

Annual Report 09

MACFARLANE BURNETINSITUTE FOR MEDICAL RESEARCH AND PUBLIC HEALTH LIMITED

Inside

4

- About Burnet 5 **Our Vision and Mission** Chairman's Report 6 **Director's Report Board of Directors** 9 Patrons
- 10 **Our New Building**
- Centre for Virology
- 20 Centre for Immunology
- 26 **Centre for Population Health**
- Centre for International Health
- 40 Where We Work
- 42 Education and Capacity Building
- **Our Students** 44

- **Burnet's Major Awards**
- Visitors to Burnet
- **Corporate and Support Services** 46
- 50 **Commercial Activity**
- **Our Organisational Structure**
- **Our Governance**
- **Committee Members**
- **Our Financial Position**
- 60 **Our Achievements**
- 82 **Our Special Thanks**
- 84 In Appreciation
- 86 **Community Engagement**
- 87 Support Our Work

Director: Professor Brendan Crabb, BSc(Hons), PhD

Deputy Directors: Professor P Mark Hogarth, PhD; Associate Professor David Anderson, BSc(Hons), PhD

Company Secretary: Peter Spiller, BBus, CPA





Cover: Responding to the HIV epidemic. For more than 10 years Burnet has worked to reduce the impact of HIV in Mozambique, a country where a quarter of all adults are HIV positive. As it is in other countries, much of our work involves building the capacity of local organisations and community groups to prevent the spread of HIV and care for those infected or affected by HIV and AIDS, such as these young people in Chimoio who lost both their parents to the disease.

Photo Credits: Brent Balalas, Peter Casamento, Gillian Chamberlain, Ben Coghlan, Fasseli Coulibaly, Karl Dorning, Marcus Flack, Paul Gilson, Ian Haigh, Iwao Isomura, Gregor Lichtfuss, Bruce Loveland, Nigel Martin, Amanda Morgan, Chris Morgan, Dan O'Brien, Tracy Routledge, Hazel Squair, Mike Toole, John van Hausell, Evy Yunihastuti.

Editorial Managers: Gillian Chamberlain, Hazel Squair Design: FLUX Design Studio Printing: Pinnacle Print Group

A full copy of the Burnet Institute's Financial Report is available on our website or if you would prefer a hard copy, please contact Hazel Squair at hazel@burnet.edu.au or call +61 3 9282 2135.



BIGreen (Burnet Institute Green) is a staff collective formed in 2007 that aims to make Burnet a more sustainable workplace. Anything Burnet can do to reduce our carbon footprint, such as reducing waste, energy and water use, is good for us and good for the planet.

The cost of preparing and printing this Annual Report has been generously donated to the Burnet Institute by an anonymous donor.

PREVENTION DISCOVERY IMPACT

Developing candidate

Vaccines for infectious diseases and cancers

Discovering factors that

prevent AIDS developing from HIV infection

Discovering factors influencing

malaria

New insights into

drug-resistant TB its emergence and spread

Understanding factors underlying

alcoholuse in Australia and the Pacific

Providing innovative

disease prevention programs in post-cyclone Burma (Myanmar)

Developing the first

rapid diagnostic test

for HIV point-of-care management

ABOUT BURNET

At Burnet, everything we do is focused on making a sustainable difference to people's health, in Australia and around the world.

The Burnet Institute is a leading Australian medical research and public health organisation focused on improving the health of resource-poor and vulnerable groups. Burnet's culture links innovative discovery-oriented research with development and humanitarian action. We integrate our world-class laboratory and field-based research into multidisciplinary programs to prevent, detect and treat diseases of global significance. This unique approach allows us to make a tangible and sustainable impact on health in both developed and developing countries. The health and medical research programs conducted in our Australian laboratories encompass three areas: infectious diseases – hepatitis, HIV and other sexually transmitted infections, influenza, malaria and tuberculosis; drug and alcohol research; and immunity – especially as it relates to vaccines and therapies for infections diseases, cancers and auto-immune diseases.

We undertake innovative epidemiological research, including surveillance and modelling complemented by participatory social research. We work at international and regional levels, and with governments, civil society and communities in more than 15 countries. We build capacity and strengthen health services to reduce the impact of major health problems.

Some of these include: reducing the impact and spread of HIV, promoting sexual and reproductive health, and improving the health of children, youth, parents and older people.

Burnet has four Centres – Virology, Immunology, Population Health and International Health. These Centres represent our key areas of research and public health.

Our Vision and Mission

The unifying vision of all health, medical research and development undertaken at the Burnet Institute is the linking of laboratory and field research with practical public health programs; with an emphasis on addressing the health needs of disadvantaged populations.

To achieve this vision, Burnet's mission is to create a healthier world by utilising our unique skills in infectious diseases, immunology and public health to produce health outcomes such as vaccines for infectious diseases and cancer, better strategies for the treatment and prevention of infection, and innovative public health programs both in Australia and throughout the world, especially in our region.

Burnet's broad mission embraces all facets of its research and development work - from basic laboratory research and discovery through to clinical trials, public health, treatment and prevention, advocacy and policy development - and allows the Institute to develop unique cross-disciplinary programs to respond to the major global health problems of our time. The broad mission allows Burnet to be proactive in leading Australia's and our region's preparedness and responsiveness to the threat of emerging diseases, such as avian and swine influenza, while continuing to address longterm health priorities. These include: developing hepatitis C, HIV and cancer vaccines; novel treatment strategies and diagnostics for HIV, hepatitis, tuberculosis and malaria; understanding the pathogenesis of infectious diseases; and undertaking advocacy, capacity building and policy development in the international health arena.

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.

Chairman's Report

I am delighted to present the Burnet Institute's Annual Report for 2009. Burnet is an amazing organisation that addresses some of the major health challenges of our time such as HIV, malaria, TB and hepatitis. Our blend of laboratory-based research and field programs is unique within medical research organisations in Australia and provides tangible benefits for the many communities in which we work.

The past 12 months has been a rewarding, productive and challenging time. We completed the final stages of our new building, developed new and innovative research and public health programs, consolidated our international health offices and published our research outcomes extensively in peer-reviewed journals.

As with most organisations, we did not escape the impact of the global financial crisis. I am pleased to say that we have come through this period much stronger thanks to the skill and tenacity of the Burnet staff and Board and the continued support of many of our donors. We now enter 2010 with our new \$100 million building completed ahead of schedule and on budget.

During the first half of 2010, Burnet staff will occupy this new building, which doubles the floor space available to the Institute. It is also the final chapter in the 2006 merger of the Austin Research Institute and Burnet Institute, enabling all staff that were spread over various geographic locations to come together on the one campus. While this is very exciting for all Burnet staff, this really is the end of an era for former Austin Research Institute staff whose laboratory facilities have been located in the Kronheimer Building on the Austin Hospital Campus for almost 20 years. The additional floor space will strengthen the capacity of the Institute to respond to existing and future global health challenges and allow for the Institute's future growth. This building would not have been possible without the generous support of the Victorian State Government and the Federal Government's Department of Health and Ageing. In addition, I would like to acknowledge the many generous donors who assisted us in the funding of this project.

I would like to acknowledge the huge effort put in by the team at our bankers, Australia and New Zealand Banking Group Ltd (ANZ). ANZ saw the funding for the new building through to completion in the midst of the global financial dislocation.

I would also like to acknowledge the Victorian Government's Operational Infrastructure Support Scheme managed through the Department of Innovation, Industry and Regional Development, which assists the Institute greatly with the provision of funds to support our infrastructure costs.

In 2009, we launched our new logo designed to encapsulate our focus and practical approach to global health. Our major role is to address many of the major health challenges of disadvantaged, marginalised and resource poor groups in Australia and overseas. An emphasis on disease prevention and the unique merging of discovery-orientated laboratory and field research with surveillance and public health activities defines our approach. We continued to look at opportunities to develop closer relationships with other organisations within Australia and overseas, especially to help build capacity of organisations to respond to global health challenges. During 2009, we signed an official memorandum of understanding with the Papua New Guinea Institute for Medical Research (PNGIMR) and the Indonesian Government's Ministry of People's Welfare. Burnet is the first medical research organisation to have this formal relationship with the PNGIMR. This will enable stronger working relationships between both institutes and foster exchange of staff and students, as well as transfer of technology and training. The stronger ties with the Indonesian Government will enable us to focus on the control of infectious diseases, sexual and reproductive health and nutrition throughout Indonesia.

I would like to acknowledge and thank the members of the Board for their support and advice over the past 12 months during our Board meetings, on various Board subcommittees and during the extraordinary hours required during the year which focused on legal and financial matters pertaining to the Alfred Centre Stage 2 (ASC2) development. During the year, Mr Garry Hounsell and Dr Alan Finkel, AO resigned as Directors. Garry served as Chair of the Board's Fundraising subcommittee for a number of years, helping steer the Institute's programs to achieve increasing levels of funding for various research and public health programs. Alan, while only a Director for a short period of time, provided significant input to a range of Board matters during his time with us. I would like to take this opportunity to thank both Garry and Alan for their support and valuable counsel during their time with the Institute.

The Board has been strongly supported by a dedicated management team at the Institute led by the Director and CEO, Professor Brendan Crabb. Brendan is an exceptional talent and strong leader. Although only with the Institute for two years, he has restructured both the scientific and public health programs as well as corporate services, positioning the Institute for future growth with a streamlined and more efficient organisational structure. Already his efforts are returning dividends with increased productivity in relation to scientific publications, new research and public health programs and growing the Institute's revenue base.

To the staff of the Burnet Institute, thank you for yet another year of successful endeavours. Your dedication and enthusiasm for the work of the Institute is truly inspirational.

I would also like to thank the many supporters of the Institute both financial and in-kind who never cease to amaze me for their belief in, and passion for, the work of the Institute. It has also been a difficult year for many individuals and businesses and I do want to acknowledge those who continued to support our work despite facing challenging times themselves.







Director's Report

While 2009 was a very challenging year due to the global financial downturn, it was also a period of strong growth and productivity for the Institute. Our broad mission of addressing the health needs of the world's most disadvantaged populations continues to be the focus of Burnet's activities and our emphasis on excellence in research and public health innovation is paying dividends. Testament to this, we had a record year for field and laboratory research performance with a significant increase in the numbers and quality of peer-reviewed publications generated. In 2009, we published 139 peer-reviewed journal articles, and importantly, we more than doubled our publication rate in high-impact journals, a major indicator of research quality. It was especially pleasing to see highprofile studies published on very different topics; malaria, HIV, hepatitis C, tuberculosis, vaccine research, cancer studies and immunology all featuring prominently.

In addition, the Institute published more than 60 commissioned public health reports. Many of these technical reports will inform future policy on a variety of national and international public health issues such as measles vaccination, adolescent health, hepatitis C transmission, HIV prevention, treatment and care, education and training, and drug and alcohol use.

Our work in understanding, diagnosing, preventing and developing therapies to major global pathogens such as HIV, hepatitis C, malaria and tuberculosis remains the mainstay of the Institute. But as well as the pathogens themselves, we are focusing more and more on the immune system that responds to foreign invaders and to cancers. This understanding provides new avenues to develop therapies and the next generation of public health tools, most particularly, more effective and affordable vaccines. In addition, we continue to develop our research and public health activities that focus on broader health issues of mothers and their babies, of adolescents in this country and abroad, and increasingly, of indigenous Australians.

Much of the focus of the Institute's senior management during 2009 was taken up with the finance and construction of our new building The Alfred Centre Stage 2. This new facility will double the capacity of Burnet's existing laboratory facilities and floor space, and provide room for future growth across all our programs. This has been a fouryear project which really does complete the 2006 merger between the former Austin Research Institute and the Burnet Institute and enable all staff to operate as one Institute on the same campus.

The Institute now has 410 staff and offices in eight countries outside of Australia. While some growth has occurred as a result of the merger, our Centre for International Health (CIH) has grown substantially, in fact more than 100 per cent over the past four years. CIH is now the largest Centre at the Institute with almost 200 staff, 140 of which are based overseas. There are many highlights in this regard, but growth in scale and scope in our Burma (Myanmar) program has been most notable of recent times. We continue to look for opportunities to grow existing programs and to expand sensibly into countries such as Zimbabwe. In parallel with our overseas development programs, we are keen to develop a strong international health research component to our work so we can maximise our impact, not only in the field, but to share our findings more broadly through publication in relevant peer-reviewed journals. In addition, we are strengthening our collaborations and partnerships with our Alfred Medical Research and Education Precinct (AMREP) partners. Notably, last year we welcomed Professor Sharon Lewin, Head of The Alfred hospital's Infectious Diseases Unit, as Co-Head of Burnet's Centre for Virology. Sharon's expertise greatly strengthens Burnet while her dual role with The Alfred underscores the close partnership between our organisations.

This year will also see the development of the Institute's fiveyear strategic plan that will help build the Institute's capacity and steer our future direction. In addition to this, we will address how best to finance our major new initiatives with a decline in available infrastructure funding which is being felt across all independent medical research institutes in Australia.

Among the many highlights of 2009, I would like to congratulate our inaugural Gust-McKenzie Medallist, Associate Professor Heidi Drummer and Fenner Lecturer, Professor Mark Hogarth, and extend the Institute's thanks to the 2009 Burnet Orator, Professor Sir Gustav Nossal, AC CBE, for an outstanding presentation.

I would like to thank all the staff of the Institute for their support over the past year, which has been a challenging period for everyone. Our planning and management over this time has left the Institute in a strong position and we look forward to a very positive, successful and productive 2010. I would also extend a warm welcome to all new staff that are joining the Institute this year and wish you a successful and productive time at the Institute.

I would acknowledge and thank the members of the Board for their direction and counsel, and the many hours of their time given to help guide the Institute through the impact of the global financial crisis and the various issues that arose during the year. I would especially like to thank our Board Chair, Mr Alastair Lucas for his tireless commitment to the work of the Institute, and the members of the various Board subcommittees and management teams of the Institute for their support and advice.

Finally and by no means least, the Institute is very grateful for the support it receives from the Victorian State Government through its Operational Infrastructure Support Scheme, the various competitive grant funding bodies such as the AusAID, National Health and Research Council, philanthropic trusts and foundations, and the many individuals who contribute to the Institute. It is only with this support that the Institute can operate and make a tangible and sustainable impact on the lives of millions of people around the world.

Brendan Crabb Director and CEO Burnet Institute



Board of Directors









2

3









The Directors of the Burnet Institute, all of whom act in an honorary capacity, along with the Executive Director and Deputy 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, BCom, FCPA

Chair, Burnet Institute Board of Directors; Director since 1998; Member, Investment Committee, Grant Committee, Fundraising Committee, ACS2 Project Committee; Vice Chair and Managing Director, Goldman Sachs JB Were; Chair, Australian Stem Cell Healthcare; Director, Fauna & Flora International Australia; Member, Dean's Advisory Board for Monash University, Faculty of Medicine, Nursing and Health Sciences; Deputy Chair, Market Policy Group, Finsia; Member, Takeovers Panel

Professor Brendan Crabb, PhD

Executive Director and CEO since March 2008; Member, Research Advisory Committee and ACS2 Project Committee; Adjunct Professor, University of Melbourne; Adjunct Professor, La Trobe University; Adjunct Professor, Monash University

Ms Denise Allen

Director since 2006; Chair, Investment Committee; Director, Medical Research Commercialisation Fund (MRCF); Former Chair and Managing Director, Legg Mason Asset Management Australia Ltd; Director, Utilities of Australia; Director, AvSuper

Associate Professor David Anderson, PhD

Director since 2006; Deputy Executive Director; NHMRC Senior Research Fellow; Member, IP and Commercialisation Committee, Burnet Institute; Associate Professor, Department of Microbiology and Immunology, University of Melbourne; Director, Hepitope Limited

Mr Ross E Cooke, BCom, ACA

ACA 5 Director since 1998; Chair, Audit, Finance and Risk Committee, and Member, ACS2 Project Committee and Grant Committee; Director, Paxton Partners; Director and President, Wintringham Housing Ltd

Professor Peter Doherty, AC, FAA, FRS

Director since 2002; Member, Research Advisory Committee; Nobel Laureate, Department of Microbiology and Immunology, University of Melbourne

Mr John K Dowling, FREI, FAPI

Director since 2000; Member, Research Advisory Committee; Managing Partner, K L Dowling & Co

Mr Neil Edwards, BEcon (Hons), FAICD, FIPAA

Director since 2006; Member, Audit, Finance and Risk Committee and ACS2 Project Committee; CEO, Chifley Business School; Member, Advisory Board, Defence Science and Technology Organisation; Chairman, Regional Channels Authority

Professor P Mark Hogarth, PhD

9

6

7

Director since 2006; Deputy Executive Director; NHMRC Senior Principal Research Fellow; Former Executive Director, Austin Research Institute; Adjunct Professor University of Melbourne; Adjunct Professor Monash University; Director, IgAvax Pty Ltd; Member, IP and Commercialisation Committee, and Member, ACS2 Project Committee

Professor, the Hon Barry O Jones, AO, FAA, FAHA, FTSE, FASSA, FRSA, FRSV, FAIM 10

Director since 2000; Chair, Vision 2020 Australia; Chair, Port Arthur Historic Site Management Authority; Professorial Fellow, University of Melbourne; Former Vice Chancellor's Fellow, University of Melbourne; Former Commonwealth Minister for Science; Former Chair, Victorian Schools Innovation Commission











1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Mr Henry Lanzer, BCom, LLB

Director since 2008; Member, Fundraising Committee; Managing Partner, Arnold Block Leibler; Director, Premier Investments; Director, The Just Group; President, Mount Scopus Memorial College Foundation

Professor James McCluskey, MBBS, B Med Sci, MD, FRACP, FRCPA 12

Director since 1998; Chair, Research Advisory Committee; Pro Vice-Chancellor, Research Partnerships at The University of Melbourne; Deputy Head, Department of Microbiology and Immunology; Consultant Immunologist to the Victorian Transplantation and Immunogenetics Service,; Australian Red Cross Blood Service

Mr Robert L Milne, BEng (Civ), FIE (Aust), CP Eng 13

Director since 2000; Member, IP and Commercialisation Committee, and Chair, ACS2 Project Committee Chair, Hooker Cockram; Director, Great Connections

Mrs Maria Myers, AO, BA, BSW, LLB

Director since 2004; Member, Fundraising Committee; Chairman, Kimberly Foundation Australia; Director, Mary Ward International Australia; Director, Australian String Quartet; Director, Elisabeth Murdoch Sculpture Foundation; Director, Dunkeld Pastoral Company Pty Ltd; Member, Loreto College Ballarat School Council

Ms Natasha Stott Despoja

Director since 2008; Former Senator for South Australia; Former Leader, Australian Democrats; Director, beyondblue; Director, South Australian Museum; Member, Alumni Advisory Board, University of Adelaide; Member, Advertising Standards Board; Honorary Research Fellow, University of Adelaide

Resigned as Director during 2009

Dr Alan Finkel, AM, PhD, FTSE, BE(Hons) Director since 2008 and resigned October 2009

Mr Garry Hounsell, BBus, CPA Director since 2005 and resigned September 2009

Patrons

Patron-in-Chief

Governor of Victoria, Professor David de Kretser, AC

Patrons

Professor Gordon Ada, AO, Australian National University Hon Steve Bracks, Former Premier of Victoria Mr Nobby Clark, AO, Former Chief Executive Officer, National Australia Bank

Dr John Connell, AM, Founder, John Connell and Associates **Mr Bryce Courtenay**, AM, Author

Rt Hon Sir Zelman Cowen, AK, Former Governor General of Australia

Professor Allan Fels, AO, Former Chairman of ACCC and Dean of the Australian & New Zealand School of Government Rt Hon Malcolm Fraser, AC, Former Prime Minister, Australia Professor David Ho, Director, The Aaron Diamond AIDS Research Centre, New York

Hon Michael Kirby, AC, CMG, Member of the International Bioethics Committee of UNESCO and Member of the UNAIDS Global Panel on Human Rights

Mr Eddie McGuire, Journalist and Television Personality **Professor Sir Peter Morris,** AC, Royal College of Surgeons, London

Mr John So, Former Lord Mayor of Melbourne

Affiliations

The Burnet Institute is a partner in the Alfred Medical Research and Education Precinct (AMREP) with close working relationships and collaborations with The Alfred hospital, Baker IDI Heart and Diabetes Institute, and Monash University. In addition, the Burnet Institute has formal affiliations with the University of Melbourne and Monash University.



14

15

Burnet's New Building

Burnet's 'new' building, known as ACS2 (Alfred Centre Stage 2), is in fact a horizontal and vertical extension of the existing Alfred Centre, with the four new floors delivering an additional 14,200sqm of space. Burnet will lease out three of the four new floors in ACS2 and occupy the seventh floor, which is being fitted out for laboratories, including a PC3 security level laboratory. This initiative has been developed to allow for the future growth of the Institute as well as securing our financial future via leasing arrangements.

As I write this report in mid February 2010, this \$100 million project is scheduled for completion in three days time (19 February), some six weeks early. As the pictures here show there was a dramatic transformation during the year, from a demolition site in Jan 2009 to a near complete world class medical research and education facility in Jan 2010.

The construction of the building proceeded very smoothly throughout 2009, with no lost time, no cost blowouts and only few very minor issues, all resolved appropriately. This successful construction phase was a result of the extensive pre-construction planning and the collaborative relationships established between the co-sponsors (Burnet and Alfred Health) and the building contractors, Baulderstones. Dr Bruce Loveland, as the Burnet Project Manager, deserves special mention for his tireless work to ensure all of our needs were addressed and that the project delivered on its aims.

Financing such an initiative during a global financial crisis presented challenges not usually experienced by organisations such as Burnet. I would like to acknowledge the guidance and support of the Institute's ACS2 Board Sub-committee, led by Rob Milne, our advisors (in particular Blake Dawson) and the support and confidence demonstrated by our key stakeholders, the Commonwealth Government via DoHA and the State Government of Victoria. The Institute's ability to successfully complete this project during this period was a major accomplishment.

In fact, as you read this article, the daunting logistical challenge of relocating close to 1000 staff into this facility will be over. Burnet and our other tenants (Monash, Latrobe and Baker IDI), as well as Alfred Health occupants, will be well settled into their new 'homes'. I look forward to advising you how smoothly this went in my report next year!

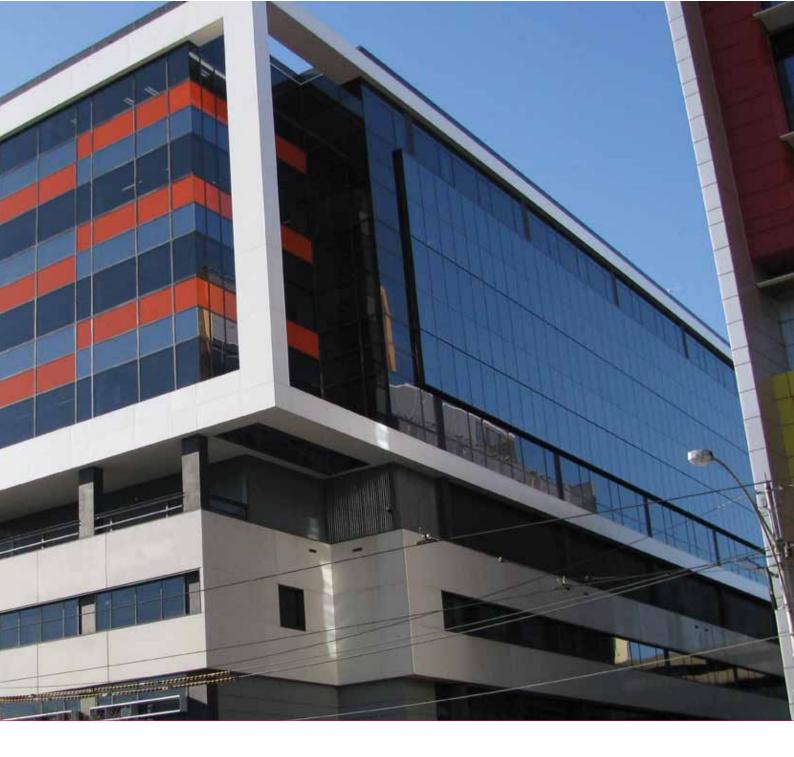
Geoff Drenkhahn Chief Operating Officer Burnet Institute



Burnet's new building ACS2, four floors atop the Alfred Centre on the corner of busy Punt and Commercial Roads in Prahran.



The Alfred Centre prior to commencement of stage two construction.

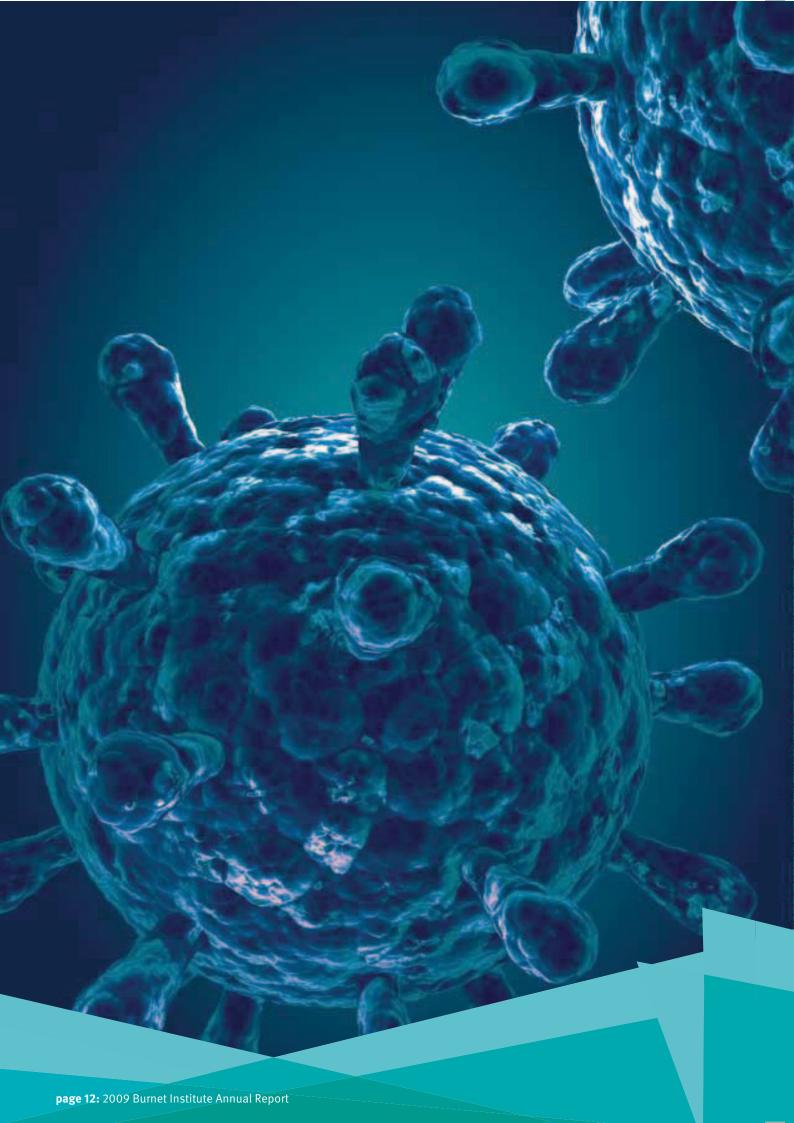




Construction brings to fruition the hard work and vision of Burnet's project team lead by Professor Bruce Loveland.



Burnet scientists will enjoy state-of-the art laboratories in our new building.



Centre for VIROLOGY

Our mission is to find innovative solutions for the world's most serious viral diseases; focusing on understanding how viruses manipulate their host cells in order to infect them and persist in the body. Research in this area is vital in developing ways to block infection and to prevent viruses replicating and causing disease. Basic research underpins most major scientific discoveries; we translate a number of our research findings into clinical and public health practice. The management of chronic viral diseases requires new drugs and diagnostic tools – research within our Centre investigates new drug targets at the molecular level.



Overview

With continued progress across the programs 2009 was a very positive year for the Centre for Virology. The Centre has continued the strategic planning process, building on the retreat held in November 2008, and identifying key priorities for research, resources and recruitment to further enhance the impact of our basic and translational research. We are pleased to welcome Professor Sharon Lewin, Director of the Infectious Diseases Unit at The Alfred hospital, as Co-Head of the Centre for Virology. Sharon has worked closely with Burnet for many years, but this appointment will allow both Burnet and The Alfred to fully capitalise on the synergies between our institutions in research, development and clinical care, in Australia and worldwide. We are also pleased to formalise the inclusion of the Wright Group within the Centre, headed by Dr Edwina Wright and focusing on NeuroAIDS consortia in Australia and the region.

Studies relating the degree of **HIV drug toxicity** to patient age and height provide an example of immediate impact of our work on clinical care (see Highlights on page 13), while studies by Dr Shuo Li (Gowans/Loveland Laboratory, in a cross-disciplinary collaboration with Burnet's Centre for Population Health and the Centre for Immunology) have revealed new insights into the immune response to hepatitis C virus (HCV) infection that will have important implications for vaccine development.

The Centre was awarded four NHMRC Project Grants (AUD\$2.3 million) to commence in 2010. Complementing these project grants, which support the core basic research of our scientists, the Centre further strengthened its efforts in **translational research** with the award of an NHMRC Development Grant (AUD\$139,000) to Dr Elizabeth Grgacic, working on a novel approach to HIV vaccine development, and six translational research grants (AUD\$875,000) from the Australian Centre for HIV and Hepatitis Virology (ACH2) addressing diagnostic and treatment challenges in HIV and hepatitis C. The Drummer/Poumbourios Laboratory continued work on the development of a highly promising vaccine candidate against hepatitis C virus, and the Anderson/Crowe Laboratory received Burnet's first investment from the Medical Research Commercialisation Fund, establishing the spin-off company See-D4 Ltd to accelerate commercialisation of the novel laboratory and point-of-care tests for CD4 T-cells developed at Burnet over the past several years.

