

Professor Robyn Norton (10)
PRINCIPAL DIRECTOR

Robyn Norton is Principal Director of The George Institute for Global Health and Professor of Public Health in the University of Sydney Medical School. She is also Executive Director of the George Centre for Healthcare Innovation, and Professor of Global Health and James Martin Professorial Fellow at the University of Oxford. Together with Stephen MacMahon, she founded The George Institute for Global Health (see full biography on page 34).

Board and Research Committees

To assist the Board with the execution of its responsibilities, a number of Board Committees meet regularly on specific issues. Board Committee meetings are reported to the Board of Directors following each Committee meeting.

Board Committee	Description	Membership
Finance, Risk and Audit Committee	Advises the Board on corporate governance in relation to financial reporting, internal controls, risk management systems and external audit functions.	**Don Green** (Chair) **David Clark** **Robyn Norton**
Fundraising Committee	Provides strategic direction on philanthropic plans and activities.	**Elsa Atkin** (Chair until June 2012) **Gina Anderson** (joined February 2012 and Chair from June 2012) **Joanna Capon** **Stephen MacMahon**
George Health Enterprises Committee	Provides strategic direction and policy advice to foster social entrepreneurship and social enterprises that enhance the financial stability of The Institute.	**Peter Church** (Chair) **Will Delaat** (from February 2012) **Don Green** **Jason Yat-sen Li** **Stephen MacMahon**
Nominations Committee	Advises the Board of Directors on matters to do with corporate governance, including the appointment and nomination of Directors and Officers of the Company and members of committees.	**Michael Hawker** (Chair) **Elsa Atkin** **Peter Church** **Don Green** **Stephen MacMahon** **Robyn Norton**
Remuneration Committee	Reviews remuneration for senior employees of the Institute.	**Michael Hawker** (Chair) **Elsa Atkin** **Joanna Capon** **Don Green**

Research Committees	Description	Membership
Research Committee	The Constitution requires the establishment of a Research Committee with a membership comprised of a majority of suitably qualified individuals to assess the relevant area of health and medical research.	**Michael Hawker** (Chair) **Joanna Capon** **Stephen MacMahon** **Robyn Norton** **Anushka Patel** (from June 2012) **Vlado Perkovic**
Research and Development Advisory Committee	The Research and Development Advisory Committee (RADAC) is an independent body, constituted by and providing advice to the Board of Directors at The George Institute for Global Health. RADAC members are invited to provide an independent assessment of the scope, content and quality of The George Institute's research and development activities as well as its future global and regional research strategies, within the context of the Institute's mission and vision. RADAC members are invited to assess the Institute's past performance as well as provide advice on future directions. RADAC members are especially invited to advise on capacity development, management and maintenance of research quality, maximising research funding and the translation of research findings into policy and practice.	**Professor Terry Dwyer** (Chair) Director, Murdoch Childrens Research Institute **Professor Deborah Cook** Canada Research Chair of Research Transfer in Intensive Care, McMaster University **Professor Garry Jennings** Director and CEO, Baker IDI Heart and Diabetes Institute **Professor Michael Merson** Director, Duke Global Health Institute **Professor Vikram Patel** Professor of International Mental Health, London School of Hygiene and Tropical Medicine **Professor TAN Chorh Chuan** President, National University of Singapore **Professor WANG Hai Yan** Director, Peking University Institute of Nephrology
Research Advisory Committee: The George Institute for Global Health, India	The Research Advisory Committee (RAC) is an independent body that provides advice to The George Institute, India. It provides independent assessment of the scope, content and quality of research and development activities as well as advice on issues relating to research and development.	**Dr G Gururaj**, National Institute of Mental Health & Neurosciences, Bangalore **Dr Rajesh Kumar**, Postgraduate Institute of Medical Education and Research, Chandigarh **Dr Ramanadham Madduri**, University of Hyderabad, Hyderabad **Dr Jeyaraj Durai Pandian**, Christian Medical College, Ludhiana **Dr M Shiva Prakash**, National Institute of Nutrition, Hyderabad **Dr KR Thankappan**, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum **Dr R Thara**, Schizophrenia Research Foundation, Chennai **Dr CS Yajnik**, King Edward Memorial Hospital, Pune

