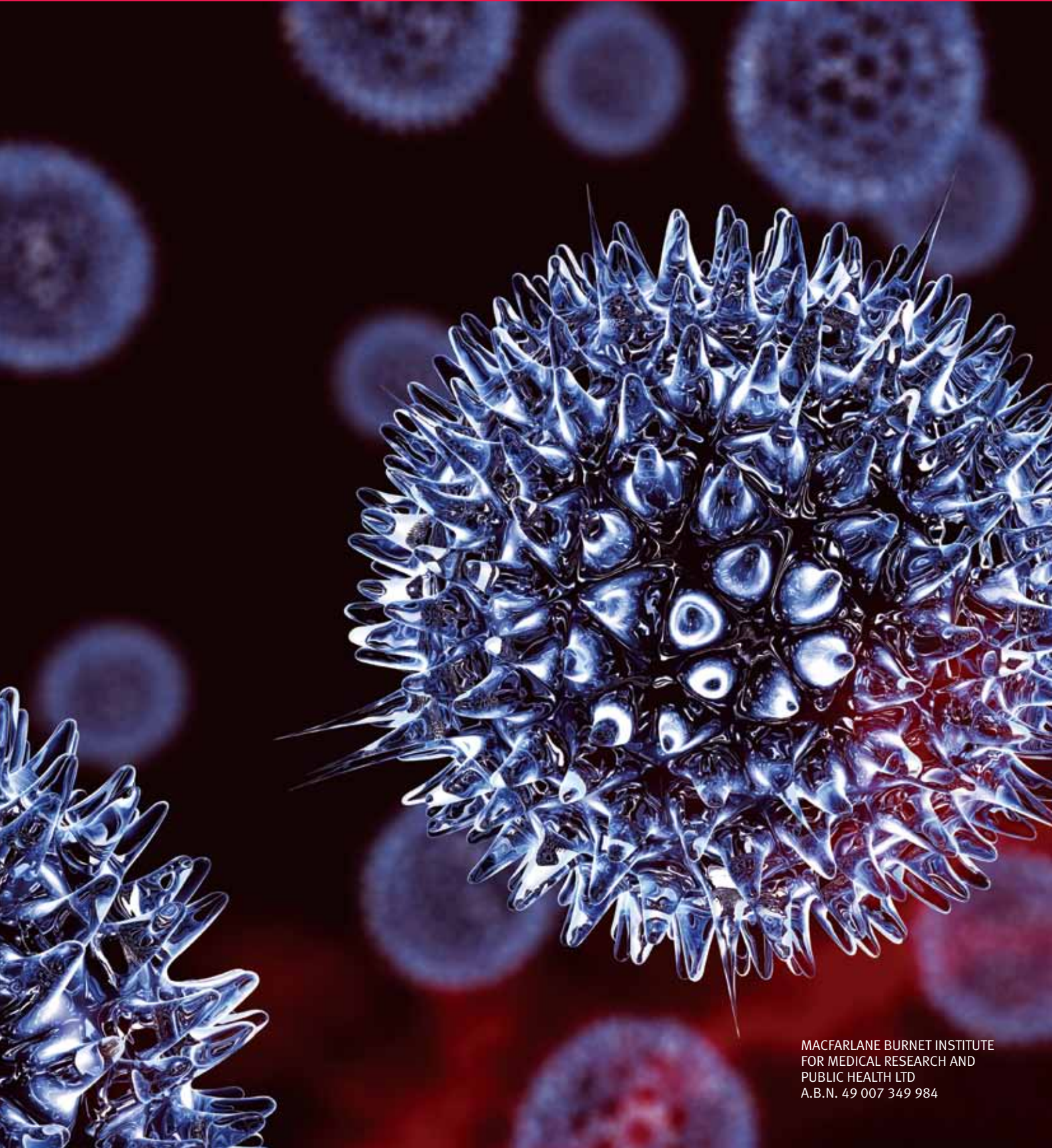




**Burnet Institute**  
Medical Research. Practical Action.

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**ANNUAL FINANCIAL REPORT 2012**  
*For the year ended 31 December 2012*



MACFARLANE BURNET INSTITUTE  
FOR MEDICAL RESEARCH AND  
PUBLIC HEALTH LTD  
A.B.N. 49 007 349 984

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- Back Our Overseas Offices

**Director and CEO:** Professor Brendan Crabb, BSc(Hons), PhD

**Deputy Directors:** Associate Professor David Anderson, BSc(Hons), PhD; Professor Mike Toole AM, MBBS, BMedSc

**Company Secretary:** Mr Peter Spiller, BBus, CPA



**Cover:** *Stylised illustration of a virus. A virus is a small infectious agent that can replicate inside the living cells of an organism and cause chronic infections. Burnet's researchers are studying chronic viral diseases such as HIV, and hepatitis B and C, to develop new drugs and new drug targets, and diagnostic tools and point-of-care assays for chronic infectious diseases.*

**Editorial Manager:** Gillian Chamberlain

**Design:** Kelly Watson Design

**Editorial contributors:** Tracy Parish, Catherine Somerville

The Burnet Institute gratefully acknowledges funds received from the Victorian Government principally under its Operational Infrastructure Support Program, and from the Federal Government principally through AusAID and NHMRC.



A full copy of this Financial Report is available on our website, or if you would prefer a printed copy, please call +61 3 9282 2111. This Financial Report has been prepared in accordance with the requirements set out in the Corporations Act, 2001 and the ACFID Code of Conduct. For further information on the Code please refer to the ACFID Code of Conduct available at [www.acfid.asn.au](http://www.acfid.asn.au).



**Auditors:** KPMG

**Partner:** Alison Kitchen

Registered Company Auditor. 147 Collins Street, Melbourne, Vic 3000

The Burnet Institute is a member of the Association of Australian Medical Research Institutes (AAMRI) which is the peak body representing Australia's pre-eminent independent medical research institutes. All members of AAMRI are internationally recognised as leaders in health and medical research.

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For more detailed information about our work, please visit our website at [burnet.edu.au](http://burnet.edu.au). Or if you would like to discuss any aspect of our work you can call us on (03) 9282 2111.



**Our Mission:** *To achieve better health for poor and vulnerable communities in Australia and internationally through research, education and public health.*

**Our Values:** *We are passionate in our commitment to working and growing together to create a healthier world. We value excellence, innovation and social justice, and share a desire to extend the boundaries of knowledge and understanding.*

Burnet Institute is named in honour of Sir Frank Macfarlane Burnet OM, AK, KBE who received the Nobel Prize for Medicine in 1960. To learn more about how we work, visit [burnet.edu.au](http://burnet.edu.au).

• We have a combined research and public health approach.

• Our staff comprises medical scientists, clinical researchers, epidemiologists, public health practitioners, educators and administrators.

# About us

*The Macfarlane Burnet Institute for Medical Research and Public Health (Burnet Institute) is an Australian not-for-profit, unaligned and independent organisation whose purpose is to improve the health of disadvantaged, poor or otherwise vulnerable people throughout the world.*

## Our Approach

Burnet's unique approach of linking medical research with public health action allows us to respond with comprehensive and innovative solutions ranging from novel discoveries, such as the development of new vaccines and diagnostic tests, to the better deployment of existing best-practice health interventions.

Our approach to address complex health issues is twofold:

- 1 to generate new knowledge and health intervention tools,
- 2 to apply the best available evidence to community-level public health programs.

As evidence of our combined research and public health approach, the Burnet Institute is formally accredited with both the Australian National Health and Medical Research Council (NHMRC) and the Australian Agency for International Development (AusAID). We are the only organisation in Australia with this dual accreditation.

### Scope of our work

We have particular expertise in specific infectious diseases of global health significance (especially HIV and AIDS, hepatitis viruses, malaria, influenza and emerging infectious diseases), and in understanding the immune responses and developing therapies to these infections and other human diseases including some cancers.

Burnet also focuses on drug and alcohol use, both in addressing risky behaviours associated with transmission of infectious diseases and as major health problems in their own right.

While based in Melbourne, the Burnet Institute has long-term offices in: China, Lao PDR, Myanmar (Burma) and Papua New Guinea; as well as activities in a number of other Asia and Pacific countries. Approximately a third of our staff are based in these overseas offices.

### Staff expertise and diversity

Our staff comprises medical scientists, clinical researchers, epidemiologists, public health practitioners, educators and administrators. Burnet Institute has many research students studying for their Masters or PhD degrees and numerous postdoctoral graduates in training.

## Leadership

Our dedicated and committed leadership team comprises:

**Director and Chief Executive Officer**  
**Professor Brendan Crabb**

**Chairman**

**Mr Alastair Lucas AM**

**Deputy Directors**

**Associate Professor David Anderson**  
Head, Business Development, Innovation and Research

**Professor Mike Toole AM**

Head, Centre for International Health (to March 2013)

**Associate Directors**

**Professor Suzanne Crowe AM**  
(from March 2013)

**Professor Margaret Hellard**  
(from March 2013)

**Executive Management**

**Professor Brendan Crabb**  
Director and CEO

**Associate Professor David Anderson**  
Deputy Director, and  
Head, Business Development, Innovation and Research

**Professor Mike Toole AM**

Deputy Director, and  
Head, Centre for International Health (to March 2013)

**Professor Suzanne Crowe AM**

Associate Director for Clinical Research (from March 2013)

**Professor Margaret Hellard**

Associate Director for Recruitment and Retention (from March 2013) and,  
Head, Centre for Population Health

**Mr Geoff Drenkhahn**

Chief Operating Officer

**Mr Paul Rathbone**

Executive Officer, and  
Head, Public Affairs and Communications (to May 2012)  
Head, Public Affairs and Development (from May 2012)

**Mr Peter Spiller**

Chief Financial Officer, and  
Company Secretary

**Senior Management**

**Mr Paul Duffy**

Head, Human Resources

**Associate Professor Bruce Loveland**

Head, Research Support and Facilities

**Ms Ruth Rosh**

Head, Advancement (to May 2012)

**Mr Paul Stephens**

Manager, Information Technology (to Dec 2012)

**Mr Mark Tennent**

General Manager, Centre for International Health

**Mr Carl Vine**

Manager, Information Technology (from Jan 2013)

**Centre Heads**

**Professor James Beeson**

Head, Centre for Immunology (to March 2013)

Co-Head, Centre for Biomedical Research (from March 2013)

**Professor Suzanne Crowe AM**

Co-Head, Centre for Virology (to March 2013)

**Professor Margaret Hellard**

Head, Centre for Population Health

**Professor Sharon Lewin**

Co-Head, Centre for Virology (to March 2013)

Co-Head, Centre for Biomedical Research (from March 2013)

**Professor Stanley Luchters**

Co-Head, Centre for International Health (from March 2013)

**Professor Robert Power**

Co-Head, Centre for International Health (from March 2013)

## Our Accomplishments

It was a stellar year for the Institute, with outstanding output across medical and health research, research translation, and in local and international public health activities. Given the tough financial environment that we faced, it was remarkable that we published more peer-reviewed scientific papers than ever before. Our 181 publications set a new record for the Institute, up 15 per cent on the previous year. Most pleasing was that much of this increase came from our local public health experts who are searching for understanding and answers to some of societies major health afflictions.

While scientific publications are a great measure of our academic performance, other indicators demonstrate how we are working more closely to translate

research findings into practical solutions. For example, the Institute attracted a number of grants from overseas bodies such as the Bill and Melinda Gates Foundation that are awarded to projects closely associated with practical interventions. Scientists working on malaria, HIV, vaccines, TB and maternal health were all recipients of such awards this year. In this regard, the launching of our low cost, point-of-care CD4 test at the AIDS 2012 conference in Washington deserves special mention. This simple test opens up HIV therapy to millions of the world's most needy people, especially to women and children who comprise the majority of HIV-positive people throughout the developing world. It is incredibly exciting to see the development of this life-saving technology become a reality. Similarly, our reputation for the development of improved diagnostic tests led to a large

grant from the Gates Foundation for improved detection of individuals with tuberculosis; the world most significant 'silent' killer.

It was also a wonderful year for our international health programs with successful activities across a wide range of disciplines in Myanmar (Burma), PNG, Lao PDR, Timor-Leste, China (including the Tibet Autonomous Region) and Zimbabwe. In the last year, we spent around \$15 million on international health programs, expanding our maternal and child health programs that also complement our mainstay activities, and reputation in sexual and reproductive health. All credit for this success goes to an incredibly committed and talented scientific, public health and administrative staff; those here in Australia and those who live and work overseas.

## SIR ZELMAN COWEN FELLOWSHIP FUND



### A few words from the Chair

*I am delighted to present the Burnet chairman's report for 2012. Burnet, like most organisations in Australia involved in medical research, faced a challenging year in financial terms.*

It was also a year of enormous achievement, of which I am very proud. I will return to the issue of medical research funding a little later, but wanted first to talk about the year's wonderful progress.

2012 was possibly Burnet's best year, amongst many strong performances. We published a record number of papers in first-class journals and won grants from many government and private funding bodies to do work in countries across the Asia and Pacific regions as well as in Zimbabwe. The impact of this work on the world's poorest was profound. While it is my custom not to single out any particular piece of research, this year I would like to mention Burnet's invention of an easy-to-use, in-field CD4 T-cell rapid diagnostic test. The concept is not complex (albeit created by groundbreaking science). Put simply, when a patient has HIV (for which there is already a simple test) there has – until now – been no way to determine when that patient should start receiving lifesaving antiretroviral drugs without very expensive flow cytometry (unavailable in most resource-poor settings). Knowing when to start treatment is critical to maximise the effectiveness of the antiretroviral

drugs – in particular for pregnant women who are at risk of infecting their babies during childbirth. Burnet has created an incredibly simple-to-use, cheap test, not too dissimilar to a pregnancy test, which can be administered anywhere in the field in the most remote locations. Executive Director of UNAIDS, Michel Sidibé was quoted as saying, "this invention will change the lives of millions of people." The CD4 test is now being trialled and limited production has begun. This invention is testament to Burnet's unique combination of biomedical research and in-the-field public health, which has enabled it to bring into being a simple but revolutionary product combining high-tech science and on-the-ground usefulness. I cannot think of a better example of the contribution Burnet makes to help the world's poorest.

To a less productive subject – governments' funding of medical research in Australia. Medical research is arguably Australia's best and most export-oriented industry. It is an industry, however, that is dependent on governments for initial funding, and it is the method by which governments fund medical research which causes profound difficulties.

First, governments provide funds for medical research and public health projects without providing sufficient funding to cover overheads. Every time an institute such as Burnet wins a grant, it falls further behind in its capacity to pay for the basic necessities of keeping the doors open – lights, IT systems, accounting etc. This is because more research generates a greater need for basic necessities which are unfunded by current grants schemes. I call on the Federal Government and Victorian State Government to coordinate their activities, to ensure that all medical research in this State is funded adequately for the basic necessities of infrastructure spending. The current situation is unsustainable – while Burnet has the breadth and depth to ensure its survival, the current funding model will ultimately ensure the demise of at least some medical research bodies in this country.

Second, medical research needs stability. The current Federal Government has, unfortunately, made material changes to the funding model for Australian medical research, which means that medical research organisations such as Burnet are unable to offer their talented scientists a reasonable level of certainty. These changes occurred after the

February 2011 proposal to slash medical research funding was aired – a proposal which caused much damage to this wonderful industry’s confidence.

Third, the community needs to address what is the correct level of funding for medical research. In my view, the funding plateau which has been experienced in recent years is preventing the dynamic development of this industry. Not only does the industry deserve certainty, but it also deserves a more considered examination of the appropriate funding level to meet the health needs of Australians. The current funding model does not address this. The recently released Strategic Review of Health and Medical Research (McKeon Report) addresses these issues and I urge governments to take its findings into account when developing policies.

Now, to some important “thank yous”.

The work and many contributions of my fellow board members is very much appreciated and valued. Our directors provide very generous support and wise counsel, and I thank them all for their amazing contributions. Their talent, dedication and commitment to the work of the Institute is very pleasing, and I know that like me, they receive great personal reward from seeing the progress we make in helping those communities we serve. We bade farewell to long-standing board member, the Hon. Barry O Jones AO. Barry had been on the Board since 2000 and made a huge contribution to the Institute during his time as a director. His valuable political insights, his wisdom and general counsel were very much appreciated. As chairman, I can say that his advice to me personally during his long tenure made my job a lot easier.