Associate Professor Heidi Drummer was awarded the inaugural Gust-McKenzie medal. The prize is named after Professor Ian Gust and Professor Ian McKenzie, the founding Directors of the Burnet and Austin Research Institutes. Awarded by the Scientific Advisory Committee of the Burnet Institute, the Medal recognises early-mid career staff of Burnet demonstrating the highest levels of sustained excellence in basic and/or translational research and public health over the previous five years. Three PhD students from the Drummer/Poumbourios Laboratory enjoyed international recognition in 2009, with Johanna Dean receiving a full scholarship to present an invited talk at the 16th International HCV meeting in Nice, France. The talk by Johanna and the poster presented by Kitty McCaffrey at that meeting were featured as conference 'highlights' in a recent feature article in the journal, Gastroenterology. Anna Bellamy-McIntyre was selected to give an oral presentation at the prestigious Cold Spring Harbor Symposium on Retroviruses.

This year saw the **successful integration** of high-resolution imaging services between Burnet, our AMREP partners and Monash (Clayton), providing greatly improved access to these increasingly important research tools and associated expertise from within, and outside Burnet. Dr Jenny Anderson and Dr Candida da Fonseca Pereira have been instrumental in driving this initiative forward.

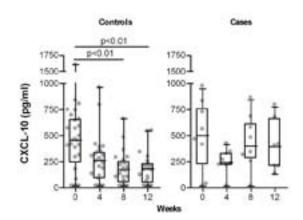
Highlights

Interaction between HIV and hepatitis B virus

Of the estimated 33 million people living with HIV infection, approximately 10 per cent of patients are also infected with hepatitis B virus (HBV). In parts of Africa and Asia nearly 30 per cent of HIV-infected patients are co-infected with HBV; infection with both viruses leads to a very dramatic change in the natural history of HBV. People infected with both viruses have a **15-fold higher chance of liver-related death** compared to those infected with HIV or HBV alone. When patients start treatment for HIV and HBV, occasionally liver disease gets worse and liver-related mortality doesn't improve, even with the availability of drugs active against both HIV and HBV.

Sharon Lewin and her team have been interested in how HIV and HBV interact in patients. Over the past five years our lab has worked closely with colleagues in Bangkok, Thailand and from the National Centre for HIV Epidemiology and Clinical Research in Sydney to better understand the interaction of these two viruses. In 2009, our collaborative group published seven papers that significantly added to our understanding of how HIV changes a patient's capacity to respond to HBV and treatment for HBV. These papers examined the pattern of decay of HBV from the blood following treatment, development of HBV drug resistance, the specific changes in the immune response to HBV, and why liver disease gets worse early following treatment of both viruses.

In the *Journal of Infectious Diseases*, Crane and colleagues identified that the key immunological change associated with worsening liver disease following initiation of HAART was the striking elevation of a protein called CXCL10 which guides infection-fighting cells to the liver. A novel strategy for the future management of HBV may be to use drugs that specifically block the activity of CXCL10 or related chemokines.



Changes in the protein CXCL10 following initiation of HAART in HIV-HBV co-infected patients in Thailand. Patients who had a decline in liver function were defined as cases (right panel) and those who had no change in liver function were controls (left panel). CXCL10 remained significantly elevated despite treatment in cases compared with controls.



Colleagues at Pokdisus HIV Care Clinic in Jakarta, Indonesia, with Australian Honours student J Affandi (second right) and collaborator Dr D Imran (far right).

Neuropathy (nerve damage in the feet) among people with HIV around the world

Neuropathy is common among people living with HIV, causing pain in the feet and impairing the patient's quality of life and ability to work. Kate Cherry and her colleagues confirmed more than 40 per cent of HIV patients attending clinics at The Alfred hospital suffer neuropathy. This is a huge problem: there is no effective treatment for neuropathy and available analgesics typically provide inadequate relief of neuropathy pain. Our laboratory aims to understand why neuropathy occurs (to aid development of better treatments and preventative strategies), and which patients are at risk (so potentially neurotoxic medications can be avoided).

Our studies in Australian HIV patients show increasing age, increasing height and use of particular medications are important neuropathy risks in Caucasians. We also find that **inflammation-related genes influence risk**, suggesting inflammation may underpin the nerve damage. Genetic risk factors may vary by ethnic group. We have therefore established collaborations in Malaysia, Indonesia and South Africa to gain a global understanding of neuropathy rates and risk factors among HIV patients. Through reciprocal site visits, Dr Kate Cherry has trained all investigators in data collection and identical methods of patient assessment.

Using data from Australia, Indonesia and Malaysia we developed an algorithm based on age and height that predicts neuropathy risk. In 2009, this was confirmed in 500 black South African patients. By using this simple algorithm to guide medication choice (the use of some potentially neurotoxic medication is an economic necessity in many countries) neuropathy rates could be reduced at no added cost, even in the most resource-limited setting.

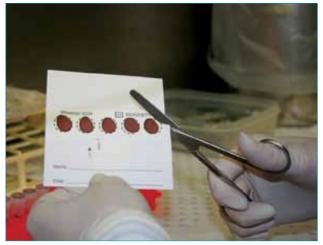
Our genetic studies have confirmed that inflammationrelated genes influence neuropathy risk in various Asian populations. Ongoing studies in Africans and investigation of inflammatory responses in Australians will further clarify the role of inflammation in neuropathy. We are also investigating proposed new neuropathy treatments. Our long-term goal is to reduce the impact of this debilitating problem on people living with HIV.

Snapshots

Clinical Research

World Health Organization Regional HIV Drug

Resistance Laboratory. Dr Anna Hearps, the senior scientist working within the World Health Organization Regional HIV Drug Resistance Laboratory at Burnet, has recently developed a low-cost test that detects drug resistance within HIV-infected patients. HIV can rapidly evolve to become resistant to one or more anti-HIV drugs and patients need to be tested for drug resistance to ensure their treatment remains effective. Whilst commercial versions of this test are commonly used in Australia. the high cost prohibits their use within resource-constrained countries. Burnet scientists have adapted the test so that it can be used with blood dried on to filter paper instead of the traditional fresh blood samples, allowing HIV-infected people living in remote areas to benefit from these important tests. Scientists from the Burnet Institute will soon be travelling to Papua New Guinea to train local scientists in how to perform both this test and other lowcost HIV monitoring assays.



Here is an example of a patient's dried blood spots on filter paper.

HIV Pathogenesis

Understanding the link between chronic immune activation and defects in innate immunity. Led by Suzanne Crowe and Anthony Jarowoski, the aim of the HIV Pathogenesis Laboratory is to understand the link between chronic immune activation and defects in innate immunity in HIV disease. Two clinical studies are being conducted: HiAct (HIV and Immune Activation) is a cross-sectional study of signal transduction defects in monocytes and natural killer cells from therapy-naive HIV patients and patients currently receiving combination antiretroviral therapy (cART). Our data has revealed a loss of specific signal transduction proteins within NK cells even when patients are receiving cART, which correlates with loss of NK cell function. HaCH (HIV and Cardiovascular Health) is a new initiative in collaboration with the Department of Cardiovascular Medicine at The Alfred hospital, which aims to investigate the link between innate immune activation and atherosclerosis in the setting of HIV infection.

HIV Neuropathogenesis

Astrocytes in the development of HIV-associated

dementia. Dr Melissa Churchill heads the HIV Neuropathogenesis Laboratory. One of her major research interests is understanding the importance of astrocytes in the development of **HIV-associated dementia**, a devastating complication of AIDS. In a study recently published in the prestigious journal *Annals of Neurology*, Melissa has shown that astrocytes in brain tissue can be extensively infected with HIV, and that astrocyte infection has an important role in the development of brain disease. Studies are now aimed at characterising the contribution of extensive astrocyte infection to the development of dementia and in the establishment of latent viral reservoirs. Melissa's studies will alter current models and provide a paradigm shift in understanding HIV-1 neuropathogenesis.

Viral Fusion

A vaccine candidate for the prevention of HCV. The Viral Fusion Laboratory led by Heidi Drummer and Andy Poumbourios focuses on how two major human pathogens, HIV and hepatitis C virus (HCV), attach to and enter target cells using their surface glycoproteins. Our studies on HCV have led to the development of a novel recombinant form of the attachment protein that is currently being **tested as a vaccine candidate** for the prevention of HCV in collaboration with CSL Ltd. The studies show that this vaccine candidate has the ability to elicit protective antibodies against diverse strains of HCV and is a major improvement on previously tested vaccines.

• While HIV clinical care in Australia is outstanding, there are serious deficiencies in our region. We owe it to our neighbours to help them improve their management of HIVinfected individuals. 99

HIV Assembly Viral reverse transcriptase and retroviral

recombination. The divergence of viral sequences in infected patients is driven by the infidelity of viral reverse transcriptase and retroviral recombination, and it has a huge impact on disease progression in patients. Correct estimation of recombination rate is critical to understand this biological process. In collaboration with Miles Davenport at the University of NSW in Sydney, Johnson Mak and his team have developed mathematical tool to account and to correct for multiple An estimated 17,500 people live with HIV in Australia. From the start of the epidemic until the end of 2008 there have been 28,330 HIV diagnoses, 10,3478 AIDS diagnoses and 6,765 AIDS-related deaths. 99

crossover events, in order to accurately measure recombination rates. In a complementary project, our laboratory has attempted to **dissect biological mechanisms** that regulate the early events post HIV entry. By manipulating cellular proteins from the natural target cells of HIV, we have made a novel observation that different strains of HIV can have distinct requirements for cellular factors at the early stage of infection depending on the route of viral entry. Our laboratory is trying to capitalise on these unexpected observations to define the early steps of HIV replication.



A Burnet student uses an intercalating agent and blue light to visualise and size DNA.

Molecular Interactions

Understanding how HIV evades the effects of

drugs. Gilda Tachedjian and her colleagues study how HIV reproduces in the cell, including the role of host-cell factors in HIV-1 replication, the study of drug resistance mutations in HIV, and the development of microbicide gels that can be used during sex to prevent the transmission of HIV. Our studies on **new drug resistance mutations** in the C-terminal domain of the HIV-1 reverse transcriptase (RT) have demonstrated that the N3481 mutation, in addition to conferring zidovudine and nevirapine resistance, causes decreased susceptibility to tenofovir and etravirine, when present together with RT N-terminal domain mutations. This work has created a potential role for N3481 in treatment failure with the newer RT inhibitors.



Some of the representative regional members of APNAC at a recent NeuroAIDS seminar.

HIV-associated Neurological Disorders The Asia Pacific NeuroAIDS Consortium (APNAC)

Edwina Wright's laboratory focuses on HIV-associated neurological disorders with an emphasis upon epidemiology, host and antiretroviral treatment responses. The Asia Pacific NeuroAIDS Consortium (APNAC) was formed in 2002 and comprises a group of physicians, scientists and social researchers with a shared interest in neuroAIDS. APNAC has studied the epidemiology of neuroAIDS across several countries of the Asia Pacific Region and recently demonstrated that HIV-associated neurocognitive disorders (HAND) and depression are prevalent amongst HIV infected patients in this region. During 2009, the Wright laboratory collaborated with several national and international groups to determine the impact of HIV-associated neurocognitive disorders. This lab also runs the Australian National NeuroAIDS Brain and Tissue Bank Project, as well as the Asia Pacific Pediatriac HIV/AIDS Consortium (APPHAC).

Centre for Virology: our staff and students

Centre Heads

Suzanne Crowe, MBBS, FRACP, MD, NHMRC PRF Sharon R Lewin, MBBS, FRACP, PhD

Personal Assistant to Suzanne Crowe Karen O'Keefe

Personal Assistant to Sharon Lewin Sandy West

ANDERSON/CROWE LABORATORY – Diagnostics and Basic Research Co-Head, Senior Principal Fellow David Anderson, BSc(Hons), PhD, NHMRC

Senior Research Fellow Suzanne Crowe, MBBS, FRACP, MD, NHMRC PRF

Senior Research Officer Mary Garcia, Dip Lab Tech

Research Officer Nadine Barnes, BSc(Hons)MSc

Research Assistants Simone van de Waarsenburg, BSc(Hons) Jocelyn Diaz, BSc

Student

Hyunsuh Kim, MS (Vet Med), BSc

Emeritus Professor, Burnet Institute Visiting Fellow Gregory Tannock, MSc, PhD, DSc, FASM CHERRY LABORATORY – HIV Neuropathy and Toxicity Head

Catherine (Kate) Cherry, MBBS, PhD, FRACP, Grad Dip (Clin Epi)

Senior Research Officer David Hooker, BSc, MSc

Research Assistant Masqura Maborok, BSc(Hons)

CHURCHILL/WESSELINGH LABORATORY – HIV Neuropathogenesis Co-Heads

Melissa Churchill, BSc(Hons), PhD **Steve Wesselingh,** BMBS, PhD, FRACP

Senior Research Assistant Lachlan Gray, BSc(Hons)

Student Daniel Cowley, BAppSci(Hons)

CROWE LABORATORY – Clinical Research Laboratory, Burnet WHO Regional Reference Laboratory for HIV Resistance Head Suzanne Crowe, MBBS, FRACP, MD, NHMRC PRF

Senior Scientist Vicki Edouard, BSc(Hons), Grad Dip Ed

Quality Manager

Megan Plate, BSc(Hons), Grad Dip Ed

Post-doctoral Fellow

Anna Hearps, Supervising Scientist, WHO Regional Reference Lab, BSc(Hons), PhD **Research Assistants**

Megan Plate, BSc(Hons), Grad Dip Ed Pauline Steele, BSc(Hons) Eman Aleksic, BSc(Hons) Annike Griffey, BSc, Grad Dip Bio Sc Jaishri (Jai) Desiker, BSc

Visiting Scientist Zamberi Sekawi, MD, MPath

Student Claire Ryan, BSc(Hons)

CROWE/JAWOROWSKI LABORATORY – HIV Pathogenesis Co-Heads

Suzanne Crowe, MBBS, FRACP, MD, NHMRC PRF Anthony Jaworowski, BSc(Hons), PhD

Post-doctoral Scientists

Anna Hearps, BSc(Hons), PhD Clare Westhorpe, BSc(Hons), PhD

Research Assistants Adrian Achuthan.

BBiomedSc(Hons), PhD Jing-Ling Zhou, MBiotech Wan-Jung Cheng, MSc

Students

Emma Tippett, (NHMRC Dora Lush Scholarship) Monash University

Gregor Lichtfuss, (Monash International Postgraduate Scholarship) Monash University

DRUMMER/POUMBOURIOS LABORATORY - Viral Fusion Co-Heads

Heidi Drummer, BSc(Hons), PhD Burnet Principal Fellow, NHMRC RD Wright Fellow Pantelis (Andy) Poumbourios, BSc(Hons), PhD

Senior Burnet Fellow Elizabeth Grgacic, BSc, MSc Prelim, PhD

Post-doctoral Fellows

Patricia Vietheer, BSc(Hons), PhD David Harrison, BSc(Hons), PhD

Research Officers

Rebecca Butcher, BSc(Hons), PhD Louise Ludlow, PhD

Research Assistants

Chan-Sien Lay, BSc(Hons) Kevin te Wierik, BSc(Hons) Irene Boo, BBiomedSci(Hons) Annemarie Laumaea, BBiomedSci(Hons)

Students

Johanna Dean, BSc(Hons) Kathleen (Kitty) McCaffrey, BSc(Hons), BA Anna Bellamy-McIntyre, BSc(Hons) Yousef Al-Hammad, BVetsSci, BSc(Hons) Hamed Gouklahni, BSc, MSc(Virology) Ashraf Khasawneh, BMed, BSur, MBioMedSci

GORRY LABORATORY – HIV Molecular Pathogenesis Head

Paul Gorry, Burnet Principal Fellow, BAppSci(Hons), PhD

Post-doctoral Fellows

Hilary Hoare, BSc(Hons), PhD Martin Jakobsen, MSc, PhD Jasminka Sterjovski, BSc(Hons)

Research Assistants

Anne Ellett, BSc Lachlan Gray, BSc(Hons) Jasminka Sterjovski, BSc(Hons)

Students

Lachlan Gray, BSc(Hons) Jessica Wade, BBioMedSc, BSc(Hons) Michael Roche, BSc(Hons)

GOWANS LABORATORY – Hepatitis C Head

Eric Gowans, MAppSci, PhD, NHMRC Senior Research Fellow

Post-doctoral Fellow Bruce Loveland, BSc(Hons), PhD

Senior Research Officer Shuo Li, PhD

Students

Sook-San Wong, BMedSc(Hons), MSc Philippe Latour, BSc(Hons) Ali Gorzin, BSc, MSc Hamed Gouklani, BSc, MSc Calum de Burgh

MAK LABORATORY – HIV Assembly Head Johnson Mak, BSc, PhD

Johnson Mak, DSC, The

Senior Research Officers Candida da Fonseca Pereira, BSc, PhD Marcel Hijnen, BSc, PhD

Research Officers and Research Fellows Paula Ellenberg, Bsc, MSc, PhD

Kate Jones, BSc(Hons), PhD

Students

David Hawkes, BSc(Hons) Redmond Smyth, BSc(Hons), MSc Steve Heaton, BSc Sanne Pfeifer, BSc Hamid Salimi, BSc, MSc Jason Brouwer, BSc Bevan Hirst, BSc

Visiting Scientists

Linda Hartkamp, BSc MSc Maya Goldstein, BA(Hons)

TACHEDJIAN LABORATORY – Molecular Interactions Head Gilda Tachedjian, Principal Burnet Fellow, BSc(Hons), PhD

Senior Burnet Fellow Secondo Sonza, BSc(Hons), PhD

Senior Research Officer Jenny Anderson, BSc(Hons), PhD

Research Assistants Katie Moore, BSc(Hons) David Tyssen, BAppSc Biotech Adam Johnson, BSc(Hons) Sushama Telwatte, BioMedSc(Hons) Tasnim Zakir, BSc(Hons)

Students

Johanna Wapling, BSc(Hons) Soo Huey Yap, BSc(Hons) Jennifer La, BMedChem(Hons) Yick Siew Tan, BSc

BURNET AFFILIATED LABORATORIES

LEWIN LABORATORY - HIV and Hepatitis Immunopathogenesis Head

Sharon R Lewin, MBBS, FRACP, PhD

Personal Assistant to Centre Head Sandy West

Deputy Head Paul U Cameron, FRACP,

FRCPA, PhD

Senior Scientist Miranda Xhilaga, PhD

Post-doctoral Fellows Suha Saleh, PhD Laveena Sharma, PhD Megan Crane, PhD Jennifer Audsley, PhD Edwin Leeansyah, PhD

Research Assistants

Fiona Wightman, BSc(Hons) Ajantha Solomon, BSc(Hons) Georgina Sallmann, BSc(Hons) Pushparaj Velayudham, BSc(Hons), MBiotech

Students

Gabriella Khoury, BSc(Hons) Vanessa Evans, BSc(Hons) David Iser, MBBS, FRACP Chris Desmond, MBBS, FRACP

Reena Rajasuriar, BPharm(Hons), MPharm Christina Chang, MBBS, FRACP Gregor Lichtfuss, (Monash International Postgraduate Scholarship) Monash University Wilson Chong, BSc(Hons) WRIGHT GROUP - THE ASIA PACIFIC NEUROAIDS CONSORTIUM Head Edwina Wright, MBBS, FRACP

Research Officer Luxshimi Lal, BAppSci, BPharm

NHMRC FELLOWS

NHMRC Principal Research Fellow

Professor Suzanne Crowe

NHMRC Senior Research Fellow Associate Professor David Anderson

Professor Eric Gowans

NHMRC Practitioner Fellow Professor Sharon Lewin

NHMRC Career Development Awards

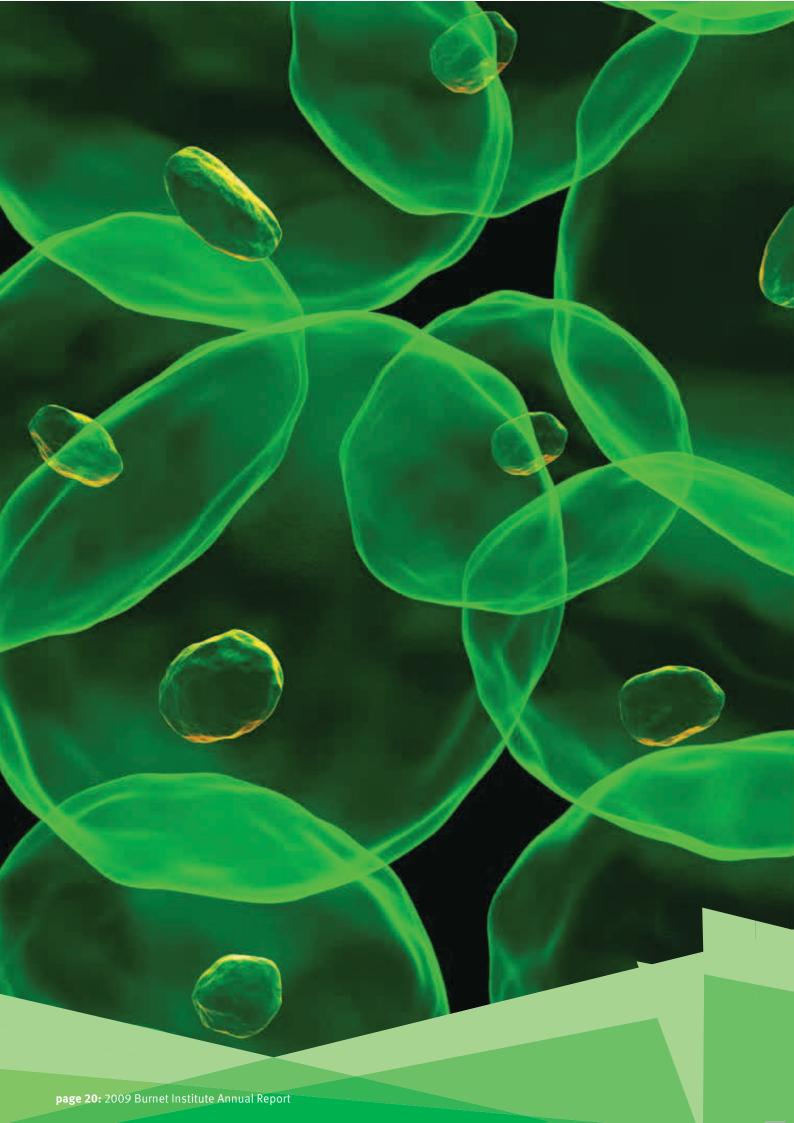
Associate Professor Gilda Tachedjian Associate Professor Paul Gorry Associate Professor Heidi Drummer Dr Kate Cherry

NHMRC Peter Doherty Fellow Dr Hilary Hoare, BSc (Hons), PhD

OTHER FELLOWSHIPS

Pfizer Foundation Fellow Associate Professor Johnson Mak

The Netherlands Rubicon Fellowship Dr Marcel Hijnen



Centre for MMUNOLOGY

Our mission is to develop novel ways to use the immune system to prevent or treat diseases such as cancer, autoimmunity and infection. Sir Frank Macfarlane Burnet was both a virologist and immunologist. His Nobel Prize winning work laid the foundation of modern immunological studies, with applications in an extraordinary range of diseases. Burnet's Centre for Immunology brings together outstanding research groups and integrates fundamental and applied research programs to understand the way the immune system functions in health as well as in disease. This knowledge is used for the development of novel treatments for incurable or chronic diseases.



Overview

The great strength of the Centre for Immunology is the integration of fundamental research with applied and clinically-related research and the application of this knowledge to develop new treatments. Tangible evidence for this is the clinical testing of our cancer vaccine, which is progressing to Phase IIb human trials in the USA, to commence in 2010. The vaccine is based on our basic research of 20 years ago, which found differences between cancer cells and normal cells in a molecule called MUC1. This discovery was than combined with our applied bio-organic chemistry research, to find ways to selectively stimulate the immune system to attack cancer cells by targeting the previously discovered MUC1, and so the mannan MUC1 vaccine was born. Current research also takes this broad approach, with programs ranging from work defining which atoms of different proteins interact to stimulate immune responses through to defining the functions of different cell types, and ultimately studying how the whole human body reacts to infection or to inflammatory conditions. Examples of these are given in the research Highlights and Snapshots sections on the following pages.

The work of the Gerondakis Laboratory in understanding the development of white blood cells that regulate the activities of other white cells is critical in understanding how our highly regulated **immune system** ultimately goes wrong in cancers, infections and autoimmune diseases.

The discovery of a new cell type by Meredith O'Keeffe in the bone marrow of mice opens the way for new understanding of mechanisms of resistance to viral infections and in the rejection of bone-marrow transplants and also has broader implications in the study of cancers.

The bio-organic chemists, led by Geoff Pietersz and his laboratory together with Vasso Apostolopoulos, continue to develop next-generation cancer 'vaccines' that improve our original cancer immunotherapy. They are now developing injectable **cancer immunotherapies** that have shown impressive results in mouse studies. Our structural immunologists led by Paul Ramsland are able to define the nature of interactions between proteins and sugars which are critical in the defence against bacterial infection.

Comprehensive genome-wide analyses by the Hogarth Laboratory of white blood cells involved in inflammation and autoimmunity in special mice expressing human genes and in patients, are identifying **new genes** that are 'switched on' before disease is apparent in rheumatoid arthritis and lupus. This may provide new targets for the treatment of these and other intractable chronic inflammatory conditions in humans, and provide a greater understanding of connections between infection and autoimmunity.

Similarly, understanding the battle between humans and viruses is a major effort in the Ffrench Laboratory where the researchers apply novel strategies towards the development of an **HIV vaccine** and in understanding immune responses to pandemic influenza.

This year has seen the move of the Austin-based researchers to AMREP prior to our move into the new facility in April 2010. Regrettably, 2009 saw the departure of several research groups: cancer researcher, Associate Professor Pei-xiang Xing who worked for many years on the application of monoclonal antibodies to **cancer therapy**; Associate Professor Denise Jackson whose laboratory identified processes involved in the regulation of blood clotting; and Professor David Power and his work on understanding kidney function and the molecular mechanisms that regulate energy.

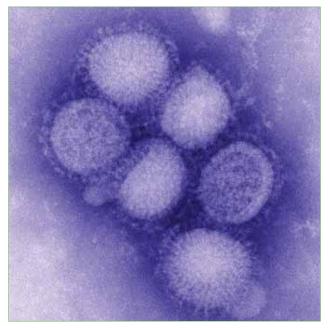
We continue to actively recruit exceptional scientists and Dr Amanda Gavin, presently at the Scripps Institute in the USA, was awarded an ARC Future Fellowship to return to the Centre during 2010.

The coming year promises to be a year of new opportunity with our move into our state-of-the-art purpose-built laboratories next-door to our current building.

Highlights

Pandemic H1N1 Influenza Study

Associate Professor Rose Ffrench and her team were funded from a special initiative of the NHMRC, to assess immune responses in individuals infected with the pandemic H1N1 influenza strain, compared to healthy controls. This study has involved recruitment of people with H1N1 influenza in collaboration with Professor Suzanne Crowe, and Dr Allan Cheng and Dr Julian Elliott of The Alfred hospital. Subjects had samples collected weekly for three weeks and were then assessed for antibody responses and cellular immune function by Burnet's research staff members Devy Santoso and Kylie Goy. The aim of this project was to determine if there were some cross-reactive responses from earlier infections, and to see how these responses correlated with disease severity. In addition, once the CSL PanVax vaccine became available in September we also assessed immune responses in individuals given the vaccine, compared to those who had received the seasonal vaccine earlier in 2009 or those who were not vaccinated.

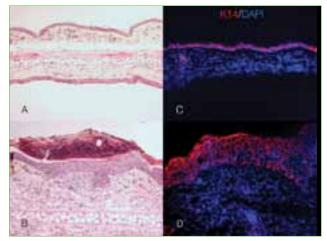


H1N1 pandemic influenza virus. Image courtesy of Centre for Disease Control, USA.

We have been able to show that the majority of those infected with the H1N1 strain developed very high titre antibody responses, and we could also detect responses to earlier strains of influenza in these individuals. We also saw crossreactive responses to the H1N1 strain in some individuals who did not appear to be infected, indicating the possibility of recent subclinical infection or cross-reactive responses. In addition while most people made strong antibody and B-cell responses to the PanVax vaccine, some had responses that reacted predominantly to earlier H1N1 strains. This ongoing study aims to develop a suite of assays of influenza immunity that can be used for future influenza research and vaccine development, as well as informing H1N1 pandemic vaccination strategies in the northern hemisphere. The interim results from this study were presented at an NHMRC summit in Canberra in early December.

Understanding how regulatory T-cells develop

CD4 Regulatory T-cells (Tregs) are a specialised subset of T-cells that serve an essential role controlling immune function. Normally, Treg cells serve two main purposes. First, they suppress those rare, detrimental self-reactive T-cells that have managed to escape elimination during the quality control process that normally occurs in the thymus during T-cell development. Second, they curtail normal T-cell-dependent immune function, ensuring that immune responses remain restrained and immune mediated damage does not occur. Consistent with these roles, impaired or inappropriate Treg cell function has been linked to a wide variety of autoimmune diseases and the inability of the immune system to effectively eliminate cancer cells. Understanding how Treg cells develop and are maintained offers the potential to manipulate the size of this population and in turn influence the impact Treg cells have on immune functions associated with infection, autoimmune disease, cancer and transplantation. Our laboratory has recently shown that expression of the gene regulatory factor c-Rel in T-cell precursors is crucial in ensuring that these precursor cells that have a capacity to develop into different types of T-cells, specifically develop into Treg cells (Isomura et al / Exp Med 206: 3001-3014.). Our ongoing studies are directed towards understanding how c-Rel dictates this Treg cell specific genetic blueprint, and whether this information can be used to manipulate the number and function of Treg cells.



A comparison of skin histology from a normal mouse (A and C) and a mouse deficient in regulatory T-cells that has inflamed skin (B and D). Hematoxalin and eosin stains of mouse skin (A and B). Stains with a fluorescent antibody for the epidermal protein K14 (red) (C and D).