Senior Management Committee


3


1


2


4

Professor Stephen MacMahon (1)
PRINCIPAL DIRECTOR
EXECUTIVE DIRECTOR, GEORGE CENTRE FOR HEALTHCARE INNOVATION

Stephen MacMahon is one of the founders of The George Institute for Global Health and an architect of its global expansion. He currently holds positions as Principal Director of The George Institute for Global Health and Executive Director of the George Centre for Healthcare Innovation at the University of Oxford. He also holds professorial appointments in medicine at both the University of Sydney and the University of Oxford, where he is a James Martin Professorial Fellow. He is an international authority on the causes, prevention and treatment of common cardiovascular diseases, and has a special interest in the management of chronic and complex conditions in resource-poor settings, particularly in the Asia-Pacific region. In addition to his Institute and university appointments, Stephen holds several external appointments, including those as Chairman of the International Scientific Advisory Board of the UK BioBank. He is also Executive Chairman of George Clinical Pty Ltd, a wholly owned subsidiary of The George Institute. He sits on the boards of several other not-for-profit organisations, including the Oxford Health Alliance. He has published more than 300 scientific papers and delivered more than 200 invited lectures. For his work in the field of cardiovascular disease, he has received numerous awards, fellowships and honours from various governments, universities and learned societies.

Professor Robyn Norton (2)
PRINCIPAL DIRECTOR
EXECUTIVE DIRECTOR, GEORGE CENTRE FOR HEALTHCARE INNOVATION

Robyn Norton is also founder and Principal Director of The George Institute for Global Health and Professor of Public Health in the University of Sydney Medical School. She is also Executive Director of the George Centre for Healthcare Innovation, and Professor of Global Health and James Martin Professorial Fellow at the University of Oxford. Robyn holds an Honorary Professorship at Peking University Health Science Center, and is an Honorary Consultant Epidemiologist at the Royal Prince Alfred Hospital in Sydney. She is an international authority on the causes and prevention of injuries, particularly road traffic injuries. Robyn was the inaugural Chair and is now Chair Emeritus of the Road Traffic Injuries Research Network, a global network, supported by the World Health Organization and the World Bank, aimed at increasing research and research capacity to address the current and growing burden of road traffic injuries in low and middle-income countries.

Tim Regan (3)
CHIEF OPERATING OFFICER, CHIEF FINANCIAL OFFICER

Tim is the Chief Operating Officer and Chief Financial Officer of The George Institute for Global Health. He has extensive experience in the services, property and construction industries, including as former COO of top 50 ASX-listed Mirvac Group, CEO of TJS Services, Commercial Manager for the Sydney Organising Committee for the Olympic Games and Senior Manager at PricewaterhouseCoopers. Tim is currently a Non-Executive Director of ASX-listed Thomas & Coffey, current President of Financial Executives Institute in Australia and former Vice-Chair of the Australian Theatre for Young People. He holds a Bachelor of Economics from the University of Sydney and is a Fellow of both the Institute of Chartered Accountants and Australian Property Institute.

Professor Anushka Patel (4)
CHIEF SCIENTIST, THE GEORGE INSTITUTE
EXECUTIVE DIRECTOR, THE GEORGE INSTITUTE, INDIA

Anushka Patel is the Chief Scientist at The George Institute for Global Health, Professor with the Medical School at the University of Sydney, and a cardiologist at Royal Prince Alfred Hospital. Anushka completed her undergraduate medical training at The University of Queensland in December 1989, and her training in cardiology (leading to Fellowship of the Royal Australian College of Physicians) in 1998. She has a Master of Science degree in Epidemiology from Harvard University, and a PhD in Medicine from the University of Sydney. Anushka also holds a National Health and Medical Research Council Senior Research Fellowship. Over the next 12 months, Anushka will focus on developing new major global strategic research initiatives, which involve the development and evaluation of innovative solutions that address common health problems in those regions of the world where we work.

Professor WU Yangfeng (5)
EXECUTIVE DIRECTOR, THE GEORGE INSTITUTE, CHINA

WU Yangfeng is the Executive Associate Director of the Clinical Research Institute at Peking University Health Science Center and Professor of Epidemiology in the Department of Epidemiology and Biostatistics at the Peking University School of Public Health. Yangfeng has made valuable contributions to reducing the impact of cardiovascular disease in the region as a result of his previous work at the Cardiovascular Institute, Fu Wai Hospital, and the World Health Organization Collaborating Center in Cardiovascular Disease Prevention,


5


7


9


6


8


10

Control and Research in China, and his current work at Peking University. He was appointed Executive Director of The George Institute, China, in 2006.