We were greatly saddened at the passing of the Hon. Geoffrey Connard AM, the founding Chairman of the Institute. Geoffrey was the inaugural Chair of the Macfarlane Burnet Centre (MBC) from 1986 to 1990, a member of the Burnet Institute Board until 2007, and a proud and committed supporter of our work over many decades. His significant

contribution played a part in Burnet becoming one of the leading medical research and public health institutes in Australia. Geoffrey was an outstanding supporter of the Institute’s work and an inspiration to all who met him.

During 2012, we announced the Sir Zelman Cowen Fellowship Fund as a flagship foundation to raise funds for two important causes: fellowships for talented young Australian scientists and backing for Burnet’s PNG “Healthy Mothers Healthy Babies” programme. We are delighted the Governor General of the Commonwealth of Australia, the Honourable Quentin Bryce AC CVO has agreed to be Chief Patron of the Fund. I would also like to pay tribute to Sir Zelman Cowen who passed away in 2011 but in his name, the Sir Zelman Cowen Fellowship Fund continues. I am deeply appreciative of the enormous support we have had from Lady Anna Cowen and other members of the Cowen family whose support for Burnet has been superb.

I want to thank all donors who have made sacrifices to keep Burnet functioning in the productive way that it does. Donations are our lifeblood and I would like you to know that your support is simply essential. Thank you.

Lastly, but certainly not least, I would like to thank Professor Brendan Crabb and his talented staff of 400 people in Australia and across our region. Burnet staff, year after year, make great sacrifices to improve the health of the world’s poorest and as I said earlier, this year as been no exception. I would like to thank each and every one of them.



**Mr Alastair Lucas AM**  
*Chair,  
Burnet Institute*

## In Appreciation

### Thank you to the organisations that support us:

#### TRUSTS AND FOUNDATIONS

- ANZ Trustees
- Arthritis Foundation of Australia
- Australian Communities Foundation
- Australian Rechabite Foundation
- Australian Rotary Health
- Bell Charitable Fund
- CASS Foundation Ltd
- Equity Trustees – Harold and Cora Brennen Trust
- Goldman Sachs Australia Foundation
- Harold Mitchell Foundation
- Ian Potter Foundation
- Invergowrie Foundation
- Joe White Bequest
- Lord Mayor’s Charitable Foundation
- Perpetual Trustees – H and L Hecht Trust
- Perpetual Trustees – Nancy E Pendergast Charitable Trust Fund
- State Trustees Foundation – Ruby C Thomas and Ronald R Fraser
- State Trustees Australia Foundation
- State Trustees – John Burge Trust
- William Angliss (Victoria) Charitable Fund

#### CORPORATES

- Becton Dickinson
- BHP Billiton
- Cockram Construction
- Goldman Sachs
- JBWere
- National Australia Bank



## A few words from the Director

*I am delighted to present this annual review of our activities for 2012. Much of our attention this year has been to concentrate our activities across the Institute on core business, and to ensure we remain focused on our mission of achieving better health for poor and vulnerable communities in Australia and internationally.*

We have made strategic changes to our laboratory structures, merging the Centre for Virology and the Centre for Immunology to form a new 'super centre' the Centre for Biomedical Research. This change will further invigorate our laboratory programs and provide many new opportunities for growth, cross-disciplinary collaboration, leadership and success through increased capacity. It will also provide a means to grow non-virus infectious disease research, such as tuberculosis and malaria, and expand our capacity for research translation, especially the development of rapid diagnostic tests, antibody-based therapeutics and vaccines. Our mainstay remains the understanding, diagnosing, preventing and developing of therapies to major global diseases such as HIV, hepatitis C, malaria and tuberculosis, however the new Centre does provide opportunities to address other key global health issues as they arise. Because each of the Co-Heads, Professor James Beeson and Professor Sharon Lewin are also expert in clinical and public health, the new laboratory-focused Centre will engage closely with our other two

'community' centric centres; the Centre for Population Health and Centre for International Health.

Major indicators of success as a medical research and public health institute include the level of peer-reviewed publications in high impact journals, our translational research activities and grants success. This year, we set a new research performance record for the Institute, surpassing the previous year's results with 182 publications, an increase of 14 per cent. This is a great reflection on the productivity and quality of the Institute's research programs both in the laboratory and in the field. In addition, our rapid diagnostic test development program has progressed significantly. The Burnet point-of-care CD4 test was officially launched at the International AIDS Conference in Washington and was recognised for its innovative approach by winning the prestigious Australian Innovation Biosciences Award. We are now entering a phase of site validation before full distribution into international markets with our commercial partner on the project Omega Diagnostics.

We continued to operate in a tight financial environment over the past year, primarily the result of reduced income from the state government's operational infrastructure support (OIS) scheme and other funding bodies. While we are very grateful for the support we and other Victorian medical research institutes receive each year, the fact is the scheme has not kept pace with costs. We are hopeful that after substantial lobbying, changes to the OIS will occur and reflect the increased infrastructure costs associated with operating a medical research institute as well as bring us in line with interstate government funding bodies. We are also waiting to hear the Federal Government's response to the McKeon Review into medical research, which was completed in February 2013 and provides a blueprint for the research sector for the next 10 years.

This year I assumed the Presidency of the Association of Australian Medical Research Institutes, the peak body which represents Australia's 41 medical research institutes. Australia has an incredibly vibrant, productive and talented research community and we punch well above our weight in



medical research, but there's work to be done especially around funding and security of tenure for our researchers if we want to retain our position on the international stage.

After 17 years as the Head of the Centre for International Health, Professor Mike Toole AM has stepped down to assume greater responsibilities across the Institute as Deputy Director. I would like to thank Mike for his extraordinary contribution to the Institute in his role as head of the Centre and for developing a Centre which enjoys an international reputation. Mike was also recognised for his contributions to global health through being awarded a Member of the Order of Australia, a deserved recognition for more than 30 years of service to humanity.

I would like to thank our many donors whose contributions during the year have enabled many of our research and public health programs to continue and given us the opportunity to develop new programs which address the needs of the poor and vulnerable population groups we serve. Your financial support is very much valued and appreciated, and I know having met many of you that you share our passion for helping those who find themselves in less fortunate circumstance. I would also like to acknowledge the support provided to the Institute through the very generous gifts left in the estates of donors who passed away during the year. This ultimate gift is very much appreciated and enables us to plan well ahead and to implement new programs.

A special thank you to our Chair, Mr Alastair Lucas AM for his tireless support of the Institute and for his guidance and advice. We are also very fortunate to have an amazing Board, whose members are equally passionate about the work of the Institute and who give so much of their time and energy. Thank you for your support, counsel and commitment to the Institute. To those who also serve on our various committees a special thank you for your time, expertise and additional contributions.

I also acknowledge and thank the Burnet Institute staff and the Executive Management Team for their continued commitment and support and for yet another year of outstanding achievement. Their hard work and dedication never ceases to amaze and encourage me. We were required to make some difficult restructuring decisions during this time to ensure that we remained focused on our core business and within the confines of our operating budget. I do appreciate the resilience shown by many across the Institute, who understand our long-term goals and the need for change to occur in order to position us for strong growth in the future.

We remain very confident of an outstanding future for the Institute and look forward to many productive years ahead.

Our achievements in research and public health, and our reputation for humanitarian action, are stronger than ever.



**Professor Brendan Crabb**  
Director and CEO,  
Burnet Institute

## Community Support

### Thank you to the individuals who support us:

The Burnet Institute extends a heartfelt thank you to those in the community who support the Institute by way of donations and in-kind support. Your contribution underpins the work we do and enables us to tackle the hardest problems through medical research and public health activities.

### Community generosity helps bring super-resolution microscope to Burnet

Thanks to the generous support of donors and supporters, Burnet now has a super-resolution microscope, one of only three in Victoria.

For the first time our scientists will be able to analyse microbes such as malaria in high-definition and potentially accelerate vaccine development.

"We have the brightest minds here at Burnet so it is a priority that we provide them with state-of-the-art equipment. Thank you for your support to bring this microscope to Burnet," Professor Brendan Crabb, Director and CEO.

### Bequests

Every bequest, however small or large, is gratefully received and helps us plan for our long-term future with confidence.

We thank **Albert John Shurey, Robert William Robertson, Grace Ella Fraser, Desmond Edward O'Donnell** and **Enez Lily Lesser** for their special support of Burnet's work through a gift in their Will.

## 2012 HIGHLIGHTS IN:

# Sexual & Reproductive Health



• We are committed to providing validated, low-cost tests for monitoring HIV patients in resource-limited settings.



• We provide young people with condoms and information about safe sex.

*Sexual and reproductive health (SRH) is an important global issue, with outcomes such as unintended pregnancy, safe abortions and sexually transmitted infections (STIs), including HIV, impacting on the health of all communities.*

Burnet is engaged in a broad range of research, evaluation projects and development interventions – from basic (laboratory) science projects, clinical trials and epidemiologic studies, through to capacity building, education, training and policy development.

The Crowe Laboratory is committed to providing validated, low-cost tests for monitoring HIV patients in resource-limited settings, including training scientists in Papua New Guinea (PNG) in low-cost HIV-1 viral load assays to facilitate paediatric HIV care.

### Clinical Trials

With Starpharma Pty Ltd, the Tachedjian Laboratory has completed a Phase I trial of VivaGel®, a candidate microbicide for HIV prevention. The Tachedjian Laboratory is also working on understanding the role of lactic acid in the inactivation of sexually transmitted viruses, including HIV, and use these findings to improve female sexual health.

The Lewin Laboratory is currently involved in a trial to see whether Vorinostat (a cancer treatment drug) can activate latent (hibernating) HIV in patients on therapy, an important potential step towards curing HIV.

### STI prevalence in pregnant women in PNG

In PNG, treatable STIs cause significant morbidity. The Health Pregnancy in PNH Study (a partnership between the PNG Institute of Medical Research, Burnet and The Kirby Institute), is the largest bio-behavioral investigation in pregnant women in PNG, aims to determine STI prevalence. This work will provide the first local type-specific prevalence data of human papillomavirus (HPV), the virus necessary for the development of cervical cancer, and support the advocacy for introducing the HPV vaccine into PNG.

### Community-based sexual and reproductive health prevention interventions

SRH also remains a key priority of Burnet's Population and International Health Centres. These undertake a diverse range of local and international activities, including ongoing refinements to disease surveillance systems to inform prevention priorities, working with organisations such as Marie Stopes International to

establish best-practice monitoring and evaluation frameworks for their services, modeling the health benefits for investment in family planning in the Pacific as well as implementation of community-based SRH prevention interventions.

For more information go to [www.burnet.edu.au/health\\_themes](http://www.burnet.edu.au/health_themes)

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## 2012 HIGHLIGHTS IN:

# Maternal & Child Health



- The overwhelming majority of maternal and child deaths could be prevented.

*Considerable progress has been made over the past two decades to reduce maternal and child deaths globally. However, more than seven million children and almost 300,000 women continue to die each year. The overwhelming majority of these deaths occur in developing countries and most could be prevented.*

### **Burnet's low cost, point-of-care CD4 test in field validation tests**

Associate Professor David Anderson, Professor Suzanne Crowe AM and their team, have developed the world's first instrument-free, low cost, point-of-care CD4 test. The inexpensive, simple to use finger-prick test allows health workers to assess CD4 counts during the first antenatal visit, without the need for a laboratory, and immediately initiate lifesaving interventions. Burnet's VISITECT® CD4 test was awarded one of only 15 innovation grants (out of more than 500 applications worldwide) by the Grand Challenges "Saving Lives at Birth" Initiative. The project, led by Professor Stanley Luchters, will assess the accuracy, feasibility and acceptability of the test through antenatal clinics in Kenya and South Africa.

### **High rates of mental ill-health among pregnant and new mothers**

A systematic review conducted by Dr Wendy Holmes in collaboration with Professor Jane Fisher at Monash University and published in the Bulletin of the World Health Organization, found that 16 per cent of pregnant women and 20 per cent of new mothers in low and lower-middle income countries are affected by mental ill-health, higher than rates in developed countries.

To identify effective strategies to improve maternal mental health, Burnet was involved in a review of 13 interventions in eight countries in Africa, Asia, South America and the Caribbean. This review found that improving health worker training and working with women, their families and communities can help prevent maternal mental health problems such as depression, and improve the health and well-being of children. Building on these findings, Burnet is currently developing an intervention in Vietnam, which will test the acceptability and cultural appropriateness of a behavioural modification program for women after childbirth to address maternal depression and improve outcomes for mothers and their children.

### **Iron deficiency anaemia and malaria in PNG**

Burnet has conducted a comprehensive research project to quantify the burden of iron deficiency anaemia and malaria in pregnant women in a rural area of Papua New Guinea.

We found that the burden of iron deficiency anaemia was very high in these pregnant women (>70 per cent), and that most pregnant women were anaemic (>90 per cent). Ongoing studies seek to understand how these factors impact on maternal and infant health, and the development of strategies to address these major health issues.

### **Malaria and immune responses**

Major research projects aim to understand the biological mechanisms that cause malaria disease and immune responses that protect people against malaria. Our studies of childhood malaria in PNG and Kenya have identified key targets of immune responses that protect against malaria. In studies of Karen women on the Thai-Burma border and PNG women, we have made major gains in understanding how pregnant women develop immunity to malaria and maintain this over time.

**For more information go to [www.burnet.edu.au/health\\_themes](http://www.burnet.edu.au/health_themes)**

#### **Professor**

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## 2012 HIGHLIGHTS IN:

# Young People's Health



- SMS is proving an effective promotion tool for reaching young people about sexual health.



- The annual Big Day Out survey asks about risky sexual practices, alcohol and drug use.

*Young people experience disproportionately high levels of substance use disorders, risky sex with consequent sexually transmitted infections (STIs), blood-borne viruses (BBVs), unintentional injuries and interpersonal violence. The Burnet Institute has a strong track record in using innovative methods to understand the key issues affecting young people and implement programs to reduce risk events.*

### ICT spreading health message to young people

The use of information communication technologies (ICT) in health has expanded greatly in the past decade. ICT include mobile phones, computers and the internet, and other technologies such as personal digital assistants (PDA). These technologies are particularly useful for reaching young people, as they are the demographic with the fastest rate of technology uptake. ICT have many advantages over traditional modes of communication; they are cheaper and less time consuming to use, and they can reach people in an asynchronous manner, in almost any location. In most settings, particularly developing

countries, the reach of technologies like mobile phones is far greater than coverage of other media such as television, or infrastructure such as roads and clinics.

### Burnet leading the way using SMS for sexual health promotion

Burnet's past randomised controlled trials using SMS for sexual health promotion and STI research targeting young people have made us international leaders in the field. We have also used Facebook and other social networking sites to promote sexual health to at-risk groups in Victoria. An example of our current work in ICT is a pilot study investigating existing smart phone applications that could be used in alcohol-related health promotion.

We also are expanding our findings into developing countries in the Asia-Pacific region. In a current project in Indonesia with US-based research institute RTI International and a Jogjakarta-based university (Universitas Gadjah Mada) we are developing a trial using text messages to promote sexual health and reproductive services to young people. Health promotion messages will also be sent relating to reducing smoking and providing sexual health information.

Another project is investigating the potential to use ICT in monitoring and evaluating programs for the prevention of parent-to-child transmission of HIV in Papua New Guinea.

### Smart phone apps and alcohol

Smart phone apps can also be used to influence health; however, Burnet research has shown that this influence is not always positive. A comprehensive review of alcohol-related smart phone apps identified worryingly poor categorisation and regulation of apps, particularly of those wrongly claiming to provide legitimate health messages. It was found that apps claiming to provide health information were often scientifically inaccurate and unreliable. Young people were more likely to download apps that encourage drinking (such as drinking games or bottle shop locators) rather than apps that aim to reduce alcohol consumption and related harms.

**For more information go to**  
[www.burnet.edu.au/health\\_themes](http://www.burnet.edu.au/health_themes)

**Professor**  
**Margaret Hellard**

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## 2012 HIGHLIGHTS IN: Infectious Diseases



• We have unique skills and expertise in infectious diseases of global significance.



• Burnet's Andrew Guy working with Ismael Baretto from Timor-Leste on a key diagnostic test that will improve malaria treatment in Timor-Leste.