Snapshots

Immunology and Cancer Vaccine

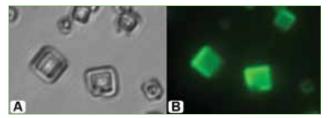
Modifying and diverting immune responses in

multiple sclerosis. Vasso Apostolopoulos and her group have developed novel peptides from myelin basic protein, a protein responsible for auto reactive T-cells in Multiple Sclerosis (MS) patients. When these peptides were joined to a novel carrier (reduced mannan) a change in the nature of the immune response occurred. In addition, these peptides prevented the development of MS-like symptoms in animal models. Our work also demonstrated two functionally distinctive stages of dendritic cell development from **mouse bone marrow**, which were affected by the levels of critical reactive oxygen species (ROS). These findings indicate the role of ROS in the development of dendritic cells from haemopoietic precursor cells during responses, and have implications for new treatments for autoimmune disease and for cancer.

Viral Immunology

Development of a 'microcube' vaccine for HIV.

Associate Professor Rose Ffrench, in collaboration with Dr Fasseli Coulibaly from Monash University and Dr Johnson Mak of Burnet's Centre for Virology, were awarded a Gates Grand Challenges Exploration grant to provide **proof of concept data** on a novel strategy for an HIV vaccine. This involves the use of an insect virus protein that naturally forms crystals within infected cells to deliver HIV proteins in a strategy they called 'microcubes'. Our group is assessing the immunogenicity of this novel vaccine *in vitro* using cells from people infected with HIV and *in vivo* in mice.



HIV 'microcube' vaccine engineered to incorporate functional green fluorescent protein (GFP). (A) Bright-field, (B) GFP fluorescence.

Helen Macpherson Smith Trust Inflammatory Diseases

Understanding the causes of inflammation and

autoimmunity. Studies by Mark Hogarth's team this year have revealed an exciting **connection between autoimmune arthritis and infectious diseases.** Analysis of the white blood cells of mice have revealed unexpected alterations to gene expression 'signature' in white blood cells, before disease onset, which are characteristic of cells normally associated with resistance to infection. Analysis of the gene expression in the cells invading joints in humans has commenced with gene array analysis of 34,000 genes in the white blood cells of patients with arthritis.

Immunoreceptors

Regulating the immune system. Receptors that invoke opposing intracellular signalling effects are considered essential for maintaining a balance between activation and quiescence of the immune system. This conceptual model may also be involved in the regulation of haemostasis and thrombosis. While this signalling balance has been established as a major means of **activating and inhibiting platelets** by studies on GPVI-FcR -chain collagen receptor and PECAM-1, our understanding of immunoreceptor signalling in the context of haemostasis and thrombosis is at an early stage. Associate Professor Jackson's team demonstrated a novel role for a cell adhesion model called CEACAM1 in acting as a negative regulator of plateletcollagen interactions, involving GPVI receptor and thrombus growth *in vitro* and *in vivo*.

The surface of white blood cells is where most immune responses are initiated or stopped.

Viral Immune Resistance

Discovering the function of new dendritic cell populations. In 2009, Meredith O'Keeffe joined Burnet and established the Viral Immune Resistance Laboratory. Meredith arrived from previous positions at Bavarian Nordic, Immunology Research, in Munich and WEHI in Melbourne. Her research is focused on understanding the role that sentinel cells of the immune system, called dendritic cells, play in immunity to infections. Recognising how dendritic cells in different parts of the body 'see' infectious agents and then **inform other cells of a foreign presence** is a key factor in the generation of effective vaccines.

Bio-Organic and Medicinal Chemistry

Improving cancer 'vaccines'. Geoff Peitersz and his team in the Bio-Organic and Medicinal Chemistry laboratory aim to develop novel delivery systems for cancer and infectious disease vaccines. These are based on protein or **DNA vaccination**. One such delivery- system is based on synthetic peptides that can enter immune cells. We have used these agents to deliver multiple breast cancer associated peptides (MAP). These internalising MAPs primed good antibody responses and activated killer cells in mouse models. Mice immunised with these MAPs were protected from a challenge with cancer cells. Furthermore, incorporation of agents such as CpG or Imiquimod that activates immune cells (danger signals) further enhanced the anti-tumour efficacy of the MAP.

Structural Immunology

Recognising carbohydrates. Recognition of carbohydrates by proteins is of fundamental importance to immunity and infection. Paul Ramsland and his team, with Mark Agostino (PhD student) and Dr Elizabeth Yuriev (Monash University), developed a validated computational approach called '*site mapping*' for displaying and interpreting carbohydrate binding modes generated by **automated docking procedures**. Site mapping is generally applicable for examining and understanding the multitude of antibody-carbohydrate interactions that are critical for immunity to pathogens, transplantation rejection and are of potential use in cancer immunotherapy.

Centre for Immunology: our staff and students

Centre Head

P Mark Hogarth, PhD, NHMRC Senior Principal Research Fellow

Personal Assistant to Centre Head

Susan Collins

APOSTOLOPOULOS LABORATORY – Immunology and Cancer Vaccine Head

Vasso Apostolopoulos, BSc(Hons), PhD, Adv Cert Prot Cryst

Post-doctoral Fellows Kuo-ching Sheng, BSc(Hons), PhD Stephanie Day, BSc(Hons), PhD

Clinical Associate

Christine McDonald, MBBS, PhD, FRACP

Visiting Professors

John Matsoukas, BSc, MSc, PhD Lily Stojanovska, BSc, MSc, PhD

Visiting Fellow Maria Katsara, BSc, MSc, PhD

Students Ying Ying Kong, BSc Jennifer Perret, MBBS

FFRENCH LABORATORY – Viral Immunology Head

Rosemary Ffrench, BSc(Hons), PhD, NHMRC Industry Fellow

Immunological Monitoring Facility Coordinator Kylie Goy, BSc(Hons)

Project Manager

Harini de Silva, BSc (Hons), PhD Laboratory Scientist Amanda Brass, BA, BSc, MSc, PhD

Research Assistant Devy Santoso, BMS(Hons)

Student Jacqueline Flynn, BSc(Hons), MBiotech

GERONDAKIS LABORATORY – Intracellular Signalling and Gene Expression Head

Steve Gerondakis, BSc(Hons), PhD, NHMRC Principal Research Fellow

Senior Post-doctoral Fellows

Ashish Banerjee, BSc(Hons), PhD Raffi Gugasyan, BSc(Hons), PhD George Grigoriadis, BSc(Hons), PhD, MBBS(Hons) Ajithkumar Vasanthakumar, BSc, MSc, PhD

Senior Research Assistant/ Laboratory Manager Raelene Grumont, BSc(Hons), MSc

Laboratory Animal Care Technician Sonia Guzzardi

Sonia Guzzardi

Students Elisha Horan, BSc Isaac Han, BSc

HOGARTH LABORATORY – Helen Macpherson Smith Trust Inflammatory Diseases Head P Mark Hogarth, PhD, NHMRC Senior Principal Research Fellow

Post-doctoral Fellows

Bruce Wines, PhD Maree Powell, PhD Pat Mottram, PhD Peck Szee Tan, PhD Angela Cendron, PhD Nicholas van de Velde, PhD (to May 2009) Bock Lim, PhD

Research Assistants

Soong Ling, BSc(Hons) Halina Trist, BSc Lee-Ann Crooks, BSc(Hons) (to May 2009) Kerry Ko, BBiomed, BSc(Hons) May Lin Yap, BSc(Hons)

JACKSON LABORATORY – Immunoreceptor Head

Denise Jackson, FAIMS, PhD, NHMRC Senior Research Fellow

Research Assistants Rochna Chand, BSc(Hons) Eva Orlowski, BSc(Hons)

O'KEEFFE LABORATORY -Viral Immune Resistance Head

Meredith O'Keeffe, PhD

PIETERSZ LABORATORY – Bio-Organic and Medicinal Chemistry Head

Geoffrey A Pietersz, PhD Staff

Martha Kalkanidis, PhD Owen Proudfoot, PhD Choon Kit-Tang, PhD Jennifer Hsu, PhD Sandra Esparon, BSc

Student Nicole Brooks, BSc(Hons)

POWER LABORATORY – Kidney Head

David Power, MD, PhD, FRCP, FRACP

Staff

Peter Mount, MBBS, PhD, FRACP

Scott Fraser, BSc(Hons), PhD Marina Katerelos, BSc(Hons), PhD Kurt Gleich, BSc(Hons)

Students

Michael Desmond, MBBS Darren Lee, MBBS, FRACP Suet-wan Choy, MBBS, FRACP

RAMSLAND LABORATORY – Structural Immunology Head

Paul A Ramsland, PhD, NHMRC Career Development Award

Staff William Farrugia, MSc

Student Chloe Ngo, BSc

XING LABORATORY – Cancer Immunotherapy Head

Pei-xiang Xing, MBMM, PhD

Post-doctoral Fellow Xiu Feng Hu, MBMM, PhD

Research Assistant Scott Vandervalk, BSc(Hons)

Student Eunice Yang, BSc(Hons), PhD

Clinical Associates

Dr Ross Baker Dr Russell Buchanan Dr Frank Ierino Dr Christine McDonald Dr Paul Johnson Professor Stamatis Vassilaros

Research Associates

Dr Mal Brandon Professor Dennis Burton Professor John Cambier Dr Peter Colman Dr Henry Metzger

Emeritus Professor

Professor Ian F C McKenzie, AM, MD, PhD, FRACP, FRCPA



Centre for POPULATION HEALTH

The Centre for Population Health (CPH) improves the health of the community by conducting high quality, policyrelevant and innovative research that addresses the major public health problems associated with infectious diseases, drug use and related behaviours. Areas of specific interest include HIV, hepatitis C, sexually transmitted infections, malaria, tuberculosis, drug and alcohol misuse and justice health; all are serious health concerns in Australia and in the Asia and Pacific Regions predominately affecting highly vulnerable populations. An important component of our work is developing effective mechanisms to communicate with these populations about how to improve their health. The problems and populations which the CPH addresses are highly challenging, but this makes our work equally rewarding and important.



Overview

HIV, hepatitis C, sexually transmitted infections, malaria, tuberculosis and drug and alcohol misuse are serious health concerns in Australia and in the Asia and Pacific Regions. 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 (CPH) 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.

Our Centre undertakes a broad spectrum of work, ranging from research that helps to better understand the priority diseases and their transmission and ecology, to discovery science with potential for longer-term benefits, such as therapeutics and vaccines, to health systems-oriented research that directly influences health policy.

Some areas of specific interest are described below.

Alcohol and other drug use is a major public health issue costing the Australian community an estimated \$55 billion per annum. Paul Dietze and his team conduct leading-edge epidemiological and programmatic research designed to measure the nature and extent of alcohol and other drug use over time, with a view to developing effective policy responses.

Prisoners in Australia and elsewhere are disproportionately affected by social disadvantage, chronic ill health and preventable disease (including blood-borne and sexually transmitted infections), mental illness and high rates of substance misuse. Stuart Kinner's group undertakes innovative, rigorous and policy-relevant research that aims to enhance the evidence base for justice health policy and practice, in turn improving health outcomes in this group.

Malaria is a major global public health problem, causing as many as one billion malaria episodes each year and more than a million deaths, predominantly in young children in the poorest communities. The Centre's malaria program, led by Paul Gilson and Brendan Crabb, extends from basic laboratory research through molecular epidemiology to large field trials of anti-malarial therapy in children in Papua New Guinea, all aimed at providing evidence for more effective control and treatment.

Hepatitis C is associated with considerable mortality and morbidity; over 180 million people are infected world-wide and the virus affects over 200,000 Australians. Working closely with people who inject drugs and a multidisciplinary team of scientists, led by Campbell Aitken undertakes innovative research to improve our understanding of hepatitis C virus infection, with the ultimate aim of developing effective harm reduction strategies to reduce hepatitis C transmission and to develop a hepatitis C vaccine.

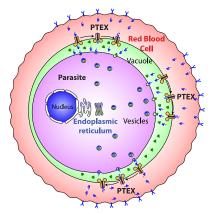
In Australia, new diagnoses of **HIV** increased in the past decade after declining in the 1990s. Our team headed by Mark Stoové aims to reduce the impact of HIV on the community by managing and developing innovative HIV surveillance systems on behalf of the Victorian government, working closely with the groups at greatest risk of HIV, and conducting research to better understand the transmission and prevention of HIV in these populations.

Chlamydia trachomatis is a sexually transmitted infection that predominately affects young heterosexual men and women. If untreated, chlamydia infection is a major cause of pelvic inflammatory disease and tubal infertility in women. Margaret Hellard leads the team that works to reduce the impact of chlamydia on the community by developing and managing innovative surveillance systems on behalf of the state and federal governments and developing health promotion programs that use new technologies such as SMS and Facebook to increase both chlamydia awareness and testing in young people.

Tuberculosis (TB) remains a major public health menace with the number of cases worldwide increasing. The emergence of TB that is resistant to currently available drugs is a significant threat to control programs internationally. Helen Cox is working on the epidemiology and health systems implications of the emergence of drug-resistant TB.

Highlights

An Achilles heel in malaria offers new therapy hope.



Malaria parasites extensively modify the human red blood cells they infect by exporting hundreds of proteins into the blood cells. The exported proteins are read by a barcode reading machine in the endoplasmic reticulum of the parasite and are then delivered to the PTEX machine which transports them into the red blood cell.

🎦 Exported protein 🎕 Secreted protein 🏌 Sticky knob protein

A major highlight for the Centre's Gilson/Crabb Laboratory (Malaria) was publication in the leading scientific journal *Nature* of their **discovery of a protein pore that is a chink in the life cycle of malaria** – offering hope for the development of new treatment options for this devastating disease. Their research was undertaken in collaboration between The Burnet Institute, The Walter and Eliza Hall Institute of Medical Research and Deakin University's Medical School.

Malaria is spread via mosquitoes and its most lethal form is caused by the parasite *Plasmodium falciparum*. The malaria parasite grows inside red blood cells but to survive and cause illness it must transport hundreds of different proteins to the outside. While these proteins have many different functions crucial to parasite growth and survival, a common feature is that they must all pass through the same pore in the surrounding membrane called PTEX. The main significance of the discovery of the identity of this PTEX pore is its implication for a new anti-malarial therapy – the next step being to identify drugs that block this protein channel. Therapies that block the PTEX pore could interfere with many different crucial processes in the one hit and in that sense the pore is **an Achilles heel of the malaria parasite**.

There are more than 400 million cases of malaria each year with more than one million people, mainly children, dying from the disease. New therapies are urgently needed to combat ever-increasing resistance to the available drugs.

Sexual health and young people – new ways to communicate about risk.

Young people are highly susceptible to health problems that begin in young adulthood but have life-time consequences. A prime example of such diseases is chlamydia infection that can have long-term consequences including pelvic inflammatory disease and **infertility in women**. Of major concern is that the prevalence of chlamydia is on the rise with Australian notifications increasing from 180/100,000 in 2004 to 271/100,000 in 2008.

> Communication technologies such as text messaging (SMS) and the internet offer novel ways to reach young people.

Over the past five years CPH has undertaken a series of innovative studies aimed at increasing young people's knowledge of chlamydia. This includes recognising their risk and their awareness of the importance of regular chlamydia testing if they are sexually active (a simple urine test) and treatment if found to be infected (two antibiotic tablets). We have also undertaken work aimed at improving young people's access to chlamydia testing and treatment programs through outreach testing programs based in locations like sporting clubs (The Sex and Sport Study).

For the past five years the Centre for Population Health has attended the Melbourne Big Day Out music festival, and each year we interview more than 1,000 people about sexual health and behaviour. As part of this work we conducted the first randomised controlled trial to evaluate the use of SMS and email messages to improve the sexual health of young people – half the group were sent regular sexual health-related SMS and email messages, and the other half received no messages. An important outcome of the study was that young women in the intervention arm (the group who were sent messages) were significantly more likely to have had an STI test compared to those who did not receive the messages. The increase in reported sexual health-seeking behaviour among young women is a very promising and important result because chlamydia testing and treatment (if necessary) reduce the duration of infection, thereby decreasing the potential for transmission and the risk of complications associated with chlamydia infection. A second notable finding was that both young males and females in the intervention arm demonstrated increased STI knowledge after receiving these messages compared with the control group who did not receive messages. Similar findings were found when the SMS approach was scaled up to reach a larger number of young people (the SMS 2008 project and the S5 project), providing further proof of the utility of using SMS for sexual health promotion to young people.

More recently we have established **The FaceSpace Project**, which uses online environments such as Facebook, MySpace and YouTube, to communicate with young people about sexual risk behaviour. The project involves the development of fictional characters who exist online and communicate on social networking sites, with sexual health and behaviour messages embedded within their interactions. The Project brings together CPH, with its experience in research and evaluation related to young people's sexual behaviour, with experience in the interaction of people and technology from the Department of Information Systems at The University of Melbourne, and creative involvement from X:MACHINE, an online production company associated with the Victorian College of the Arts. This exciting project is a worldfirst in examining if and how fictional characters can be used to deliver sexual health promotion messages to young people via social networking sites.

> Further information on these studies can be found on our website – burnet.edu.au/home/cph

Snapshots

HCV research

Our research into the hepatitis C virus (HCV) continued in 2009 largely through our ongoing Networks study and the collaborations it supports. The Networks study has encountered more than **400 people who inject drugs** (the major risk group for HCV infection in Australia) and over 200 have been interviewed and given blood multiple times. This unique cohort produces data of interest to immunologists, virologists, mathematical modellers and network modellers. To date it has generated seven national-level collaborations and three international collaborations aimed at improving our understanding of various aspects of the hepatitis C virus, and several articles in high-impact peer-reviewed journals.

Alcohol and other drug program

The Melbourne Injecting Cohort Study (MIX) is now well underway. MIX involves the recruitment of a large cohort of approximately 750 young people who inject drugs and then following up the cohort for a period of five years. Funded by the Colonial Foundation Trust (through the Drug Policy Modelling Program at the University of New South Wales) and the National Health and Medical Research Council, this research is unique in Australia and will provide new data on the trajectories of injecting drug use over time. Baseline data have now been collected, and analyses have commenced producing initial findings around a variety of health and social issues. For example, 59 per cent of cohort members report having ever been the victim of an assault, with 22 per cent reporting being such a victim in the six months prior to interview. Future analyses will examine the impacts of these kinds of events on the lives of cohort members over time.

Early warning surveillance systems for better targeted intervention

In 2009, CPH ran two complementary surveillance systems for HIV; 1) a routine system based on mandatory notifications by laboratories and clinicians and 2) **a sentinel surveillance system**, where additional risk behaviour is also collected for all tests conducted at high-caseload clinics. These systems provided timely detection of a significant change in Victoria's HIV epidemic, indicating increased risk of HIV infection among younger gay men. Findings reported to public health officials resulted in a rapid response, with new HIV prevention messages targeting younger gay men being produced by the Victorian AIDS Council.

Malaria vaccine design: overcoming parasite diversity

Many malaria vaccines are made up of purified parasite proteins that stimulate our immune system to seek out and eliminate the parasite when infection occurs. Biodiversity helps the parasite evade such attacks. To be effective a malaria vaccine may need to cover this biodiversity so we have been analysing the gene sequences for vaccine candidate proteins from parasite populations worldwide. We classified hundreds of sequences into a small number of groups, mapped their location and identified the most promising vaccine candidates. The research provides a framework for parasite diversity to be considered in the design of the **next generation of malaria vaccines**.

Understanding HIV in Victoria

Over the past decade new HIV diagnoses have steadily increased. In Victoria; between 1999 and 2007–2008, they rose from 2.8 to 5.3 per 100,000 people with infections predominately occurring in **men who have sex with men**. To understand more about the epidemic we conducted the Suck It and See Study, measuring the prevalence of HIV in men who have sex with men. Important findings included an HIV-prevalence estimate of 9.6 per cent among communityrecruited men who have sex with men, with 31 per cent of those diagnosed as HIV positive being unaware of their HIV status. This result has important implications for HIV transmission and is currently informing HIV prevention and testing programs in Victoria.

In Australia, new diagnoses of HIV increased in the past decade after declining in the 1990s.

Scaling up treatment for drug-resistant TB

Multidrug-resistant and extensively drug-resistant tuberculosis (M/XDR-TB) are significant threats to **global tuberculosis control**. While it is possible to treat patients with M/XDR-TB, treatment is costly, lengthy and difficult for patients. To date, fewer than three per cent of the half a million cases estimated to emerge globally each year receive effective treatment. A program to scale up M/XDR-TB treatment through decentralisation and integration with the routine TB program is being carefully evaluated in Khayelitsha, a township in South Africa. Early results suggest improvements in case detection, treatment outcomes and survival. Similar patient-centred models of care can be implemented in other high-burden settings internationally.

Justice health research

The Centre for Population Health recently established a Justice Health Research Group, headed by Dr Stuart Kinner. This new group has received in excess of AUD\$1.8m funding from various sources including NHMRC, Department of Human Services and Secretariat of the Pacific Community. Current projects include: the world's first randomised controlled trial of a broad-based health intervention for exprisoners, a novel record linkage study to explore patterns of mortality among ex-prisoners, a longitudinal study of ex-prisoners with a history of injecting drug use in Victoria, the first ever longitudinal study of ex-prisoners in Fiji and a systematic review of health interventions for ex-prisoners, under the auspices of the Cochrane Collaboration. Dr Kinner was invited to co-coordinate a new (proposed) Justice Health Field in the Cochrane Collaboration, which will for the first time facilitate synthesis and dissemination of high quality evidence in the justice health field internationally.

Centre for Population Health : our staff and students

Centre Heads

Margaret Hellard, MBBS, FRACP, FAFPHM John Reeder, MSc, PhD

Office Manager and Personal Assistant to Centre Heads Liz Nicol

Head, International Health Research Group John Reeder, MSc PhD

Head, Drug and Alcohol Program Paul Dietze, BSc(Hons), PhD

Head, HCV Program Campbell Aitken, BSc(Hons), PhD

Head, HIV, AIDS and STI Program Mark Stoové, GradDip (Ed), BAppSci(Hons), PhD

Head, Justice Health Program **Stuart Kinner**, BA(Hons), PhD

Co-Heads, Gilson/Crabb

Laboratory Brendan Crabb, BSc(Hons), PhD Paul Gilson, BSc(Hons), PhD

Co-Heads, Malaria Genomic Epidemiology Laboratory Alyssa Barry, BSc (Hons), PhD John Reeder, MSc, PhD

Principal for Disease Prevention **Robert Power**, BSc (Economics), PhD (LSE), PGCE (London)

HIV Clinical Advisor Julian Elliot, MBBS, FRACP, PhD

Deputy Director, Drug Policy Modelling Program **Trevor King**, BBSc, GradDip App Psych, MHSc **Research Fellows**

Isabel Bergeri, Pharm, MSC, DTM&PH Lucinda Franklin, BA, MPH, MAE

NHMRC Principal Research Fellow

Professor John Reeder

NHMRC Senior Research Fellow Associate Professor Margaret Hellard

NHMRC Career Development Award Associate Professor Paul

Dietze

NHMRC Post-doctoral Fellows Dr Helen Cox, BSc, MPH, PhD(TB Epidemiology) Peter Higgs, PhD, MA, BSW Stuart Kinner, BA(Hons), PhD Megan Lim, BBiomedSc(Hons)

Post-doctoral Fellows Kerstin Leykauf, Diploma, PhD Mauro Azevedo, BSc, PhD

Paul Sanders, BSc (Hons), PhD Statisticians Tim Spelman, BSc, GradCertStats Maelenn Gouillou, MSc

Research Officers Sandra Downing, RN, RM, GradDipNursing, MPH&TM, MAE Carol El-Hayek, BSc, MEpi Jane Goller, RN, GradDipNursing, MPH, Master of Health Science Fabian Kong, BPharm, MEpi Yung-Hsuan Julie Wang, MBBS, FRACGP, MAE Keflemariam Yohannes, BPsych(Hons), MPH, MAE

Research Assistants

Jessica Andrews, BHSci(Hons), BComm Stuart Armstrong Anna Bowring, BBiomed Sci, MPH Sarah Charnaud, BSc(Hons) Duyen Duong, Diploma **Community Welfare** Danielle Horyniak, BBiomedSci(Hons) Rebecca Jenkinson, BEng(Geol), GDipEpid and Biostat, MEpid Amy Kirwan, BA (Hons), MSocSci(Policy and Human Services) Phuong Nguyen Cerissa Papanastasiou, BHSc(Hons) **Dearne Quelch** Brendan Quinn, BA(Hons)/BSc Rachel Sacks-Davis, BSc,BA(Hons) Lee Schultz, PhD Tara Newen Sally Von Bibra, RN, RM Rebecca Winter, BA Jessica Wade, BBiomedSci(Hons) Johanna Wapling, BSc(Hons)

PhD Scholars

Hayley Bullen, BBiomedSci (Hons) Judy Gold, BBiomedSci(Hons) Chris Lemoh, MBBS, BMedSci, FRACP, DipClinEpi Alisa Pedrana, BBiomedSci(Hons) Brendan Quinn, BA(Hons)/BSc Tana Taechalertpaisarn, BSc(Hons)

Masters Student Anna Wilkinson, RN

Honours Students

Anita Fegin, BSc(Hons) Andreea luga, BSc(Hons) Katherine Hall, BBiomedSci(Hons) Caroline van Gemert, BA, HSc, GradDipIntHealth, MAE (current)

Youth Scholarships

Adonis Espinosa Elisha Jones Rebecca Reale

Associates

Dr Jane Hocking, BAppSc, MPH, MHealthSci, PhD Dr Anne Mijch, MBBS, FRACP



Centre for INTERNATIONAL HEALTH

The Burnet Institute's Centre for International Health leads practical action to improve the health of people in low-income countries. 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 about all these fields. Our approach is based on innovation, inquiry and influence. We work with local communities, governments, the UN system and international organisations including Australia's development agencies. We have country offices in Papua New Guinea, Indonesia, Lao PDR, Myanmar (Burma), China (including Tibet), and Mozambique. We have regional offices in Bangkok and Fiji, and selective small projects in other countries.



Melbourne staff with country and regional representatives at the Centre for International Health annual staff retreat.

Overview

The Centre for International Health was able to achieve substantial growth despite the Global Financial Crisis and a changing donor environment. We expanded our number of activities, annual turnover (close to a 50 per cent increase), and staff numbers: we now have in excess of **180 staff in our Melbourne and overseas offices**. We continued to manage a number of substantial multi-year projects and strengthened our own capacity in technical assistance and program management. Following are some highlights from 2009.

The **Women's and Children's Health** Knowledge Hub undertook case studies in adolescent reproductive health, women's ability to reach emergency obstetric care, community-level interventions for improving maternal and perinatal health, and human resources for health. These case studies will inform policy and programming, and strengthen networks of organisations working towards improved health outcomes for women and children in Asia and the Pacific. In addition, the Hub has a focus on **adolescent health**, which has led to new work in Asia and the Pacific by the Melbourne International Adolescent Health Group: this includes Burnet, the Nossal Institute, the Centre for Adolescent Health, the Youth Research Centre, and the Key Centre for Women's Health.

Burnet was one of only four Australian non-government organisations to be awarded an Innovations Grant by AusAID. This 12 month **maternal and child health** innovation will include needs assessments of Zimbabwean women and their children on both sides of the Mozambique–Zimbabwe border and then the introduction of pilot models to help them access good quality care. We hope that this will just be the start of Burnet's return to work in Zimbabwe. It will build on our existing work in Mozambique and extend our networks in Southern Africa.

We continue to play a leading role in harm reduction, maintaining membership in high level UN and other forums such as the UN Regional Task Force on Injecting Drug Use and HIV/AIDS in Asia and the Pacific, the UNAIDS Technical Support Facility for South Asia, the Reference Group to the United Nations on HIV and Injecting Drug Use, the International Harm Reduction Development Program, and the Open Society Institute, New York, USA. We have developed strong links with regional networks representing key affected populations, such as the 7 Sisters Coalition and the Asian Networks of People who Use Drugs (ANPUD). We continued to work with the Asian Consortium on Drugs, HIV, AIDS and Poverty (ACDHAP) to plan and organise the South Asia Regional Workshop of Response Beyond Borders, and the 1st Asian Consultation on the Prevention of HIV Related to Drug Use. Burnet also conducted an update of our earlier 2006 Baseline Assessment of Policies, Resources and Services for People Who Inject Drugs.



Our staff are often involved in consultancies for national and international NGOs. Mike Toole and Ben Coghlan visited Afghanistan as part of a team providing surveillance of polio outbreaks.

The Centre again contributed to improving health in the Pacific by establishing a regional presence in Fiji – in the past we had projects but no Burnet regional base. We prepared a report on regional procurement of pharmaceutical drugs for the **Global Fund on AIDS, Tuberculosis and Malaria**; this resulted in the appointment of a regional advisor to build capacity in pharmacology. We hosted a regional pharmacy workshop on treatment guidelines, and continued to advise Fiji and the Solomon Islands on pharmaceuticals guidelines. The first year of our new Pacific program resulted in over \$1 million in contracted activities awarded to Burnet, including a review of the Pacific responses to the H1N1 virus. Burnet also played an important role in the post-tsunami relief effort in Samoa through disease surveillance with the Ministry of Health.

Through our other regional office in Bangkok, Thailand, Burnet strengthened **regional relationships with donors and technical partners**. We have an increasing reputation as a provider of high quality specialised services. Burnet is a partner of RTI International implementing the USAID Health Policy Initiative in the Greater Mekong Region and China; Burnet leads the program component on health of men who have sex with men. As part of this, we developed a Resource Estimation Tool for Advocacy, which will be used by community and civil society groups to estimate the level of funding needed to scale up HIV prevention programming for men who have sex with men over a five year period. Burnet also led the production of a **policy brief** prepared for USAID and the Health Policy Initiative in the Greater Mekong Region and China. This was titled Investing in HIV prevention for men who have sex with men: Averting a Perfect Storm. Burnet also developed the Purple Sky Network Regional Information System on Men Who Have Sex with Men this tool allows country and provincial working groups in the Greater Mekong to map HIV programming for men who have sex with men in their areas, in order to identify gaps in geographical coverage, program areas, and target populations. The mapping will be used to advocate with governments and donors for more comprehensive programming.