Professor Vlado Perkovic (6)
EXECUTIVE DIRECTOR, THE GEORGE INSTITUTE, AUSTRALIA AND GEORGE CLINICAL

Vlado Perkovic is Executive Director of The George Institute, Australia as well as George Clinical, the clinical trials arm of The George Institute. He is a Staff Specialist in Nephrology at the Royal North Shore Hospital, and Professor of Medicine at the University of Sydney. His major research interest is understanding both the cardiovascular risk associated with chronic kidney disease and the impact of interventions that might mitigate this risk mainly through the conduct of clinical trials and meta-analyses. He is Chair of the Scientific Committee of the Australasian Kidney Trials Network.

Professor Rebecca Ivers (7)
DIRECTOR, INJURY
CHAIR, AUSTRALIAN EXECUTIVE COMMITTEE (UNTIL DECEMBER 2011)

Rebecca Ivers is Professor of Public Health at the University of Sydney, and directs a research program, which is centred on injury prevention, with a strong focus on the prevention of road traffic injury. She has published widely in the field of road traffic injury, and has 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 research. She is an investigator on studies in a diverse range of areas, including disability, 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. Rebecca is Editor (epidemiology) for the key journal *Injury* and an academic editor for *PloS Medicine*, sits on a wide range of committees and boards, and is current President of the Australian Injury Prevention Network.

Dr Marisa Petersen (8)
MANAGING DIRECTOR, GEORGE CLINICAL

Marisa Petersen is the Managing Director of George Clinical, the clinical trial delivery arm of The George Institute for Global Health. Established in 2005, George Clinical has undertaken numerous large-scale, high-impact clinical trials that have informed healthcare policy across the world. Under Marisa's stewardship as a division of The George Institute, George Clinical not only conducts trials to provide evidence to support new treatments, but operates to make a financial contribution towards the academic research and mission of The George Institute.

Marisa completed her pharmacy degree at the University of Sydney and continued her studies with a PhD in Clinical Pharmacology and Pharmacokinetics. She has worked for over 20 years in the pharmaceutical industry, fulfilling roles in Regulatory Affairs, Clinical Research and Project Management. Prior to joining George Clinical, Marisa was the Vice President Asia Pacific for Omnicare Clinical Research, a global CRO, taking responsibility for the delivery of trials in the Asia-Pacific region and developing a network of offices across the region to effectively service customer needs. Marisa has a strong association with ARCS in Australia and Asia and is a member of the Pharmaceutical Industry Council R&D Taskforce.

Peter Dolnik (9)
DIRECTOR, RESEARCH SERVICES

Peter Dolnik's career has spanned both the academic and research management sectors. For a number of years, he taught philosophy at various universities in Sydney. For the last 12 years he has worked in the area of research management in a number of senior roles. In 2007 Peter joined The George Institute as the Head of Research Services. Key responsibilities associated with the latter role have included contribution to strategic planning process, development of policies on research management and pursuing opportunities for growth and funding. Peter's ambition in 2013 is to open the Institute to multi-million dollar global funding opportunities in Europe and US and contribute to capacity development amongst our young researchers in India and China.

Karen Barrett (10)
DIRECTOR, GLOBAL COMMUNICATIONS (FROM JUNE 2012)

Karen Barrett joined the Institute this year as the Director of Global Communications. Karen's industry experience spans telecommunications, aviation, financial services and wealth management, retail, insurance and the not for profit sector. She has previously held senior Corporate Affairs executive roles with Westpac, Telstra and the NRMA. She has experience across employee communications, media and crisis management, corporate social responsibility and stakeholder engagement programs. Most recently she has been a consultant specialising in designing communications models, web content and strategy, campaign management, brand strategy, communications research and measurement.