*Infectious diseases remain among the leading causes of mortality in developing countries, especially in poor and vulnerable communities. Burnet's unique blend of skills and expertise in infectious diseases is utilised across basic science research, clinical management and public health responses.*

### HIV

Current HIV treatment is extremely effective in suppressing replication of the HIV virus but is unable to completely eradicate the virus from the body. Despite treatment, HIV is able to lie dormant, sleeping within the human body in what are termed 'latent reservoirs'. Key strategies to achieve an HIV cure were identified by a team of world experts from The International AIDS Society that included Professor Sharon Lewin and Associate Professor Melissa Churchill. Key recommendations included the need for increased basic research into viral latency and clinical trials for the cure of HIV.

Professor Lewin's group also started a clinical trial with the cancer drug Vorinostat, normally used in the treatment of leukaemia, to awaken the virus from its latent state.

### Malaria

Burnet continued to play a key role in influencing regional malaria control with its involvement in a landmark policy meeting, hosted by Australian Foreign Minister, Senator, the Hon. Bob Carr. This meeting forged a regional consensus on priorities for malaria control; an issue of particular importance given the recent reports of increasing drug resistance for antimalarial medications in South-East Asia. The Institute also hosted a study tour of senior health managers from Nepal to improve planning district level responses to malaria.

Burnet's contribution to implementing regional malaria control included preparatory work for a trial of home-based management of malaria in Papua New Guinea. This study starts in 2013 and aims to deploy new rapid diagnostic tests and initiate early treatment of malaria by training local village volunteers in remote areas of PNG that are not well serviced by existing health services.

Malaria control in Timor-Leste is also likely to be strengthened with the Institute transferring knowledge about key diagnostic tests to detect different types of malaria parasites with greater precision than existing microscopy based tests. The development and transfer of a new test to detect the red blood cell enzyme deficiency, glucose-6-phosphate, is also likely to lead to safer malaria treatment in Timor-Leste and pave the way for the first

national survey of this genetic condition which can lead to widespread red blood cell destruction if left unrecognised.

### Zoonotic infections

The Burnet also contributed to better preparedness for emerging infections, especially those that arise in animals and are transmitted to humans (called zoonotic infections). In collaboration with the Australian Animal Health Laboratory (AAHL), a global database has been developed that identifies key stakeholders and gaps in international policy to prevent and control zoonotic infections.

The Burnet has also contributed to a Global Avian Influenza ('bird flu') project that focuses on improving communication strategies to prevent potential pandemics.

**For more information go to**  
[www.burnet.edu.au/health\\_themes](http://www.burnet.edu.au/health_themes)

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## 2012 HIGHLIGHTS IN:

# Alcohol, Other Drugs & Harm Reduction



• A new cohort of young risky drinkers will provide evidence around behavior and experiences of harm.



• Our mobile van enables researchers to provide hepatitis B vaccinations through assertive outreach to people who inject drugs.

*Burnet is committed to addressing the adverse health affects of alcohol and other drug use through the application of behavioural and clinical research, treatment practice and community-based harm reduction programs based on sound evidence.*

The Drugs and Public Health Interest Group (DPHG) fosters cross-Centre collaboration by sharing information about potential opportunities for Burnet in Australia and the Asia and Pacific regions

### Alcohol and other drugs

The Melbourne Injecting Drug User Cohort Study (MIX) is the biggest longitudinal cohort study of people who inject drugs (PWID) ever established in Australia. With over 700 participants, MIX has already provided important information on the way in which heavy alcohol consumption impacts on the lives of PWID, as well as the incidence of blood-borne viral infections such as hepatitis C virus. As a result of our findings on hepatitis B virus (HBV), a new study has commenced comparing two schedules for HBV vaccination that will provide new evidence of the most effective way to provide this vaccine in PWID and the wider population.

A cohort of 800 young risky drinkers was recruited as part of the Young Adults and Alcohol Study (YAAS). This study

will provide new evidence about the trajectories of risky drinking among young adults in Melbourne, as well as their experiences of harm.

### Harm reduction

In 2012 the Australian Capital Territory (ACT) became the first Australian jurisdiction to provide naloxone – an opioid overdose reversal drug – for use by potential overdose victims. This is the first time naloxone has been provided for use outside of emergency medical settings such as ambulances and hospital emergency departments.

Professor Paul Dietze, Head of the Alcohol and other Drug Research Group, is leading the evaluation of the effects of the wider distribution of naloxone along with colleagues from Curtin University, Australian National University and University of New South Wales. The results of the evaluation of the rollout of the program in the ACT will be available in 2014.

Professor Dietze is also involved in a study based at the Sydney Medically Supervised Injecting Centre (MSIC) that will determine whether intranasal administration of naloxone is as effective as intramuscular administration of the drug in reversing the effects of opioid overdose.

### HIV prevention in Lao PDR and Vietnam

Burnet has been working on HIV prevention in Lao PDR and Vietnam on

the second northern Greater Mekong sub-region transport network improvement project (ADB funding). It includes training government counterparts in Lao PDR on harm reduction and site visits for Lao government to learn from needle syringe programs and methadone services in Vietnam.

### Training and capacity building

Through UNESCO, UNICEF and UNFPA funding we have conducted regional capacity building training focusing on young people and adolescents who inject drugs in HIV-epidemic areas in Asia and the Pacific.

Burnet has designed a standard comprehensive package of HIV services interventions for injecting drug users, men who have sex with men, people in correctional facilities and sex workers in Zanzibar (UNICEF funding).

We conducted a number of Australian Leadership Award Fellowship programs, including on amphetamine type stimulants for Laos PDR and Myanmar, and harm reduction for the Solomon Islands (AusAID funding).

Our Australian NGO Cooperation Program in PNG focused on developing targeted drug and alcohol harm reduction interventions Papua New Guinea (ANCP funding).

**For more information go to**  
[www.burnet.edu.au/health\\_themes](http://www.burnet.edu.au/health_themes)

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## 2012 HIGHLIGHTS IN:

# Immunity, Vaccines & Immunisation



• Immunisation programs are the most effective preventive strategy to fight infectious diseases.



• A young girl in Nigeria receives the polio vaccine.

*Vaccine and Immunisation programs remain the single most effective preventive health strategies to combat infectious diseases. Burnet's research and public health actions are driven by the needs to protect against threats to the world's most vulnerable populations from diseases such as malaria, polio, TB, hepatitis C, hepatitis B and HIV.*

Discovery research and public health initiatives at Burnet focus on producing new vaccines, researching disease patterns and testing new approaches to implement vaccination programs. Burnet is also at the forefront of technologies to manipulate the immune system for the production of vaccines against non-infectious diseases such as cancer and arthritis.

### Progress towards a preventative hepatitis C vaccine

The Institute continues to make steady progress on the development of a preventative vaccine for hepatitis C virus (HCV). HCV is a blood-borne virus that causes chronic liver disease, liver failure and hepatocellular carcinoma. Current estimates suggest that 250,000 Australians and 200 million people worldwide are chronic carriers of the virus. Treatment options for HCV have

been limited to the use of a combination of pegylated interferon and ribavirin although the severe side effects, variable sustained virological response rates (SVR) and lengthy treatment times limit the number of people who are treated to less than 5,000 Australians per year. Associate Professor Heidi Drummer leads a team of researchers developing a vaccine that would prevent infection and she was invited to present her work at the 7th Annual Immunotherapeutics and Vaccines Summit in Massachusetts, USA in August 2012.

### Supporting vaccination initiatives in developing countries

The Centre for International Health (CIH) continues to research new ways to support immunisation program managers in the provision of vaccination services – with a special focus on developing countries.

Professor Mike Toole AM continued to support the worldwide push to eradicate polio through contributions to the World Health Organization's (WHO) eight-person Independent Monitoring Board for the Global Polio Eradication Initiative (GPEI). Dr Ben Coghlan also contributed to polio eradication by supporting efforts in Afghanistan (one country where polio transmission risk persists) to monitor progress and plan for expanded services.

Burnet continues to support a new global hepatitis program, and the WHO's immunisation program, in scaling up vaccination against hepatitis B within 24 hours of birth. Dr Chris Morgan and Priya Mannava continued work on a global review of effective practice in this area, conducted with support from the AusAID Women's and Children's Health Knowledge Hub hosted at Burnet. The review was completed in 2012 and is now being published as a WHO monograph. Work also started, in partnership with the USA's Centers for Disease Control, to turn this evidence into a practical manual for national immunisation program managers. Dr Morgan continued to serve on a global WHO advisory committee (IPAC) that provides the organisation with expert advice on the uptake of innovations in the provision of immunisation services.

For more information go to [www.burnet.edu.au/health\\_themes](http://www.burnet.edu.au/health_themes)

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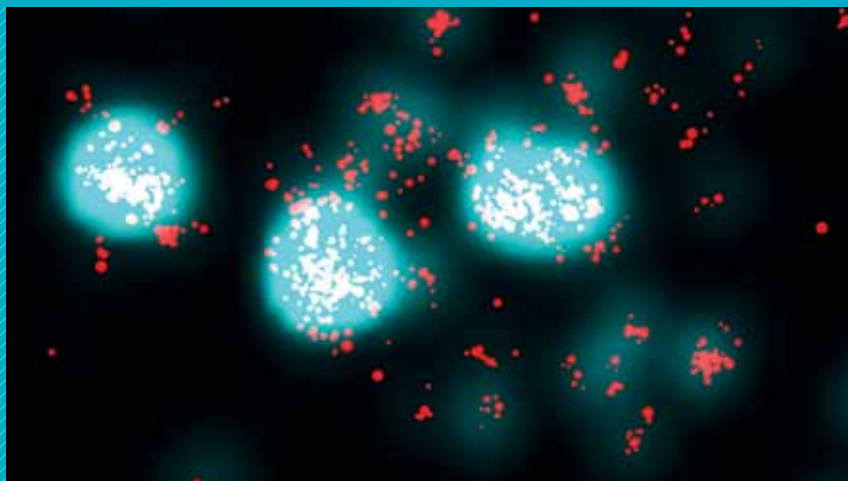
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# Centre for Virology

• There is a strong emphasis on basic research to facilitate the development of new drugs and new drug targets.



• HIV Proteins seen through a super-resolution microscope.



• Basic research

## Achieving innovative solutions for viral diseases of global importance underpins our approach to research and public health practice

The Centre for Virology's main focus is the study of chronic viral diseases such as HIV, hepatitis B and C, and understanding how viruses manipulate their host cells in order to infect them and replicate within the body.

There is a strong emphasis within the Centre on basic research to facilitate the development of new drugs and new drug targets, as well as the technologies and diagnostics required to monitor treatments. These include the development of new drug resistance assays as well as developing appropriate diagnostic tools and point-of-care assays for use within resource-constrained countries.

We are also identifying possible new drug targets at the molecular level and developing diagnostic tools and point-of-care assays for chronic infectious diseases.

### Our research program is focused on:

- HIV neuropathogenesis
- Hepatitis immunovirology
- HIV pathogenesis and HIV reservoirs
- Point-of-care diagnostics and low-cost monitoring in resource constrained countries
- Retroviral biology and molecular pathogenesis
- Emerging infectious diseases - influenza
- HIV eradication, antivirals, treatment and prevention.

### Our working groups:

#### Anderson Laboratory

*(Diagnostics Development)*

Accurate diagnostic techniques are a cornerstone of infectious disease control, yet there is an unmet need for new and/or improved tests for many diseases that predominantly affect disadvantaged populations. We work to develop and validate such tests.

#### Churchill Laboratory

*(HIV Neuropathogenesis)*

Our research into understanding how HIV infects cells of the central nervous system is pivotal to the development of strategies aimed at HIV eradication. This requires an understanding of HIV neuropathogenesis, development of viral reservoirs and characterisation of viral/host factors impacting of the central nervous system.

#### Crowe Laboratory

*(International Clinical Research Laboratory (ICRL))*

The focus of our lab is on developing and assessing laboratory monitoring tests for HIV infection, particularly low-cost tests that can be used in resource limited countries. The laboratory is also an accredited WHO Regional HIV Drug Resistance Laboratory for the Asia and Pacific regions.

#### Drummer/Poumbourios Laboratory

*(Viral Fusion)*

The Viral Fusion Laboratory examines how human immunodeficiency virus and hepatitis C virus attach to and enters cells. Our objective is to find new targets for the development of antiviral agents and vaccine candidates.

#### Gorry Laboratory

*(HIV Molecular Pathogenesis)*

We undertake research into understanding how HIV gains entry into cells of the immune system, with the overall aims of understanding HIV pathogenesis, developing new HIV inhibitors, and developing new diagnostics to assist physicians in treating patients.

#### Gowans/Loveland Laboratory

*(Hepatitis C Immunity & Immunotherapies)*

We undertake studies of immunotherapy, and clinical trials, to address persistent



infection by the hepatitis C virus (HCV), particularly using novel strategies to get expression of virus proteins in a way to improve the immune response in people infected with HCV.

#### **Jaworowski Laboratory**

*(HIV Pathogenesis)*

Our study of the pathogenesis of HIV infection is aimed at improving patient outcomes in the era of successful control of viremia with antiretroviral drugs.

#### **Lewin Laboratory**

*(HIV & Hepatitis Immunopathogenesis)*

Headed by physician scientists, Sharon Lewin and Paul Cameron, the research focus is mainly on HIV, hepatitis B virus (HBV) and cytomegalovirus (CMV), and includes a wide range of health related skill sets and backgrounds.

#### **Tachedjian Laboratory**

*(Retroviral Biology & Antivirals)*

Our fundamental research approach is to understand the biology of retroviruses and to translate these findings into the discovery of new drug targets for antiretroviral therapy and prevention.

#### **Tannock Laboratory**

*(Influenza)*

Research by our group is concerned with determining the causes of variability in the growth of influenza B viruses in eggs, and in developing methods to increase yields of vaccine antigens.

#### **Wright Group**

*(Asia Pacific NeuroAIDS Consortium)*

We are committed to improving health in the Asia and Pacific regions, through extensive training programs and research studies on HIV clinical management and neurological complications of HIV.

### **Harnessing the changeability of HIV-1 as an approach to finding novel vaccine candidates.**

#### **Drummer/Poumbourios Laboratory**

A major reason for HIV-1/AIDS remaining a global health problem is the fact that a vaccine is not available. This is largely due to the ability of the virus to change rapidly so that it hides itself

from the host's immune response.

One way of achieving this is to cloak itself with sugar, which confuses the human immune system. We have harnessed the changeability of HIV-1 as an approach to finding novel vaccine candidates. By forcing HIV-1 to rapidly evolve in the lab, we isolated mutant viruses that permanently display targets on their coat proteins that are recognised by neutralising antibodies found in rare HIV-1 infected people that can control their infections. The further development of these mutant viruses as candidate vaccines represents a significant step towards a prophylactic vaccine against HIV-1.

### **New insights into how HIV-1 can persist in the central nervous system.**

#### **Gorry Laboratory**

HIV-1 invades the central nervous system (CNS) where it can hide from the immune system and hinder the ability of antiviral drugs to eradicate the virus from the body. The reduced immune surveillance of the CNS also means that HIV-1 may adopt a 'less defensive' configuration, potentially allowing it to more aggressively infect the susceptible cell types. A recent study by the Gorry Laboratory, published in the *Journal of Leukocyte Biology*, characterised HIV-1 strains isolated from brain and lymphoid tissues of AIDS patients, and showed that the brain isolates adopted a highly efficient ability to interact with its primary cellular receptor, CD4, and displayed an altered mechanism of engagement with its secondary coreceptor, CCR5. In collaboration with scientists from the University of California, Los Angeles, mathematical models were applied to these data, which finely defined the balance in which these brain-derived viral strains interact with their cellular receptors. These results are particularly important, as they provide new insights into how HIV-1 can persist in the CNS.

### **Associate Professor Gilda Tachedjian awarded two prestigious Fenner Awards.**

#### **Tachedjian Laboratory**

Associate Professor Gilda Tachedjian was awarded the Fenner Award from the Australian Society for Microbiology and the Burnet Institute. The Burnet award is presented to a member of the Burnet Institute who has made a significant and continued contribution to laboratory research and/or public health during their time at the Institute. Also, in 2012 the Tachedjian Laboratory was part of team that discovered the first gammaretroviruses in bats, which may be the origin of similar viruses circulating in mammals today.

### **Clinical trials underway to activate latent HIV virus**

#### **Lewin Laboratory**

Understanding how latency in the HIV virus is established, maintained and finding novel ways to eliminate latently infected cells has been a major focus this year. Researchers from the Lewin Laboratory have developed unique models to study the latency of the HIV virus in the laboratory and are currently testing a range of compounds that activate latent virus. One of these compounds is an anti-cancer drug, Vorinostat, in advanced clinical trials, which is currently being evaluated in HIV-infected people.