Country Program Highlights



Children at Phaung Daw Oo in Mandalay, Burma.

Burma (Myanmar)



Burnet Burma's civil society partners are now entering a new phase of maturation and effectiveness, working in HIV prevention, treatment, care and support. Our **Local Resource Centre** and post Cyclone Nargis programs continue to support civil society and to address specific needs for psychosocial recovery

after the disaster. A new program addresses health needs of men who have sex with men. Another will develop partners' involvement in HIV treatment and Burnet staff will also work directly to deliver services at a local level. A new partnership with the International Rescue Committee will address maternal and child health in Chin State.

China

Burnet manages the China Australia Health and HIV Facility in Beijing, and also provides technical direction for the Australia-China health project in the Tibet Autonomous Region. We have community HIV and STI projects in Tibet, and a rural community health project supports communities to identify health needs and **develop solutions themselves.**

We supported training of senior health workers, and undertook Tibet's first HIV and STI prevalence study and a health resource study. Burnet assessed methadone services, conducted a review of best practice for HIV prevention, treatment and care in closed settings, and developed a training curriculum for law enforcement and prison officials.

In Burma, our Local Resource Centre has played a vital role in the emergency response post Cyclone Nargis by supporting civil society organisations to access financial, material and technical resources. 99

Indonesia



Burnet signed a new Memorandum of Understanding (MOU) with the Indonesian Co-ordinating Ministry of People's Welfare, making us one of the first international non-government organisations to do this. Our training in HIV Voluntary Counselling and Testing expanded nationally, our Bali HIV Care,

Support and Treatment Network grew, we developed **training on HIV for doctors** in public health centres and hospitals, and we further developed the national network for men who have sex with men. The 9th International Congress on AIDS in Asia and the Pacific was held in Bali in August 2009; Burnet recruited and managed 170 volunteers to assist.

Lao People's Democratic Republic



Our Lao program now manages a wide-ranging portfolio of activities. Burnet is recognised for its strong research focus and in-depth expertise on HIV prevention, particularly among men who have sex with both men and women. We began major HIV prevention work along new road developments in

northern Laos, for the Asian Development Bank, and we were commissioned by the WHO to evaluate national Community Events Based HIV Surveillance. Burnet commenced new HIV prevention among **men who have sex with men** with support from the Global Fund; as well as receiving approval to extend the Mother and Child Health and Nutrition project in Savannakheth Province.

Mozambique



Burnet prepared three reference manuals for **community counsellors**, after a long period of community consultation and field testing. These manuals will enable counsellors to provide accurate information to people on a range of topics deemed critical by communities themselves. The three

manuals are on Violence against Women and the new Family Law; Nutrition for HIV Positive People; and the Proper Use of Medicinal Plants and Herbs. We now have a new Country Representative, Dr José Carlos Lopez Seisdedos, who has many years' experience in Mozambique.

Adolescent girls are twice as likely to die as a result of pregnancy and childbirth as adult women. 99

Pacific Program



Building on our previous work, Burnet formally established a Pacific Program in 2009. Funding from the Secretariat of the Pacific Community will allow us to support national **HIV and STI strategic plans**, guidelines for STI tests, a study of HIV and health behaviours among prisoners in Fiji, and STI surveys in

Vanuatu and Fiji. We also commenced a review of Pacific responses to the H1N1 virus; and contributed to the posttsunami relief effort in Samoa, conducting disease surveillance.

Papua New Guinea



The Tingim Laip HIV prevention project and the East New Britain Sexual Health Improvement Project both continued. Our project on Improving Immunisation and Newborn Survival at the Aid-post Level showed that village health volunteers can deliver **hepatitis B birth-dose vaccinations** to women in

remote locations; we also explored the potential for integrating post-natal care with programs in maternal and newborn mortality. This work was recognised in global meetings of WHO, UNICEF and GAVI. Burnet works effectively with government at national and provincial levels, multilateral agencies including WHO and UNICEF, and non-government organisations including Save International and Catholic Health Services.



A young girl with her sister, Kambot Village, East Sepik, PNG.

Sri Lanka, Vietnam and Malaysia

Burnet maintains its presence though partnerships in a number of other countries in the Asia and Pacific Regions including: Sri Lanka (improving the **health and well-being of elders**), Vietnam (harm reduction) and Malaysia (harm reduction).

Centre for International Health: our staff and students Melbourne office

Centre Head

Mike Toole, MBBS, BMedSc (Monash), DTM&H (London)

Deputy Head, Technical Programs

Wendy Holmes, MBBS (London), MSc Community Health in Developing Countries (LSHTM)

Deputy Head, Management

Mark Tennent, BSc (Hons), Grad Dip Acc, CPA

Principal for Disease Prevention

Robert Power, BSc (Economics), PhD (LSE), PGCE (London)

Assistant Project Accountant

Kelly Xiao, BCom (Accounting), BEng (Environmental) (Hons), Melbourne

Essential Drugs and Community Health Specialist

Beverley Snell, PhC (Victorian College of Pharmacy), MAppSc (Research) (La Trobe), PHCb (London IOE)

Fellow, HIV and

Development Specialist Clare Murphy, RN, BEdSt, MPH&TM, MHSc

Fellow, International Maternal and Newborn Health

Elissa Kennedy, MBBS, Master of Public Health (International Health) (from June 2009)

Fellow, Women's and Children's Health Advisor

Lisa Natoli, DipAppSc Nursing (La Trobe), MPH Intl Health (Monash)

Finance Manager

Sarah Thomson, BA, BEc Asian Studies (ANU), GradDipCommerce (UNSW), CA Harm Reduction and Development Advisor Andrea Fischer, BA, BSc, GradDip (EpiPopHealth) (ANU), MPH (Monash)

Health and Development Specialists

Karl Dorning, DipT, BEd (La Trobe) (to April 2009) Suzanne O'Neill, MConflict Resolution (LaTrobe), DipHealth Sciences (LaTrobe), BA (Melbourne)

Health Economist

Rohan Sweeney, B Ec, PGrad Dip Health Eco & Eval, MPH Intl Health (to June 2009)

International HIV and

Development Specialist Chad Hughes, BSc(Biomed), MPH(Monash)

International Programs Finance Officer James Lawson

Medical Epidemiologist Ben Coghlan, MBBS

(Melbourne), MPH&TM (James Cook)(currently on leave without pay)

Office Manager

Trish Clark, DipBus (Swinburne)

Principal Fellow

Chris Morgan, MBBS (Sydney), DTCH (Liverpool) FRAC (on sabbatical from September 2009)

Principal Fellow Harm

Reduction Jimmy Dorabjee, BA(Sociology) India

Principal Fellow, HIV and Development Specialist Bruce Parnell, BA, MPH

(Monash), GradDipComDev (Phillip Institute of Technology) Program Director Mozambique, Senior Fellow and Program Quality and Learning Robyn Whitney, BA/SocSc

(Hons)(La Trobe), Postgrad Cert in Assess & Eval

Program Manager Tibet, Health and Development Specialist

Chris Hagarty, MPH International Health, Bachelor of Podiatry La Trobe

Project Accountant Dean Garreffa, BComm (LaTrobe), CPA

Project Manager – China Health Facility and Tibet Program Manager Satoko Kiyota, BEcon (YCU,

Japan), Master of Health Administration(UNSW)

Project Managers – Mekong Delta Region

Meg Quartermaine, MPH Project Manager – Myanmar (Burma) Program Dino Asproloupos,

BA(Leisure Services)(UVIC), IMBA(International Strategy) (York)

Project Manager – PNG Program

Tansie Jarrett, Ba Arts(Anthropology), BA Asian Studies(Indonesian and Contemporary Asian Society)(ANU)

Research Officer

Lucina Schmich, BA(Asian Studies)(ANU) – (Vietnamese), Monash LLM (Juris Doctor) ongoing

Research Officer Women's and Children's Health Anna Bauze, BSc(Hons), MPH, GradDipTechMgmt

Senior Fellow, Child and Adolescent Health Mick Creati, MBBS, MPH Epi and Biostats(Melbourne)

Senior Fellow, Education

Services Coordinator Marion Brown, BA, Bed TESL(La Trobe), DipEd(Monash), MAss&Eval(Melbourne)

Senior Fellow, HIV and Development Specialist Lisa Renkin, BA(UQ), MPH(UNSW)

Senior Fellow, Medical Epidemiologist

Tony Stewart, MBBS (Monash) MAppEpid (ANU) FAFPHM

Senior Project Manager

Shaun Liddell, BE (Civil) (Hons) (Canterbury), MPH (to Feb 2009)

Training and Education Administration Officer

Andrea Eakins (to June 2009) Sieyin Phung, BBus (from June 2009)

Women's and Children's Health Hub Program Coordinator

Mary-Ann Nicholas, BSc in European Management Science (German) (from May 2009)

Women's and Children's Health Specialist

Natalie Gray, FAFPHM, Masters of Int Public Health (Hons) (Syd), MBBS (Hons) (Syd), BSc, LLB (Hons) (Class 1)

Resident Associate Tony Mellen – Business Development

Centre for International Health: our staff and students **Overseas offices**

Finance Manager

English Dip (Laos)

Assistants

Vanmixay Boudtavong,

Senior Project Officer

of International Health,

Monash Univ. (Australia)

Kongchay Vongsaya, Master

Administration and Finance

Thavisouk Homsombath, Dip

BA, Economics & Business

Keomongkoun, studying

BA, Economics & Business

Phuangphanh Keovanthong,

Ounheurn Sabouatieng, Dip

BA, Economics & Business

Viroth Beuypanpittouleth,

Bangone Santavasy, M.A

Management (Laos)

Management(Laos)

Mathematic Teaching

Management (Laos)

Project Officers

Higher Dip(Laos)

Thatthaphone

College (Laos)

China - Tibet

Country Program Manager Chris Hagarty, MPH International Health, Bachelor of Podiatry La Trobe (currently based in Melbourne)

Office Manager and Outreach Project Officer Wangmo

Outreach Project Officers Sonam Palmo (Finances) Wangdue (IEC Development) Zomkyi Tseyang

Fiji

HIV/AIDS Program Management Specialist, Team Leader Pacific **Regional HIV/AIDS Project**

Dr Tamara Kwarteng, MSc (University of Ghana & LSHTM), PhD (LSHTM), Grad DipEpid (Melbourne)

Indonesia

BALI OFFICE

Country Representative Amanda Morgan, BTEC HND in Business and Finance Management

Finance Officer

Edwin Timotius, Bachelor degree in Accounting

House Keeper I Gusti Ayu Kade

Office Assistant Yufri Isomoyo

Office and Administration Manager

Ferny Hapsari, Bachelor degree in Agricultural Technology

Technical Assistant Erijadi Sulaeman

Program Officers

Asti Widihastuti, Masters degree - Health Counseling Nuretha Hevy (from April 2009) Ni Luh Putu Ariastuti (from September 2009)

Program Support Manager Evy Suryanti, Master of HR Management (until August 2008)

Volunteer Elise Willersdorf (from July 2009)

JAKARTA OFFICE

Program Manager Marcia Soumokil, MPH

Program Officers Tintin Rejeki

Mohammad Tono Permana LOMBOK OFFICE (closed

October 2009)

Project Assistant Imam Sofian. Bachelor Degree in Law

Project Officer Ika Christi, Diploma in International Relations

ACEH OFFICE (closed 31st January 2009)

Program Manager Hamsya, Bachelor Degree in Applied Physics

Cleaner **Ely Darweti**

Driver Mr Fauzi

Finance and Office Manager Hadya Noer, Diploma in Management

M&E Training Coordinator

Erwien Temasmico, Bachelor **Degree in Economics**

Office Assistant Fitria

Lao PDR

Institute)

Rights)

Country Program Manager

Niramonh Chanlivong, MD (Prague), MPH (NSW),

Philippa Sackett, BSc

Regional Manager

(Psychology), MA (Human

Phoxay Xayyavong, Master

of International Health,

Monash Univ. (Australia)

Project Management Advisor

GradDipHE (Gandhigram

Finance Manager Benjamim Antonio, Bachelor of Business Adm Moz

Office Assistant Ana Matlombe

Project Assistant Edna Sandra Reis

CHIMOIO OFFICE

Regional Coordinator Alfeu Manuel Muchine. BA

Cleaner/Office Assistant Victorino Durbek

Driver Vicente Fernando Silva

VSO Volunteer Lemeul Peterson (from

September 2009)

BURMA

Country Representative Kim Benton, BBSc, GradDipBHC (La Trobe), GradDip Drama (Auckland), LTh (NZJBTS), LTCL (to February 2009) Karl Dorning, DipT, BEd (La Trobe) (from April 2009)

Administration Assistants

Naw Cecilia Aye, LLB, M Dev S (Yangon) Zin Mar Nay Win, BSc (Geol)

Administration Coordinator Nyi Nyi Win, Assoc in AppSc (New York City Technical College)

Administration Officers

Nee Sin Thwet Aye, BA (English), LCCI, DipBusAdmin (Thames) **Myo Khin**, BA (History)

Centre Coordinator

Myint Su, MDevS, BCIS, BCSC

Cleaner

Nwe Nwe Ohn

Consultant

Patrick Ko Kyaw, BSc (Zool), MSc (Zool), MScMarine Biol (Brussels)

Driver

Naing Htoo Zaw (a) Zaw Zaw

Education Advisor Coordinator

Suzannah Dorning (from August 2009)

Field Monitors

Min Than Htike, BCom (from August 2009) Maung Maung Phyo (from October 2009) Khaing Su Mar (from November 2009)

Anongly Phimmasone, Dip BA, Economics & Business Management (Laos) Amphone Keooudom, MD (Laos) Assistant Project Officers

(Thailand)

Souvanhthong Lorkham, BA English, Laos Phansamai Vilasack, 3rd year of English Dip (Laos) Soutchay Phuealavong, English Dip (Laos) Pakaythip Keokangphen, Medical Assistant (Laos)

Mozambigue

MAPUTO OFFICE

Country Representative Dr Paulo Proto de Souza, MD, MPH (to October 2009)

Finance Assistant

Ei Cho Zin (from September 2009)

Finance Coordinator

Cho Cho Mar, BCom (Institute of Economics, Yangon), CPA (Myanmar Accountancy Council)

Finance Manager

Hnin Nandar Win, BCom(Hons), DA (UK), ACCA

Finance Officers

Aung Lwin Wintwar Tun

Housekeepers Ni Ni Mar

San San Aye

HR Officer

Aye Myat Soe, BA (Bus Management), LCCI

Information Management Coordinator

Aye Myat Thu, BA (Business Management)

Information Management Officer

Nang Nechi Minn, BA (Business Management)

IT Officers

Myo Min Min Htike, BSc (Physics) Lwin Min Ko, BCSc (Computer Science)

Logistics Officer

Thida Win, BA (Ec)

Monitoring and Accountability Coordinator

Thu Thu Nwe Hlaing, BA, M Public Policy (from April 2009)

Program Coordinator Phone Myint Win, MBBS (Yangon)

Project Managers

Aye Aye Myint, BA (Psychology) (from August 2009) Nang Pann El Kham, MBBS (Yangon), MPH (Bangkok) Khin Pa Pa Naing, MBBS (Yangon), MPH (Bangkok), DipComputer Studies QLMA Coordinator Mon Mon, MBBS, MCH

QLMA Program Officers

Yadanar Khin Khin Kyaw, BSc(Hons), DipBus Thandar Aye (from September 2009)

Regional Officers

William Wayan Tin Maung Win (from Aug 2009) Nay Nwe Lin Maung (from August 2009)

Senior Technical Officers

Khin Hnin Oo, MBBS (Yangon) DipApplied Psychology (Yangon) Aung Myint Than, MBBS (Yangon), PhD Mi Mi Aung Khin, MBBS (Yangon), MA Sienne Lai Zaw, MBBS (Yangon) (from Feb 2009) Tin Aung Win, BVetSc (Inst of Animal Husbandry & Science, Yangon), DipFood Tech (Yangon Inst of Tech) Htar Htar, BSc (Mawlamyaing), DipAcc (London) Hla Htay, MBBS (Yangon), MPH (Bangkok)

Technical Advisor

Kelly Macdonald, MSc Reproductive & Sexual Health (London), MSc Rural Planning & Dev (Ontario), BA Int Dev Studies (Calgary)

Technical Coordinator Kyi Kyi Ohn (from September 2009)

Technical Officers

Nwe Mar, BA (Psychology), MA (Psychology) **Ye' Min Htoon**, BSc (Physics) Wai Lin Kyaw, BA (English), Dip Dev Studies, Dip Social Work, Dip English Ne Chye Thwin, BA (Ec), AGTI Nay Myo Aung, LLB Doi Ra, BA (Public Health & Biology) Sai Aung Kyaw Myint, BA (Business Science) Htun Htun Lynn, BNSc(Genetics) (from February 2009) Pyae Phyo Aung, MBBS (Yangon) Zaw Thein Oo, MBBS (Yangon) (from March 2009)

Htun Naing Win, BA (Geography) Htwe Htwe Hlaing, BSc, DipChinese DipDS

Technical Support

Coordinator Wint Maw Thinn, MBBS (Yangon), DipIT (Yangon)

Papua New Guinea

Senior Program Manager, Port Moresby Jim Benn, BSocSc(Waikato), PG DipAcc (Wellington), PG Dip Community Development (Deakin)

Administration Assistant ENBSHIP

Elizabeth Norman

Administration Assistant Lae Jena Rekon (from September 2009)

Administration Assistant Port Moresby Freda Joup

Administration Manager Beranice Reuben

Community Engagement

Workers ENBSHIP Ellen Kavang Hadlee Supsup Sakaia Luana Rebecca Gabong-Mano

Drivers Port Moresby

Harry Fong Raymond Nambate (from February 2009) Terrence Kassman (to September 2009)

Finance Assistant Naomi Vele

Finance Manager Kathleen Waninara-Kema

Immunisation Project Officer Hedwig Winjong

Janitor Port Moresby Inara Udia

Logistics Officer Caroline Talei Bunemiga

M&E Coordinator Fidelis Jogamup

National Manager – Tingim Laip program Ako Maniana

Project Management Advisor Stephanie Lusby

Project Officers

Benson McRubins Bridget Taimbari David Dena Denys Waibauru James Sekul (to May 2009) Jerimiah Konga (from May 2009) Joseph Mocke Meredith Tutumang Paul Weriyai Simon Kange Ronald Kwenama Rose Mauyet

Receptionist Lillian Tau

Regional Coordinators Tingim Laip Joan Usan

Joanne Ganoka Judy Tokeimota Tanya Mossman (to August 2009)

Social Mobilisation Health Promotion

Lester Bisibierra

Team Leaders ENBSHIP Joan Macfarlane (to April 2009) Geraldine Wambo

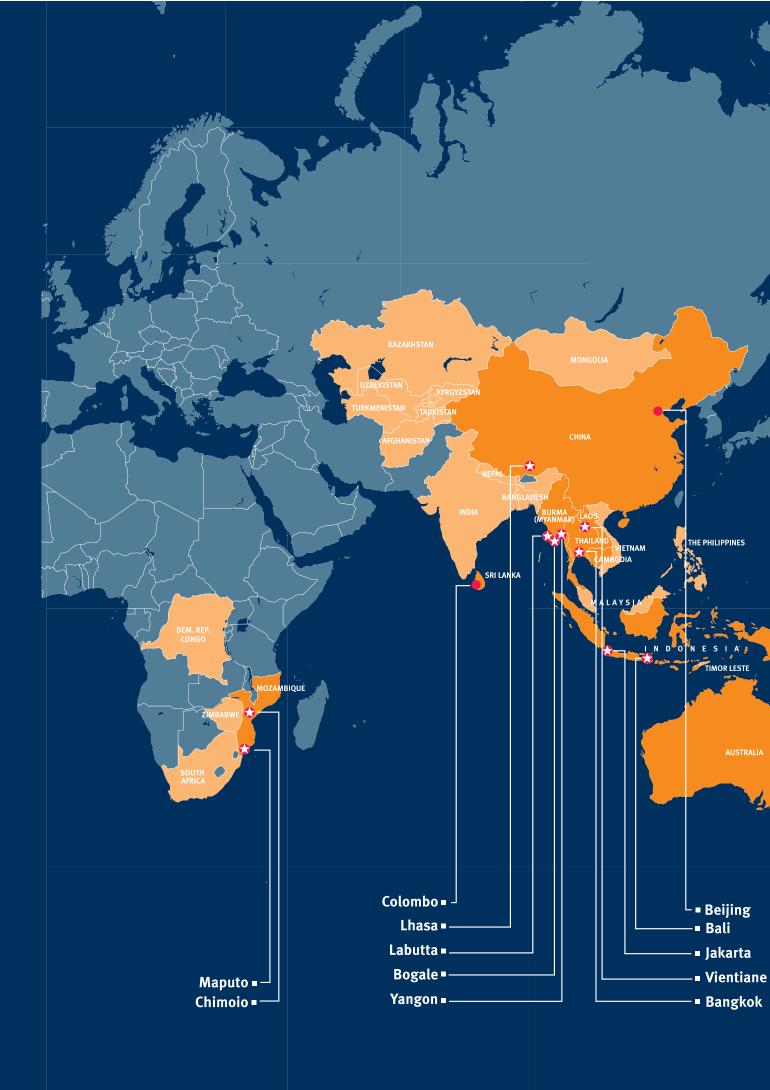
Technical Advisor

Pilly Mapira (from October 2009)

Training Coordinator Erica Ogoba

Thailand

Asia Regional Representative Brad Otto, BA (Denver)





The Burnet Institute has country programs and offices in Papua New Guinea, Indonesia, the Lao PDR, Burma (Myanmar), China (Tibet), and Mozambique. We also support a range of activities in Sri Lanka, Cambodia, Vietnam, and a number of Pacific Island Countries, and Central Asian nations. The Institute has regional offices in Bangkok and Suva.

Our work in the region

Through our local and internationally-located public health staff, the Burnet Institute has the capacity to respond in a timely fashion to international health crises, as well as to provide training and support to Ministries of Health and community groups in our region. In Laos for example, Burnet staff provided training to district health staff in three provinces in disease surveillance, epidemic investigation and response. Burnet also developed the only Lao language applied epidemiology training manual which is now used throughout the country. These initiatives helped the Lao Ministry of Health to respond effectively to the avian influenza outbreak.

Over the past five years, the Burnet Institute has strengthened disease surveillance capacity throughout the Tibet Autonomous Region of China, through an Australian Government-funded program. The focus of this activity has been emergency preparation and response, and has included epidemiology training, laboratory strengthening, and the establishment of computerised database systems in three prefectures. Through its participation in the Global Outbreak Alert and Response Network (GOARN), Burnet has provided staff to assist with cholera surveillance in Zimbabwe, the avian influenza outbreak in Cambodia, and the 2009 swine flu outbreak.



AREAS OF BURNET'S WORK

BURNET'S PARTNER OFFICES

BURNET'S OPERATIONAL CENTRES

BURNET'S COUNTRY AND REGIONAL OFFICES

Education and Capacity Building



left to right: Steve Gerondakis, Rose Ffrench, Paul Gorry, Heidi Drummer and Marion Brown.

The Burnet Institute continued to play an important role in education and capacity building during 2009, both within Australia and overseas. Burnet provided training in laboratory and social research, with students from Australian and international universities undertaking postgraduate independent research projects across all of our program areas. Burnet was also actively involved in the delivery of public health courses at undergraduate and postgraduate levels, through associations with the University of Melbourne, Monash University, Deakin University, La Trobe University, and Udayana University (Bali) and Atma Jaya Catholic University in Indonesia, and the University of Malaya in Malaysia.

During 2009, there was a major review of the education program at the Burnet Institute, conducted by the new Education Principals, Ms Marion Brown and Professor Steve Gerondakis; the review assessed the education policy and practice. The review process included consultation with relevant Burnet staff, current and past students, and external informants from other medical research institutes. The report confirmed the depth and breadth of the current



Associate Professor Rosemary Ffrench discusses her work with Burnet's student representative, PhD student, Michael Roche.

Burnet education program, reflecting the commitment of each Centre to providing quality education for students, and produced a five-year strategic plan for implementing these recommendations. In addition, there was a consolidation of oversight of the research undergraduate, honours and postgraduate students with the formation of the Research Students Committee, chaired by Associate Professor Rosemary Ffrench. Associate Professor Anthony Jaworowski retired as postgraduate coordinator during 2009 and we thank him for his many years service to the Institute in this role. In addition, Dr Heidi Drummer joined Associate Professor Paul Gorry as an honours coordinator.

Honours Program

The Institute accepts honours students from all major universities within Victoria with the aim of providing training in public health, infectious diseases and immunology research programs.

In 2009, the Burnet Institute hosted eight honours students, three from the University of Melbourne and five students from Monash University. The honours projects covered diverse areas of research including the immunology of hepatitis C virus (HCV) infection, the structure and function of cell surface receptors, mechanisms of immune evasion by pathogens, population genetics of malaria and HIV replication.

The Burnet Institute also hosted an Honours Disciplinespecific module through the Department of Immunology, Monash University. The topic for 2009 was 'Emerging Infectious Diseases'. Students were asked to write a 5000word essay in the format of a Nature News and Views article on an emerging pathogen of their choice, followed by an oral presentation. Six students completed the module, including students from the Baker Institute, Department of Immunology and the Burnet Institute. This project contributed to the assessed component of their course work.

You will find further information about Burnet's Honours Program at http://www.burnet.edu.au/home/education

Postgraduate Study

The Burnet Institute places great emphasis on postgraduate study, with the aim of providing **high-quality research** training in areas related to public health and basic science in infectious diseases and immunology.

In 2009 there were 24 students undertaking PhD research programs at the Burnet Institute, predominantly enrolled via Monash University and the University of Melbourne. These PhDs covered a range of topics including HIV entry and replication, HIV and reproduction, HCV virology and immunology, malaria, sexual health, and vaccine development.

Advanced Medical Science (AMS) Program

A one-year research program for third-year medical students from the University of Melbourne. In 2009, Burnet had three AMS students – two in Burnet's laboratories – **Pilate Omphile Ntsuke** and **Jing Yuan Joshua Tey**; and **Nik Ahmad Akmal Nik Zulkepeli** in the Department of Infectious Diseases at The Alfred.

Centre for International Health (CIH)

The Centre for International Health (CIH) again offered 14 international health short courses in 2009. These CIH subjects, accredited by Monash University and/or University of Melbourne, can be credited towards a Master of Public Health or Master of International Health degree, a Graduate Diploma in International Health, or may even be attended by students not seeking any academic accreditation. A total of 225 students were enrolled in these courses, with many completing two or more subjects. Total subject enrolments within Burnet's CIH for 2009 were 395, 17 more than for 2008. Similar to previous years, the enrolment data shows that the student cohort comprises significantly more women (181) than men (44).

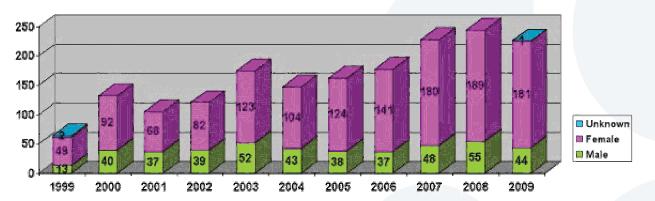
In addition to this core teaching, CIH was involved in some exciting education and training activities. This year the **Asia Regional HIV course** was moved from Phnom Penh to Bali and held in the days leading up to the 9th International Congress 15 participants from eight countries, the Centre was disappointed with the enrolment number. In 2010 we will not run the course but, instead, will explore other alternatives for training in the region. Under the Memorandum of Understanding with the University of Malaya, the CIH also conducted two short courses on Awareness to Harm Reduction in Kuala Lumpur. The two courses, one for paramedics and one for local NGOs in Malaysia, were funded by the University and were well received.

A major review confirmed the depth and breadth of Burnet's current education program, reflecting the commitment of each Centre to providing quality education for students. 99

Centre for Population Health (CPH)

The Centre for Population Health (CPH) provided two short courses in conjunction with the Centre for International Health (CIH) during 2009. CPH staff also presented teaching sessions, as needed, for other organisations. These teaching sessions included General Practice Victoria and the HIV, Hepatitis and STI Education and Resource Centre. In addition, CPH provided the field-placement component for one Master of Applied Epidemiology student, studying the course through the Australian National University's National Centre for Epidemiology and Public Health.

For the past four years, CPH has been successfully running a training program that offers **young people from marginalised communities** the chance to undertake a traineeship in which they gain practical research skills, and also allows them to study and obtain a qualification in a relevant field. The program is supported by grants from the Myer, Bokhara, IOOF, Invergowrie, Ray and Joyce Uebergang and Matana Foundations, and the Gandel Charitable Trust. Each traineeship is for a two-year period, with a new trainee selected to start each year. In 2009 two of the three trainees focused on hepatitis C outreach and field work, and the other was involved with research on sexually transmitted infections in collaboration with the Victorian Aboriginal Health Service.



This comparison of Centre for International Health enrolment data for years 1999 to 2009 shows that the student cohort comprises significantly more women (181) than men (44).

Our award winning students



The following list of awards is testimony to the high quality of students that Burnet attracts, they are highly regarded on the national and international stage.