Sue Murray
EXECUTIVE DIRECTOR, THE GEORGE FOUNDATION (UNTIL APRIL 2012)

Academic leaders

Professor Craig Anderson
SENIOR DIRECTOR,
NEUROLOGICAL AND MENTAL HEALTH

Professor Craig Anderson is Senior Director of the Neurological and Mental Health Division at The George Institute. He is also Professor of Stroke Medicine and Clinical Neurosciences in the Sydney Medical School and Head of the Neurology Department at the Royal Prince Alfred Hospital. He holds a Senior Principal Research Fellowship of the Australian National Health and Medical Research Council. Craig is a member of several specialist societies, is the President-elect of the Asia Pacific Stroke Organisation, is an Editor for the *Cochrane Stroke Group*, and a past 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 epidemiological and clinical trial projects.

Professor Alan Cass
SENIOR DIRECTOR, RENAL AND METABOLIC

Alan Cass trained as a nephrologist at the Royal Prince Alfred Hospital, in public health and health policy. He undertakes multi-centre clinical trials, collaborative research in Aboriginal health and studies of the economic burden of chronic disease. Alan is an Executive Member of the Operations Secretariat of the Australasian Kidney Trials Network and member of the International Society of Nephrology Global Outreach Research and Prevention Committee and Chronic Kidney Disease Policy Taskforce.

Professor John Chalmers
SENIOR DIRECTOR AC FAA FRACP

John Chalmers is Head of the Professorial Unit at The George Institute, and Emeritus Professor of Medicine at the University of Sydney and Flinders University. He is a world leader in research on the causes and treatment of high blood pressure. He has also served in many senior academic roles in Australia and internationally. John's 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. He was appointed a Companion of the Order of Australia (AC) in 1991 and most recently, was made an Officer of the French National Order of Merit in 2010, in recognition of his contributions to enhancing Franco-Australian relations.

Professor Bruce Neal
SENIOR DIRECTOR

Bruce Neal is Professor of Medicine at the University of Sydney, Scientific Director of George Clinical, 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 joining 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 Royal College of Physicians in the UK and the American Heart Association.

Laurent Billot
DIRECTOR, STATISTICS
AND DATA MANAGEMENT

Laurent Billot manages a global team of biostatisticians and programmers responsible for the provision of statistical expertise to support the research undertaken at The George Institute. This includes clinical trials, meta-analyses, observational studies, as well as teaching and the development of new statistical methods. Laurent is a statistician with over 10 years experience in the design, analysis, and reporting of health and medical studies, from public health surveys and epidemiological studies to multinational Phase III/IV clinical trials.

Associate Professor Graham Hillis
CO-DIRECTOR, CARDIOVASCULAR

Graham Hillis is Associate Professor within the Medical School at the University of Sydney, and a Consultant Cardiologist with clinical appointments at Concord Hospital, Royal Prince Alfred Hospital (honorary), Strathfield Private Hospital and Central Sydney Cardiology. His current post is partly funded by a Life Sciences Research Award from the New South Wales Office for Science and Medical Research.

Professor Chris Maher
DIRECTOR, MUSCULOSKELETAL

Chris Maher is Professor in the Sydney Medical School at the University of Sydney. He also holds an Australian Research Council Future Fellowship and an honorary National Health and Medical Research Council Senior Research Fellowship. Chris leads a program of research that aims to improve the management of the common disabling musculoskeletal conditions. There is an emphasis on simple interventions that can be readily implemented in primary care and community settings, including low resource settings.

Professor John Myburgh
DIRECTOR, CRITICAL CARE AND TRAUMA

John Myburgh is Director of the Division of Critical Care and Trauma at The George Institute. He is a Professor of Medicine at The University of New South Wales, an Honorary 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.

Associate Professor Fiona Turnbull
CO-DIRECTOR, CARDIOVASCULAR

Fiona Turnbull is Associate Professor within 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. Fiona has an MPH (Hons) and a PhD in Medicine from the University of Sydney and she currently holds a National Heart Foundation of Australia Career Development Fellowship.

Professor Richard Lindley
PROFESSORIAL FELLOW

Richard Lindley is Professorial Fellow in Injury, Frailty and Disability, appointed in February 2010. After graduating in medicine in the United Kingdom, he trained in geriatric and general medicine in the UK and Australia, and was consultant and Senior Lecturer at The University of Edinburgh (1996-2003). In 2003 he was appointed Moran Foundation for Older Australians Professor of Geriatric Medicine at the University of Sydney, a post he continues to hold. Richard has collaborated with colleagues at the Institute for many years, and moved his research base to the Institute early in 2010. His main research themes have been the reliable assessment of new treatments for older people, especially in stroke and vascular disease. He retains a clinical appointment in the Western Sydney Local Health District (Blacktown Hospital).