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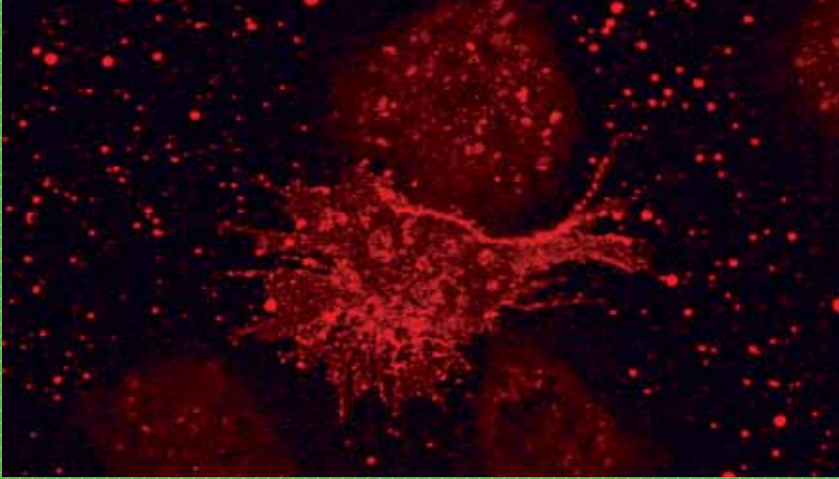
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# Centre for Immunology

• Why does the immune system attack some normal cells and ignore others that it should be destroying?



• Dendritic cells are the sentinels of the immune system.



• Understanding the way the immune system functions in health and disease.

*Developing novel ways to prevent or treat major infectious diseases, autoimmune and inflammatory diseases, and cancers underpins our research approach.*

The Centre for Immunology integrates fundamental and applied research programs to understand the way the immune system functions in health and disease. This knowledge is used for the development of new treatments, vaccines, and diagnostic tests for major human diseases. Key aims include understanding how the immune system attacks or clears infectious agents, why the immune system attacks normal cells it should ignore in autoimmune diseases, and how infectious agents and cancer cells avoid immune destruction.

#### **Our research program is focused on:**

- Malaria and other infectious diseases
- Autoimmune and inflammatory diseases
- Vaccines for infectious diseases and cancer
- Immune function in health and disease
- Structural biology.

#### **Our working groups:**

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

Designing novel vaccines for cancer and major infectious diseases is the focus of our work.

##### **Dendritic Cell Receptors** (Lahoud Laboratory)

Our research is focused on characterising the molecular interactions that underpin Clec9A function, the role of these interactions in mediating immune responses, and the potential of targeting Clec9A for immune therapy.

##### **Dendritic Cell Research** (O'Keefe Laboratory)

Dendritic cells are sentinels of the immune system. Our goal is to understand how these cells are activated by pathogens and other signals, and to harness this knowledge to address problems in human disease.

##### **Dendritic Cells in Innate and Adaptive Immunity** (Caminschi Laboratory)

Improving vaccines by targeting dendritic cells is one key focus of our research. We know that potent immune responses can be induced by targeting antigens to surface receptors on dendritic cells (DC).

##### **Diagnostics Development Laboratory** (Anderson Laboratory)

There is an unmet need for new and/or improved tests for many diseases that predominantly affect the disadvantaged. Our work aims to develop new diagnostics tests to improve the management and control of important diseases.

##### **Immunology and Cancer Vaccines** (Hogarth Laboratory)

Understanding how the immune system responds to cancer cells and developing effective vaccines to treat cancer and infectious diseases is the focus of our research.

##### **Inflammatory, Cancer and Infection** (Hogarth Laboratory)

We aim to understand the cellular and molecular basis of inflammation and translate this knowledge into developing new immunomodulatory therapeutics for autoimmune diseases and infection.

##### **Leukocyte Development in Health and Disease** (Gavin Laboratory)

Our work aims to understand how responses by the immune system can lead to the development of autoimmune diseases.

### Lymphocyte Biology Group

(Gugasyan Laboratory)

Our lab aims to understand how the immune system responds when subjected to various external factors that promote the differentiation of immune cells.

### Malaria Epidemiology Group

(Fowkes Laboratory)

Understanding malaria dynamics in populations is key to implementing effective public health control measures as we strive towards the ultimate goal of malaria elimination.

### Malaria Research

(Gilson/Crabb Laboratory)

Resistance to mainstream anti-malarial drugs is now widespread. Our work aims to identify new targets and approaches for malaria drugs and vaccines.

### Malaria Immunity, Vaccines and New Therapies

(Beeson Laboratory)

Our work focuses on understanding immune responses to malaria and how malaria disease develops, particularly in children and pregnant women, and to use this knowledge in the development of malaria vaccines and new drugs.

### Structural Immunology Laboratory

(Ramslund Laboratory)

Examining the three-dimensional (3D) structures of proteins of the immune system and how this influences their function is our key research focus.

### Viral Immunology

(Ffrench Laboratory)

Our aim is to gain a clearer understanding of the nature of cellular immune responses to viral infections to aid the development of new vaccines and immunotherapies.

### Lifting malaria's deadly veil: mystery solved in quest for vaccine

#### Malaria Immunity, Vaccines and New Therapies Laboratory

Our researchers made a major breakthrough in the quest for a vaccine against malaria, which causes up to

one million deaths each year. The research revealed a key target of the immune system's attack against malaria. The findings show that people who are immune to malaria develop antibodies that primarily target a protein known as PfEMP1, which is produced by *Plasmodium falciparum*, the causative organism of most cases of malaria. The findings are a major advance towards developing an effective vaccine because they unlock the mystery of which malaria proteins, known as variant surface antigens (VSAs), an effective vaccine could target to achieve immunity to malaria. Head of the Centre for Immunology, Professor James Beeson said the new findings support the idea that a vaccine could be developed that stimulates the immune system so that it specifically mounts a strong response (or attack) against the PfEMP1 protein that malaria produces. The study also showed that when the immune system attacks other proteins that malaria produces, this is not as effective in protecting people. This emphasises that the immune system has to 'get it right' in order to fight malaria infection effectively. The research involved studies conducted at the Burnet Institute, Kenya Medical Research Institute, Walter and Eliza Hall Institute, and University of Melbourne.

### Discovery paves the way for more effective vaccines

#### Dendritic Cell Receptors Laboratory

Burnet scientists discovered an important mechanism in which a synthetic DNA targets the immune system that could significantly improve the effectiveness of future vaccines. Dr Irina Caminschi has identified for the first time a new receptor (DEC-205) that binds to the synthetic DNA (known as CpG). CpG is very immune-stimulatory, it makes the immune system more reactive, which is why it is used in vaccines. It is currently in clinical trials for cancer and malaria vaccines. While testing it for various immune responses, they discovered a mechanism that elicits that very strong reaction. Though researchers have used CpG to enhance immune

responses, it was unknown which receptor the immune cells used to actually grab the DNA and internalise it for recognition. By understanding how the immune system recognises this foreign, synthetic DNA and the rules that govern this recognition, researchers can exploit it so that when it gets used in a vaccine it works better. The research was conducted in collaboration with the Walter and Eliza Hall Institute.

### Dr Paul Gilson awarded prestigious 2012 Gust-McKenzie Medal.

#### Malaria Research Laboratory

The medal, named in honour of the founding Directors of the Burnet and Austin Research Institutes, Professor Ian Gust AO and Emeritus Professor Ian McKenzie AM, is awarded to a mid-career Burnet Institute staff member in recognition of excellence in research and/or public health. Dr Gilson is investigating how parasites invade human red blood cells where they grow and multiply, and how the parasite-infected red blood cells avoid the immune system. The research team, led by Dr Gilson and Professor Brendan Crabb, are specifically trying to discover how the malaria parasite reads the red blood cell surface and then makes the decision to invade it. Once inside, the malaria parasite synthesises sticky, Velcro-like proteins and sends them out to the surface of the red blood cell causing the cell to bind to the walls of blood vessels. This keeps the infected blood cells away from the spleen, a blood-filtering organ that can destroy the infected cells. Over the next few years, Dr Gilson hopes to build upon his discoveries and develop drugs that block the parasite's capacity to invade red blood cells and to export the Velcro-like proteins.

#### Professor

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# Centre for Population Health

• We implement novel programs to better understand the challenges of reducing the impact of infectious diseases and behaviours among highly vulnerable populations.



• Burnet conducts leading research into the harms of risky drinking.



• Injecting drug use is a global public health issue.

*We aim to improve the health of the community by conducting high quality, innovative research that addresses the major public health problems associated with infectious diseases and drugs and related behaviours.*

HIV, hepatitis C, sexually transmitted infections, malaria, tuberculosis, and drug and alcohol use are serious health concerns in Australia, in Asia and the Pacific. It is an enormous challenge to reduce the impact of these diseases and behaviours, particularly in highly vulnerable populations and disease endemic areas.

The Centre for Population Health implements novel, multidisciplinary scientific programs that use cutting-edge epidemiology, high quality laboratory science, excellent clinical and social research, and strong public health principles to address these major health problems in our region.

The broad spectrum of work ranges from research that helps to better understand the priority diseases and

their transmission and ecology, to discovery science with potential for longer-term benefits such as therapeutics and vaccines, to health systems oriented research that directly influences health policy.

## **Our working groups:**

### **Alcohol and Other Drugs**

*Co-Heads, Professor Paul Dietze and Dr Peter Higgs*

Conducts leading research on alcohol and other drug use, and related harms, in Australia. We work with a variety of at-risk populations, including young people and people who inject drugs. Using innovative research designs and methods, the program has a strong history of collaboration with researchers from key national and international institutions.

### **HIV**

*Head, Dr Mark Stoové*

Its innovative research is aimed at understanding the transmission and prevention of HIV, with a particular focus on those populations most at risk, such as young people and men who have sex with men.

### **Justice Health**

*Head, Dr Mark Stoové*

The group undertakes innovative, scientifically rigorous and policy-relevant research projects that employ a range of methodologies including prospective

cohort designs, randomised controlled trials and record linkage, to enhance the evidence base for justice health policy and practice.

### **Malaria and Infectious Diseases Epidemiology**

*Head, Dr Freya Fowkes*

The group centres on malaria immunology and focuses on developing and utilising immunological biomarkers for vaccine trials, disease surveillance and evaluating the impact of interventions for malaria.

### **Infectious Diseases Surveillance**

*Manager, Ms Carol El-Hayek*

Rigorous evaluations of projects and programs are aimed at better understanding the transmission and prevention of communicable diseases, including HIV and STIs, and the health and wellbeing of affected populations.

### **Sexual Health**

*Co-Heads, Professor Margaret Hellard and Dr Megan Lim*

Undertakes sexual health research that focuses on young people; those most at risk of STI. Our research, public health and health promotion aims to create a strong evidence base for tackling STI in Australia, and the Asia and Pacific region.

### **Viral Hepatitis**

*Head, Professor Margaret Hellard*

Our work focuses predominantly on hepatitis C virus (HCV), aiming to

improve the understanding of the virus, to develop harm reduction strategies for populations at greatest risk, and ultimately to develop a vaccine.

#### **Modelling & Biostatistics**

*Head, Dr Emma McBryde*

Biostatistics is the application of statistics to a wide range of topics including public health research.

#### **Research opens door for potential pregnancy-specific malaria vaccine**

Led by Dr Freya Fowkes, Head of Malaria and Infectious Disease Epidemiology, researchers found that pregnant women are able to mount an effective immune response against malaria and that the immune response to special pregnancy-specific proteins lasts for many years. These pregnancy-specific responses can help fight-off malaria infections in the placenta during pregnancy and protect women against malaria in subsequent pregnancies. The findings are a major advance in the quest for a vaccine. They suggest that a long-lasting, pregnancy-specific vaccine could be developed to protect pregnant women and their babies against the devastating consequences of the infectious disease. The study was the largest and most detailed to date of immunity to malaria during pregnancy and was undertaken in the North West border of Thailand, in Karen refugee women from Myanmar. This year Dr Fowkes was awarded an NHMRC project grant to extend this work in Thailand to try and understand immunity to malaria post-partum and how maternal immunity is transferred to newborn infants.

#### **Risky Drinking Study focuses on metropolitan Melbourne**

Young people in Melbourne, aged between 18 and 24 years, have been recruited for a study aimed at better understanding how drinking behaviours change over time. The Young Drinkers Study involves a representative sample of 800 young people. The study, conducted

by the Alcohol and Other Drugs working group, has a unique focus on the most recent risky drinking occasion of study participants. Detailed data is collected for each specific drinking location during this specific drinking occasion. Participants are initially asked where they were when they started drinking and then asked how long they were there, how much did they drink, how much did they spend on alcohol and who were they with. These questions are then repeated for each drinking location over the course of the drinking occasion, along with questions about the drinking occasion more generally such as specific risk behaviours (e.g., risky sexual practices) and the experiences of harms, such as assault and other forms of violence. The Risky Drinking Study is part of a wider study funded by the Australian Research Council that is led by collaborators from the National Drug Research Institute. The data will inform the development of agent-based models of the effects of different interventions targeted at risky drinking that are part of the wider project. The researchers will be following participants over time in order to better understand how drinking behaviours change over time. Findings from initial analysis of the study will be available in 2013.

#### **Evaluation of condom distribution trial in Victorian prisons**

The Centre for Population Health has been commissioned by Justice Health (Department of Justice) to evaluate a pilot program introducing condoms and dental dams for prisoner use into Victorian prisons. The project includes a process evaluation, and impact modeling using a mixture of qualitative and quantitative methods. Initially the program has been implemented in four prisons. An examination of barriers to implementation, and positive and adverse outcomes during this pilot stage will inform the roll-out of condoms and dental dams to the remaining Victorian prisons in 2012.

#### **VPCNSS – an innovative surveillance system**

The Victorian Primary Care Network for Sentinel Surveillance on Blood Borne Viruses and Sexually Transmitted Infections (VPCNSS) is an innovative surveillance system that links HIV, other STI testing, and behavioural data, from clinics that see high numbers of at-risk patients - men who have sex with men and young people. By collecting and linking individuals' testing and behavioural data, the VPCNSS is able to provide reliable data on trends in the incidence of STIs and deliver unique insights into the drivers of these transmissions in Australia.

#### **Big Day Out – Sex, Drugs and Rock'n'Roll**

Sexually transmitted infections (STIs) are on the rise among young Victorians. Since 2005, we have surveyed more than 10,000 people aged between 16 and 29 years at the Big Day Out (BDO) music festival in Melbourne about sexual risk behavior and drug use. In our 2012 survey we identified a concerning increase in the number of young people reporting unprotected sex with casual partners. We have also found that STI-related knowledge is very poor among young people with many incorrectly thinking that a pap smear could diagnose all STIs, and only half of participants knew that chlamydia could be treated. This information is useful for policy makers and educators in understanding gaps in young people's sexual health understanding.

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# Centre for International Health

• Complex issues surrounding major health problems in developing countries are approached through innovation, inquiry and influence.



• Burnet works on improving access to health services in Myanmar.



• In PNG, mothers and children continue to die from preventable diseases.

*We respond to major health problems in developing countries through the provision of technical advice and support, organisational capacity building, applied research, policy analysis and development, and training and education programs.*

Our expertise spans HIV prevention and care, women's and children's health, sexual and reproductive health, drug use, primary health care, strengthening national health systems, and education across these fields.

In Papua New Guinea, Indonesia, Lao PDR, Myanmar (Burma), China (including Tibet), Vanuatu, Zimbabwe, Fiji and Thailand we work with local communities, governments, the UN system and international organisations including Australia's development agencies.

Our locally based country reps are supported by public health project managers in Australia to implement our country programs which aim through practical action to improve the health for people in low-income communities.

## Our working groups:

### International Operations

*Team Leader, Professor Robert Power*  
Our focus is on improving the health of local vulnerable communities through effective public health action and capacity building across Asia and the Pacific regions.

### Education and Capacity Development

*Team Leader, Ms Marion Brown*  
Responsible for the oversight, development and strategic direction of the Centre for International Health's education, training and capacity development programs in Melbourne and overseas.

### HIV and Harm Reduction

*Team Leader, Mr Chad Hughes*  
The team provides technical assistance, strategic direction and advice to countries and communities addressing the HIV epidemic, and/or drug and alcohol related harms.