PhDs awarded in 2009 included

Michele Giles: Centre for Population Health and Centre for Virology

Lachlan Gray: Centre for Virology

Kate Jones: Centre for Virology

Jasminka Sterjovski: Centre for Virology

Tong Yuh Koon: Centre for Virology

Several students were awarded prizes during 2009 including:

Hayley Bullen: Student Travel Award ASP and ARC/NHMRC Parasitology Conference

Daniel Cowley: Young Investigator Award, Conference on Retroviruses and Opportunistic Infections, Montreal; Young Investigator Travel Award, International Conference on Neurovirology, Miami and Monash Postgraduate Travel Award

Johanna Dean: Young Investigator Travel Award, International HCV Conference; Burnet Virology Travel Award; Australian Virology Group Student Award Jacqueline Flynn: ACH2 Conference Student Award for Hepatitis Research; Alfred Research Week Poster Prize for Infectious Diseases Research; AMREP postgraduate research symposium (invited speaker); FIMSA Postgraduate Workshop Travel Award; Monash Postgraduate Travel Award, International HCV conference

Lachlan Gray: Young Investigator Award, Conference on Retroviruses and Opportunistic Infections, Montreal

Gregor Lichtfuss: ASHM Conference Travel Award; best basic science oral presentation, Australasian HIV/AIDS Conference

Alisa Pedrana: Burnet Institue Public Health Travel Award.

Michael Roche: ACH2 Student Award

Tana Taechalertpaisan: Student Poster Award and Student Travel Award, ASP and ARC/NHMRC Parasitology Conference

Burnet's PhD students also initiated a new general journal club, held monthly, with presentations by senior scientists from the Institute, and organised by postgraduate student representative, Michael Roche.

For further information regarding postgraduate research programs at the Burnet Institute, please visit http://www. burnet.edu.au/home/education or contact Associate Professor Rosemary Ffrench at ffrench@burnet.edu.au.

Burnet's Major Awards



1. **Fenner Lecture Award:** The Fenner Lecture is presented by, and pays tribute to, a Burnet Institute staff member who has made a significant contribution to the Institute's vision and mission in the areas of medical research and/or public health. This award honours Professor Frank Fenner, AC, CMG, MBE, one of Australia's greatest scientists who has made outstanding contributions to international virology and public health. In 2009, the honour of presenting the Fenner Lecture was awarded to **Professor Mark Hogarth**, Deputy Director of the Institute and Head of the Centre for Immunology, pictured here with Burnet's Director and CEO Professor Brendan Crabb (left) and Burnet's Chair, Mr Alastair Lucas.

2. Gust-McKenzie Medal: The Gust-McKenzie Medal is awarded to a Burnet Institute mid-career staff member in recognition of excellence in either research and/or public health. The Medal is named in honour of the founding Directors of both the Burnet and Austin Research Institutes:

Visitors to Burnet

1. In December 2009 the Burma (Myanmar) program was pleased to welcome and host the senior leaders of the Phaung Daw Oo Monastic Education School (PDO) to the Burnet Institute. The **Venerable U Nayaka (Principal), U Pu Nar Nanda (Patron) and U Win Nyunt** came to discuss how HIV/ health, education and civil society strengthening are being addressed through their school. It is rare for senior monks to be granted permission to travel outside of Burma, especially in recent times. It was a great privilege and honour to host U Nayaka and U Pu Nar Nanda at Burnet. Pictured here with Dino Asproloupos and Associate Professor David Anderson.

2. Burnet Institute hosted a visit by **His Highness, Prince Manvendra Singh Gohil**, Crown Prince of the former state of Rajpipla, India, in November 2009. The Prince was given a tour through the Institute, and met with the Institute's Centre Heads. The AIDS Council of New South Wales (ACON) coordinated his visit, with assistance from the Burnet Institute. Pictured here beside Professor Brendan Crabb with Associate Professor Rose Ffrench.

3. On 3 March 2009 **Sharon Camp**, the President of Guttmacher Institute, in Washington DC, visited Burnet.

Professor Ian Gust, AO, and Emeritus Professor Ian McKenzie, AM. In 2009 the winner of this award was **Associate Professor Heidi Drummer**, pictured here with Burnet's Chair, Mr Alastair Lucas and Burnet's Director and CEO Professor Brendan Crabb.

3. Edelmira Peregrino Go International Health Student of the Year Award: This award is given to the international health student who achieves the highest academic results in international health subjects in a given year. The award is in honour of Edelmira Peregrino Go (affectionately known as Mai Mai), one of the first students to complete the Master of Public Health (International Health), who died after a year-long battle with cancer in 2003. In 2009, the Edelmira Peregrino Go International Health Student of the Year Award was presented to **Geoff Chan** receiving his award from Head of the Centre, Professor Mike Toole.

She met with Mike Toole, Head of Centre for International Health, Wendy Holmes, Bruce Parnell, and the Development working group, Lisa Natoli, Mick Creati and Heads of Centre for Population Health, John Reeder and Margaret Hellard. This visit was an opportunity to discuss mutual interests, to learn about the work of the respective institutes, and for a useful exchange of experiences. The Guttmacher Institute shares common interests with Burnet in the areas of sexual and reproductive health of young people, the promotion of family planning, and prevention of gender-based violence. Pictured with Wendy Holmes (left) and Mike Toole.

4. In October 2009, **Mr Mark Butler, MP**, Parliamentary Secretary for Health with responsibility for the NHMRC, came to Burnet. The purpose of this visit was to familiarise the Minister with the work of the Institute, and for him to be briefed on issues of key importance to us as an organisation. The ministerial party was taken on a tour of the laboratories and public health areas, accompanied by Burnet's Director, Brendan Crabb, and Chair of the Board, Alastair Lucas. Pictured here with Gilda Tachedjian.



CORPORATE AND SUPPORT Services

Corporate and Support Services provide a range of management and administrative activities necessary to support the Institute's broad range of activities. The division includes: business development, commercialisation, corporate governance, facilities management, finance, fundraising, human resources, information technology, occupational health and safety, public affairs and communications, and the research office.



Not only a year of change for the Institute, 2009 was also the year we recognised and responded to the changes that had occurred over the previous four years. While adapting to these changes, their significance and impact reached a point where a formal review and realignment was warranted. Over that time the Institute had increased in size (staff numbers) and turnover (dollars) by more than 50 per cent. So, to coincide with the consolidation of Melbourne activities to one campus, a formal review was commissioned to ensure that the Corporate and Support Services (CSS) was best placed to meet the needs of the Institute in 2009 and beyond.

Not surprisingly, many recommendations emerged from the review, identifying areas where some streamlining and efficiencies would be possible, and areas where additional attention is required. A restructured CSS created the foundation for the new scope of services to be provided with focus and efficiency, and aligned to the current and future needs of the Institute.

Key recommendations from this review included:

- the consolidation and integration of commericalisation and IP, legal services, grants management and business development activities, leading to the formalisation of a Business Development Office (BDO)
- the separation of Fundraising from the Public Affairs department, to facilitate 'Fundraising' and 'Public Affairs and Communication (PAC)' activities to be delivered with greater focus and accountability
- a revision of the skills required to support the IT requirements of the Institute
- a need to invest further in laboratory safety and OHS initiatives across the Institute
- the establishment of a precinct-wide flow cytometry facility

 the re-establishment of an Executive Officer role to join the Institute's leadership team to allow for more a proactive and prominent role in Institute-wide, precinctwide and sector-wide issues and initiatives.

While these changes were of great benefit at the macro/ Institute level, it is acknowledged such significant changes also impact on an individual level; many staff experienced changes to their personal roles and responsibilities, and the structure of workgroups etc. The level of professionalism and enthusiasm of staff during this period of change reflected the need for change, and their desire to deliver the best possible support and to contribute to the success of the Institute.



left to right: Executive Officer, Paul Rathbone; CEO and Director, Brendan Crabb and Chief Operating Officer, Geoff Drenkhahn.

During this period of change CSS continued to deliver on several major initiatives as well as the ongoing provision of core services. The PAC team coordinated and implemented the Institute's rebranding, the IT team implemented a help desk system for support and implemented a new telecommunications system (VoIP), the finance team took on responsibility for the purchasing and distribution functions for BakerIDI – which also included the establishment of a major stores facility for both Institutes, and the Business Development Office undertook a major review of our patent portfolio. The Research Support and Facilities team managed the relocation of staff, equipment and operations from the Austin campus, and of course (with IT) have been planning for the move into the new building and the relocation of staff within the Burnet Tower, scheduled for March/April 2010. The move from the Austin campus also signalled the end of operating our own animal facility; the successful relocation of the breeding stock to other facilities (primarily at AMREP) was a major achievement.

2009 was also the year of the Global Financial Crisis (GFC). The GFC had an impact on Burnet, especially on CSS via the expected reduction on fundraising revenue. Like most organisations our fundraising revenue was well down in 2009 and was further reduced by the decision to defer our major event, the ROMP, from October 2009 to March 2010. While prompted by the GFC and the reduction in sponsorships, it also is a longer term re-scheduling to what we believe will be a more suitable time of year. Despite The GFC, Burnet was still generously supported and I would like to thank all of our personal donors, organisational donors and partners for their support of our events and fundraising initiatives throughout the year. Elsewhere in this Report we acknowledge the support we received and provide information on what the Institute has been able to achieve with this additional income.

While a number of people joined CSS, mainly due to the changes noted above, we also experienced departures, some related to the above changes and some for more personal reasons. I wish to thank and acknowledge all those who left the organisation in 2009 for their contribution



Burnet's technical leadership team is made up of Centre Heads, Principals, the Deputy Directors and the Director (absent David Anderson and Sharon Lewin).

to the Institute in the CSS areas over the years. I would also like to make special mention of Valerie Skahill, who officially left in 2010 after 16 years as the PA to the Director of the Institute. Valerie was PA to three of the four Directors in Burnet's history, and her stellar contribution was acknowledged in a farewell presentation in February 2010.



Valerie Skahill is pictured here at her farewell with Associate Professor David Anderson, Deputy Director and Head, Business Development; Professor Ian Cooke, former Associate Director, Research and Development; and Peter Spiller, Chief Financial Officer – just a few of the many people to whom she has provided enormous help over the past 14 years.

2010 will be another challenging year, with CSS to coordinate and implement the major logistical exercise of relocating 200+ staff to our new premises at the AMREP campus. There will no doubt be a 'bedding down' period of operational procedures and arrangements, following the move in April. We will also focus on growing our discretionary revenue base via a new fundraising strategy, including the launching of the **Sir Zelman Cowen Foundation** and the redevelopment of the Institute's website. Amid these new initiatives, we will strive to further refine and develop the core suite of CSS services and value-added inputs, to support the Institute's staff, the Centres and various stakeholders.

A restructured CSS created the foundation for the new scope of services to be provided with focus and efficiency, and aligned to the current and future needs of the Institute.

Corporate and Support Services: our staff

EXECUTIVE

Director Brendan Crabb, PhD

Deputy Directors P Mark Hogarth, PhD, NHMRC Senior Principal Research Fellow David Anderson, BSc(Hons), PhD, NHMRC Senior Research Fellow

Chief Operating Officer Geoff Drenkhahn, MBA Tech Mgr (Deakin), FAIM

Executive Officer

Paul Rathbone, BAppSc, FAIMS, Grad Dip (Public Relations), MBus (Marketing) (from June 2009)

Company Secretary Peter Spiller, BBus, CPA

Personal Assistant to the Director Valerie Skahill, BA(Hons)

Personal Assistants to Deputy Directors Susan Collins (Professor Hogarth) Nadine Barnes (Associate Professor Anderson)

Personal Assistant to the Chief Operating Officer Andrea Eakins (from July 2009)

BUSINESS DEVELOPMENT AND MANAGEMENT

BUSINESS DEVELOPMENT OFFICE Head David Anderson, BSc(Hons), PhD, NHMRC Senior Research Fellow

Manager, Research and Legal Office Alison Greenway, PhD, BSc(Hons), LLB

Intellectual Property Manager Maria Harrison Smith (to July 2009) **Commercialisation Manager Serina Cucuzza**, BSc(Hons), BComm

FUNDRAISING AND EVENTS Head Brendon Grail, BBus

Director of Events Fiona Rhody-Nicoll, LLB(Hons)

Community Development Manager Ian Haigh, BA

Relationships Manager Pin Affleck, BFA(Hons)

Events Administrator Rachel Lenders, BA

Trusts and Foundations Coordinator Hazel Squair, BMA (Public Relations)(to June 2009) Louise McNeil (from June 2009)

MELBOURNE CITY ROMP Event Manager

Petrina Boles, B Bus (from July 2009)

Events Coordinator Stephanie Luketic, BBus, Dip HR, Adv Dip Bus Mgmt (from September 2009)

Marketing Coordinator Clara Hilsen, BA, (from October 2009)

PUBLIC AFFAIRS AND COMMUNICATIONS Director

Paul Rathbone, BAppSc, FAIMS, Grad Dip (Public Relations), MBus (Marketing)

Marketing and Communications Manager Gillian Chamberlain, AdvCertBus (RMIT), Cert IV MagWritEdit&Pub (RMIT), CertDirMar (ADMA)

Event Media and Communications Tracy Parish, BA(Sports Journalism)(from July 2009) Senior Public Affairs Officer Tracy Routledge, BA (Communications)

Public Affairs Officer Hazel Squair, BMA (Public Relations)(from June 2009)

Receptionist Sieyin Phung, BBus (to July 2009) Amanda Fairbairn (from November 2009)

RESOURCES MANAGEMENT

FINANCE Chief Financial Officer Peter Spiller, BBus, CPA

Accounting Manager Pixie Tan, BCom, CPA

Finance Manager Rob Tanner, BBA, CA

Assistant Accountant Peter Dib

Finance Officers Liz Kitchen Sonja Murphy (from June 2009)

Payroll Officer Jack Bambino

Purchasing Officers Mark Hamilton, BA Kevin Hesse

HUMAN RESOURCES

Human Resources Manager Paul Duffy, BA, Grad Dip (HR/IR)

RESEARCH SUPPORT AND FACILITIES Head Bruce Loveland, PhD

SAFETY OHS Manager Margarete White, PhD (from August 2009)

OHS Laboratory Specialist Sol Hall

INFORMATION TECHNOLOGY Head

Paul Stephens, BComp

Staff

Britta Taylor, MA (to July 2009) Damon Warren, BSurv(Hons) Gary Jamieson, PhD Matt Gray, Dip InfoSys Dyson Simmons, BInfoSys(Hons) John Ngo Mark Bean, CCNA, CNA, MCP (from July 2009)

FACILITIES MANAGEMENT Operations Manager

Dana Herman, BAppSc, MBA (to February 2009)

Facilities Manager Soto Kolivas, PhD

Facilities Officer Gary Jamieson, PhD

Animal Technology Assistant Manager Julie Toussaint (to March 2009)

Staff

Josh Lorimer (to July 2009) Carlie Tobias, DipAppSc, Animal Technology (to July 2009)

Senior Biological Resources Manager Tricia Murphy, DipAppSc, Animal Technology

LABORATORY SERVICES AMREP Senior Flow Cytometrist Geza Paukovics, BA (Med Lab Sci)

Research Assistant – Flow Cytometry Michael Thomson

Technical Assistants Leanne Reardon Barb Ledwidge

Storepersons Blaine Oataway Kerry Bridges-Tull

Maintenance Technician Chris Pope

Commercial Activity

The Institute in 2009 consolidated its commercialisation team within a formal Business Development Office (BDO). Associate Professor David Anderson was appointed head of the BDO, and has firsthand experience in commercialising medical research through his association with Burnet's spin-off company, Select Vaccines Pty Ltd, as well as the more recent spin-out company, See-D4 Pty Ltd.

Burnet filed two new provisional applications in 2009 as listed below.

PATENTS GRANTED - 2009

Title	Country	Filing Date	Number	
NEW PROVISIONALS – 2009				
Methods of Detecting Dead and Dying Cells	US Prov	22-Jun- 09	61/219216	
Prophylactic Protocols	Au prov	11-Dec- 09	61/285,708	

- Burnet's partner companies IgAvax Pty Ltd and 4G Vaccines Pty Ltd continued their research into developing an effective intranasal vaccine for respiratory diseases and a vaccine for the treatment of, and protection against, breast cancer. Research is progressing according to milestones and both companies are likely to reach clinical stage by 2010–2011.
- Associate Professor Heidi Drummer and Dr Andy Poumbourios continued to progress work on a promising vaccine candidate for the prevention of hepatitis C virus infection.
- Associate Professor David Anderson and Professor Suzanne Crowe have continued to progress their project for the development of a rapid point-of-care CD4 test, initially funded by the CD4 Initiative, Imperial College London through a grant from the Bill and Melinda Gates Foundation. The test aims to provide a quick and accurate method of measuring CD4 levels in HIV-infected individuals, suitable for use in resource-poor settings where there is no access to laboratory infrastructure. The team has been successful in raising further investment from the Medical Research Commercialisation Fund (MRCF) to support the optimisation and development of the ELISA-based version of this test for use in the developed world. See-D4 Pty Ltd has been established as a vehicle to commercialise the technologies.
- Associate Professor David Anderson and Professor Geoffrey Pietersz were successful in receiving NHMRC development grants commencing mid-2009 worth more than AUD\$330,000 in total for the further development of Associate Professor Anderson's diagnistic CD4 test and Professor Pietersz' novel vaccine formulation for the immunotherapy of adenocarcinomas. Dr Elizabeth Grgacic was successful in receiving an NHMRC development grant commencing 2010 worth nearly AUD\$140,000 for the further development of a novel candidate vaccine against HIV infection.

- Burnet researchers were again successful in securing funding from the Australian Centre for HIV and Hepatitis Virology (ACH2), with seven grants commencing in 2010 across the key areas of diagnostics, vaccines and drug development. The ACH2 scheme funds translational projects specifically in the area of HIV and hepatitis.
- Burnet's Immunological Monitoring Facility has been established building on the capabilities and expertise of Associate Professors Rose Ffrench and Bruce Loveland. The Facility aims to become a NATA-accredited facility that will develop optimised and validated immunological assays for clinical trials and preclinical research compliant to Good Laboratory Practice standards (cGLP). In 2009, Burnet collaborated with Nucleus Network Pty Ltd on a number of clinical trials including those for Alvine Pharmaceuticals, Nexpep Pty Ltd and Schering Plough. The Facility aims to achieve accreditation by 2010 and attract further funding to enable it to become self-sustaining.
- The Burnet Institute continues to be a participant in the CRC for Biomarker Translation, which officially commenced operation in 2007. Other participants include La Trobe University, The Mater Medical Research Institute, Mater Misericordiae Health Services, The Women's & Children Health Research Institute, and The Institute of Medical and Veterinary Science. The commercial partners are Amgen (USA) and Becton Dickinson Biosciences (USA). The CRC principal objective is the development of antibodies directed against therapeutic and diagnostic targets (biomarkers) present on cells that play a key role in major diseases including autoimmune disease (especially rheumatoid arthritis) and cancers (haematological, colorectal, breast and prostate). The CRC has been awarded AUD\$30.6m over seven years.

Commercialisation Office

Associate Professor David Anderson – Deputy Director and Head, Business Development Office

Ms Serina Cucuzza – Commercial Development Manager **Dr Alison Greenway** – Legal Counsel and Research Office Manager

Ms Maria Harrison-Smith – Intellectual Property Manager **Mr Tony Mellen** – Centre for International Health Business Development Manager

Dr Patricia Mottram - Project Manager

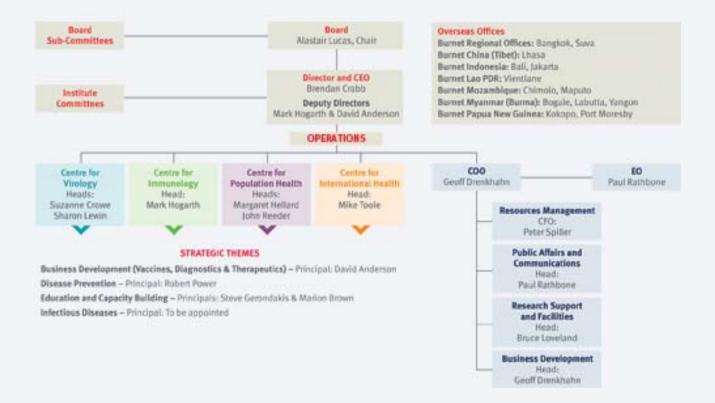
Working Group Committee Members (including individuals listed above)

Professor Mark Hogarth Professor Geoffrey Pietersz

Board, IP and Commercialisation Committee:

Mr Rob Milne – Chairman Mr Alastair Lucas Associate Professor David Anderson Professor Mark Hogarth Ms Serina Cucuzza

Our Organisational Structure



Burnet's new structure, put in place during 2008 and 2009, laid a solid foundation for the Institute's future. A future that marries laboratory research, population studies, public health intervention and capacity building programs to address major health problems in Australia and in our region. Our special emphasis on the specific health needs of disadvantaged communities in Australia and overseas remains the central platform of the Institute.

With these issues in mind, the Institute has been reorganised into a structure that is appropriate for the effective operation of an organisation of this scale and complexity.

The cornerstone of this structure was the creation of four Centres of excellence. The Centres – Virology, Immunology, Population Health and International Health. The Centres represent Burnet's key areas of research and public health strength, and are led by the Institute's most experienced and highly credentialed scientists. Two new mechanisms have also been created to foster crossinstitute activities and to promote attention to our central themes. The first is the formal recognition of crosscutting themes and the appointment of Burnet Principals to represent them. The second approach to ensuring cross-institute thinking is the creation of the Scientific Advisory Committee (SAC) which comprises Centre Heads and Principals together with the Director and Deputy Directors.

While reform to the scientific leadership has been achieved with the restructure diagrammatically represented above, Burnet Institute administration and corporate services has also been reviewed and overseen by the newly created position of Chief Operating Officer with the key purpose of ensuring that the Institute is supported in the most efficient and effective manner.

Governance Statement

The Board of Directors has adopted a Governance framework which incorporates the 'Corporate Governance Principles and Recommendations' of the Australian Stock Exchange and which is appropriate for the size, complexity and operations of the Burnet Institute. While some of these provisions are particular to listed for-profit corporations, many are just as relevant to a complex not-for-profit entity such as the Burnet Institute as they are to the commercial sector. The ongoing relevance and effectiveness of this framework will be periodically reviewed to reflect changing circumstances and ways of improving the practices we have adopted.

Role of the Board and Management

The Board's primary role is the protection and enhancement of the long-term interests of the Burnet Institute and its stakeholders. To fulfil this role, the Board gives consideration to the range of research and other activities that are appropriate to the Institute ensuring that the key stakeholders' interests are addressed. The Board is responsible for the overall governance of the Institute including formulating (on the advice of the Executive Director) its strategic direction, ensuring that risk management policies are in place and are being monitored, establishing and monitoring the Executive Director's and management's goals and performance and ensuring the integrity of internal control and management information systems. It is also responsible for approving and monitoring financial and other reporting.

To assist the execution of its responsibilities, the Board has established the following Board committees

- Audit, Finance and Risk
- Investment
- Intellectual Property and Commercialisation
- Fundraising
- Project
- Research Advisory

Matters attended to by Board Committees are reported to the Board following each committee meeting. Board Committees are authorised to seek any information they require from any officer of the Institute and may take such independent professional advice as they consider necessary. They have no executive powers regarding their findings and recommendations. The Board may at any time determine to address matters identified within a committee's terms of reference at the full Board level.

Responsibility for the operation and administration of the Institute has been delegated to the Executive Director and the executive management team. These responsibilities have been delineated by formal authority delegations.

Composition of the Board

In accordance with the Institute's Constitution, the number of directors constituting the Board must not be less than eight and not more than 20 and will include the Executive Director in its number. A majority of the Board should be independent directors, in particular the role of the Chair and Executive Director should not be exercised by the same person. Directors shall be appointed by resolution of the Board and each Affiliated University may propose one director.

The appointment of Board Members is run by the Chair of the Board who will review nominations in consultation with the Executive Director and other Members. Appointments will be approved by the Board and confirmed at the AGM.

All Board Members appointed to the Burnet Institute Board will receive a letter of appointment from the Chair, which sets out the basis of the appointment. That letter will outline background information, documentation and policies including:

- Term of appointment
- Meeting attendance expectations
- Governance charter
- Constitution
- Committees
- Board papers
- Confidentiality
- Access to professional advice
- Conflicts of interest
- Induction

As a general rule, Board Members are not expected to serve for more than 10 years. This rule will be subject to review on a case-by-case basis.

Ethical and Responsible Decision Making

All Directors and employees are expected to discharge their duties in good faith and act honestly in the best interests of the Institute, striving at all times to enhance the reputation and performance of the Institute. Directors must ensure that they use the powers of office for the proper purpose and in the best interests of the Institute as a whole. They must not make improper use of information gained through their position as a director, or take improper advantage of their position as a director.

Directors are required to undertake diligent analysis of all proposals placed before the Board and make reasonable enquiries to ensure that the Institute is operating efficiently, effectively and legally towards achieving its goals.

Directors must keep the Board advised, on an ongoing basis, of any interest that could potentially conflict with those of the Institute and any development which may impact the directors' perceived or actual independence. The Board has procedures in place to allow directors to disclose potential conflicts of interests. Directors do not participate in the day-to-day management of the Institute. Consequently, representations or agreements with suppliers, clients, employees, consultants, professional firms or other parties or organisations are made by management unless such an authority is explicitly delegated by the Board to directors, either individually or as a Member of a Committee.

The Institute has adopted guidelines for dealing in securities. Directors and employees have been advised of the seriousness and consequences of trading in public companies with which the Institute has entered into commercial arrangements, when in possession of confidential information which would have a material effect on the share price of those companies. The Company Secretary's written approval must be sought before Board Members and employees can trade shares in these companies. Approval will be granted when the Company Secretary is satisfied that the Board Member or employee does not have confidential information in these companies.

Risk Management

The Board, through its Audit, Finance and Risk Committee, has responsibility for ensuring that risk management policies are in place and are being monitored. The Audit, Finance and Risk Committee reports to the Board regularly on the status of risks.

The Institute's risk management process is supported by:

- Australian/New Zealand Standard AS/NZS 4360:1999

 Risk Management, which provides a generic guide for the establishment and implementation of the risk management process involving the identification, analysis, evaluation, treatment and ongoing monitoring of risks
- Burnet Institute's Risk Management guidelines
- Training as required to ensure that management and staff of the Burnet Institute understand and implement this Policy.

Audit, Finance and Risk Committee

The main role of the Audit, Finance and Risk Committee is to audit the business operations and to oversee the finance and risk management functions. The Committee shall have unlimited access to the Internal and External Auditors and to senior management and may require reports and presentations on specific items.

Specific responsibilities of the Committee include:

- Reviewing the risk management framework and internal control processes relating to all risks of the Institute
- Monitoring internal controls in relation to financial and commercial activities, legislative and regulatory conformance and asset protection
- Ensuring that the preparation and presentation of the annual financial statements show a true and fair view and comply with all relevant accounting standards and statutory requirements

- Facilitating open communication between the Board, Audit, Finance and Risk Committee, Senior Management and Auditors
- Determining the adequacy of the Institute's administrative, quality, project and accounting systems
- Developing and enforcing a framework for accountability at all levels of the organisation.

Remuneration and Succession Planning

The Remuneration Committee reviews and makes recommendations to the Executive Director on remuneration packages and policies applicable to senior staff.

The review of the Executive Director's performance is conducted by the Chair with one other Board Member. However, all Board Members have the opportunity to provide input into the process. The Executive Director's remuneration is approved by the Board.

Succession planning is undertaken as follows:

- In relation to the Executive Director conducted by the Board
- In relation to other senior staff by the Executive Director with input from the Board
- In relation to staff below senior level by the Executive Director with input from the senior management team.

Integrity in Financial Reporting

The Audit, Finance and Risk Committee manages the relationship between the Institute and the external auditor on behalf of the Board. It recommends to the Board potential auditors for appointment and the terms of engagement, including remuneration. The Audit, Finance and Risk Committee evaluates the performance of the external auditor during its term of appointment against specified criteria which include delivering value to stakeholders and the Institute, cost-effectiveness and maintaining the highest levels of professional integrity, objectivity and independence.

The Executive Director and the Chief Financial Officer provide formal statements to the Board that in all material respects:

- The Institute's financial statements present a true and fair view of the Institute's financial condition and operational results and comply with relevant accounting standards
- The risk management and internal compliance and control systems are sound, appropriate and operating efficiently and effectively.