Professor Mark Woodward
PROFESSORIAL FELLOW

Mark Woodward is Professor of Biostatistics at the University of Sydney and Adjunct Professor of Epidemiology at Johns Hopkins University. He holds long-term visiting professorships at Mahidol University in Thailand, Shiga University in Japan and Glasgow University in Scotland. He is the author of over 300 peer-reviewed publications and the Chair of the Asia Pacific Cohort Studies Collaboration. Mark is the senior statistician for several international collaborative studies and a Fellow of the European Society of Cardiology, the New York Academy of Medicine, the Royal Society of Medicine and the Royal Statistical Society. He is also a Chartered Statistician.

Professor Rob Herbert
PROFESSORIAL FELLOW

Rob Herbert is a Professor in the Sydney Medical School at the University of Sydney, NHMRC Senior Research Fellow and Honorary Research Fellow at Neuroscience Research Australia. He trained as a physiotherapist and completed a PhD in human neurophysiology. He conducts clinical research investigating the effectiveness of physiotherapy interventions as well as preclinical research investigating mechanical properties of human muscles and tendons. These two strands of research converge in a program of research investigating epidemiology, mechanisms, prevention and treatment of contracture after stroke and spinal cord injury.

Professor Simon Finfer
PROFESSORIAL FELLOW

Simon Finfer is a Senior Staff Specialist in the Intensive Therapy Unit at Royal North Shore Hospital in Sydney, a Conjoint Professor at the University of Sydney and a Professorial Fellow in the Division of Critical Care and Trauma at The George Institute for Global Health. At Royal North Shore, Professor Finfer is responsible for the Intensive Care Unit's clinical research program and was a founder member of the ANZICS Clinical Trials Group. A former Chair of the ANZICS Clinical Trials Group, Professor Finfer led the two largest ICU-based clinical trials conducted anywhere in the world to date. He has published over 100 scientific papers, many in the highest profile journals in the world. He is a much sought after international speaker and has delivered over 100 presentations at international conferences. His research has resulted in changes to treatment recommendations by many national and international bodies including the US Food & Drug Administration, American Diabetes Association, American College of Physicians and the Institute for Healthcare Improvement. He is currently a Guest Editor for *The New England Journal of Medicine* and an Editor of the *Oxford Textbook of Critical Care*.

Professor Anthony Rodgers
PROFESSORIAL FELLOW

Anthony Rodgers is Professor of Global Health at the University of Sydney. After graduating in medicine in the United Kingdom, he trained in epidemiology and public health in New Zealand. He was the principal author of the 2002 World Health Report, the main annual publication for the World Health Organization. Since 2003, he has led a public-private partnership developing an affordable four-in-one cardiovascular combination pill ('polypill'), with a clinical trial program in economically developed and developing countries. His current work aims to foster similar developments designed to be 'fit for purpose' in low-income settings, and raise funding for entrepreneurs and frugal innovation.

Professor JI Linong
CHIEF SCIENTIST, DIABETES RESEARCH PROGRAM

JI Linong is Professor of Medicine at Peking University, Co-Director of Peking University Diabetes Center and Director of the Department of Endocrinology and Metabolism, People's Hospital, in Beijing, China. He is Vice President of the International Diabetes Federation, President of the Chinese Endocrinologist Association, President of the Chinese Diabetes Society, and Editor-in-Chief of *Chinese Journal of Diabetes*. He serves as a member of The Study Group of Molecular Diabetology in Asia, and member of IDF-WPR Diabetes Policy Group. He is also an Advisor of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus of WHO. His work mainly focuses on epidemiological and genetic research on diabetes mellitus. Professor JI received his MD from Beijing Medical University and completed his postdoctoral training on genetic of diabetes at Joslin Diabetes Center, Harvard Medical School. From 1997 to 1999, he was a Visiting Associate Professor of Medicine at Harvard University. Professor JI joined The George Institute, China, in April 2011.