### Infectious Disease and Health System Strengthening

*Team Leader, Dr Chris Morgan*  
Malaria and tuberculosis (TB) are preventable infectious diseases yet cause the highest burden for communities in the countries where we work. We support our partners in each country using technologies from 'bench to the bedside' through basic science, clinical and social research.

## Women's and Children's Health

*Team Leader, Professor Stanley Luchters*

We aim to improve the health of women and children in resource-poor settings through capacity building, technical advice, research and advocacy.

### Improving STI awareness and services in East New Britain, Papua New Guinea

For the past five years, Burnet has successfully supported the East New Britain Sexual Health Improvement Program (ENBSHIP) as part of the broader PNG – Australia Sexual Health Program funded through AusAID. Weakened health services, low levels of health literacy, and high levels of stigma and discrimination has resulted in limited uptake of sexual and reproductive health (SRH) services, and contributed to relatively high rates of sexually transmitted infections (STIs). In collaboration with the Provincial Health Office (PHO), the project supported provincial, district and community initiatives to increase awareness and decrease stigma related to STIs and to strengthen and expand the provision of health services. The project empowered the community and raised STI awareness through community educators – Stret Tokers; strengthened health services through provision of training and

mentoring of health workers; and provided training and support on a range of clinical and clerical topics to improve coordination and management. As the project draws to a close, some 285 community members have been trained as Stret Tickers and over 700 community awareness activities have been conducted which significantly increased STI clinic attendance. In addition, 92 clinicians and seven laboratory staff received additional training and support, and 19 clinics have been supported through regular supervisory visits.

### China-Australia Health and HIV/AIDS Facility (CAHFF)

The AusAID-funded China-Australia Health and HIV/AIDS Facility (CAHFF) as managed by Burnet and HLSP ended in November 2012. Over the past five years, the Facility supported the strengthening of China's health system in response to the Chinese Government's health reform agenda. CAHFF's 53 policy-relevant research and development activities were led by 29 Chinese health institutions with support from 26 Australian institutions. The strong role played by the Chinese Ministry of Health (MoH) and CAHFF's flexible processes enabled it to direct resources in response to the Ministry of Health's immediate needs. Research results contributed to 75 new health policies, half of which are at national level. The MoH has noted CAHFF as an exemplary model of bilateral partnership, one with practical lessons for future health programming. In October 2012, Burnet staff and Chinese counterparts presented results from CAHFF at the Second Global Symposium on Health Systems Research in Beijing and provided an opportunity for exceptional Chinese researchers to play an increasingly active role in the growing international movement in health systems research. As Burnet launches the Tibet Health Capacity Building Program, in collaboration with the Australian Red Cross, the experiences

of CAHFF will provide important lessons to improve our work focusing on policy engagement and capacity development for stronger health systems.

**For more information go to: [www.cahhf.org](http://www.cahhf.org).**

### Community Engagement - World Health Day 2012

More than 50 policy-makers, researchers and international public health specialists attended the "Bridging the know-do gap: communicating results and measuring influence" symposium held at Burnet on 4 April 2012. They discussed how policy and practice are influenced by research. Topics included knowledge translation, the use of research in the development of WHO guidelines, research culture in NGOs with examples from the Monash-Oxfam partnership, barriers to using research in maternal and child health to inform policy, and the impact of communications on research. The symposium was supported by the Burnet Institute and Compass: Women's and Children's Health Knowledge Hub.

### Improving women and children's health in underserved areas of Vilabouly District, Savannakhet Province, Laos

This project supports health workers in a remote district in Southern Laos to deliver quality maternal, neonatal and child health (MNCH) services in line with the Government's Integrated Package of MNCH Services. This year we set up local project management structures, initiated capacity building processes and outreach activities in target villages. The project will now focus on increasing the capacity of health personnel to plan, manage and review health outreach activities; improving the health and nutrition related practices of women, provide refresher training on project management skills, health promotion and communication skills, Integrated

Management of Childhood Illnesses (IMCI) and community-based treatment of malnutrition.

### Addressing women's and children's health issues in Myanmar

Burnet Institute Myanmar is implementing a program of maternal, neonatal and child health initiatives in four townships in peri-urban Yangon. The aim of the program is to provide capacity building to local organisations complemented by support to local health authorities to improve the demand, utilisation and quality of maternal and child health services in these underserved populations. Three ongoing programs link maternal health, neonatal and child health, and male involvement by strengthening the continuum of care from the community level to health facilities and referral hospitals. Technical training for in-service midwives, pre-service auxiliary midwives and community health volunteers is facilitated by Myanmar's Department of Health core central trainers with quality assurance provided by Burnet and our partner PATH, who also brings new technology and training for newborn care.

#### Professor Mike Toole

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#### Professor Robert Power

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#### Professor Stanley Luchters

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# Annual Financial Report 2012

For the year ended 31 December 2012

## Directors' Report

*The Directors present their report together with the Financial Report of the Macfarlane Burnet Institute for Medical Research and Public Health Limited (Burnet Institute) for the year ended 31 December 2012 and the Audit Report thereon.*

### Directors

The Directors of the Burnet Institute, all of whom act in an honorary capacity, along with the Executive Directors, who receive remuneration as paid members of staff, held office at any time during or since the end of the financial year are:

**Mr Alastair Lucas AM, BCom, FCPA**  
*Chair, Burnet Institute Board of Directors*  
*Director since 1998*

*Chair, Budget & Investment Committee*  
*Member, Audit, Compliance and Risk Committee*

*Member, Engagement Committee*  
*Chair, Investment Banking, Goldman Sachs Australia*

*Chair, Cell Care Australia*  
*Director, Research Australia*  
*Member, Advisory Board, Fauna & Flora International Australia*  
*Member, Australian Takeovers Panel*

**Professor Brendan Crabb, BSc(Hons), PhD**

*Executive Director and CEO since March 2008*

*Member, Engagement Committee*  
*Member, Budget and Investment Committee*

*Secretary, Research Advisory Committee*  
*President, Association of Australian Medical Research Institutes (AAMRI) Pty Ltd*

*Director, AMREP Animal Services Pty Ltd*  
*Chair, Alfred Medical Research and Education Precinct Council*  
*Chair, PATH/MVI Vaccine Science Portfolio Advisory Council (VSPAC), USA*  
*Chair, 2013 Gordon Research Conference on Malaria, USA/Italy*  
*Chair, PNG Institute of Medical Research Buttressing Coalition*

*Member, Board of Management, Gene Technology Access Centre (GTAC)*  
*Member, Scientific Advisory Board, Malaria Program, Wellcome Trust Sanger Institute, UK*

*Member, Scientific Advisory Board, Monash Institute of Pharmaceutical Sciences (MIPS)*

*Adjunct Professor, The University of Melbourne*

*Adjunct Professor, Monash University*

**Mr Robin Bishop, LLB(Hon), BCom, BA**  
*Director since 2012*

*Member, Budget and Investment Committee*

*Head and Executive Director, Macquarie Capital Australia and New Zealand*

*Member, Australian Takeovers Panel*

**Professor Peter Colman, BSc, PhD**  
*Director since 2011*

*Chair, Research Advisory Committee*  
*Member, IP & Commercialisation Committee*

*Head, Structural Biology Division, WEHI*  
*Former Chief, Division of Biomolecular Engineering, CSIRO*

**Mr Ross Cooke, BCom, ACA**  
*Director since 1998*

*Chair, Audit, Compliance and Risk Committee*

*General Manager, Garrison Health, Medibank Health Solutions*  
*Director and President, Winteringham, and Winteringham Housing Ltd*

**Mr John K Dowling, FREI, FAPI**  
*Director since 2000*

*Member, Research Advisory Committee*  
*Managing Partner, K L Dowling & Co*

**Professor, the Hon Barry O Jones AO, FAA, FAHA, FTSE, FASSA, FRSA, FRSV, FAIM**

*Director since 2000 and resigned May 2012*

*Member, Research Advisory Committee*  
*Chair, Vision 2020 Australia*

*Chair, Port Arthur Historic Site Management Authority*

*Professorial Fellow, University of Melbourne*

*Director, Care Australia*

**Mr Henry Lanzer, BCom, LLB**  
*Director since 2008*

*Member, Budget & Investment Committee*

*Managing Partner, Arnold Bloch Leibler*  
*Director, Premier Investments*

*Director, The Just Group*

*Director, Tarrawarra Museum of Art*  
*President, Mount Scopus Memorial College Foundation*



**Mr Robert L Milne, BEng (Civ), FIE (Aust), CP Eng**

*Director since 2000*

*Chair, IP & Commercialisation Committee*

*Member, Budget and Investment Committee*

*Chair, Cockram Corporation and subsidiaries*

**Professor Christina Mitchell, MBBS (Melb), PhD, FRACP**

*Director since 2011*

*Dean, Faculty of Medicine, Nursing and Health Sciences, Monash University*

*Scientific Advisory Board Member, Peter McCallum Research Institute*

*Organising Committee Member, Hunter Cell Biology Meeting*

**Ms Mary Padbury, BA, LLB**

*Director since 2011*

*Member, IP & Commercialisation Committee*

*Chair, Ashurst Australia*

*Panelist, World Intellectual Property Domain Name*

*Director, Australasian Gastrointestinal Trials Group, GI Cancer Institute*

*Member, Chief Executive Women*

*Member, Commonwealth Attorney-General's International Legal Services Advisory Council*

*Member, Melbourne Law School Foundation*

**Professor Philippa Pattison, BSc, PhD**

*Director since 2011*

*Member, Research Advisory Committee*

*Deputy Vice Chancellor (Academic), University of Melbourne*

*Professor, Psychological Sciences, University of Melbourne*

*Associate Editor, Social Networks*

*Member, Editorial Board, Journal of Classification*

*Member, Graduate Careers Australia Survey Reference Group*

*Member, Queen's College Council*

*Member, Trinity College Council*

*Governor, University College*

*Member of Council, Melbourne Girls Grammar School*

**Ms Natasha Stott Despoja AM**

*Director since 2008*

*Chair, Engagement Committee*

*Former Senator for South Australia*

*Former Leader, Australian Democrats*

*Director, beyondblue*

*Director, South Australian Museum*

*Member, Advisory Council, Museum of Australian Democracy*

*Member, Advertising Standards Board*

*Honorary Research Fellow, University of Adelaide*

**Professor Michael Toole, AM, MBBS, BMedSci, DTM&H**

*Executive Director since 2011*

*Member, Research Advisory Committee*

*Adjunct Professor, School of Public Health, Monash University*

*Board Member, Three Diseases Fund for Burma/Myanmar*

*Member, Independent Monitoring Board of the Global Polio Eradication Initiative*

*Member, Technical Review Panel, Global Fund to Fight AIDS, TB, and Malaria*

*Founding Board Member, Médecins Sans Frontières Australia*

**Ms Mary Waldron, BEcon & SS, FCPA**

*Director since 2011*

*Member, Audit, Compliance and Risk Committee*

*Managing Partner PwC, Reputation, Regulation and Risk*

*Member, PwC Australian Firm Executive Board*

*Chairman, Centre for Ethical Leadership Advisory Board – Melbourne*

*Business School*

*Board Member, Institute of Chartered Accountants Australia*

*Advisory Member, Global Foundation*

*Advisory Corporate Council Member, European Australian Business Council*

*Member, Chief Executive Women and Member of Scholarship Committee*

**Resigned as Director during 2012 or since year end:**

**Professor, the Hon Barry O Jones AO, FAA, FAHA, FTSE, FASSA, FRSA, FRSV, FAIM**

*Director since 2000 and resigned May 2012*

# Directors' Report

## Directors' Meetings

The number of Directors' meetings (including meetings of Committees of Directors) and number of meetings attended by each of the Directors of the Burnet Institute during the financial year are:

Directors	Board of Directors		Audit, Compliance and Risk Committee		Engagement Committee		Budgeting and Investment Committee		IP and Commercialisation Committee		Research Advisory Committee	
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)
Alastair Lucas AM	5	5	8	6	3	3	3	3	1	0	–	–
Brendan Crabb	5	5	–	–	3	3	3	3	1	0	1	1
Robin Bishop	3	3	–	–	–	–	1	1	–	–	–	–
Peter Coleman	5	3	–	–	–	–	–	–	1	1	1	1
Ross Cooke	5	5	8	8	–	–	–	–	–	–	–	–
John Dowling	5	5	–	–	–	–	–	–	–	–	1	1
Barry Jones AO	2	2	–	–	–	–	–	–	–	–	1	1
Henry Lanzer	5	3	–	–	–	–	3	2	–	–	–	–
Robert Milne	5	5	–	–	–	–	3	2	1	1	–	–
Christina Mitchell	5	3	–	–	–	–	–	–	–	–	–	–
Mary Padbury	5	2	–	–	–	–	–	–	1	0	–	–
Phillipa Pattison	5	4	–	–	–	–	–	–	–	–	–	–
Natasha Stott Despoja AM	5	4	–	–	3	3	–	–	–	–	–	–
Michael Toole AM	5	4	–	–	–	–	–	–	–	–	–	–
Mary Waldron	5	2	8	7	–	–	–	–	–	–	–	–

(A) Meetings held – reflects the number of meetings held during the time the Director held office during the year.

(B) Meetings attended.

### Principal Activities

The principal activities of the Burnet Institute during the financial year were medical research and associated public health activities directed at the diagnosis, treatment and control of infectious diseases and cancer in humans. The Burnet Institute is a not-for-profit organisation combining programs of clinical and laboratory research in virology and immunology with epidemiology, social research and public health programs. The Burnet Institute has been endorsed as a charitable institution by the Australian Taxation Office. As a charitable not-for-profit organisation, the Burnet Institute does not pay dividends and all non-executive directors serve in an honorary capacity. There was no significant change in the nature of this activity during the year.

### Operating Results

The Burnet Institute recorded a deficit in the current year of \$1,900,168 (2011: deficit \$4,770,321). Depreciation and amortisation amounted to \$2,342,398 (2011: \$2,364,558). Income tax is not applicable.

### Dividends

The Burnet Institute is limited by guarantee, has no share capital and declares no dividends.

### Objectives

The principal objective of the Institute remains improving health of vulnerable communities via research, public health and education. Progress against this objective is reported on at each Board meeting (and via other reporting mechanisms) using a variety of key indicators including the number of research grants awarded, research or project contracts won, fellowships awarded, publications, league table for Operational Infrastructure Support (Victorian State Government) and the progress reports and the achievements made on ongoing grants and projects.

### State of Affairs

The Burnet Institute had an active and successful year in its core activities of laboratory and field research and delivery of its public health programs

in the areas of infectious diseases and related health disciplines. A number of key output indicators, especially the high number of peer-reviewed publications and the awarding of new competitive grants, demonstrate the quality and impact of the Institute's work.

While the Institute recorded a financial deficit for 2012, it was almost exclusively due to non-operational factors such as organisational restructuring costs, the revaluation of derivatives and the depreciation/amortisation of property assets.

The Institute implemented a number of decisions made in late 2011 and in 2012 to reduce services and expenditure in light of an expected reduced income level in 2012 and in particular the sector's limited capacity to recoup funding for indirect costs so vital in supporting our research and public health activities. In addition a better than forecast result from the Institute's international operations was achieved, reflecting both a refined cost structure and a more focused business development effort.

In the opinion of the Directors there were no other significant changes in the state of affairs of the Burnet Institute that occurred during the financial year.

### Events Subsequent to Balance Date

There has not arisen in the interval between the end of the financial year and the date of this Report any item, transaction or event of a material and unusual nature likely, in the opinion of the Directors, to affect significantly the operations of the Burnet Institute, the results of those operations, or the state of the Burnet Institute in future financial years.

### Likely Developments

The Institute continues to explore strategic and operational opportunities that will address the inherent challenge of generating the appropriate levels of indirect funding to support our core medical research and public health grants.

### Directors' Benefits

Since the end of the previous financial year no Director of the Burnet Institute has received or become entitled to receive any benefit (other than a benefit included in the aggregate amount of remuneration received or due and receivable in their capacity as full time employees as shown in the accounts) because of a contract made by the Burnet Institute, its controlled entities or a related body corporate with the Director or with a firm of which the Director is a member, or with an entity in which the Director has a substantial interest.

### Indemnification and Insurance of Officers

The Directors have not included details of the nature of the liabilities covered or the amount of the premiums paid in respect of the Directors' and Officers' liability and legal expenses insurance other than to confirm that a policy is in force.