ASX Corporate Governance Principles and Recommendations

ASX	Recommendation	Compliance
1	Lay solid foundations for management and oversight	
1.1	Establish the functions reserved to the Board and those delegated to senior executives	Comply
	Ŭ	1 7
2	Structure the Board to add value	
2.1	A majority of the Board should be independent Directors	Comply
2.2	The Chair should be an independent Director	Comply
2.3	The roles of Chair and Chief Executive Officer (CEO) should not be exercised by same person	Comply
2.4	The Board should establish a nomination committee	Comply
2.5	Disclose the process for evaluating the performance of the board, its committees and individual	Comply
	directors	
3	Promote ethical and responsible decision-making	
3.1	Establish a code of conduct	Comply
3.2	Establish a policy concerning trading in company securities by Directors, senior executives and employees	Comply
	employees	
4	Safeguard integrity in financial reporting	
4.1	Establish an Audit Committee	Comply
4.2	Audit Committee structure to include:	compty
	Only non-executive Directors	Comply
	• A majority of independent Directors	Comply
	• An independent chairperson who is not chairperson of the Board	Comply
	Consists of at least three members	Comply
5	Make timely and balanced disclosures	
5.1	Continuous policies and procedures	Not applicable
6	Respect the rights of stakeholders	
6.1	Design a communications policy for promoting effective communication with stakeholders and	Comply
	encourage their participation at general meetings	
_		
7	Recognise and manage risk	
7.1	Establish policies for the oversight and management of material business risks	Comply
7.2	Management to design and implement the risk management and internal control system to manage the material business risks	Comply
7.3	Written statement to Board by CEO and CFO in accordance with section 295A of the Corporations Act	Comply
8	Remunerate fairly and responsibly	
8.1	The Board should establish a Remuneration Committee	Comply
8.2	Distinguish non-executive directors' remuneration from that of executive directors and senior	Comply
	executives	

Committee Members

BOARD SUB-COMMITTEES:

Audit Finance & Risk Committee: Ross Cooke – Chair* Neil Edwards

Investment Committee:

Denise Allen – Chair* Sid Khotkar* David Lee* Alastair Lucas

IP & Commercialisation Committee:

Rob Milne – Chair* David Anderson Serina Cucuzza Tracey Batten (to December 2008) P Mark Hogarth Ian Wightwick (to December 2008)

Research Advisory Committee:

James McCluskey – Chair* Michael Alpers* Lorena Brown* Nick Crofts* Brendan Crabb Peter Doherty John Dowling P Mark Hogarth Anne Kelso* (from 2009)

Fundraising Committee:

Alastair Lucas – Chair* Henry Lanzer Maria Myers Natasha Stott Despoja Rob Milne Brendan Crabb

ACS2 Project Committee:

Rob Milne – Chair* Brendan Crabb Alastair Lucas Mark Hogarth Neil Edwards Ross Cooke

INTERNAL COMMITTEES:

Scientific Advisory Committee: Brendan Crabb – Chair David Anderson Marion Brown Suzanne Crowe Steve Gerondakis Margaret Hellard Mark Hogarth Robert Power John Reeder Mike Toole Geoff Drenkhahn

OH&S Committee:

Con Sonza - Chair Margarete While Sol Hall Soto Kolivas Andy Poumbourios Bruce Loveland Johnson Mak Paul Gilson Brendan Crabb Geoff Drenkhan

Lab/Group Representatives:

Amanda Brass Anne Ellett Blaine Oataway Laveena Sharma Matt Gray Nadine Barnes Owen Proudfoot Paula Ellenberg Raelene Grumont Rebecca Butcher Sarah Charnaud Soong Ling Stephanie Day Trish Clark

Laboratory Users Group:

Heidi Drummer - Chair **David Anderson** Jenny Anderson Alyssa Barry **Melissa Churchill Brendan Crabb Geoff Drenkhahn Rosemary Ffrench** Steve Gerondakis **Paul Gilson** Paul Gorry **Elizabeth Grgacic Mark Hamilton** Anthony Jaworowski **Bruce Loveland Johnson Mak Andy Poumbourios** Li Shuo Ajantha Solomon Con Sonza Gilda Tachedijan **Margarete White** Sol Hall Meredith O'Keefe

Research Students Committee:

Rosemary Ffrench – Chair Michael Roche (student representative) Anthony Jaworowski Heidi Drummer Paul Gorry Campbell Aitken Alyssa Barry Melissa Churchill Gilda Tachedjian Paul Ramsland Maree Powell

Laboratory Equipment and Facilities

Committee: Melissa Churchill – Chair Ashish Banjeere Alyssa Barry Brendan Crabb Kylie Goy Vicki Greengrass David Harrison Marcel Hinjen Gary Jamieson Soto Kolivas Maree Powell Paul Rathbone Gilda Tachedjian

IP Working Group:

Geoff Pietersz – Chair (to August 2009) David Anderson – Chair (from August 2009) Mark Hogarth Serina Cucuzza Alison Greenway Pat Mottram David Randerson*

AMREP AS Pty Ltd:

Andrew Giddy – Chair* Brendan Crabb Jenny Grace* Steve Wesselingh* Garry Jennings* David Anderson (to October 2009) Steve Gerondakis (to October 2009)

AMREP Animal Ethics Committee:

Raffi Gugasyan - Chair Geoff Head - Chair Dr Kay Juliff* Mandy Errington* Carol Ginns* Helen Kiriazis* Chris Tikellis* Judy DeHaan* **Robert Andrews*** Charles Hardy* **Ashish Banerjee** Michael Skilton* Jaye Chin-Dusting* Frank Alderuccio* Marissa Bowden* Robyn Sullivan* Nicholas Kanarev* Ian Burns* Noel Ancell* Patricia Baitz* Mary Klein* Ms Debra Ramsey* **Mr David Spiteri***

* Member external to the Burnet Institute

Statement of Comprehensive Income

		2009	2008
	Notes	\$'000	\$'000
Operating revenue	3	44,988	39,453
Research and development laboratory consumables expenses		(4,158)	(4,913)
Employee expenses		(20,517)	(19,971)
Depreciation and amortisation expenses		(1,181)	(1,032)
Research and development non-laboratory expenses	5	(16,739)	(10,809)
Other expenses from ordinary activities		(4,220)	(3,611)
Total Operating Expenses		(46,815)	(40,336)
Results from operating activities		(1,827)	(883)
Financial income	7	1,094	937
Financial expenses	7	(293)	(1,416)
Net financing costs		801	(479)
Capital grants and income on capital grants	3	20,945	11,966
Building costs	5	(790)	(1,058)
Impairment of construction in progress	5	(22,700)	-
Capital profit/(loss) before income tax		(2,545)	10,908
Profit/(loss) before income tax		(3,571)	9,546
Income tax attributable to operating profit		-	-
Profit/(loss) After Income Tax		(3,571)	9,546
Other comprehensive income			
Net Change in fair value of available-for-sale financial assets		12	(225)
Income tax on other comprehensive income		-	-
Other comprehensive income for the period net of income tax		12	(225)
Total Comprehensive Income for the Period		(3,559)	9,321

The Statement of Comprehensive Income is to be read in conjunction with the Notes to the Financial Statements set out on pages 11 to 25 of the Burnet Institute's Annual Financial Report. Please visit www.burnet.edu.au to download a copy.

Statement of Financial Position

as at 31 December 2009

		2009	2008
	Notes	\$'000	\$'000
CURRENT ASSETS			
Cash and cash equivalents – operating	21(i)	16,331	11,144
Cash and cash equivalents – capital grants	21(i)	-	31,309
Trade and other receivables	8	4,845	4,231
Inventories		83	73
Investments	9	3,064	2,764
Other financial assets	10	82	133
TOTAL CURRENT ASSETS		24,405	49,654
NON-CURRENT ASSETS			
Property, plant and equipment	11	17,079	17,386
Construction in progress	12	42,086	11,040
TOTAL NON-CURRENT ASSETS		59,165	28,426
TOTAL ASSETS		83,570	78,080
CURRENT LIABILITIES			
Trade and other payables	13	4,923	2,277
Borrowings	14	378	60
Current tax liabilities	15	140	105
Provisions	16	3,190	3,368
Deferred income – capital grants	17	-	28,988
Deferred income – other grants	17	13,354	13,655
TOTAL CURRENT LIABILITIES		21,985	48,453
NON-CURRENT LIABILITIES			
Borrowings	14	25,621	-
Provisions	16	571	649
Deferred income – rent in advance	17	10,660	-
Derivatives	18	350	1,036
TOTAL NON-CURRENT LIABILITIES		37,202	1,685
TOTAL LIABILITIES		59,187	50,138
NET ASSETS		24,383	27,942
EQUITY			
Retained earnings		7,281	8,773
Building reserve		17,019	19,098
Fair value reserve		83	71
TOTAL EQUITY		24,383	27,942

The Statement of Financial Position is to be read in conjunction with the Notes to the Financial Statements set out on pages 11 to 25 of the Burnet Institute's Annual Financial Report. Please visit www.burnet.edu.au to download a copy.

The Macfarlane Burnet Institute for Medical Research and Public Health Limited is a signatory to the Australian Council for International Development Code of Conduct (ACFID). 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: **Non Current Assets:** trade and other payables, other financial assets, investment property, intangibles, and other non-current assets; **Current Liabilities:** other financial liabilities and other non-current liabilities.

Statement of Changes in Equity as at 31 December 2009

	Retained Profits \$'000	Building Reserve \$'000	Fair Value Reserve \$'000	Total \$'000
Balance at 1 January 2008	8,921	9,404	296	18,621
Fair value adjustment	-	-	(225)	(225)
Total other comprehensive income for the period	-	-	(225)	(225)
Operating profit/(loss)	(148)	9,694		9,546
Total comprehensive income for the period	(148)	9,694	(225)	9,321
Balance at 31 December 2008	8,773	19,098	71	27,942
Balance at 1 January 2009	8,773	19,098	71	27,942
Fair value adjustment	-	-	12	12
Total other comprehensive income for the period	-	-	12	12
Operating profit/(loss)	(1,492)	(2,079)	-	(3,571)
Total comprehensive income for the period	(1,492)	(2,079)	12	(3,559)
Balance at 31 December 2009	7,281	17,019	83	24,383

The Statement of Changes in Equity is to be read in conjunction with the Notes to the Financial Statements set out on pages 11 to 25 of the Burnet Institute's Annual Financial Report. Please visit www.burnet.edu.au to download a copy.

Burnet Institute International Development Activities Operating Statement for the year ended 31 December 2009

Revenue	2009 \$'000	2008 \$'000
Donations and gifts – monetary	315	200
Donations and gifts – non-monetary	3	66
Legacies and bequests	-	
Grants		
• AusAID	15,597	9,985
• Australian organisations	1,250	1,774
• Overseas organisations	1,284	854
Investment Income	-	-
Other Income	2,423	2,082
Total revenue	20,872	14,961
Disbursements		
Overseas projects:		
Funds to overseas projects	8,213	9,599
Other project costs	8,759	3,066
Domestic projects	2,895	1,170
Community education	-	-
Fundraising costs:		
Public	4	28
Government, multilaterals and private	234	260
Administration	1,011	1,193
Non-monetary expenditure	3	66
Total disbursements	21,119	15,382
Excess/(Deficiency) of revenue over disbursements	(247)	(421)

Notes:

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



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.

Website: www.acfid.asn.au Tel: (02) 6285 1816 Fax: (02) 6285 1720

Achievements:

Grants

Current Grants:

Anderson, D. Fellowship (NHMRC). Uncoupled Research Fellowship. \$583,750 (2007-2011).

Anderson J, Hope T, **Tachedjian G.** Project Grant (NHMRC). *Mechanisms underlying APOBEC3G restriction of HIV.* \$518,250 (2008-2010).

Tachedjian, G. Program Grant, US NIH. *Dendrimer and Combination Microbicides*. \$131,294.49 (2004-2009).

Tachedjian, G. Program Grant, US NIH. *Starpharma HIV microbicide design and development*. \$105,749.95 (2008-2009).

Kinner S, Lennox, Jamrozik, Haswell-Elkins, Williams, Alati, Boyle, Vlack and Taylor. NHMRC Strategic Award Passports to advantage. *Health and capacity building as a basis for social integration*. \$1,445,000 (2007-2012).

Cowley, D. Biomedical Postgrad Scholarship(NHMRC). *Viral and host determinants in the development of HIV associated dementia.* \$63,693.

Cox, H. Public Health Fellowship (NHMRC). *TB drug resistance in PNG: Implications for treatment success and TB control.* \$274,000 (2007-2010).

Cunningham A, Brew B, **Crowe S, Lewin S**, Slobedman B, **Wesselingh S**. Program Grant (NHMRC). *Pathogenesis of persistent human virus infections of global significance*. \$6,180,170 (2005-2009).

Cowman A, Brown G, **Crabb B**, Handman E, McConville M, McFadden G, Schofield L, Speed T. Program Grant (NHMRC). *Host parasite interactions: disease, pathogenesis and control.* \$12,940,270 (2006-2010).

Crabb B, Cowman et al. Bill and Melinda Gates Foundation. *Preclinical prioritization of blood-stage malaria vaccine candidates*. US\$2.916 million (2007-2010).

Crabb B, Ralph S. Project Grant (NHMRC). *Epigenetic control of antigenic variation in plasmodiumfalciparum*. \$447,400 (2007-2009).

Wesselingh S, Churchill M, Gorry PR. Project Grant (NHMRC). *Molecular studies of the astrocyte reservoir of HIV-1 in the central nervous system*. \$513,000 (2007-2009).

Crowe, S. Fellowship (NHMRC). Uncoupled Research Fellowship. \$726,250 (2008-2012).

Crowe S, Malau C, O'Connor J, Tiban K. Spelman Program Grant. *Moleclar Epidemiology of HIV and TB in Asia Pacific Secretariat of the Pacific Community. TB - Kiribati Project.* \$100,146 (2008-2010).

Crowe, S. Project Grant (New Technologies), Victoria Department Human Services. *HIV susceptibility testing using genotyping*. \$674,626.58.

Crowe S, Anderson D, Landay A, Denny T. Project Grant, Imperial College of Science, London. *A point of care test for examining CD4 T cells in remote areas*. \$1,076,226 (2008-2009).

Dietze, P. Career Development Award (NHMRC). \$550,000 (2006-2010).

Dietze P, Munir V, Johnston J, Fry C, Smit D, Degenhardt L. Project Grant (NHMRC) *The risk factors for ecstasy and rug related overdose: A case crossover study.* \$310,125 (2007-2010). Moore D, **Dietze P**, Bammer G, Perez P. Project Grant (NHMRC). Understanding the barriers to improved access, engagement and retention of methamphetamine users in health services. \$756,850 (2008-2010).

Drummer, H. Career Development Award (NHMRC). R Douglas Wright Biomedical Career Development Award. \$452,500 (2007-2011).

Drummer H, Poumbuorios A, Elhassen D. Project Grant (NHMRC). *Structure and function of the Hepatitis C Virus glycoproteins E1 and E2*. \$513,000 (2007-2009).

Ffrench, R. Industry Fellowship (NHMRC). *Development and immunogenicity testing of 'Virus-Like particle' vaccines*. \$475,000 (2006-2010).

Flynn, J. Public Health Postgrad Scholarship(NHMRC). Stimulation and maintenance of T-cell responses in acute HCV infection. \$65,598 (2007-2009).

Adams J, Bouilett P, Colman Cory SP, **Gerondakis S**, Huang D, Linden G, Stasser A, Vaux D, Visvade J. Program Grant (NHMRC). *Roles of Impaired Apoptosis and Differentiation in Tumorigenesis and Therapy*. \$20,404,520 (2007-2011).

Gerondakis, S. Project Grant, Leukemia and Lymphoma Society of America Specialized Center of Research Grant. *Apoptosis in Hematopoiesis.* \$8,930,000 (2006-2010).

Gerondakis, S. Fellowship (NHMRC). Uncoupled Research Fellowship. \$675,000 (2006-2010).

Gilson P, de Konig-Ward T, ,Boddley J. Project Grant (NHMRC). *Identification of the Plasmodium falciparum,translocon that exports parasite proteins into their erythrocytic hosts.* \$362,250 (2008-2010).

Gorry P, Poumbourios P, Center R, Churchill, M. Project Grant (NHMRC). *Pathogenesis of CCR5-restricted HIV-1*. \$361,875 (2007-2009).

Gowans E, Shuo, L, Loveland B. Project Grant (NHMRC). *Understanding hepatitis c virus-specific t cell tolerance*. \$412,875 (2007-2009).

Grgacic, E. Project Grant (NHMRC). *A new insight into hepatitis B infection: the HBV fusion peptide*. \$276,750 (2007-2009).

Hellard, M. Project Grant (NHMRC). Aust Health Ministers' Advisory Council (AHMAC). *The impact of text and email messaging on the risk behaviour of young men and women: a randomised controlled trial.* \$192,735 (2005-2009).

Hellard, M. Project Grant, Commonwealth Department of Health and Ageing. *Drug Policy Modelling*. \$70,000.

Kinner, S. NDARC Illicit Drug Reporting System (IDRS) and Ecstasy and Related Drugs Reporting System (EDRS) – Queensland arm. \$122,765 (2008).

Kong F, Dietze P, Hellard M. Commonwealth Department of Health and Ageing. *Ecstasy and related drugs reporting system (EDRS).* \$48,000 (2005-2010).

Lehmann D, **Reeder J**. Welcome Trust International Collaborative Research Grant. *Neonatal immunization with pneumococcal conjugate vaccine in PNG.* £940,000 (2005-2010).

Croft N, **Hellard M**. NCHECR. A prospective, longitudinal, Australian cohort study of newly acquired hepatitis C (HCV) infection, and the impact and efficacy of therapy with PEGinterferon alpha-2a. \$240,040 (2003-2009). Hellard M, Donovan B, Guy R, Kaldor J, Sullivan E, Dimech W. Federal Government Chlamydia Targeted Grants Program. *Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance*. \$1,083,843 (2007-2009).

Hellard, M. Project Grant, Victoria Department Human Services. *Surveillance for sexually transmitted diseases and HIV/AIDS in Victoria*. \$332,506.48.

Aitken C, Dixon H, **Lim M**, Wakefield M, Ferrari G, Hope J, **Hellard M**. VicHealth Discovery Grant. *Using text messaging (SMS) to promote health issues to young people: a randomised controlled trial.* \$68,593 (2008-2009).

Hellard M, Aitken C. Gandel Charitable Trust. *A research traineeship for an outreach worker from a marginalised community.* \$100,000 (2007-2009).

Hogarth, M. *CRC Transbio Ltd. CRC for Biomarker Translation*. \$30.59 Million (2006-onwards).

Hogarth, M. Fellowship (NHMRC). Uncoupled Research Fellowship. \$721,250 (2007-2011).

Hogarth M, Wines B, Powell MS. Project Grant (NHMRC). *Structure and Function of Receptors for IgG (Fc*_Y*R*). \$741,000 (2008-2010).

Hogarth M, Mottram P, Powell M. Project Grant (NHMRC). *The role of Fc Rlla in antibody dependent tissue destruction in autoimmunity.* \$516,375 (2008-2010).

Jackson, D. Project Grant, National Heart Foundation. *Defining mechanisms of stabilisation of platelet aggregates*. \$125,500 (2008-2009).

Kinner, S. Postdoctoral Fellowship (NHMRC). *Monitoring the health and well-being of ex-prisoners in Australia a longitudinal data linkage study.* \$269,000 (2006-2009).

Mak J, Jaworowski A, da Fonseca Pereira C. Project Grant (NHMRC). Does HIV function as a lipid-raft during infection? \$582,750 (2008-2010).

McCaffrey, K. Biomedical Postgrad Scholarship(NHMRC). *Role of the variable regions of Hepatitis C Virus envelope glycoprotein E2 in glycoprotein structure and function.* \$65,598 (2007-2009).

Hellard, M. Australian Centre for HIV and Hepatitis Virology Research Project Grant. *Identifying key immunological markers that predict injecting drug users risk of hepatitis C virus reinfection.* \$118,886 (2008-2009).

Anderson, A. Australian Centre for HIV and Hepatitis Virology Research Project Grant *Serological diagnosis of neonatal HIV infection in resource-poor settings: selective detection of endogenous HIV-specific IgA.* \$158,675 (2008-2009).

Ffench, R. Australian Centre for HIV and Hepatitis Virology Research Project Grant. *The influence of HCV treatment strategies on the development and maintenance of potentially protective cellular immune responses* \$174,608 (2008-2009).

Gorry P. Australian Centre for HIV and Hepatitis Virology Research Project Grant. *In vitro assay for HIV resistance to the CCR5 inhibitor Maraviroc.* \$150, 875 (2008-2009)

Poumbourios, P. Australian Centre for HIV and Hepatitis Virology Research Project Grant. *The terminal fusion clasp of gp41: new target for antiviral discovery.* \$150,000 (2008-2009).

Sonza, C. Australian Centre for HIV and Hepatitis Virology Research Project Grant. *Lactic acid as a natural microbicide for HIV.* \$165,000 (2008-2009).

Drummer, H. Australian Centre for HIV and Hepatitis Virology Research Project Grant. *Monoclonal antibodies specific to novel epitopes in glycoprotein E2 for diagnostic and therapeutic research.* \$150,000 (2008-2009).

Stratov, I. Australian Centre for HIV and Hepatitis Virology Research Project Grant. *Immunotherapy of HIV with ADCC monoclonal antibodies.* \$170,000 (2008-2009). **Pietersz G, Apostolopoulos V.** Project Grant (NHMRC). *Polynucleotide vaccine based on targeted delivery to antigen presenting cells.* \$518,250 (2008-2010).

Pietersz, G. Project Grant, The Cancer Council. *Cell penetrating peptide-mediated delivery of multiple CD8 and CD4 T cell epitopes for breast cancer vaccines*. \$277,038 (2008-2010).

Poumbourios P. Drummer H, Gorry P. Project Grant (NHMRC). Delineation of receptor-activated conformational signalling pathways in HIV-1 envelope glycoproteins. \$801,000 (2008-2010).

Power, D. Project Grant (NHMRC). *Protein kinases regulate salt reabsorption in the kidney.* \$511,500 (2007-2009).

Ramsland, P. Career Development Award (NHMRC). \$436,250 (2006-2010).

Reeder J, Barry A. Project Grant (NHMRC). *Population genomics of plasmodium falciparum surface antigens*. \$370,500 (2008-2010).

Stratov, I. Postdoctoral Fellowship (NHMRC). *Role of HIV-specific natural killer cell mediated antibody-dependent cellular cytotoxicity in HIV infection progression*. \$274,000 (2007-2010).

Tachedjian, G. Program Grant (NHMRC). *Investigating a novel generic Approach to Anti-Infective Agents*. \$70,068 (2008-2010).

Tachedjian, G. Harrigan, R. Sluis-Cremer, N. Project Grant (NHMRC). *Drug resistance mutations in the connection subdomain of the HIV-1 reverse transcriptase.* \$361,875 (2007-2009).

Centre for International Health Current Grants:

Chanlivong, N. ADB. *HIV Prevention and Infrastructure: Mitigating risk in th Great Mekong Subregion. Subproject 1 Expanded HIV Prevention Program on Lao Northern Economic Corridor (Route 3) (2008-2010).* (Laos). \$857,143 (2009-2011).

Chanlivong, N. Dutch Embassy – Bangkok. *Female peer education on sexual and reproductive health*. (Laos). \$41,885 (2008-2009).

Chanlivong, N. Equity Trustees. *Lao working womens HIV and STI Response.* (Laos). \$50,000 (2008-2010).

Chanlivong, N. LXML (Oxiana). Safer mines: HIV intervention for Lan Xang Minerals Ltd and Vilabouly communities. (Laos). \$248,625 (2007-2009).

Chanlivong, N. Oxiana Lane Xang Minerals Ltd (LXML). *Laos, Mother and Child Health Project*. (Laos). \$523,341 (2008-2011).

Chanlivong, N. PACT Men who have sex with Men peer outreach activities IV. (Laos). \$73,333 (2007-2010).

Creati, M. World Vision and AIHI. *Facility- HIV,Mental Health, Organisational Development and Health Financing.* (Indonesia). \$5,000,000 (2007-2009).

De Souza, PP. AusAID. *Reducing Community Vulnerability to HIV and AIDS*. (Mozambique). \$391,569 (2008-2009).

Dorning, K. AusAID. *Integrated Psychosocial Support for Sexual Reproductive Health - Cyclione Nargis*. (Burma) \$800,000 (2008-2010).

Dorning, K. AusAID. *Strenthening HIV responses through partnership*. (Burma). \$1,917,132 (2007-2012).

Dorning, K. Burma Project. *Local resource centre - Cyclone Nargis*. (Burma). \$1,940,000 (2008-2010).

Dorning, K. UNOPS. *3 Diseases Fund- reducing the burden of commincable disease morbidity/mortality in the area of HIV/AIDs.* (Burma). \$3,726,796 (2007-2011).

Hagerty, C. Canada Fund. *Prevention education among workers exposed to the highest risk of contracting HIV.* (China-Tibet). \$51,347

Holmes, W. AusAID, Menzies and UoM. *Women and Children's Health Hub - collaboratin with Menzies and Centre for International Child Health* (University of Melbourne). \$6,000,000 (2008-2011). **Morgan, A.** Ford Foundation *Promoting men's involvement in ante natal care services*. (Indonesia). \$117,647 (2008-2009).

Morgan, A. Levi Strauss Foundation. *Capacity Building for Local Responses to HIV amongst Injecting Drug Users*. (Indonesia). \$117,647 (2007-2009).

Morgan, A. NZAID. *Building Capacity for HIV prevention and support programs among local NGOs.* (Indonesia). \$574,979 (2005-2010).

Morgan, C. AusAID. *China-Australia Health and HIV/AIDS Facility*. (China). \$31,800,000 (2007-2012).

Natoli, L. AusAID. *PNG-Australia Sexual Health Improvement Program*. (PNG). \$2,444,003 (2007-2011).

Power, R. AusAID. *Investigating the role of drug and alcohol use in the spread of HIV and other STIs in Pacific*. (Pacific). \$112,750 (2008-2009).

Power, R. GRM. *HIV Cooperation Program for Indonesia*. (Indonesia). \$1,000,000 (2008-2013).

Power, R. Salvation Army (NSW). *Situational Assessment of Drug and Alcohol issues and responses in the Pacific Region*. (Pacific). \$98,670 (2008-2009).

Quartermaine, M. Wheeler Foundation. *Vietnam - Support of the Dove Club to undertake Peer Outreach Activities with IDU.* (Mekong Delta). \$60,000.

Renkin,L. Australian Red Cross. *Tibet Health Sector Support Program*. (China-Tibet). \$2,000,000 (2004-2009).

Whitney, R. AusAID. AusAID *NGO Cooperation Program* (ANCP). \$391,569 (2008-2009).

New Grants:

Anderson D, Garcia M, Crowe SM. Development Grant (NHMRC). Development and prototype manufacture of a high-throughput CD4 T-Cell test for management of HIV/AIDS infections. \$159,750 (2009).

Cherry, C. Career Development Award (NHMRC). Uncoupled Career Development Award Level 1. \$370,000 (2009-2012).

Crowe, S. Strategic Awards (NHMRC). *Immune responses to 2009* H1N1 to assist public health response. \$184,712 (2009).

Danta M, **Hellard M**, Sasadeusz J, Prestage G. Matthews G. NHMRC. *Defining sexual transmission of hepatitis C among gay men*. \$380,050 (2009 -2010).

Drummer H, Poumbourios P. Project Grant (NHMRC). *Role of the hepatitis C virus glycoprotein E2 variable regions in viral entry and antibody mediated neutralization.* \$521,500 (2009-2011).

Ffrench, R. Strategic Awards (NHMRC). *A centralised facility for immunological monitoring of human H1N1 immunity post infection or vaccination.* \$184,395 (2009).

Gavin, A. Future Fellowship, ARC. *The roles of novel pathways in the activation and regulation of the adaptive immune response in health and disease.* \$788,400 (2009-2013).

Gerondakis, S. Project Grant (NHMRC). *The transcription factors c-Rel and RelA serve distinct roles in the development and function of CD4 Regulatory T cells.* \$483,500 (2009-2011).

Gilson P, Crabb B, de Koning Ward T, Street. Grand Challenge Exploration Grant. *GCE: A novel virulence-associated malaria drug target*. US\$100,000 (2009-2010).

Gilson, P. Project Grant, Bill Melinda Gates. A novel virulence associated malaria drug targets. \$100,000 US (2009-2010).

Gorry P, Churchill M. Project Grant (NHMRC). Adaptive changes in HIV-1 subtype C envelope glycoproteins contributing to pathogenicity. \$410,350 (2009-2011).

Gorry, P. Career Development Award (NHMRC). Uncoupled Career Development Award Level 2. \$409,000 (2009-2012).

Gowan E, Loveland B. Project Grant (NHMRC). *Multiple vector vaccine for hepatitis C virus*. \$463,000 (2009-2011).

Gowan E, Roberts S, Loveland B. Project Grant (NHMRC). *A novel immunotherapy to treat HCV infection*. \$530,849 (2009-2011).

Hearps A, Crowe S. Project Grant, Merck Sharp & Dohme. *Establishment of a clinically-validated assay to screen for resistance to the HIV integrase-inhibitor class of antiretroviral drugs.* \$19,808 (2009).

Hearps A, Crowe SM. Project Grant, PNG Medical Research. *Surveillance of HIV drug resistance in the national capital district of PNG.* \$27,236.66 (2009).

Hellard M, Gold J, Pedrana A. Commonwealth Bank Community Grants. Sex on the Beach: Sexual Health Testing among Young People. \$9,470 (2009).

Hellard M, Lester R, McBryde E, Fielding J, Stewart A, **Bergeri I.** Strategic Awards (NHMRC). *The Epidemiology, Transmission and Impact of New Influenza A (H1N1) on The Victorian Community in 2009.* \$152,335 (2009).

Hellard M, Stoove M, Pedrana A, Gold J, Howard S, Benda P, Batrouney C, Asselin J, Reeder D, Hocking J, Milne, C. Victorian Department of Human Services. *Our Place on FaceSpace: Using Social Networking Sites to Promote Sexual Health and Safer Sex to Higher Risk Groups.* \$176,323.70 (2009-2010).

Hellard, M. Fellowship (NHMRC). Uncoupled Research Fellowship SRFA. \$560,000 (2009-2013).

Jackson, D. Fellowship (NHMRC). Uncoupled Research Fellowship Level SRFB. \$618,750 (2009-2013).

Jaworowski A, Crowe SM. Project Grant (NHMRC). *ITAM signalling proteins in chronic viral disease*. \$438,000 (2009-2011).

Kinner S, Jamrozik K, Williams G, Alati R. Project Grant (NHMRC). Post-release mortality among ex-prisoners in Queensland: A data linkage study (known as the Mortality After Release from custody, or MARC, Study.) \$430,000 (2009).

Kinner S, Winter R, Kwarteng T. *Pacific Islands HIV and STI Response Fund. Monitoring HIV, risk behavior and health service access among prisoners and ex-prisoners in Fiji.* \$100,00 (2009-2011).

Kinner, S. Public Health Post-doctoral. Fellowship (NHMRC). \$89,062.50 (2009-2010).

Kinner, S. Strategic Awards (NHMRC). *Health and capacity building as a basis for social integration Passports to advantage: Health and capacity building as a basis for social integration.* \$1,081,849.07 (2009-2011).

Lim, M. Postdoctoral Fellowship (NHMRC). *Exploring innovative epidemiological research to understand sexually transmissible infections in large cohorts.* \$405,072 (2009-2012)

Mak J, Hinjen M. Project Grant (NHMRC). *Biochemical and structural analysis of virus-host interactions during HIV-1 assembly.* \$324,250 (2009-2011).

Moore D, Dietze P, Bammer G, Perez. Program Grant (NHMRC). Understanding the barriers to improved access, engagement and retention of methamphetamine users in health services. \$756,850 (2008-2011).