Professor YAN Lijing
DEPUTY DIRECTOR, THE GEORGE INSTITUTE, CHINA

Lijing is a cardiovascular epidemiologist with a background in epidemiology, demography and health economics. She is also 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. She currently directs the China International Center for Chronic Disease Prevention, a network of 12 international and Chinese institutions hosted by The George Institute. Lijing has worked extensively in the areas of chronic disease prevention and control especially cardiovascular disease and diabetes, economic evaluations in healthcare, and integrated health management.

Dr Pallab K. Maulik
DEPUTY DIRECTOR, THE GEORGE INSTITUTE, INDIA

Pallab Maulik joined The George Institute, India, as the Head of Research and Development in early 2010. Pallab brings a wealth of experience to the Institute, in particular expertise in mental health. Pallab has worked with the World Health Organization, Geneva on mental health programs, and clinically as a psychiatrist in India and Australia. His particular research interests include social determinants of health, especially mental health services, mental disorders, international mental health, and intellectual disability. After training as a psychiatrist at the All India Institute of Medical Sciences, New Delhi, he received training in public health at the London School of Hygiene and Tropical Medicine, and Johns Hopkins School of Public Health in Baltimore, where he completed his Masters and Doctoral level training.

Dr Kazem Rahimi
DEPUTY DIRECTOR, GEORGE CENTRE FOR HEALTHCARE INNOVATION, UNIVERSITY OF OXFORD

Kazem Rahimi leads the Essential Healthcare Programme of the George Centre, which aims to find practical and affordable solutions for the global health priorities of the world's largest emerging economies, as well as the priorities of vulnerable or disadvantaged populations in established economies. Kazem graduated in medicine from the University of Leipzig in Germany with postgraduate training in cardiology and health services research in Leipzig, London and Oxford. Prior to joining the George Centre, in October 2010, he was a Research Fellow at Oxford's Clinical Trial Service Unit and Epidemiological Studies Unit. His research interests include innovation in chronic disease prevention and management, complex intervention studies and complexity science. Kazem is also a James Martin Fellow in Essential Healthcare and Honorary Consultant Cardiologist at the University of Oxford.

Our staff

Our success and reputation for high-quality and high-impact research outcomes has resulted in a growing demand for our research services. We have become a benchmark for others to follow, setting standards that are best practice.

By investing and developing in our people, we will create a team who can deliver the organisation's mission. A team who are champions for change, at the top of their game, focused, disciplined and aligned to delivering the strategic vision.

Successful growth in our business and profile can only be achieved by retaining and building on our existing knowledge. Maintaining staff turnover rates (11.3% voluntary turnover) below benchmarks, together with greater emphasis on succession planning has provided a significant contribution to this task.

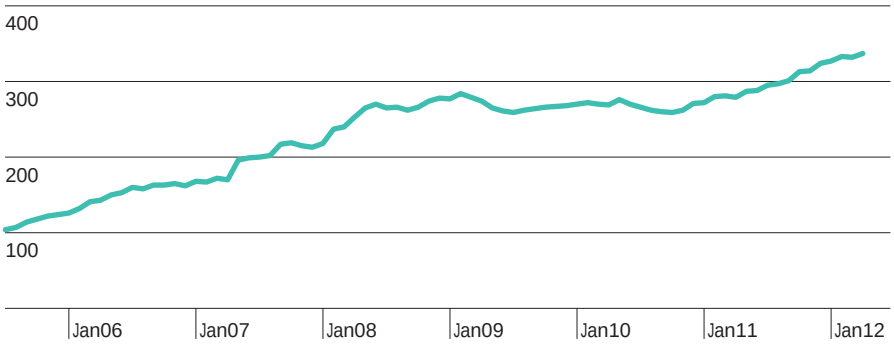
This year we have also witnessed our evolution to a truly global organisation. We introduced global virtual team development programs to facilitate and develop skills that allow staff to work with each other regardless of their location or cultural background.

The Institute commenced career and capacity development programs to enable staff exchange between our global offices.

Together, these programs are building organisational cohesion, developing working relationships, improving knowledge sharing, and harnessing the benefits of diversity.

We are continually improving services to our employees. During the year a number of initiatives have resulted in staff benefiting from structural change in the China office to ensure a more focused delivery of human resource services and the adoption of a new employee self-service system for the Australian operation.