### Rounding Off

The Institute is of a kind referred to in ASIC Class Order 98/100 dated 10 July 1998 and in accordance with that Class Order, amounts in the Financial Report and Directors' Report have been rounded off to the nearest thousand dollars, unless otherwise stated.

### Lead Auditor's Independence Declaration under Section 307C of the Corporations Act 2001

The lead auditor's independence declaration is set out on page 26 and forms part of the Directors' Report for the year ended 31 December 2012.

Dated at Melbourne this 23rd day of April 2013.

*Signed in accordance with a resolution of the Directors.*



**Alastair Lucas AM** — Director



**Ross Cooke** — Director

## Lead Auditor's Independence Declaration Under Section 307C of the Corporations Act 2001



### *Lead Auditor's Independence Declaration under Section 307C of the Corporations Act 2001*

To: the directors of the Macfarlane Burnet Institute for Medical Research and Public Health Ltd

I declare that, to the best of my knowledge and belief, in relation to the audit for the financial year ended 31 December 2012 there have been:

- (i) no contraventions of the auditor independence requirements as set out in the Corporations Act 2001 in relation to the audit; and
- (ii) no contraventions of any applicable code of professional conduct in relation to the audit.

A handwritten signature in black ink, appearing to read 'Allison Kitchen', written over a printed KPMG logo.

Allison Kitchen  
*Partner*

Melbourne

23 April 2013

KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Liability limited by a scheme approved under Professional Standards Legislation.

## Statement of Comprehensive Income

(FOR THE YEAR ENDED 31 DECEMBER)

	NOTE	2012 \$'000	2011 \$'000
Operating revenue	3	38,857	42,256
Other income	3	4,036	4,374
Research and development laboratory consumables expenses		(3,309)	(3,562)
Personnel expenses	4	(20,524)	(22,505)
Depreciation and amortisation expenses		(1,072)	(1,094)
Depreciation and amortisation expenses – property management		(1,270)	(1,270)
Property management operating costs		(187)	(201)
Research and development non-laboratory expenses		(12,594)	(14,056)
Other expenses from ordinary activities	5	(3,161)	(4,547)
Results from operating activities		776	(605)
Financial income	7	574	732
Financial expenses	7	(3,250)	(4,897)
Net finance costs		(2,676)	(4,165)
<b>Profit/(Loss) Before Income Tax</b>		<b>(1,900)</b>	<b>(4,770)</b>
Income tax expense		–	–
<b>Profit/(Loss) After Income Tax</b>		<b>(1,900)</b>	<b>(4,770)</b>
<b>Other comprehensive income</b>			
Other comprehensive income for the period net of income tax		–	–
<b>Total Comprehensive Income for the Period</b>		<b>(1,900)</b>	<b>(4,770)</b>

The Statement of Comprehensive Income is to be read in conjunction with the Notes to the Financial Statements set out on pages 31 to 46.

## Statement of Financial Position

(AS AT 31 DECEMBER)

	NOTE	2012 \$'000	2011 \$'000
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	20(i)	11,888	17,842
Trade and other receivables	8	4,776	2,189
Inventories		33	61
Other Assets	10	449	243
<b>TOTAL CURRENT ASSETS</b>		17,146	20,335
<b>NON-CURRENT ASSETS</b>			
Trade and other receivables	8	1,282	941
Investments	9	2,472	2,484
Property, plant and equipment	11	67,476	68,836
<b>TOTAL NON-CURRENT ASSETS</b>		71,230	72,261
<b>TOTAL ASSETS</b>		88,376	92,596
<b>CURRENT LIABILITIES</b>			
Trade and other payables	12	3,704	3,883
Borrowings	13	300	318
Current tax liabilities	14	110	100
Provisions	15	2,480	3,012
Deferred income	16	9,654	10,956
Derivatives	17	165	–
<b>TOTAL CURRENT LIABILITIES</b>		16,413	18,269
<b>NON-CURRENT LIABILITIES</b>			
Borrowings	13	34,500	34,800
Provisions	15	1,312	1,394
Deferred income	16	11,661	12,490
Derivatives	17	3,563	2,816
<b>TOTAL NON-CURRENT LIABILITIES</b>		51,036	51,500
<b>TOTAL LIABILITIES</b>		67,449	69,769
<b>NET ASSETS</b>		<b>20,927</b>	<b>22,827</b>
<b>EQUITY</b>			
Retained earnings		3,119	4,653
Building reserve		17,808	18,174
Fair value reserve		–	–
<b>TOTAL EQUITY</b>		<b>20,927</b>	<b>22,827</b>

The Statement of Financial Position is to be read in conjunction with the Notes to the Financial Statements set out on pages 31 to 46.

The Macfarlane Burnet Institute for Medical Research and Public Health Limited is a signatory to the Australian Council for International Development (ACFID) Code of Conduct. The Code requires members to meet high standards of corporate governance, public accountability and financial management. In accordance with the ACFID code of conduct, the Institute had nil balances in the following categories as at the end of the financial year which are required to be disclosed separately:

- Current Assets: assets held for sale, and other financial assets;
- Non-Current Assets: other financial assets, investment property, intangibles, and other non-current assets;
- Current Liabilities: other financial liabilities and other current liabilities;
- Non-Current Liabilities: trade and other payables, other financial liabilities and other non-current liabilities.

## Statement of Changes in Equity

(AS AT 31 DECEMBER)

	Retained Profits \$'000	Building Reserve \$'000	Fair Value Reserve \$'000	Total \$'000
Balance at 1 January 2011	7,741	19,856	–	27,597
Total other comprehensive income for the period	–	–	–	–
Operating profit/(loss)	(3,088)	(1,682)	–	(4,770)
Total comprehensive income for the period	(3,088)	(1,682)	–	(4,770)
<b>Balance at 31 December 2011</b>	<b>4,653</b>	<b>18,174</b>	<b>–</b>	<b>22,827</b>
Total other comprehensive income for the period	–	–	–	–
Operating profit/(loss)	(1,534)	(366)	–	(1,900)
Total comprehensive income for the period	(1,534)	(366)	–	(1,900)
<b>Balance at 31 December 2012</b>	<b>3,119</b>	<b>17,808</b>	<b>–</b>	<b>20,927</b>

*The Statement of Changes in Equity is to be read in conjunction with the Notes to the Financial Statements set out on pages 31 to 46.*

## Statement of Cash Flows

(FOR THE YEAR ENDED 31 DECEMBER)

	NOTE	2012 \$'000	2011 \$'000
<b>Cash Flows from Operating Activities</b>			
Cash receipts in the course of operations		42,550	51,949
Cash payments in the course of operations		(45,444)	(47,450)
Cash generated from operating activities		(2,894)	4,499
Interest received		574	732
Interest paid		(2,338)	(2,473)
Net cash provided by /(used in) operating activities	20(ii)	(4,658)	2,758
<b>Cash Flows from Investing Activities</b>			
Payments for property, plant and equipment		(1,096)	(926)
Proceeds from disposal of property, plant and equipment		118	128
Distribution received on winding up of investment		–	528
Net cash provided by /(used in) investing activities		(978)	(270)
<b>Cash Flows from Financing Activities</b>			
Payment of finance lease liabilities		(18)	(70)
Repayment of borrowings		(300)	(150)
Net cash provided by /(used in) financing activities		(318)	(220)
Net increase /(decrease) in cash held		(5,954)	2,268
Cash at the beginning of the financial year		17,842	15,574
<b>Cash at the End of the Financial Year</b>	20(i)	<b>11,888</b>	<b>17,842</b>

*The Statement of Cash Flows is to be read in conjunction with the Notes to the Financial Statements set out on pages 31 to 46.*



# Notes to the Financial Statements

(FOR THE YEAR ENDED 31 DECEMBER)

## 1. Reporting Entity

The Macfarlane Burnet Institute for Medical Research and Public Health Limited (Burnet Institute) is a company limited by guarantee and is domiciled in Australia. The address of the Burnet Institute's registered office is 85 Commercial Road, Melbourne, Victoria, Australia 3004. The Burnet Institute is primarily involved in medical research and associated public health activities directed at the diagnosis, treatment and control of infectious diseases and cancer in humans.

### 1.1 Basis of Preparation

#### (i) Statement of compliance

The financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards (AASBs) adopted by the Australian Accounting Standards Board (AASB) and the Corporations Act 2001. The financial statements were authorised for issue by the Board of Directors on 23 April 2013.

#### (ii) Basis of measurement

The financial statements have been prepared on the historical cost basis except for the following material items in the Statement of Financial Position:

- derivative financial instruments are measured at fair value;
- income securities are measured at fair value.

The method used to measure fair values is discussed further in Note 1.2.

During the preparation of the Financial Report the Directors made an assessment of the ability of the Burnet Institute to continue as a going concern, which included an assessment of the continuity of business operations, realisation of assets and settlement of liabilities in the normal course of business. The Directors also assessed the loan interest and principal repayments, swap and

cap arrangements, and rental income over the next five to ten years and the obligations associated with the various loan covenants. The Directors also considered the likelihood of financial support and funding from the State and Federal Governments on which the Burnet Institute is dependent for its ongoing operations. As a result of their review they are of the opinion that the going concern basis of accounting is appropriate in the preparation of the Financial Report.

#### (iii) Functional and presentation currency

These financial statements are presented in Australian dollars, which is the functional currency of the Burnet Institute. The Burnet Institute is of a kind referred to in ASIC Class Order 98/100 dated 10 July 1998 and in accordance with that Class Order, all financial information presented in Australian dollars has been rounded to the nearest thousand unless otherwise stated.

#### (iv) Use of estimates and judgements

The preparation of the financial statements in conformity with AASBs requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in the following Notes:

- Note 1.11 – Impairment
- Note 15 – Provisions

#### (v) Changes in accounting policies

The accounting policies applied by the Burnet Institute in this report are the same as those applied in the Financial Report for the year ended 31 December 2011. There were no additional standards applicable to the Burnet Institute which have a material effect from 1 January 2012.

## 1.2 Financial Instruments

### (i) Non-derivative financial assets

The Burnet Institute initially recognises loans and receivables on the date that they are originated. All other financial assets (including assets designated at fair value through profit or loss) are recognised initially on the trade date at which the Burnet Institute becomes a party to the contractual provisions of the instrument.

The Burnet Institute derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Burnet Institute is recognised as a separate asset or liability.

Financial assets and liabilities are offset and the net amount presented in the Statement of Financial Position when, and only when, the Burnet Institute has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

The Burnet Institute has the following non-derivative financial assets: financial assets at fair value through profit or loss and loans and receivables.

## Notes to the Financial Statements

(FOR THE YEAR ENDED 31 DECEMBER)

### *Financial assets at fair value through profit or loss*

A financial asset is classified as at fair value through profit or loss if it is classified as held for trading or is designated as such upon initial recognition. Financial assets are designated at fair value through profit or loss if the Burnet Institute manages such investments and makes purchase and sale decisions based on their fair values in accordance with the Burnet Institute's documented risk management or investment strategy. Attributable transaction costs are recognised in profit or loss when incurred. Financial assets at fair value through profit or loss are measured at fair value, and changes therein are recognised in profit or loss.

### *Loans and receivables*

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are recognised initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition loans and receivables are measured at amortised cost using the effective interest method, less any impairment losses. Loans and receivables comprise cash and cash equivalents and trade and other receivables.

### *Cash and cash equivalents*

Cash and cash equivalents comprise cash balances and at call deposits with original maturities of three months or less.

### **(ii) Non-derivative financial liabilities**

The Burnet Institute initially recognises financial liabilities on the trade date, which is the date that the Burnet Institute becomes a party to the contractual provisions of the instrument. The Burnet Institute derecognises a financial liability when its contractual obligations are discharged or cancelled or expire.

Financial assets and liabilities are offset and the net amount presented in the Statement of Financial Position when, and only when, the Burnet Institute has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

The Burnet Institute classifies non-derivative financial liabilities into the other financial liabilities category. Such financial liabilities are recognised initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, these financial liabilities are measured at amortised cost using the effective interest rate method.

Financial liabilities comprise loans and borrowings and trade and other payables.

### **(iii) Derivative financial instruments**

The Institute has chosen to hedge its interest rate risk exposure on the ACS2 loan facility by a cap and swap transactions (refer Note 17). These are the only derivative financial instruments that the Institute is involved in and are considered by the Directors to be a prudent means to manage risk associated with fluctuations in interest rates.

The derivative financial instruments do not qualify for hedge accounting. Derivatives are recognised initially at fair value, attributable transaction costs are recognised in the Statement of Comprehensive Income when incurred. Subsequent to initial recognition, derivatives are measured at fair value and changes are recognised immediately in the Statement of Comprehensive Income. The fair value of interest rate swaps and caps is based on lender quotes.

### **1.3 Inventories**

Inventories are comprised of laboratory materials and are valued at the lower-of-cost and net realisable value. The cost of inventories is based on the first-in first-out principle, and includes expenditure incurred in acquiring the inventories and other costs incurred in bringing them to their existing location and condition.

### **1.4 Property, Plant and Equipment**

#### **(i) Owned assets**

Items of property, plant and equipment are measured at cost less accumulated depreciation (see below) and accumulated impairment losses (see accounting policy Note 1.11). Cost includes expenditure that is directly attributable to the acquisition of the asset. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment. Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment.

#### **(ii) Leased assets**

Leases in terms of which the Burnet Institute assumes substantially all the risks and rewards of ownership are classified as finance leases. The owner-occupied property acquired by way of finance lease is stated at an amount equal to the lower of its fair value and the present value of the minimum lease payments at inception of the lease, less accumulated depreciation (see below) and impairment losses (see accounting policy Note 1.11). The cost of self-constructed assets under lease arrangements includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located, and capitalised borrowing costs (see below).

Lease payments are accounted for as described in accounting policy Note 1.8(ii).

Other leases are operating leases and are not recognised in the Statement of Financial Position.

### (iii) Subsequent costs

The Burnet Institute recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefits embodied within the item will flow to the Burnet Institute and the cost of the item can be measured reliably. All other costs are recognised in the Statement of Comprehensive Income as an expense when incurred.

### (iv) Depreciation

Depreciation is based on the cost of an asset less its residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of that asset, that component is depreciated separately.

Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Burnet Institute will obtain ownership by the end of the lease term. The depreciation rates used for the current and comparative years are as follows:

Buildings	2% to 2.5%
Plant and equipment	10% to 20%
Computer equipment	33.3%
Motor vehicles	20%

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

## 1.5 Employee Benefits

### (i) Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognised as an employee benefits expense in the Statement of Comprehensive Income in the periods during which services are rendered by employees.

### (ii) Long-term service benefits

The Burnet Institute's net obligation in respect of long-term service benefits, other than defined benefit plans, is the amount of future benefit that employees have earned in return for their service in the current and prior periods. The obligation is calculated using expected future increases in wage and salary rates including related on-costs and expected settlement dates, and is discounted using the rates attached to the Commonwealth Government bonds at the Statement of Financial Position date which have maturity dates approximating to the terms of the Burnet Institute's obligations.

### (iii) Wages, salaries, annual leave, sick leave and non-monetary benefits

Liabilities for employee benefits for wages, salaries, annual leave and sick leave that are expected to be settled within 12 months of the reporting date represent present obligations resulting from employees' services provided to reporting date, are calculated at undiscounted amounts based on remuneration wage and salary rates that the Burnet Institute expects to pay as at reporting date including related on-costs, such as workers compensation insurance.

Non-accumulating non-monetary benefits, such as medical care, housing, cars and free or subsidised goods and services, are expensed based on the net marginal cost to the Burnet Institute as the benefits are taken by the employees.

Termination benefits are recognised as an expense when the Burnet Institute is demonstrably committed, without realistic possibility of withdrawal, to a formal detailed plan to either terminate an employee before the normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy. Termination benefits for voluntary redundancies are recognised as an expense if the Burnet Institute has made an offer encouraging voluntary redundancy, it is probable that the offer will be accepted, and the number of acceptances can be estimated reliably.

## 1.6 Revenue Recognition

### (i) Contract R&D revenue/consultancies

R&D contract income is recognised in the Statement of Comprehensive Income to the extent that R&D expenditure to which it relates has been incurred. Until this time, funds drawn down in accordance with the relevant R&D funding agreement are recognised in the Statement of Financial Position as deferred income.

### (ii) Grant income

#### *Reciprocal grants*

Grants received on the condition that specified services be delivered, or conditions fulfilled, are considered reciprocal. Such grants are initially recognised in the Statement of Financial Position as deferred income and revenue is recognised as services are performed or conditions are fulfilled.