Morrissey, O. Project Grant, Merck Sharp & Dohme. *A randomised trial of diagnostic strategies for invasive Aspergillosis in at-risk hematology patients (ASPID Trial.)* \$200,000 (2009-2011).

O'Keeffe, M. Project Grant, Bavarian Nordic A/S. *Analysis of Dendritic cells in bone marrow.* \$474,250 (2009-2011).

Pattison P, Robbins G, McBride E, **Hellard M.** *ARC Linkage Grant*. The Structure and Dynamics of social contact for human disease. \$550,000 (2009-2012).

Pedrana, A. Public Health Postgraduate Scholarship (NHMRC). *The Epidemiology of HIV among men who have sex with men (MSM) in Victoria.* \$85,827 (2009-2011).

Pietersz, G. Development Grant (NHMRC). *Novel vaccine formulation for immunotherapy of adenocarcinomas.* \$178,500 (2009).

Pietersz, G. Project Grant (NHMRC). *Development of a novel mannanbased avian influenza vaccine*. \$174,500 (2009).

Poumbourios P, Drummer H, Wilce M. Project Grant (NHMRC). Structural and functional role of HIV-1 gp41 terminal interactions in the membrane fusion mechanism. \$508,500 (2009-2011).

Power R, Winter R. Position Paper commissioned by the Yarra Drug and Health Forum (auspiced by North Yarra Community Health Centre) *The viability and potential for a supervised injecting facility in Melbourne, Australia.* \$8,500 (2009).

Power, D. Project Grant (NHMRC). *Role of the lysosomal protein SCARB2 in kidney disease.* \$438,000 (2009-2011).

Ramsland P, Wines B. Project Grant (NHMRC). *Structural investigations of bacterial evasion of IgA mucosal and systemic immunity.* \$462,750 (2009-2011).

Reeder, J. Fellowship (NHMRC). Uncoupled Research Fellowship Level PRF. \$677,500 (2009-2013).

Slavin M, Morrissey O. Project Grant Pfizer. *ASPID Study-A* multicentre randomised controlled tiral comparing two strategies for the diagnosis of invasive Aspergillosis in high risk hematology patients. \$200,000 (2009-2011).

Stoove M, Hellard M, Bergeri I, Sacks-Davis R, Van Gemert C. Project Grant, Department of Health and Ageing, Health Network Ltd QLD. *Queensland - An investigation of hepatitis C surveillance activity in Queensland and opportunities for establishing a sentinel hepatitis C surveillance network.* \$107,190 (2009).

Tachedjian, G. Fellowship (NHMRC). Uncoupled Research Fellowship SRFA. \$560,000 (2009-2013).

Toole M, Hellard M, Pattison P, Sihavong A, Khoat D. (ADRA) Mapping sexual and social networks of men who have sex with both men and women in Laos and Vietnam, countries with concentrated HIV epidemics. \$370,730 (2009-2010).

Centre for International Health New Grants:

Fischer, A. AusAID. *Tingim Laip: Interim Management and Oversight Arrangements for Tingim Laip.* (PNG). \$2,397,370 (2009).

Kwarteng, T. SPC. Implementation of the Pacific regional Strategic Implementation Plan II. (Pacific). \$449,800 (2009-2012).

Morgan, A. Oxfam. ANTARA HIV Technical Assistance. (Indonesia). \$66,824 (2009-2010).

Morgan, C. Robert Christie Foundation. *Project in Partnership with Braille without Borders (BWB) to establish a school in Kerala India.* (India). \$31,000 (2009).

Morgan, C. UNICEF. WHO PNG - Improving Immunisation Service Delivery at the Aid Post level in PNG. (PNG). \$21,739 (2009).

Morgan, C. WHO. Improving Immunisation Service Delivery and Newborn Survival at the Aid Post Level in PNG - Year 2 January 2009. (PNG). \$32,857 (2009).

Natoli, L. SPC. *Piloting of a strategy to integrate point of care testing into current PICT responses to STIs and HIV.* (Pacific). \$205,400 (2009-2011).

O'Neill, S. Baker IDI Heart and Diabets Institute . *Provision of experience and capacity in relation to the pursuit of, and management of, international development opportunities.* (Australia). \$100,000 (2009-2010).

Otto, B. RTI. *Strengthening HIV/AIDS Policy and Advocacy for MSM in Asia Pacific Region*. (China). \$50,588 (2009).

Otto, B. University of Queensland. *The investment Case for closing the gap: financing equitable progress towards the Millenium Development Goals.* \$211,364 (2009).

Renkin, L. WVA. *Funding of Partner for continuation of health activities in Aceh.* (Indonesia). \$350,000 (2009-2010).

Toole, M. AusAID. *Modelling Sexual and Social Networks of Urban Men who Have Sex with Men and Women in Vietnam and Lao PDR*. (Mekong Delta). \$370,730 (2009-2011).

Whitney, R. AusAID. AusAID NGO Cooperation Program (ANCP). \$1,190,769 (2009-2012).

Whitney, R. AusAID. *Needs assessments of Zimbabwean women and their children on both sides of the Mozambique/Zimbabwe border and the development of pilot interventions to help them access good quality care.* (Mozambique/Zimbabwe). \$150,000 (2009-2010).

Centre for International Health Consultancies:

Brown, M. UNOPS. *Most significant change technique workshop* (Burma). \$5,636.

Chanlivong, N. Care. *Community events based surveillance evaluation for the AusAID funded community based avian influenza risk reduction project* (Laos). \$12,696.

Chanlivong, N. WHO. *Development of community based health insurance approach* (Laos). \$10,750.

Coghlan, B. WHO. For Mr Benjamin Coghlan to serve as a member of the Sub-Team for Afghanistan to undertake the Independent Evaluation of major barriers to interruption of poliovirus transmission (Afghanistan). \$10,601.

Creati, M. WHO. Development of strategy for implementation of Adolescent Job Aid (AJA) and Orientation Program (OP) in the Phillipines (Phillipines). \$10,616.

Denham, G. UNODC. *China desk review and field visits for HIV/AIDS control in closed settings and drug users.* (China). \$36,000.

Dorabjee, J. IHRA. Assist with content and programming of the harm reduction festival in London. \$9,420.

Dorabjee, J. AIHI. *Delivery of capacity building for the country flexible program from Burma effective approach program sites* (Burma). \$8,000.

Dorabjee, J. WHO. *Establishing, strengthening and formalisation of the Asian Network of people who use drugs* (Asia). \$23,640.

Dorabjee, J. East and South East Asia Technical Support Hub. Technical support to the Alliance China Office Programme Staff and Guangxi Red Cross Programme officer (Cambodia). \$25,640.

Fischer, A. University Malaya. *Design mission and delivery of prefessional development training for Prisons and Malaysian AADK* (Malaysia). \$19,589.

Fischer, A. MAC. Needle and Syringe Exchange Program - Capacity Building and Peer Education Workshop (Malaysia). \$16,835.

Fischer, A. Guangxi Health Bureau. *Study tour on harm reduction program for Guangxi Health Bureau Melbourne 22-24 July 2009* (Australia). \$9,943.

Fischer, A. WHO. Updating the baseline assessment of status of policies, resources and services for people who inject drugs (2006) and analysis of gaps in the country responses to injecting drug use and HIV/AIDS. \$19,785.

Hagerty, C. CHARTs. CHARTS Study Tour to Australia (Australia). \$29,074.

Holmes, W. UNICEF. Contextualising global Preventing Mother to Child Transmission (PMTCT) of HIV strategy and guidance on global scale-up of PMTCT in low and concentrated epidemic settings in Asia Pacific (Asia Pacific). \$28,571.

Kwarteng, T. UNICEF. *Evaluation of the adolescent health and development programme in 2007* (Pacific). \$21,032.

Kwarteng, T. IPPF. Provision of support service to the Secretariat of the Pacific Community (SPC) to revise and implement a monitoring and evaluation framework for the pacific islands HIV and STI Response Fund (Pacific). \$22,444.

Morgan, C. Crucell. *Advisory board member at the Crucell Uniject meeting held at Geneva* (Switzerland). \$2,439.

O'Neill, S. SPC. Consultancy to assist in the evaluation of the Pacific Regional Strategy on HIV and AIDS (Pacific). \$32,308.

Otto, B. RTI. Assistance with USAID bid preparation (HIV/AIDs Scaling up for most at risk populations)(Indonesia). \$20,025.

Otto, B. RTI. *Men who have sex with men (MSM) small grants and MSM advocacy review meeting final report.* \$71,258.

Otto, B. RTI. Strengthening HIV/AIDS Policy and advocacy for Men Who have Sex with Men (MSM) in the Asia Pacific Region. \$164,045.

Parnell, B. WHO. Advocacy paper on neglected tropical diseases and best practice paper on HIV for Thailand (India). \$16,663.

Parnell, B. World Bank. *AIDS Strategy and Action Plan (ASAP) second evaluation.* \$49,295.

Parnell, B. WHO. Desk review, paper and attendance at regional consultation on cross border control of communicable diseases (SE Asia). \$42,074.

Parnell, B. WHO. *Peer review and editing of scientific papers for WHO Bulletin special issue on communicable diseases in South East Asia Region.* \$7,500.

Power, R. WHO. Technical support to review harm reduction programme and needle and syringe exchange program - conduct of workshop on scaling-up and sustaining the implementation (Malaysia). \$9,333.

Power, R. WHO. Work with WHO Malaysia and Ministry of Health Malaysia to review the progress and gaps targeting the problematic areas of onging needle and syringe exchange program (Malaysia). \$14,083.

Quartermaine, M. Australian Red Cross. *Community HIV and harm reduction in Cambodia* (Cambodia). \$7,399.

Snell, B. WHO. Development of training modules for improved pharmaceutical and health service delivery at peripheral health settings in Fiji (Fiji). \$19,012.

Snell, B. SPC. *External technical review of Fiji Pharmaceutical and Biomedical Services procurement and suppy management systems, policies and practices* (Fji). \$17,143.

Snell, B. WHO. Organisation of the training course on improving medicines supply and management for Pacific Island Countries in Melbourne Australia (Australia). \$12,278.

Snell, B. WHO. Short term consultancy on national medicines policy in Solomon Islands 17 July - 14 Aug 2009 (Solomons). \$9,500.

Stewart, T. AusAID HRF. *Appraisal of August 2009 Asia Pacific Malaria Elimination Network design* (Asia Pacific). \$2,500.

Stewart, T. HLSP. Asia Pacific Malaria Elimination Network (APMEN - Establishment Support Program - AusAID Quality at Entry Review (Pacific). \$3,750.

Stewart, T. SPC. Provide advice to the Ministry of Health in post tsunami management of potential health problems in Samoa (Samoa). \$13,300.

Stewart, T. SPC. To review the national and regional responses to Influenza A (H1N1) and make recommendations on responses (Pacific). \$37,400.

Sweeney, R. Monash University. *Modelling costs and efficiency of primary health care services in Papua New Guinea* (PNG). \$55,000.

Toole, M. WHO. For Professor Michael Toole to serve as a member of the core Team to lead the Independent Evaluation of major barriers to interrupting poliovirus transmission (Afghanistan). \$17,960.

Toole, M. AusAID HRF. *Pandemics and emerging infectious diseases strategy - review of funded activities and development of a new draft strategy.* \$46,500.

Toole, M.UNOPS. Three Diseases Fund Board Membership (Burma). \$23,077.

Publications

Peer Reviewed:

- Agostino M, Jene C, Boyle T, Ramsland PA, and Yuriev E. Molecular Docking of Carbohydrate Ligands to Antibodies: Structural Validation against Crystal Structures. Journal of Chemical Information and Modeling 2009;49:2749-2760.
- Agostino M, Sandrin MS, Thompson PE, Yuriev E, and Ramsland PA. In silico analysis of antibody-carbohydrate interactions and its application to xenoreactive antibodies. Molecular Immunology 2009;47:233-246.
- 3. Aitken C, Dwyer R, Spelman T, and Power R. *Is handedness associated with health outcomes for people who inject illicit drugs*? Drugs-Education Prevention and Policy 2009;16:471-477.
- 4. **Aitken CK,** Fry TRL, Farrell L, and Pellegrini B. *Smokers of illicit tobacco report significantly worse health than other smokers.* Nicotine & Tobacco Research 2009;11:996-1001.
- Aitken CK, Lewis JA, Hocking JS, Bowden DS, and Hellard ME. Does Information about IDUs' Injecting Networks Predict Exposure to the Hepatitis C Virus? Hepatitis Monthly 2009;9:17-23.
- Ambrose Z, Herman BD, Sheen CW, Zelina S, Moore KL, Tachedjian G, Nissley DV, and Sluis-Cremer N. The Human Immunodeficiency Virus Type 1 Nonnucleoside Reverse Transcriptase Inhibitor Resistance Mutation I132M Confers Hypersensitivity to Nucleoside Analogs. Journal of Virology 2009;83:3826-3833.
- 7. **Apostolopoulos V**, and Weiner DB. *Development of more efficient and effective DNA vaccines*. Expert Review of Vaccines 2009;8:1133-1134.
- 8. Apostolopoulos V. Cancer vaccines and immunotherapy of autoimmune diseases. Immunotherapy 2009;1:15-17.
- 9. **Apostolopoulos V**. *MHC and MHC-Like Molecules in the Design of Vaccines*. Current Pharmaceutical Design 2009;15:3207-3208.
- 10. **Apostolopoulos V.** *Peptide-based vaccines for cancer: are we choosing the right peptides?* Expert Review of Vaccines 2009;8:259-260.
- Audsley J, Arrifin N, Yuen LKW, Ayres A, Crowe SM, Bartholomeusz A, Locarnini SA, Mijch A, Lewin SR, and Sasadeusz J. Prolonged use of tenofovir in HIV/hepatitis B virus (HBV)-coinfected individuals does not lead to HBV polymerase mutations and is associated with persistence of lamivudine HBV polymerase mutations. Hiv Medicine 2009;10:229-235.
- 12. **Barry AE,** Schultz L, Buckee CO, and **Reeder JC**. *Contrasting* population structures of the genes encoding ten leading vaccine-candidate antigens of the human malaria parasite, Plasmodium falciparum. PLoS One 2009;4:e8497.
- Baum J, Papenfuss AT, Mair GR, Janse CJ, Vlachou D, Waters AP, Cowman AF, Crabb BS, and de Koning-Ward TF. Molecular genetics and comparative genomics reveal RNAi is not functional in malaria parasites. Nucleic Acids Research 2009;37:3788-3798.
- Bharadwaj M, Thammanichanond D, Aitken CK, Moneer S, Drummer HE, Tracy S, Holdsworth R, Bowden S, Jackson D, Hellard M, Torresi J, and McCluskey J. *T-CD8 response in diverse outcomes of recurrent exposure to hepatitis C virus*. Immunology and Cell Biology 2009;87:464-472.
- Brew BJ, Crowe SM, Landay A, Cysique LA, and Guillemin G. Neurodegeneration and Ageing in the HAART Era. Journal of Neuroimmune Pharmacology 2009;4:163-174.
- Brooks MJ, Sasadeusz JJ, and Tannock GA (2009). A brief history of clinical trials on viral vaccines. In Clinical Trials Handbook, SC Gad, ed. (Hoboken, NJ, John Wiley and Sons), pp. 775-784.

- 17. Brooks NA, Pouniotis DS, Tang CK, Apostolopoulos V, and Pietersz GA. *Cell-penetrating peptides: Application in vaccine delivery.* Biochim Biophys Acta 2009.
- Bullen HE, Tonkin CJ, O'Donnell RA, Tham WH, Papenfuss AT, Gould S, Cowman AF, Crabb BS, and Gilson PR. A Novel Family of Apicomplexan Glideosome-associated Proteins with an Inner Membrane-anchoring Role. Journal of Biological Chemistry 2009;284:25353-25363.
- Chan KY, Yang Y, Li ZR, Stoove MA, and Reidpath DD. Interrelationships between HIV/AIDS and risk behavior prejudice among medical students in Southern China. Curr HIV Res 2009;7:601-611.
- Chen MY, Millwood IY, Wand H, Poynten M, Law M, Kaldor JM, Wesselingh S, Price CF, Clark LJ, Paull JRA, and Fairley CK. A Randomized Controlled Trial of the Safety of Candidate Microbicide SPL7013 Gel When Applied to the Penis. Jaids-Journal of Acquired Immune Deficiency Syndromes 2009;50:375-380.
- 21. Cheong WS, **Drummer HE**, and Netter HJ. *Delivery of a foreign epitope by sharing amino acid residues with the carrier matrix.* Journal of Virological Methods 2009;158:35-40.
- 22. **Cherry CL**, Affandi JS, Imran D, Yunihastuti E, Smyth K, Vanar S, Kamarulzaman A, and Price P. *Age and height predict neuropathy risk in patients with HIV prescribed stavudine*. Neurology 2009;73:315-320.
- 23. Chikritzhs TN, **Dietze PM**, Allsop SJ, Daube MM, Hall WD, and Kypri K. *The "alcopops" tax: heading in the right direction*. Medical Journal of Australia 2009;190:294-295.
- 24. Chung AW, Rollman E, Center RJ, Kent SJ, and **Stratov I**. *Rapid Degranulation of NK Cells following Activation by HIV-Specific Antibodies*. Journal of Immunology 2009;182:1202-1210.
- 25. **Churchill MJ, Wesselingh SL, Cowley D**, Pardo CA, McArthur JC, Brew BJ, and Gorry PR. *Extensive Astrocyte Infection Is Prominent in Human Immunodeficiency Virus-Associated Dementia*. Annals of Neurology 2009;66:253-258.
- Coghlan B, Ngoy P, Mulumba F, Hardy C, Bemo VN, Stewart T, Lewis J, and Brennan RJ. Update on mortality in the Democratic Republic of Congo: results from a third nationwide survey. Disaster Med Public Health Prep 2009;3:88-96.
- 27. **Cox HS,** Ford N, and **Reeder JC**. *Are we really that good at treating tuberculosis?* Lancet Infectious Diseases 2009;9:138-139.
- Crane M, Oliver B, Matthews G, Avihingsanon A, Ubolyam S, Markovska V, Chang JJ, Dore GJ, Price P, Visvanathan K, French M, Ruxrungtham K, and Lewin SR. Immunopathogenesis of Hepatic Flare in HIV/Hepatitis B Virus (HBV)-Coinfected Individuals after the Initiation of HBV-Active Antiretroviral Therapy. Journal of Infectious Diseases 2009;199:974-981.
- 29. Crowe SM, Westhorpe CL, Mukhamedova N, Jaworowski A, Sviridov D, and Bukrinsky M. *The macrophage: the intersection* between HIV infection and atherosclerosis. J Leukoc Biol 2009.
- Dale K, Wolfe R, Sinclair M, Hellard M, and Leder K. Sporadic Gastroenteritis and Recreational Swimming in a Longitudinal Community Cohort Study in Melbourne, Australia. American Journal of Epidemiology 2009;170:1469-1477.
- Day SL, Ramsland PA, and Apostolopoulos V. Non-Canonical Peptides Bound to MHC. Current Pharmaceutical Design 2009;15:3274-3282.
- 32. de Koning-Ward TF, and **Gilson PR**. *Keeping it simple: an easy method for manipulating the expression levels of malaria proteins*. Trends in Parasitology 2009;25:4-7.
- de Koning-Ward TF, Gilson PR, Boddey JA, Rug M, Smith BJ, Papenfuss AT, Sanders PR, Lundie RJ, Maier AG, Cowman AF, and Crabb BS. A newly discovered protein export machine in malaria parasites. Nature 2009;459:945-U966.

- Degenhardt L, Roxburgh A, Dunn M, Campbell G, Bruno R, Kinner SA, Georg, J, Quinn B, White N, and Topp L. *The epidemiology of ecstasy use and harms in Australia*. Neuropsychobiology 2009;60:176-187.
- Denholm JT, Yong MK, and Elliott JH. Long term management of people with HIV. Australian Family Physician 2009;38:574-577.
- 36. Dent AE, Chelimo K, Sumba PO, Spring MD, **Crabb BS**, Moormann AM, Tisch DJ, and Kazura JW. *Temporal stability of naturally acquired immunity to Merozoite Surface Protein-1 in Kenyan Adults*. Malaria Journal 2009;8:10.
- 37. **Dietze PM**, Jolley DJ, Chikritzhs TN, Clemens S, Catalano P, and Stockwell T. *Income inequality and alcohol attributable harm in Australia*. Bmc Public Health 2009;9:9.
- Dwyer R, Topp L, Maher L, Power R, Hellard M, Walsh N, Jauncey M, Conroy A, Lewis J, and Aitken C. Prevalences and correlates of non-viral injecting-related injuries and diseases in a convenience sample of Australian injecting drug users. Drug and Alcohol Dependence 2009;100:9-16.
- 39. Elliott JH, Vohith K, Saramony S, Savuth C, Dara C, Sarim C, Huffam S, Oelrichs R, Sophea P, Saphonn V, Kaldor J, Cooper DA, Vun MC, and French MA. *Immunopathogenesis and Diagnosis of Tuberculosis and Tuberculosis-Associated Immune Reconstitution Inflammatory Syndrome during Early Antiretroviral Therapy.* Journal of Infectious Diseases 2009;200:1736-1745.
- 40. **Farrugia W**, Scott AM, and **Ramsland PA**. A Possible Role for Metallic Ions in the Carbohydrate Cluster Recognition Displayed by a Lewis Y Specific Antibody. Plos One 2009;4:8.
- 41. Feng GQ, Aitken E, Yosaatmadja F, Kalilani L, Meshnick SR, Jaworowski A, Simpson JA, and Rogerson SJ. Antibodies to Variant Surface Antigens of Plasmodium falciparum-Infected Erythrocytes Are Associated with Protection from Treatment Failure and the Development of Anemia in Pregnancy. Journal of Infectious Diseases 2009;200:299-306.
- 42. Feuerriegel S, **Cox HS**, Zarkua N, Karimovich HA, Braker K, Rusch-Gerdes S, and Niemann S. *Sequence Analyses of Just Four Genes To Detect Extensively Drug-Resistant Mycobacterium tuberculosis Strains in Multidrug-Resistant Tuberculosis Patients Undergoing Treatment*. Antimicrobial Agents and Chemotherapy 2009;53:3353-3356.
- 43. Ffrench RA. 6th Australasian Viral Hepatitis Conference. Future Virology 2009;4:35-37.
- Fielding JE, Higgins N, Gregory JE, Grant KA, Catton MG, Bergeri

 Lester RA, and Kelly HA. Pandemic H1N1 influenza surveillance in Victoria, Australia, April-September, 2009. Eurosurveillance 2009;14:37-44.
- 45. Gidding HF, Topp L, Middleton M, Robinson K, Hellard M, McCaughan G, Maher L, Kaldor JM, Dore GJ, and Law MG. The epidemiology of hepatitis C in Australia: Notifications, treatment uptake and liver transplantations, 1997-2006. Journal of Gastroenterology and Hepatology 2009;24:1648-1654.
- 46. **Giles M.** *HIV and pregnancy: screening and management update.* Current Opinion in Obstetrics & Gynecology 2009;21:131-135.
- Giles ML, Hellard ME, Lewin SR, and O'Brien ML. The "work" of women when considering and using interventions to reduce mother-to-child transmission (MTCT) of HIV. Aids Care-Psychological and Socio-Medical Aspects of Aids/HIV 2009;21:1230-1237.
- Giles ML, McDonald AM, Elliott EJ, Ziegler JB, Hellard ME, Lewin SR, and Kaldor JM. Variable uptake of recommended interventions to reduce mother-to-child transmission of HIV in Australia, 1982-2005 REPLY. Medical Journal of Australia 2009;190:220-221.
- Giles ML, Pedrana A, Jones, C, Garland, S, Hellard M, and Lewin SR. Antenatal screening practice for infectious diseases by general practitioners in Australia. Australian & New Zealand Journal of Obstetrics & Gynaecology 2009;49:39-44.

- Gilson PR, and Crabb BS. Do apicomplexan parasite-encoded proteins act as both ligands and receptors during host cell invasion? F1000 Biology Reports 2009;1:64 (doi:10.3410/ B3411-3464).
- 51. **Gilson PR**, and **Crabb BS**. *Morphology and kinetics of the three distinct phases of red blood cell invasion by Plasmodium falciparum merozoites*. Int J Parasitol 2009;39:91-96.
- 52. **Gilson PR.** *Malaria parasites do the stick-and-slip shuffle.* Cell Host Microbe 2009;6:499-501.
- 53. Grais RF, Luquero FJ, Grellety E, Pham H, **Coghlan B**, and Salignon P. *Learning lessons from field surveys in humanitarian contexts: a case study of field surveys conducted in North Kivu, DRC 2006-2008.* Confl Health 2009;3:8.
- 54. Gray L, Roche M, Churchill MJ, Sterjovski J, Ellett A, Poumbourios P, Sherieff S, Wang B, Saksena N, Purcell DF, Wesselingh S, Cunningham AL, Brew BJ, Gabuzda D, and Gorry PR. Tissue-specific sequence alterations in the human immunodeficiency virus type 1 envelope favoring CCR5 usage contribute to persistence of dual-tropic virus in the brain. J Virol 2009;83:5430-5441.
- 55. Greengrass V, Lohman B, Morris L, Plate M, Steele PM, Walson JL, and Crowe SM. Assessment of the Low-Cost Cavidi ExaVir Load Assay for Monitoring HIV Viral Load in Pediatric and Adult Patients. Jaids-Journal of Acquired Immune Deficiency Syndromes 2009;52:387-390.
- 56. Greengrass VL, Plate MM, Steele PM, Denholm JT, Cherry CL, Morris LM, Hearps A, and Crowe SM. Evaluation of the Cavidi ExaVir Load Assay (Version 3) for Plasma Human Immunodeficiency Virus Type 1 Load Monitoring. Journal of Clinical Microbiology 2009;47:3011-3013.
- 57. Gustafsson E, Haas PJ, Walse B, Hijnen M, Furebring C, Ohlin M, van Strijp JAG, and van Kessel KPM. *Identification* of conformational epitopes for human IgG on Chemotaxis inhibitory protein of Staphylococcus aureus. Bmc Immunology 2009;10:13.
- 58. **Guy R, Gold J,** Calleja JM, Kim AA, Parekh B, Busch M, Rehle T, Hargrove J, Remis RS, and Kaldor JM. *Accuracy of serological assays for detection of recent infection with HIV and estimation of population incidence: a systematic review*. Lancet Infect Dis 2009;9:747-759.
- Guy R, Goller J, Leslie D, Thorpe R, Grierson J, Batrouney C, Kennedy M, Lewis J, Fairley C, Ginige S, Zablotska I, and Hellard M. No increase in HIV or sexually transmissible infection testing following a social marketing campaign among men who have sex with men. Journal of Epidemiology and Community Health 2009;63:391-396.
- 60. **Guy RJ,** Prybylski D, Fairley CK, **Hellard ME**, and Kaldor JM. *Can data from HIV voluntary counselling and testing be used to assess the impact of public health interventions? A literature review.* International Journal of Std & Aids 2009;20:378-383.
- 61. **Hearps AC, Greengrass V**, Hoy J, and **Crowe SM.** *An HIV-1 integrase genotype assay for the detection of drug resistance mutations*. Sexual Health 2009;6:305-309.
- 62. Hellard M, Sacks-Davis R, and Gold J. Hepatitis C Treatment for Injection Drug Users: A Review of the Available Evidence. Clinical Infectious Diseases 2009;49:561-573.
- Hellard ME, and Wang YHJ. The role of general practitioners in managing and treating hepatitis C. Medical Journal of Australia 2009;191:523-524.
- Higgs P, Dwyer R, Duong D, Thach ML, Hellard M, Power R, and Maher L. *Heroin-gel capsule cocktails and groin injecting* practices among ethnic Vietnamese in Melbourne, Australia. International Journal of Drug Policy 2009;20:340-346.
- Higgs P, Jordens J, Maher L, and Dunlop A. Vietnamese-Australian heroin users' perspectives on the role of the family in treatment. Drugs-Education Prevention and Policy 2009;16:409-421.