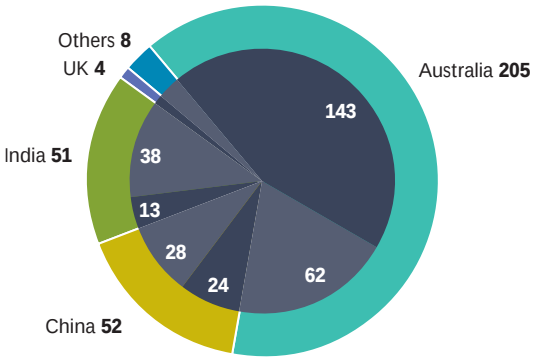
Number of staff
Full-time employees



Our workforce across the world
Full-time employees

Total workforce 320

- The George Institute **184** (non George Clinical)
- George Clinical **136**



Financial highlights

The following provides an overview of the financial statements and highlights during the year.

Our financials

Net surplus – increased to $1.6m
The 2011/2012 financial year has been a year of financial improvement for the Institute, reporting a net surplus of $1.6m compared to $1.5m the previous year. The result is particularly pleasing as it includes an onerous lease expense for our Sydney premises, 341 George Street, of $0.6m and realised losses on the investment portfolio of $0.2m.

Operating revenue was $53m with Australia continuing to be the main focus of activity assisted by China and India. The Institute also maintained tight cost control measures throughout the year to produce a net surplus.

The financial strength of the consolidated group continues to be solid.

At the end of the financial year the Institute had $16.2m of cash and $7.9m of trade receivables, however the value of the investment portfolio fell to finish the year at $6.1m. Deferred income, unutilised amount of funding received for projects, decreased to $16.4m.

Peer-reviewed funding – increased to $14.8m
The Institute continues to be successful in securing both Australian and non-Australian peer-reviewed grants. In Australia grants are provided by the Federal Government's National Health and Medical Research Council and Australian Research Council. The Institute was successful in increasing grant income during the year from $12.5m to $14.8m.

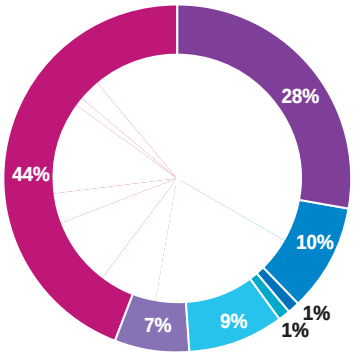
Government funding – increased to $5.3m
The Australian and NSW Governments provide grants to support the Institute's infrastructure and administration based on the Institute's successful grant income. A range of Federal, State and Territory Governments also provide support for specific research projects undertaken by the Institute. Despite this, funding the overall costs of running a global operation cannot be met by infrastructure income alone and each division aims to secure additional funding to its grant income.

Clinical research – increased to $23m
Several years ago the Institute realised that Government funding was insufficient to support its global activities and established the clinical research organisation George Clinical Pty Ltd. George Clinical manages commercial trials for global pharmaceutical companies and specific research projects for the Institute. Enterprises like George Clinical are important for the Institute as 100% of the profits are devoted to supporting its global research.

Donations and sponsorships – increased to $0.8m
Donations and sponsorships are a small but important source of funding for the Institute. During the year donations were received from a small yet valuable number of donors.

Our funding sources 2011-12

- Peer review **28%**
- Infrastructure grants **10%**
- Donations received **1%**
- Other government **1%**
- Other **9%**
- Contract research **7%**
- George Clinical **44%**



Statement of Comprehensive Income
for the year ended 30 June 2012

Consolidated	2012 $	2011 $
Operating Revenue	**51,149,906**	45,265,426
Other Income	**1,874,333**	1,795,090
Employee Benefits Expense	**(24,646,684)**	(22,000,342)
Depreciation and Amortisation Expense	**(449,607)**	(418,476)
Impairment Expense	**(36,856)**	–
Rental Expense	**(2,478,410)**	(2,672,677)
Administration Expense	**(2,567,378)**	(1,894,101)
Study Contract Fee	**(5,401,055)**	(6,745,750)
Patient Recruitment Expense	**(4,677,954)**	(1,228,103)
Consultants' and Sub-contractors' Fee	**(4,807,636)**	(5,457,016)
Travel/Accommodation Costs	**(2,200,949)**	(2,460,483)
Other Expenses	**(3,973,990)**	(2,633,069)
Realised Loss on Disposal of Financial Assets	**(172,895)**	–
Surplus for the Year	**1,610,825**	1,550,499
Other Comprehensive Income		
Exchange Differences on Translation of Foreign Operations	**(79,574)**	(389,760)
Changes in the Fair Value of Available-for-sale Financial Assets	**(823,699)**	(105,614)
Total Comprehensive Income for the Year	**707,552**	1,055,125