#### *Non-reciprocal grants*

Where a grant is received where there is no performance obligation or return obligation, revenue is recognised when the grant is received or receivable.

### (iii) Government contributions towards capital works (capital grants)

Government contributions to assist in the acquisition or construction of non-current assets are recognised as an asset and revenue when all conditions of the grants have been satisfied.

## Notes to the Financial Statements

(FOR THE YEAR ENDED 31 DECEMBER)

### (iv) Donations

Donations are recognised as income in the Statement of Comprehensive Income, as and when received, unless they are for specific purposes in which case they will be recognised when the conditions are fulfilled.

### (v) Interest and other income

Interest and other income is recognised in the Statement of Comprehensive Income as it accrues, taking into account the effective yield on the financial asset.

### (vi) Asset sales

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment and are recognised as other income or other expenses in the Statement of Comprehensive Income.

### (vii) Rental income

Rental income is recognised as income in the Statement of Comprehensive Income on a straight-line basis over the term of the lease.

## 1.7 Finance Income and Expenses

Finance income comprises interest income of funds invested and gains on revaluation of investments. Interest income is recognised as it accrues in the Statement of Comprehensive Income, using the effective interest method.

Finance expenses comprise interest expense on borrowings and changes in the fair value of derivative financial instruments. All interest expense on borrowings is recognised in the Statement of Comprehensive Income, using the effective interest method.

## 1.8 Expenses

### (i) Operating lease payments

Payments made under operating leases are recognised in the Statement of Comprehensive Income on a

straight-line basis over the term of the lease. Lease incentives received are recognised in the Statement of Comprehensive Income as an integral part of the total lease expense and spread over the lease term.

### (ii) Finance lease payments

Minimum lease payments made under finance leases are apportioned between the finance charge and the reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

### (iii) Borrowing costs

Borrowing costs are expensed as incurred unless they relate to qualifying assets. Qualifying assets are assets which take more than 12 months to get ready for their intended use or sale. In these circumstances, borrowing costs are capitalised to the cost of the assets. Where funds are borrowed specifically for the acquisition, construction or production of a qualifying asset, the amount of borrowing costs capitalised are those incurred in relation to those borrowings, net of any interest earned on those borrowings. Where funds are borrowed for the acquisition of a qualifying asset, borrowing costs are capitalised using a weighted average.

## 1.9 Income Tax

The Burnet Institute is exempt from paying income tax under Section 50-5 of the Income Tax Assessment Act, 1997.

## 1.10 Goods and Services Tax

Revenue, expenses and assets are recognised net of the amount of goods and services tax (GST), except where the amount of GST incurred is not recoverable from the taxation authority. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as

part of the expense. Receivables and payables are stated with the amount of GST included. The net amount of GST recoverable from, or payable to, the Australian Taxation Office (ATO) is included as a current asset or liability in the Statement of Financial Position. Cash flows are included in the Statement of Cash Flows on a gross basis. The GST components of cash flows arising from investing and financing activities which are recoverable from, or payable to, the ATO are classified as operating cash flows.

## 1.11 Impairment

### (i) Non-derivative financial assets

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably.

Objective evidence that financial assets are impaired can include default or delinquency by a debtor, restructuring of an amount due to the Burnet Institute on terms that the Burnet Institute would not consider otherwise, indications that a debtor or issuer will enter bankruptcy and adverse changes in the payment status of borrowers or issuers in the Burnet Institute.

The Burnet Institute considers evidence of impairment for receivables at both a specific asset and collective level. All individually significant receivables are assessed for specific impairment. All individually significant receivables found not to be specifically impaired are then collectively assessed for any impairment that has been incurred but not yet identified. Receivables that are not individually significant are collectively assessed

for any impairment by grouping together receivables with similar risk characteristics.

In assessing collective impairment the Burnet Institute uses historical trends of the probability of default, timing of recoveries and the amount of loss incurred, adjusted for management's judgement as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognised in Statement of Comprehensive Income and reflect in an allowance account against receivables. Interest on the impaired asset continues to be recognised. When a subsequent event (e.g. repayment by a debtor) causes the amount of impairment loss to decrease, the decrease in impairment loss is reversed in the Statement of Comprehensive Income.

#### **(ii) Non-financial assets**

The carrying amounts of non-financial assets other than inventories are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset or its related cash-generating unit (CGU) exceeds its estimated recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current

market assessments of the time value of money and the risks specific to the asset or CGU. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generate cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGU.

Impairment losses are recognised in Statement of Comprehensive Income. Impairment losses recognised in respect of CGUs are recognised as a reduction in the carrying amounts of the assets in the CGU on a pro-rata basis.

Impairment losses recognised in prior periods are assessed at each reporting date for indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Under AASB 136, the Institute can elect to have the carrying amount of non-current assets' impairment reviewed at each reporting date using a depreciated replacement cost valuation. If any such indication exists, the asset will be tested for impairment by comparing its recoverable amount to its carrying amount. Reversal of a previously recorded impairment will be recorded in the Statement of Comprehensive Income where appropriate. In respect of not-for-profit entities, where the future economic benefits of an asset are not primarily dependent on the asset's ability to generate net cash inflows and where the entity would, if deprived of the asset, replace its remaining future economic benefits, value in use shall be determined as the depreciated replacement cost of the asset.

### **1.12 Comparatives**

Where applicable, comparatives have been adjusted to disclose them on the same basis as current period figures.

### **1.13 Segment Reporting**

The Institute determines and presents operating segments based on the information that is internally presented to the CEO, who is the Institute's chief operating decision maker. An operating segment is a component of the Institute that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Institute's other components. All operating segments' operating results are regularly reviewed by the Institute's CEO to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available. Segment results that are reported to the CEO include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Segment capital expenditure is the total cost incurred during the period to acquire property, plant and equipment.

## **2. New Standards and Interpretations Not Yet Adopted**

There are no standards, amendments to standards and interpretations which have been identified as those which may impact the entity in the period of initial application.

## Notes to the Financial Statements

(FOR THE YEAR ENDED 31 DECEMBER)

	2012 \$'000	2011 \$'000
<b>3. Revenue</b>		
Grants – operating	16,996	16,930
Grants – Victorian Government operational infrastructure support	3,776	4,174
Donations	2,548	4,781
Contract R&D consultancies	15,031	15,855
Other income – miscellaneous	506	516
Operating Revenue	38,857	42,256
Rental income	3,207	3,730
Prepaid rent amortisation	829	644
Other Income	4,036	4,374
<b>4. Personnel Expenses</b>		
Salary and wages	20,061	21,197
Employee entitlements	463	1,308
	20,524	22,505
<b>5. Other Expenses</b>		
Net loss on disposal of property, plant and equipment	12	22
Operating lease rental expenses	81	217
Facilities and laboratory support	1,639	2,026
Other administration	1,429	2,282
	3,161	4,547
<b>6. Auditors' Remuneration</b>		
<b>Audit Service</b>		
KPMG Australia:	\$	\$
Audit and review of financial reports	48,000	48,000
Other regulatory audit services	12,000	26,223
	60,000	74,223

<b>7. Net Financing Costs</b>	<b>NOTE</b>	<b>2012 \$'000</b>	<b>2011 \$'000</b>
Interest income		574	732
Financial Income		574	732
Decrease in fair value of derivatives		(912)	(2,424)
Interest expense		(2,338)	(2,473)
Financial Expenses		(3,250)	(4,897)
Net Financing Costs		(2,676)	(4,165)

### 8. Trade and Other Receivables

<b>Current</b>			
Funds on deposit		2,000	–
Trade receivables		2,776	2,189
Less: allowance for doubtful debts		–	–
	27	4,776	2,189
<b>Non-Current</b>			
Lease receivables	27	1,282	941

### 9. Investments

<b>Non-Current Investments</b>			
• Income Securities of National Australia Bank and Macquarie Bank, fair value as at 31 December		207	219
• Investment in AMREP AS Pty Ltd – animal facility 306 fully paid shares at cost		2,265	2,265
• Fully paid ordinary shares in Ascend Biopharmaceuticals Pty Ltd valued at cost		–	–
	27	2,472	2,484
<b>Reconciliation:</b>			
Total investments opening balance		2,484	3,020
Write up/(down) of income securities to fair value		(12)	(21)
Increase in value of investment in SZCF to fair value		–	13
Transfer of assets of SZCF to the Institute		–	(528)
Total Investments Closing Balance		2,472	2,484

As at 31 December 2012, the Institute controlled 12.3% (2011:17.1%) of Ascend Biopharmaceuticals Pty Ltd (formerly IgAvax Pty Ltd). The amount of investment in this company was \$nil and the contribution to the surplus of the Institute was \$nil.

As at 31 December 2012, the Institute controlled nil% (2011: 25.7%) of 4G Vaccines Pty Ltd. The amount of investment in this company was \$nil and the contribution to the surplus of the Institute was \$nil. During the year shares in 4G Vaccines Pty Ltd were exchanged for shares in Ascend Biopharmaceuticals Pty Ltd on a one-for-one basis.

### 10. Other Assets

Prepayments		449	243
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## Notes to the Financial Statements

(FOR THE YEAR ENDED 31 DECEMBER)

11. Property, Plant and Equipment	Leasehold buildings \$'000	Plant and equipment \$'000	Total \$'000
<b>Cost</b>			
Balance at 1 January 2011	71,302	9,655	80,957
Acquisitions	34	892	926
Disposals	–	(679)	(679)
Balance at 31 December 2011	71,336	9,868	81,204
Balance at 1 January 2012	71,336	9,868	81,204
Acquisitions	552	544	1,096
Disposals	–	(552)	(552)
Balance at 31 December 2012	71,888	9,860	81,748
<b>Depreciation</b>			
Balance at 1 January 2011	(3,839)	(6,720)	(10,559)
Depreciation charge for the year	(1,699)	(666)	(2,365)
Disposals	–	556	556
Balance at 31 December 2011	(5,538)	(6,830)	(12,368)
Balance at 1 January 2012	(5,538)	(6,830)	(12,368)
Depreciation charge for the year	(1,707)	(635)	(2,342)
Disposals	–	438	438
Balance at 31 December 2012	(7,245)	(7,027)	(14,272)
<b>Carrying amounts</b>			
At 1 January 2011	67,464	2,934	70,398
At 31 December 2011	65,798	3,038	68,836
At 1 January 2012	65,798	3,038	68,836
At 31 December 2012	64,643	2,833	67,476

The existing leasehold within the Burnet Tower is subject to a 50 year lease ending in 2060. A peppercorn rent is payable each year. The Alfred Centre Stage 2 (ACS2) leasehold building floors are subject to a 40 year lease for levels 4 to 6 (ending 2050) and a 50 year lease for level 7 (ending 2060). A peppercorn rent is payable each year.

The Burnet Institute completed the construction of the ACS2 project which comprises 14,490 square metres of net lettable area contained in levels 4 to 7 of the ACS2 project. The carrying value of the Burnet Institute's interest in the ACS2 project is based on the March 2010 valuation of the future cash flows, discounted to their present value. The final carrying value was transferred to fixed assets as at 4 March 2010, the date of practical completion.



<b>12. Trade and Other Payables</b>	<b>2012</b>	<b>2011</b>
	<b>\$'000</b>	<b>\$'000</b>
Trade creditors	743	989
Other payables	2,961	2,894
	3,704	3,883

### 13. Borrowings

This note provides information about the contractual terms of the Burnet Institute's interest-bearing loans and borrowings which are measured at amortised cost.

#### Current

Finance lease liabilities	–	18
Current portion of secured bank loans (ACS2)	300	300
	300	318

#### Non-current

Non-current portion of secured bank loans (ACS2)	34,500	34,800
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#### Finance lease liabilities

Finance lease liabilities are payable as follows:

<b>31 December 2012 (\$'000)</b>	<b>Minimum Lease Payments</b>	<b>Interest</b>	<b>Principal</b>
	–	–	–
<b>31 December 2011 (\$'000)</b>	<b>Minimum Lease Payments</b>	<b>Interest</b>	<b>Principal</b>
Less than one year	19	1	18
Between one and five years	–	–	–
More than five years	–	–	–
	19	1	18

#### Financing arrangements – Bank loans

Interest rate on finance lease liabilities was nil% (2011: 7.40%). The lease liability was paid in full in March 2012. During 2008, the Institute entered into an arrangement with its bank to borrow \$35.25 million at the prevailing 90-day BBSW plus 0.85 per cent line fee. This bank loan is secured by a fixed and floating charge over all of the Burnet Institute's assets. The loan is for a period of ten years effective May 2011. Refer Note 17 for details of the swap and cap associated with this loan. The Burnet Institute is compliant with all bank covenants. One of the bank covenants requires the Institute to maintain an investment balance of at least \$5 million, which as at 31 December 2012 and 31 December 2011 is all invested in short-term deposits.

## Notes to the Financial Statements

(FOR THE YEAR ENDED 31 DECEMBER)

14. Current Tax Liabilities	NOTE	2012 \$'000	2011 \$'000
FBT Provision	27	110	100

There are no income tax liabilities as the Institute is a tax exempt entity.

### 15. Provisions

#### Current

Liability for long-service leave		1,530	1,899
Liability for annual leave		950	1,113
		2,480	3,012

#### Non-current

Liability for long-service leave		1,312	1,394
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The present values of employee entitlements not expected to be settled within twelve months of balance date have been calculated using the following weighted averages:

Assumed rate of increase in wage and salary rates	3.1%	3.1%
Average discount rate	3.1%	3.4%
Settlement term (years)	9	9

#### Number of employees

Number of employees at year end (FTE)	157	194
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#### Superannuation plans

The Institute contributes to various accumulation style superannuation plans. Employer contributions are at the rate required to satisfy its obligations under the Superannuation Guarantee Legislation, currently 9% of salary. The Institute may make additional contributions by agreement with employees.

16. Deferred Income	2012 \$'000	2011 \$'000
<b>Current</b>		
Other grants	7,773	8,861
Deferred Donations	1,052	1,266
Rentals received in advance	829	829
	9,654	10,956

General research operating grants are deferred where there is an obligation to repay amounts which are not spent in accordance with the conditions specified.

#### Non-current

Rentals received in advance	11,661	12,490
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The rentals received in advance relate to: The Baker IDI Heart and Diabetes Institute's contribution to the ACS2 project which covers a 21 year lease of part of level 4; and to Monash University in respect of space given up in the Burnet Tower in exchange for 13 years rent free space in the ACS2 project.

<b>17. Derivatives</b>	<b>2012</b>	<b>2011</b>
	<b>\$'000</b>	<b>\$'000</b>
<b>Current</b>		
Interest rate swap	165	–
<b>Non-current</b>		
Interest rate swap	3,172	2,426
Interest rate cap	391	390
	3,563	2,816

The Institute entered into an interest rate swap transaction in 2008 whereby \$6.8 million of the secured bank loan to finance ACS2 is fixed at an interest rate of 6.07% (before line fees) until 31 December 2013. The Institute also entered into an interest rate cap transaction whereby \$27.2 million of the secured bank loan to finance ACS2 is subject to a capped BBSW rate of 7.5% per annum for a fixed rate of 0.58% until 31 December 2015. In 2010, the Institute entered into another interest rate swap transaction whereby \$20.4 million of the secured bank loan to finance ACS2 is fixed at an interest rate of 6.025% (before line fees) until 30 September 2020. The cap and swap transactions were taken out to provide long-term protection from exposure to rising interest rates.

## 18. Capital and Reserves

### Fair value reserve

The fair value reserve includes the cumulative net change in the fair value of available-for-sale investments until the investments are derecognised or impaired.

### Building reserve

The building reserve relates to building and relocation grants received and expenses incurred in connection with the premises occupied by the Institute. Where a building is permanently vacated the related reserve will be derecognised.

## 19. Operating Leases

### Leases as lessee

Non-cancellable operating lease rentals payable:

Less than one year	74	74
Between one and five years	62	135
More than five years	–	–
	136	209

### Leases as lessor

The Institute leases out space that it controls to third parties.

Non-cancellable operating lease rentals receivable:

Less than one year	2,953	2,852
Between one and five years	12,687	12,556
More than five years	50,692	53,776
	66,332	69,184

During the year \$4.0 million was recognised as rental income in the profit or loss (2011: \$4.4 million).

## Notes to the Financial Statements

(FOR THE YEAR ENDED 31 DECEMBER)

### 20. Notes to the Statement of Cash Flows

#### (i) Reconciliation of cash

For the purposes of the Statement of Cash Flows, cash includes cash on hand and at bank and short-term deposits at call, net of outstanding overdrafts. Cash as at the end of the financial year as shown in the Statement of Cash Flows is reconciled to the related items in the Statement of Financial Position as follows:

	NOTE	2012 \$'000	2011 \$'000
Cash	27	11,888	17,842

#### (ii) Reconciliation of operating profit/(loss) after income tax to net cash from operating activities:

##### Cash flows from operating activities

(Loss)/Profit for the period (1,900) (4,770)

##### Adjustments for:

Depreciation	11	2,342	2,365
Amortisation of rent in advance		(829)	(644)
Lease revenue not billed		(341)	(941)
Change in fair value of derivatives	7	912	2,424
Loss on revaluation of investments	9	12	8
Amounts set aside in provisions		(614)	400
Gain on disposal of property, plant and equipment		(4)	(4)

**Operating profit before changes in working capital and provisions (422) (1,162)**

(Increase)/decrease in trade and other receivables		(2,587)	4,175
(Increase)/decrease in inventories		28	42
(Increase)/decrease in other assets		(206)	(140)
(Decrease)/increase in grant deferred income		(1,302)	8
(Decrease)/increase in trade and other payables		(179)	(111)
(Decrease)/increase in current tax liabilities		10	(54)

**Net Cash from Operating Activities (4,658) 2,758**

### 21. Remuneration of Key Management Personnel

	2012 \$	2011 \$
Short-term employee benefits	1,397,000	1,426,000
Termination benefits	–	–
	1,397,000	1,426,000

### 22. Particulars in Relation to Controlled Entities

The Burnet Institute has an interest in a number of subsidiary companies which were originally formed to manage R&D projects in partnership with other parties. Other than intellectual property these companies have no material assets or liabilities. As there is no reliable measure of the value of this intellectual property, the carrying value of the investment in the following companies is recorded as \$nil:

## 22. Particulars in Relation to Controlled Entities (Continued)

Entity	Interest Held		Amount of Investment	
	2012 %	2011 %	2012 \$	2011 \$
Macfarlane Burnet Syndicate No. 1 Pty Ltd	100	100	–	–
Macfarlane Burnet Syndicate No. 2 Pty Ltd	100	100	–	–
Hep R&D Pty Ltd	100	100	–	–
Actract Pty Ltd	100	100	–	–

## 23. Related Party Transactions

The Institute purchased services from AMREP AS Pty Ltd during the year on normal commercial terms amounting to \$298,500 (2011: \$356,000). During the year various directors made donations to the institute totalling \$655,100 (2011: \$236,660).

## 24. Subsequent Events

On 19 February 2013 the Burnet Institute acquired all of the issued shares of the dormant company, Burnet Institute (Hong Kong) Limited for consideration of HKD \$100. Other than this event, there has not arisen in the interval between the end of the financial year and the date of this Report any item, transaction or event of a material and unusual nature likely, in the opinion of the Directors, to significantly affect the operations of the Burnet Institute, the results of those operations, or the state of the Burnet Institute in future financial years.

## 25. Segment Information

The Institute has two reportable segments, as described below, which represent the two main focuses of the Institute. For each segment the CEO reviews internal management reports on a quarterly basis. The Institute operates in one geographical area, Australia. The following summary describes the operations in each of the Institute's reportable segments:

- Property Management – Includes rental income and expenses associated with the space leased;
- Medical Research and Public Health – Includes activities around the conduct of medical research and the provision of public health work.

Information regarding the results of each reportable segment are included below. Performance is measured based on segment surplus or deficit in addition to a number of non-financial metrics.

Information about reportable segments (\$'000)	Property Management		Medical Research & Public Health		Total	
	2012	2011	2012	2011	2012	2011
External revenues	4,036	4,374	38,857	42,256	42,893	46,630
Inter-segment revenue	–	–	–	–	–	–
Interest income	306	314	268	418	574	732
Interest expense	(2,338)	(2,473)	–	–	(2,338)	(2,473)
Depreciation and amortisation	(1,270)	(1,270)	(1,072)	(1,095)	(2,342)	(2,365)
Reportable segment profit/(loss)	(366)	(1,682)	(1,534)	(3,088)	(1,900)	(4,770)
Other material non-cash items						
• Fair value adjustment of derivative	(912)	(2,424)	–	–	(912)	(2,424)
Reportable segment assets	55,966	55,987	32,410	36,609	88,376	92,596
Investment in associates	–	–	2,265	2,265	2,265	2,265
Capital expenditure	552	–	544	926	1,096	926
Reportable segment liabilities	51,642	51,743	15,807	18,026	67,449	69,769

## Notes to the Financial Statements

(FOR THE YEAR ENDED 31 DECEMBER)

### 26. Financial Risk Management

#### Overview

The Institute has exposure to the following risks from its use of financial instruments:

- credit risk
- liquidity risk
- market risk
- interest-rate risk

This note presents information about the Institute's exposure to each of the above risks, its objectives, policies and processes for measuring and managing risk, and the management of capital. Further quantitative disclosures are included throughout this Financial Report. The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework and is also responsible for developing and monitoring risk management policies. Risk management policies are established to identify and analyse the risks faced by the Institute, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Institute's activities. The Institute, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations. The Board oversees how management monitors compliance with the Institute's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Institute.

#### Credit risk

Credit risk is the risk of financial loss to the Institute if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from cash on deposit and from the Institute's receivables from customers and investment securities. In relation to credit risk arising from cash on deposit, the Institute only deposits with highly rated counterparties as approved by the Board.

#### Trade and other receivables

The Institute's exposure to credit risk is influenced mainly by the individual characteristics of each debtor. Work is only undertaken for another entity once a contract for services has been signed. The demographics of the Institute's debtor base, including the default risk of the industry and country in which debtors operate, have less of an influence on credit risk. Approximately 54% (2011: 53%) of the Institute's revenue is attributable to transactions with a single debtor. However, geographically there is only concentration of credit risk in Australia. Most of the Institute's debtors have been transacting with the Institute for a number of years, and losses have occurred infrequently. In monitoring debtor credit risk, debtors' ageing profiles are reviewed as well as any existence of previous financial difficulties. The Institute has established an allowance for impairment that represents its estimate of possible losses in respect of trade and other receivables. This allowance is the aggregate of specific possible losses from identified debtors.

#### Investments

The Institute limits its exposure to credit risk by only investing in liquid securities and only with counterparties that have a solid credit rating in consultation with the Board and other advisors. Management does not expect any counterparty to fail to meet its obligations.

#### Liquidity risk

Liquidity risk is the risk that the Institute will not be able to meet its financial obligations as they fall due. The Institute's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Institute's reputation. Management monitors cash flow requirements on a daily basis to optimise its cash return on investments. Typically the Institute ensures that it has sufficient cash on demand to meet expected operational expenses for a

period of 30 days, including the servicing of financial obligations without the need to draw down from its investments; this excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. In addition, the Institute maintains the following line of credit:

- \$250,000 overdraft facility that is secured against the assets of the Institute. Interest would be payable at the base lending rate plus 0.75% margin.

#### Capital risk management

During 2008, the Institute entered into an arrangement with its bank to borrow \$35.25 million at the prevailing 90-day BBSW plus 0.85 per cent line fee. This bank loan is secured by a fixed and floating charge over all of the Burnet Institute's assets. The loan translated from a construction facility to a term facility in May 2011 and is for a period of 10 years. Refer to Note 17 for details of the swap and cap associated with this loan. Principal is repaid over the course of the term facility according to an agreed schedule as set out in the Loan Agreement. Management monitors the loan facility on a regular basis to ensure that all loan covenants and reporting requirements are met.

#### Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Institute's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return. The Institute can enter into derivatives in order to manage market risks in consultation with the Board and other advisors. As explained above, the only derivative financial instruments the Institute is currently involved in are a cap and two swap transactions (Note 17) to manage potential interest rate fluctuations on the ACS2 loan facility. Institute risk is also minimised due to limited holdings of foreign currency and equities.

## 26. Financial Risk Management (continued)

### Interest rate risk

The Institute has adopted a policy to mitigate its interest rate risk by entering into interest rate swaps and caps to manage its overall exposure. Refer Note 17.

## 27. Financial Instruments

### Credit risk

#### Exposure to credit risk

The carrying amount of the Institute's financial assets represents the maximum credit exposure. The Institute's maximum exposure to credit risk at the reporting date was:

Carrying amount	NOTE	2012 \$'000	2011 \$'000
Investments	9	2,472	2,484
Receivables	8	6,058	3,130
Cash and cash equivalents	20(i)	11,888	17,842
		20,418	23,456

The Institute's maximum exposure to credit risk for trade receivables at the reporting date by geographic region was:

Carrying amount			
Australia		3,456	2,753
Asia		434	287
North America		166	16
Europe		2	74
		4,058	3,130

**Impairment losses:** The aging of the Institute's trade receivables at the reporting date was:

Carrying amount			
Not past due		3,438	2,666
Past due 0-30 days		389	202
Past due 31-60 days		60	90
More than 60 days past due		171	172
Less allowance for doubtful debts		–	–
		4,058	3,130

There was no impairment loss recognised on investments. The allowance accounts in respect of trade receivables are used to record impairment losses unless the Institute is satisfied that no recovery of the amount owing is possible; at that point the amounts considered irrecoverable are written off against the financial asset directly.

### Liquidity risk

The following are the contractual maturities of financial liabilities measured at amortised cost, including estimated interest payments and excluding the impact of netting agreements:

31 December 2012 (\$'000)	Carrying amount	Contractual cash flows	6 mths or less	6–12 mths	1–2 years	2–5 years	More than 5 years
<b>Non-derivative financial liabilities</b>							
Secured bank loan	34,800	55,112	1,403	1,398	2,779	8,638	40,894
Trade and other payables	3,704	3,704	3,704	–	–	–	–
Current tax liabilities	110	110	110	–	–	–	–
	38,614	58,926	5,217	1,398	2,779	8,638	40,894

## Notes to the Financial Statements

(FOR THE YEAR ENDED 31 DECEMBER)

### 27. Financial Instruments (continued)

31 December 2011 (\$'000)	Carrying amount	Contractual cash flows	6 mths or less	6–12 mths	1–2 years	2–5 years	More than 5 years
<b>Non-derivative financial liabilities</b>							
Secured bank loan	35,100	57,935	1,414	1,409	2,801	8,422	43,889
Trade and other payables	3,883	3,883	3,883	–	–	–	–
Current tax liabilities	100	100	100	–	–	–	–
Finance lease liabilities	18	19	19	–	–	–	–
	39,101	61,937	5,416	1,409	2,801	8,422	43,889

Contractual cash flows for the secured bank loan are estimated assuming an average interest rate of 7.21% over the life of the loan with principal repayments as set out in the loan agreement.

#### Foreign currency risk

The Institute is exposed to foreign currency risk on revenue, purchases and bank accounts that are denominated in a currency other than the functional currency of the Institute. The currency giving rise to this risk is primarily US dollars (USD). At any point in time the Institute has a natural hedge on USD transactions as it holds a USD bank account to pay USD denominated expenses.

#### Sensitivity analysis

For the year ended 31 December 2012, it is estimated that a general increase of one percentage point in interest rates would have increased the Institute's profit by approximately \$83,000 (2011: \$107,000).

As at 31 December 2012, it is estimated that a general increase of ten percentage points in the value of the AUD against other foreign currencies would have decreased the Institute's profit by approximately \$56,400 (2011: \$52,000).

#### Fair values

The fair value of relevant recognised assets and liabilities are approximate to the values shown in the Statement of Financial Position.

#### Fair value hierarchy

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

Level 1: quotes prices (unadjusted) in active markets for identical assets or liabilities

Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)

Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

	Level 1	Level 2	Level 3	Total
<b>31 December 2012 (\$'000)</b>				
Financial assets at fair value through the profit or loss	207	–	–	207
Derivative financial liabilities	–	3,728	–	3,728
<b>31 December 2011 (\$'000)</b>				
Financial assets at fair value through the profit or loss	219	–	–	219
Derivative financial liabilities	–	2,816	–	2,816



## Burnet Institute International Development Activities Operating Statement (FOR THE YEAR ENDED 31 DECEMBER)

	2012 \$'000	2011 \$'000
<b>Revenue</b>		
Donations and gifts – monetary	80	181
Donations and gifts – non-monetary	–	–
Bequests and legacies	–	–
Grants:		
• AusAID	12,030	12,715
• Other Australian	251	120
• Other Overseas	2,223	1,829
Investment Income	–	–
Other Income	428	1,144
Revenue for international political or religious proselytisation programs	–	–
<b>Total revenue</b>	<b>15,012</b>	<b>15,989</b>
<b>Expenditure</b>		
<b>International aid and development programs expenditure</b>		
International programs:		
• Funds to international programs	10,918	12,902
• Program support costs	812	1,445
Community education	–	–
Fundraising costs:		
• Public	14	3
• Government, multilaterals and private	298	445
Accountability and administration	498	682
Non-monetary expenditure	–	–
<b>Total international aid and development programs expenditure</b>	<b>12,540</b>	<b>15,477</b>
Expenditure for international political or religious proselytisation programs	–	–
Domestic programs expenditure	3,086	2,102
<b>Total expenditure</b>	<b>15,626</b>	<b>17,579</b>
<b>Excess/(Shortfall) of revenue over expenditure</b>	<b>(614)</b>	<b>(1,590)</b>

### Notes:

No single appeal or form of fundraising for a designated purpose generated 10% or greater of the Burnet Institute's total income.

This operating statement represents IFRS financial information and is extracted specifically for the operations of the Centre for International Health as required by the ACFID Code of Conduct.



The Macfarlane Burnet Institute for Medical Research and Public Health Limited is a signatory to the Australian Council for International Development Code of Conduct. The Code requires members to meet high standards of corporate governance, public accountability and financial management. More information about the ACFID Code of Conduct can be obtained from ACFID.

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## Directors' Declaration

(FOR THE YEAR ENDED 31 DECEMBER 2012)

1. In the opinion of the Directors of the Burnet Institute:

- (a) the Financial Statements and Notes, set out on pages 27 to 47, are in accordance with the Corporations Act 2001, including:
  - (i) giving a true and fair view of the financial position of the Burnet Institute at 31 December 2012 and of its performance, as represented by the results of its operations and its cash flows, for the year ended on that date; and
  - (ii) complying with Australian Accounting Standards and the Corporations Regulations 2001; and
- (b) there are reasonable grounds to believe that the Burnet Institute will be able to pay its debts as and when they become due and payable.

Dated at Melbourne this

**23rd day of April 2013**

Signed in accordance with a resolution of the Directors:



**Alastair Lucas AM**  
Director



**Ross Cooke**  
Director

## Independent Auditor's Report



### Independent auditors' report to the members of the Macfarlane Burnet Institute for Medical Research and Public Health Ltd

#### Report on the financial report

We have audited the accompanying financial report of the Macfarlane Burnet Institute for Medical Research and Public Health Ltd (the Company) which comprises the statement of financial position as at 31 December 2012, the statement of comprehensive income, statement of changes in equity, the statement of cash flows and the Burnet Institute International Development Activities Operating Statement for the year then ended on that date, notes 1 to 27 comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration.

#### *Directors' responsibility for the financial report*

The directors of the company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001*, and for such internal control as the directors determine is necessary to enable the preparation of the financial report that is free from material misstatement, whether due to fraud or error.

### *Auditor's responsibility*

Our responsibility is to express an opinion on the financial report based on our audit. We conducted our audit in accordance with Australian Auditing Standards. These standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

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

We performed the procedures to assess whether in all material respects the financial report presents fairly, in accordance with the *Corporations Act 2001* and Australian Accounting Standards, a true and fair view which is consistent with our understanding of the Company's financial position, and of its performance.

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

### *Independence*

In conducting our audit, we have complied with the independence requirements of the *Corporations Act 2001*.

### *Auditor's opinion*

In our opinion, the financial report of the Macfarlane Burnet Institute for Medical Research and Public Health Ltd is in accordance with the *Corporations Act 2001*, including:

- (i) giving a true and fair view of the Company's financial position as at 31 December 2012 and of its performance for the year ended on that date; and
- (ii) complying with Australian Accounting Standards and the *Corporations Regulations 2001*.



KPMG



Alison Kitchen  
Partner

Melbourne

23 April 2013

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## **Burnet Institute**

Medical Research. Practical Action.

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### **Overseas Offices**

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