Statement of Financial Position
as at 30 June 2012

Consolidated	2012 $	2011 $
Assets		
CURRENT ASSETS		
Cash and Cash Equivalents	**16,183,038**	12,631,765
Trade and Other Receivables	**7,971,612**	10,819,228
Other Assets	**583,778**	391,164
Total Current Assets	**24,738,428**	23,842,667
NON-CURRENT ASSETS		
Investments	**6,109,537**	6,942,510
Plant and Equipment	**917,894**	1,252,852
Intangible Assets	**–**	45,739
Total Non-Current Assets	**7,027,431**	8,241,101
Total Assets	**31,765,859**	32,083,258
Liabilities		
CURRENT LIABILITIES		
Trade and Other Payables	**4,596,201**	2,806,589
Deferred Income	**16,361,740**	20,262,649
Provisions	**2,962,322**	2,282,547
Total Current Liabilities	**23,920,263**	25,351,785
NON-CURRENT LIABILITIES		
Provisions	**805,467**	398,896
Total Non-Current Liabilities	**805,467**	398,896
Total Liabilities	**24,725,730**	25,750,681
Net Assets	**7,040,129**	6,332,577
Equity		
Foreign Currency Translation Reserve	**(459,829)**	(380,255)
Available-for-sale Financial Asset Reserve	**(929,313)**	(105,614)
Accumulated Surplus	**8,429,271**	6,818,446
Total Equity	**7,040,129**	6,332,577

Statement of Cash Flows
for the year ended 30 June 2012

Consolidated	2012 $	2011 $
Cash Flow from Operating Activities		
Receipt of grants and contract revenue	**56,580,507**	51,184,903
Payments to suppliers and employees	**(53,103,246)**	(49,515,690)
Rental income	**–**	953,576
Dividends received	**327,248**	219,261
Interest received	**347,161**	176,304
Net cash generated from/(used in) operating activities	**4,151,670**	3,018,354
Cash Flow from Investing Activities		
Payment for purchase of plant and equipment	**(481,274)**	(185,604)
Proceeds from sale of available-for-sale financial assets	**4,757,632**	3,685,235
Payment for purchase of available-for-sale financial assets	**(4,566,755)**	(3,629,498)
Payment for purchase of held-to-maturity investments	**(310,000)**	–
Net cash generated from/(used in) investing activities	**(600,397)**	(129,867)
Net increase/(decrease) in cash and cash equivalents held	**3,551,273**	2,888,487
Cash and cash equivalents at the beginning of the financial year	**12,631,765**	9,743,278
Cash and cash equivalents at the end of the financial year	**16,183,038**	12,631,765

The George Institute for Global Health

Level 13, 321 Kent Street, Sydney NSW 2000 Australia
www.georgeinstitute.org

The George Institute, Australia

Level 13, 321 Kent Street
SYDNEY
NSW 2000
AUSTRALIA

Telephone +61 2 9657 0300
Facsimile +61 2 9657 0301
info@georgeinstitute.org.au
www.georgeinstitute.org.au

Postal address:
PO Box M201
Missenden Road
NSW 2050 AUSTRALIA

George Clinical

Level 13, 321 Kent Street
SYDNEY
NSW 2000
AUSTRALIA

United Kingdom

George Centre for Healthcare Innovation
University of Oxford
Third Floor, Richard Doll Building
Old Road Campus, Roosevelt Drive
Oxford OX3 7LF
UNITED KINGDOM

Telephone +44 1865 617 200
Facsimile +44 1865 617 202
info@georgecentre.ox.ac.uk
www.georgecentre.ox.ac.uk/

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
info@georgeinstitute.org.cn
www.georgeinstitute.org.cn

The George Institute, India

839C, Road No. 44A
Jubilee Hills
HYDERABAD 500033
INDIA

Telephone +91 40 2355 8091
Facsimile +91 40 2354 1980
info@georgeinstitute.org.in
www.georgeinstitute.org.in

THE GEORGE INSTITUTE
for Global Health