- 66. **Higgs P, Yohannes K, Hellard M**, and Maher L. Factors Influencing a Self-Limiting HIV Outbreak Among Ethnic Vietnamese Injecting Drug Users in Melbourne, Australia. Qualitative Health Research 2009;19:1690-1701.
- 67. Hodder AN, Malby RL, Clarke OB, Fairlie WD, Colman PM, **Crabb BS**, and Smith BJ. *Structural insights into the protease-like antigen Plasmodium falciparum SERA5 and its noncanonical active-site serine*. J Mol Biol 2009;392:154-165.
- Hooker DJ, and Cherry CL. Apoptosis: a clinically useful measure of antiretroviral drug toxicity? Expert Opinion on Drug Metabolism & Toxicology 2009;5:1543-1553.
- Hooker DJ, Gorry PR, Ellett AM, Wesselingh SL, and Cherry CL. Measuring and monitoring apoptosis and drug toxicity in HIV patients by ligation-mediated polymerase chain reaction. Journal of Cellular and Molecular Medicine 2009;13:948-958.
- 70. Horyniak D, Stoove M, Yohannes K, Breschkin A, Carter T, Hatch B, Tomnay J, Hellard M, and Guy R. *The impact of immigration on the burden of HIV infection in Victoria, Australia*. Sexual Health 2009;6:123-128.
- Hu XF, Li J, Vandervalk S, Wang Z, Magnuson NS, and Xing PX. PIM-1-specific mAb suppresses human and mouse tumor growth by decreasing PIM-1 levels, reducing Akt phosphorylation, and activating apoptosis. J Clin Invest 2009;119:362-375.
- 72. Jaworowski A, Cheng WJ, Westhorpe CL, Abendroth A, Crowe SM, and Slobedman B. Enhanced monocyte Fc phagocytosis by a homologue of interleukin-10 encoded by human cytomegalovirus. Virology 2009;391:20-24.
- 73. Jaworowski A, Fernandes LA, Yosaatmadja F, Feng G, Mwapasa V, Molyneux ME, Meshnick SR, Lewis J, and Rogerson SJ. *Relationship between human immunodeficiency virus type 1 coinfection, anemia, and levels and function of antibodies to variant surface antigens in pregnancy-associated malaria.* Clin Vaccine Immunol 2009;16:312-319.
- 74. Kaldor JM, Delpech V, and **Guy RJ**. *AIDS case reporting: do we still need it?* Lancet 2009;373:181-183.
- 75. Katsara M, Deraos G, Tselios T, Matsoukas MT, Friligou I, Matsoukas J, and Apostolopoulos V. Design and Synthesis of a Cyclic Double Mutant Peptide (cyclo(87-99)[A(91),A(96)]MBP87-99) Induces Altered Responses in Mice after Conjugation to Mannan: Implications in the Immunotherapy of Multiple Sclerosis. Journal of Medicinal Chemistry 2009;52:214-218.
- 76. Katsara M, Yuriev E, Ramsland PA, Tselios T, Deraos G, Lourbopoulos A, Grigoriadis N, Matsoukas J, and Apostolopoulos V. Altered peptide ligands of myelin basic protein (MBP87-89) conjugated to reduced mannan modulate immune responses in mice. Immunology 2009;128:521-533.
- 77. Keating CP, Hill MK, Hawkes DJ, Smyth RP, Isel C, Le SY, Palmenberg AC, Marshall JA, Marquet R, Nabel GJ, and Mak J. The A-rich RNA sequences of HIV-1 pol are important for the synthesis of viral cDNA. Nucleic Acids Research 2009;37:945-956.
- 78. Kerr D, **Dietze P**, Kelly AM, and Jolley D. *Improved response by peers after witnessed heroin overdose in Melbourne*. Drug and Alcohol Review 2009;28:327-330.
- 79. Kerr D, Kelly AM, **Dietze P**, Jolley D, and Barger B. *Randomized* controlled trial comparing the effectiveness and safety of intranasal and intramuscular naloxone for the treatment of suspected heroin overdose. Addiction 2009;104:2067-2074.
- Kidd SE, Ling LM, Meyer W, Morrissey CO, Chen SCA, and Slavin MA. Molecular Epidemiology of Invasive Aspergillosis: Lessons Learned from an Outbreak Investigation in an Australian Hematology Unit. Infection Control and Hospital Epidemiology 2009;30:1223-1226.
- 81. Kidd SE, Zulkepeli N, Slavin MA, and **Morrissey CO.** *Utility of a proposed CSP typing nomenclature for Australian Aspergillus fumigatus isolates: Identification of additional CSP types and suggested modifications.* Journal of Microbiological Methods 2009;78:223-226.

- 82. Kinner SA, George J, Campbell G, and Degenhardt L. Crime, drugs and distress: patterns of drug use and harm among criminally involved injecting drug users in Australia. Australian and New Zealand Journal of Public Health 2009;33:223-227.
- 83. **Kong FY, Hocking JS,** Link CK, Chen MY, and **Hellard ME.** *Sex and sport: chlamydia screening in rural sporting clubs.* BMC Infect Dis 2009;9:73.
- 84. Kulkarni H, Marconi VC, He WJ, Landrum ML, Okulicz JF, Delmar J, Kazandjian D, Castiblanco J, Ahuja SS, Wright EJ, Weiss RA, Clark RA, Dolan MJ, and Ahuja SK. *The Duffy-null state is associated with a survival advantage in leukopenic HIV-infected persons of African ancestry*. Blood 2009;114:2783-2792.
- Lazoura E, Day SL, and Apostolopoulos V. Applications for peptide-based cancer vaccine design. Frontiers in Medicinal Chemistry 2009;4:541-561.
- Lazoura E, Lodding J, Farrugia W, Day S, Ramsland PA, and Apostolopoulos V. Non-canonical anchor motif peptides bound to MHC class I induce cellular responses. Mol Immunol 2009;46:1171-1178.
- Lemoh C, Guy R, Yohannes K, Lewis J, Street A, Biggs B, and Hellard M. Delayed diagnosis of HIV infection in Victoria 1994 to 2006. Sexual Health 2009;6:117-122.
- Lenton SR, Dietze PM, Degenhardt L, Darke S, and Butler TG. Naloxone for administration by peers in cases of heroin overdose. Medical Journal of Australia 2009;191:469-469.
- Lenton SR, Dietze PM, Degenhardt L, Darke S, and Butler TG. Now is the time to take steps to allow peer access to naloxone for heroin overdose in Australia. Drug and Alcohol Review 2009;28:583-585.
- 90. Li J, **Hu XF, Loveland BE**, and **Xing PX**. *Pim-1 expression and monoclonal antibody targeting in human leukemia cell lines*. Experimental Hematology 2009;37:1284-1294.
- Li S, Floess S, Hamann A, Gaudieri S, Lucas A, Hellard M, Roberts S, Paukovic G, Plebanski M, Loveland BE, Aitken C, Barry S, Schofield L, and Gowans EJ. Analysis of FOXP3+ regulatory T cells that display apparent viral antigen specificity during chronic hepatitis C virus infection. PLoS Pathog 2009;5:e1000707.
- 92. Lim MS, Aitken CK, Hocking JS, and Hellard ME. Discrepancies between young people's self-reported sexual experience and their perceptions of 'normality'. Sexual Health 2009;6:171-172.
- 93. Lim MS, Hellard ME, Aitken CK, and Hocking JS. Surveillance of STI risk behaviour among young people attending a music festival in Australia, 2005-08. Aust N Z J Public Health 2009;33:482-484.
- Martyn JC, Cardin AJ, Wines BD, Cendron A, Li S, Mackenzie J, Powell M, and Gowans EJ. Surface display of IgG Fc on baculovirus vectors enhances binding to antigen-presenting cells and cell lines expressing Fc receptors. Archives of Virology 2009;154:1129-1138.
- 95. Matthews GV, Hellard M, Dore GJ, and Australian Trial Acute Hepatitis, C. Initial Presentation of Acute Hepatitis C Virus (HCV) Infection among HIV-Negative and HIV-Positive Individuals-Experience from 2 Large German Networks on the Study of Acute HCV Infection Reply. Clinical Infectious Diseases 2009;49:319-319.
- 96. Matthews GV, **Hellard M**, Haber P, Yeung B, Marks P, Baker D, McCaughan G, Sasadeusz J, White P, Rawlinson W, Lloyd A, Kaldor J, and Dore GJ. *Characteristics and treatment outcomes among HIV-infected individuals in the Australian Trial in Acute Hepatitis C*. Clin Infect Dis 2009;48:650-658.
- McBryde ES, Bergeri I, van Gemert C, Rotty J, Headley EJ, Simpson K, Lester RA, Hellard M, and Fielding JE. Early transmission characteristics of influenza a(H1N1)v in Australia: Victorian state, 16 May-3 June 2009. Eurosurveillance 2009;14:45-50.

- Meshkat Z, Audsley M, Beyer C, Gowans EJ, and Haqshenas G. Reverse genetic analysis of a putative, influenza virus M2 HXXXW-like motif in the p7 protein of hepatitis C virus. Journal of Viral Hepatitis 2009;16:187-194.
- Miller ER, Hellard ME, Bowden S, Bharadwaj M, and Aitken CK. Markers and risk factors for HCV, HBV and HIV in a network of injecting drug users in Melbourne, Australia. Journal of Infection 2009;58:375-382.
- 100. Moore D, Dray A, Green R, Hudson SL, Jenkinson R, Siokou C, Perez P, Bammer G, Maher L, and Dietze P. Extending drug ethno-epidemiology using agent-based modelling. Addiction 2009;104:1991-1997.
- 101. Morgan C and Hinton R (2009). Better Use of Public Health Campaigns for Child Survival: The Impact and Operations of Papua New Guinea's Supplementary Immunisation Activity 2003-05 (Child Health and Nutrition Research Initiative (CHNRI)).
- 102. Munnoch SA, Ward K, Sheridan S, Fitzsimmons GJ, Shadbolt CT, Piispanen JP, Wang Q, Ward TJ, Worgan TLM, Oxenford C, Musto JA, McAnulty J, and Durrheim DN. A multi-state outbreak of Salmonella Saintpaul in Australia associated with cantaloupe consumption. Epidemiology and Infection 2009;137:367-374.
- 103. Ngo AD, **Schmich L, Higgs P,** and **Fischer A.** *Qualitative* evaluation of a peer-based needle syringe programme in *Vietnam.* International Journal of Drug Policy 2009;20:179-182.
- 104. **Nguyen OK, Higgs PG,** and **Hellard ME.** Limits to relying on expert information: the Delph*i technique in a study of ethnic Vietnamese injection drug users in Melbourne, Australia*. Soc Work Public Health 2009;24:371-379.
- 105. Nie CQ, Bernard NJ, Norman MU, Amante FH, Lundie RJ, Crabb BS, Heath, WR, Engwerda, CR, Hickey, MJ, Schofield, L, and Hansen, DS. *IP-10-mediated T cell homing promotes cerebral inflammation over splenic immunity to malaria infection*. PLoS Pathog 2009;5:e1000369.
- 106. Niemann S, Koser CU, Gagneux S, Plinke C, Homolka S, Bignell H, Carter RJ, Cheetham RK, Cox A, Gormley NA, Kokko-Gonzales P, Murray LJ, Rigatti R, Smith VP, Arends FP, **Cox HS**, Smith G, and Archer JA. *Genomic diversity among drug sensitive and multidrug resistant isolates of Mycobacterium tuberculosis with identical DNA fingerprints*. PLoS One 2009;4:e7407.
- 107. Orlowski E, Chand R, Yip J, Wong C, Goschnick MW, Wright MD, Ashman LK, and Jackson DE. A platelet tetraspanin superfamily member, CD151, is required for regulation of thrombus growth and stability in vivo. Journal of Thrombosis and Haemostasis 2009;7:2074-2084.
- 108. Peduru Hewa TM, **Tannock GA**, Mainwaring DE, Harrison S, and Fecondo JV. *The detection of influenza A and B viruses in clinical specimens using a quartz crystal microbalance*. J Virol Methods 2009;162:14-21.
- 109. Pietersz GA, Mottram PL, van de Velde NC, Sardjono CT, Esparon S, Ramsland PA, Moloney G, Baell JB, McCarthy TD, Matthews BR, Powell MS, and Hogarth PM. Inhibition of destructive autoimmune arthritis in FcγRIIa transgenic mice by small chemical entities. Immunol Cell Biol 2009;87:3-12.
- 110. Plate MM, Louzao R, Steele PM, Greengrass V, Morris LM, Lewis J, Barnett D, Warrino D, Hearps AC, Denny T, and Crowe SM. Evaluation of the blood stabilizers TransFix and Cyto-Chex BCT for low-cost CD4 T-cell methodologies. Viral Immunol 2009;22:329-332.
- 111. Plinke C, Cox HS, Kalon S, Doshetov D, Rusch-Gerdes S, and Niemann S. *Tuberculosis ethambutol resistance: concordance between phenotypic and genotypic test results*. Tuberculosis (Edinb) 2009;89:448-452.
- 112. Price P, Murdoch DM, Agarwal U, **Lewin SR, Elliott JH**, and French MA. *Immune Restoration Diseas*es Reflect Diverse Immunopathological Mechanisms. Clinical Microbiology Reviews 2009;22:651.

- 113. Reid G, and **Aitken C.** *Advocacy for harm reduction in China: A new era dawns.* International Journal of Drug Policy 2009;20:365-370.
- 114. Rosenthal SL, **Holmes W**, and Maher L. *Australian men's experiences during a microbicide male tolerance study.* Aids Care-Psychological and Socio-Medical Aspects of Aids/Hiv 2009;21:125-130.
- 115. Ryan CB, Kama M, Darcy A, Aleksic E, Mirza T, Chaudhary A, Oelrichs RB, Rogers GD, and Crowe SM. *HIV type 1 in Fiji is caused by subtypes C and B*. AIDS Res Hum Retroviruses 2009;25:1355-1358.
- 116. Sadler AJ, Latchoumanin O, Hawkes D, **Mak J**, and Williams BRG. *An Antiviral Response Directed by PKR Phosphorylation of the RNA Helicase A*. Plos Pathogens 2009;5:11.
- 117. Salmon AM, Dwyer R, Jauncey M, van Beek I, Topp L, and Maher L. *Injecting-related injury and disease among clients of a supervised injecting facility*. Drug and Alcohol Dependence 2009;101:132-136.
- 118. Senn N, Riddell M, Omena M, Siba P, **Reeder JC**, Clements CJ, and **Morgan C**. *Measles in Papua New Guinea: An age-specific serological survey*. Vaccine 2009.
- 119. Shehu-Xhilaga M, Rhodes D, Wightman F, Liu HB, Solomon A, Saleh S, Dear AE, Cameron PU, and Lewin SR. The novel histone deacetylase inhibitors metacept-1 and metacept-3 potently increase HIV-1 transcription in latently infected cells. Aids 2009;23:2047-2050.
- Sheng KC, van Spriel AB, Gartlan KH, Sofi M, Apostolopoulos, V, Ashman, L, and Wright, MD. *Tetraspanins CD37 and CD151* differentially regulate Ag presentation and T-cell co-stimulation by DC. European Journal of Immunology 2009;39:50-55.
- 121. Sheridan S, Phimphachanh C, Chanlivong N, Manivong S, Khamsyvolsvong S, Lattanavong P, Sisouk T, Toledo C, Scherzer M, Toole M, and van Griensven F. *HIV prevalence and risk behaviour among men who have sex with men in Vientiane Capital, Lao People's Democratic Republic, 2007.* Aids 2009;23:409-414.
- 122. Shi W, **Banerjee A**, Ritchie ME, **Gerondakis S**, and Smyth GK. *Illumina WG-6 BeadChip strips should be normalized separately*. Bmc Bioinformatics 2009;10:12.
- 123. Sonza C, Johnson A, Tyssen D, Spelman T, Lewis GR, Paull JR, and Tachedjian G. Enhancement of human immunodeficiency virus type 1 replication is not intrinsic to all polyanion-based microbicides. Antimicrob Agents Chemother 2009;53:3565-3568.
- 124. **Stoove MA, Dietze PM,** and Jolley D. *Overdose deaths* following previous non-fatal heroin overdose: Record linkage of ambulance attendance and death registry data. Drug and Alcohol Review 2009;28:347-352.
- 125. Sweeney R, Conroy AB, **Dwyer R**, and **Aitken CK**. The economic burden to the public health system of treating non-viral injecting-related injury and disease in Australia (a cost of illness analysis). Australian and New Zealand Journal of Public Health 2009;33:352-357.
- 126. **Tang CK**, and **Pietersz GA**. *Intracellular detection and immune signaling pathways of DNA vaccines*. Expert Review of Vaccines 2009;8:1161-1170.
- 127. Tang CK, Sheng KC, Esparon SE, Proudfoot O, Apostolopoulos V, and Pietersz GA. Molecular basis of improved immunogenicity in DNA vaccination mediated by a mannan based carrier. Biomaterials 2009;30:1389-1400.
- 128. Thompson KA, Varrone JJ, Jankovic-Karasoulos T, **Wesselingh SL**, and McLean CA. *Cell-specific temporal infection of the brain in a simian immunodeficiency virus model of human immunodeficiency virus encephalitis*. Journal of Neurovirology 2009;15:300-311.

- 129. van der Windt DJ, Bottino R, Casu A, Campanile N, Smetanka C, He J, Murase N, Hara H, Ball S, **Loveland BE**, Ayares D, Lakkis FG, Cooper DKC, and Trucco M. *Long-Term Controlled Normoglycemia in Diabetic Non-Human Primates After Transplantation with hCD46 Transgenic Porcine Islets*. American Journal of Transplantation 2009;9:2716-2726.
- 130. van Rooijen LB, Greengrass V, Morris LM, Plate MM, Gouillou M, Tachedjian G, Sluis-Cremer N, Hearps AC, and Crowe SM. Effect of Reverse Transcriptase Inhibitors and Mutations on the Low-Cost Cavidi Reverse Transcriptase Viral Load Assay. Jaids-Journal of Acquired Immune Deficiency Syndromes 2009;52:527-529.
- 131. van Spriel AB, Sofi M, Gartlan KH, van der Schaaf A, Verschueren I, Torensma R, Raymakers RAP, Loveland BE, Netea MG, Adema GJ, Wright MD, and Figdor CG. *The Tetraspanin Protein CD37 Regulates IgA Responses and Anti-Fungal Immunity*. Plos Pathogens 2009;5:11.
- 132. Volz J, Carvalho TG, Ralph SA, **Gilson P**, Thompson J, Tonkin CJ, Langer C, **Crabb BS**, and Cowman AF. *Potential epigenetic regulatory proteins localise to distinct nuclear sub-compartments in Plasmodium falciparum*. Int J Parasitol 2009;40:109-21
- 133. Wang YH, **Guy R**, and **Hellard M**. *The Victorian hepatitis C education program for GPs--an evaluation*. Aust Fam Physician 2009;38:749-752.
- 134. Warrilow D, **Tachedjian G,** and Harrich D. *Maturation of the HIV reverse transcription complex: putting the jigsaw together.* Reviews in Medical Virology 2009;19:324-337.
- 135. Webster DE, Wang L, Mulcair M, Ma C, Santi L, Mason HS, Wesselingh SL, and Coppel RL. Production and characterization of an orally immunogenic Plasmodium antigen in plants using a virus-based expression system. Plant Biotechnology Journal 2009;7:846-855.
- 136. Westhorpe CL, Zhou J, Webster NL, Kalionis B, Lewin SR, Jaworowski A, Muller WA, and Crowe SM. Effects of HIV-1 infection in vitro on transendothelial migration by monocytes and monocyte-derived macrophages. J Leukoc Biol 2009;85:1027-1035.
- 137. Wong C, Liu Y, Yip J, Chand R, Wee JL, Oates L, Nieswandt B, Reheman A, Ni H, Beauchemin N, and Jackson DE. CEACAM1 negatively regulates platelet-collagen interactions and thrombus growth in vitro and in vivo. Blood 2009;113:1818-1828.
- 138. Woolley IJ, Hutchinson P, **Reeder JC**, Kazura JW, and Cortes A. Southeast Asian ovalocytosis is associated with increased expression of Duffy antigen receptor for chemokines (DARC). Immunohematology 2009;25:63-66.
- 139. Yuriev E, Agostino M, Farrugia W, Christiansen D, Sandrin MS, and Ramsland PA. Structural biology of carbohydrate xenoantigens. Expert Opinion on Biological Therapy 2009;9:1017-1029.

Books and Chapters:

Anderson DA, and Shrestha IL. *Hepatitis E virus*. Clinical Virology 3rd Edition (D. D. Richman, R. J. Whitley, F. G. Hayden, Eds). ASM Press, Washington. 1127-1144 (2009).

Anderson JL, and Tachedjian G. *Chapter 4: Post-entry restrictions in lentiviral replication.* Lentivirus Infection of Macrophages. Horizon Scientific Press, Norwich, UK. (2009).

Anderson, DA. *Hepatitis E virus*. Principles and practice of infectious diseases 7th Edition (G. L. Mandell, J. E. Bennett and R. Dolin, Eds). Elsevier/Churchill Livingstone, New York. 2411-2421 (2009).

Brooks MJ, Sasadeusz JJ, **Tannock GA**. *A brief history of clinical trials on viral vaccines*. S.C. Gad: Clinical Trials Handbook. John Wiley and Sons, New Jersey, USA .Ch 10.16:775-784 (2009).

Degenhardt L, Hall W, George J, **Kinner S.** *Relationships between ecstasy use, the use of other drugs and mental disorders*. In L. Degenhardt & W. Hall (Eds.), The health and psychological consequences of ecstasy (MDMA) use. National Drug Strategy Monograph Series. Canberra: Australian Government Publishing Service (2009).

Donaghy H, **Wright EJ**, and Cunningham AL. *The role of dendritic cells in neuroinflammation*. In Inflammatory Diseases of the Central Nervous System. Edited by Kilpatrick, Ransohoff and Wesselingh. Cambridge University Press (2009).

Hellard M, Aitken C, Horyniak D. *Epidemiology among injecting drug users*. In Dore G, Temple-Smith M, (eds), Hepatitis C: an Australian Perspective (2nd ed). IP Communications, Melbourne (2009).

Hellard M, Horyniak D, Aitken C. *The Global Epidemiology of Hepatitis C*. Dore G, Temple-Smith M, Lloyd A (Editors) 'Hepatitis C: An Expanding Perspective'. East Hawthorn: IP Communications (2009).

Jones KL, Munn AL, and Mak J. Proteins, nucleic acids and lipids: a coordinated effort for the production of infectious virions during HIV assembly. In: Diefenbach, R.J., Cunningham, A.L. Viral transport, assembly and egress. Kerala, India: Research Signpost/Transworld Research Network. (2009).

Lewin SR, Post J, Street A, and Hoy JF. (editors). *HIV Management in Australasia*. Published by the Australasian Society of HIV Medicine (2009).

Pietersz GA, Mottram PL, van de Velde N, Sardjono CT, Esparon S, Ramsland PA, Moloney G, Baell JB, McCarthy TD, Matthews BR, **Powell MS, Hogarth PM.** *Inhibition of destructive autoimmune arthritis by small chemical entities designed to interact with Fc*_Y*RIIa.* Immunol. & Cell Biol. 87:3-12 (2009).

Stoové MA, Dietze PD. *Epidemiology of substance use.* In P. G. Miller, J. Strang, & P. M. Miller (Eds.), Addiction Research Methods (2009).

Wright EJ, Cherry CL, Brew BJ. Neurological Disorders in HIV/AIDS. In HIV Management in Australasia: a guide for clinical care (Revised) (2009).

Commissioned Reports and Other Published Material:

Abbott IJ, **Chang CC**, Skinner MJ, Street A, Perry G, McLean C, **Wright EJ**, and **Cameron PU**. *Development and management of systemic lupus erythematosus in an HIV-infected man with hepatitis C and B co-infection following interferon therapy: a case report.* Journal of Medical Case Reports. 3:7289 (2009).

Abigail S, **Dorabjee J**, Lewis D, Khwairakpam G. *First Consultation Meeting of the Asian Network of People who Use Drugs*. World Health Organization, WPRO (2009).

Aitken C, Dwyer R, **Power R.** *Is handedness associated with health status for people who inject illicit drugs?* Drugs: Education, Prevention and Policy, 16: 471-477 (2009).

Ambrose Z, Herman BD, Sheen C-W, Zelina S, **Moore KL, Tachedjian G,** Nissely DV, and Sluis-Cremer N. *The human immunodeficiency virus type 1 (HIV-1) nonnucleoside reverse transcriptase inhibitor resistance mutation 1132M confers hypersusceptibility to nucleoside analogues.* Journal of Virology 83:3826-3833 (2009).

Apostolopoulos V, Weiner, D. Editorial. *Development of more efficient and effective DNA vaccines*. Expert Review of Vaccines, (Special Focus issue on DNA Vaccines) 8:1133-1134 (2009).

Apostolopoulos V, Weiner, D. Guest Editor. *Expert Reviews of Vaccines*. Special Focus issue – DNA Vaccines. Volume 8 Number 9 (2009).

Apostolopoulos, V. Book Review. *Cancer vaccines: challenges and opportunities in translation*. Eds. Bots and Obrocea, Informa Healthcare. Expert Review of Vaccines, 8:289-291 (2009).

Apostolopoulos, V. Editorial. *MHC and MHC-like molecules in the design of vaccines*. Current Pharmaceutical Design, 15:3207-3208 (2009).

Apostolopoulos, V. Editorial. *Peptide based vaccines – are we choosing the right peptides*? Expert Review of Vaccines, 8:259-260 (2009).

Apostolopoulos, V. Foreword. *Chemistry vs Biology: Neither exists independently of the other.* Proceedings of the 10th Medicinal Chemistry: Drug Discovery and Design Conference, 10:5 (2009).

Apostolopoulos, V. Guest Editor. *Current Pharmaceutical Design.* Special issue – Structural insights of the MHC molecule in the design of vaccines. Volume 15 Number 28 (2009).

Apostolopoulos, V. News and Views – Interview – *Dr Vasso Apostolopoulos: Cancer vaccines and immunotherapy of autoimmune diseases.* Immunotherapy. 1:15-17 (2009).

Audsley J, Arrifin N, Yuen L, Ayres A, **Crowe SM**, Bartholomeuz A, Mijch A, Locarnini SA, **Lewin SR**, Sasadeusz J. *Prolonged use of Tenofovir in HIV-HBV co-infected individuals does not lead to HBV polymerase mutations and is associated with persistence of Lamivudine HBV polymerase mutations*. HIV Med 10:229-35 (2009).

Bergenstrom A, McLeod R, Sharma M, Mesquita F, **Dorabjee J**, Atun R, Lewis G, Rao JVRP. *How much will it cost? Estimation of resource needs and availability for HIV prevention, treatment and care for people who inject drugs in Asia*. International Journal of Drug Policy (2009-2010).

Bergeri I, Heywood SM, **El-Hayek C, Horyniak D,** Breschkin A, Fielding J, **Stoové M, Hellard M.** *The changing pattern of HIV diagnoses in Victoria: A 10 year analysis of surveillance trends 1999-2008.* Victorian Infectious Disease Reference Laboratory; Department of Human Services, ASHAM 21 Annual Conference, Brisbane. (September 2009).

Bharadwaj M, Nivarthi U, Moneer S, **Aitken C, Thammanichanond D, Drummer H,** Bowden S, **Hellard M,** McCluskey J. *Hepatitis C virus-specific TCD8 response in recurrently exposed intravenous drug users with diverse disease outcomes*. European Congress of Immunology, Berlin (September 2009).

Bharadwaj M, Thammanichanond D, **Aitken CK**, Moneer S, **Drummer HE**, Tracy S, Holdsworth R, Bowden S, **Jackson D, Hellard M**, Torresi J, McCluskey J. *TCD8 response in diverse outcomes of recurrent exposure to hepatitis C virus*. Immunol Cell Biol 87:464-72 (2009).

Boyle D, **Kong F.** A systematic mechanism for the ethical collection and interpretation of display format pathology test results from Australian Primary Care records. HIC'09 Conference, National Convention Centre Canberra (August 2009).

Brew BJ, **Crowe SM**, Landay AL, Cysique LA, Guillemin GJ. *Neurodegeneration and ageing in the HAART era*. J Neuroimmune Pharmacol. 4:163-174 (2009).

Chang JJ, Sirivichayakul S, Avihingsanon A, Thompson AJV, Revill P, Iser D, Slavin J, Buranapraditkun S, Marks P, Matthews G, Cooper DA, Kent SJ, Cameron PU, Sasadeusz J, Desmond P, Locarnini S, Dore GJ, Ruxrungtham K, Lewin SR. Impaired Quality of the HBV-Specific T-Cell Response in HIV-1-HBV Co-Infection. J Virol 83:7649-58 (2009).

Cheong WS, **Drummer HE**, Netter HJ. *Delivery of a foreign epitope by sharing amino acid residues with the carrier matrix*. J Virol Methods 158:35-40 (2009).

Cherry CL, Affandi JS, Imran D, Yunihastuti E, Smyth K, Vanar S, Kamarulzaman A, Price P. *Age and height predict neuropathy risk in HIV patients prescribed stavudine*. Neurology 73:315-20 (2009).

Churchill MJ, Wesselingh SL, Cowley D, Pardo CA, McArthur JC, Brew BJ, and **Gorry PR**. *Extensive astrocyte infection is prominent in HIV-associated dementia*. Ann Neurol. 66:253-8 (2009).

Cogger S, **Kinner SA**. *Queensland Drug Trends 2009: Findings from the Illicit Drug Reporting System (IDRS)*. Australian Drug Trends Series No. 27, National Drug and Alcohol Research Centre, University of New South Wales, Sydney (2009).

Crane M, Oliver B, Matthews G, Avihingsanon A, Ubolyam S, Markovska V, Chang JJ, Dore GJ, Price P, Visvanathan K, French M, Ruxrungtham K, Lewin SR. *Immunopathogenesis of hepatic flare in HIV-Hepatitis B Virus (HBV) co-infected individuals following initiation of HBV-active antiretroviral therapy.* J Infect Dis. 199:974-81 (2009). **Crane M,** Sirivichayakul S, **Chang JJ**, Avihingsanon A, Ubolyam S, Buranapraditkun S, Thantiworasit P, **Wightman F,** Locarnini SA, Matthews G, Dore GJ, Ruxrungtham K, **Lewin SR**. *No increase in HBV-specific CD8+ T cells in patients with HIV-1-1 HBV co-infection following HBV-active HAART*. J Virol (2009).

Crowe SM, Westhorpe C, Mukhamedova N, **Jaworowski A**, Sviridov D, Bukrinsky M. *The Macrophage: the intersection between HIV infection and atherosclerosis.* J Leuk Biol, In Press (2009).

Crowe SM, Ziegler-Heitbrock L. *Monocyte subpopulations and lentiviral infection*. J Leuk Biol. (Invited Editorial) In Press (2009).

Day SL, Ramsland PR, Apostolopoulos V. Non-canonical peptides bound to MHC. Current Pharmaceutical Design, 15:3274-3282 (2009).

Denholm JT, **Wright EJ**, Street A, Sasadeusz J. *HCV Treatment with Pegylated interferon and ribavirin in patients with haemophilia and HIV/ HCV con-infection: a retrospective review.* Hemophilia 15:538-43 (2009).

Deraos G, Chatzantoni K, Matsoukas MT, Katsara M, Tselios T, Deraos S, Papathanasopoulos P, Vynios D, **Apostolopoulos V**, Mouzaki A, Matsoukas J. *Modifications of the myelin basic protein epitope MBP87-99 divert Th2 to Th1: immune responses in PBMC from MS patients*. In: 30EPS, Peptides, 2-01-106: 230-231 (2009).

Dietze P, Jolley D, Room R, Chikritzhs T, Matthews S. *Harms attributed to alcohol in the Victorian population: First results from the GENACIS study.* APSAD Conference (2009).

Dorabjee J, Samson L, Zafar T, Phurailapatam S, Chakrapani V, O'Gorman P. *Enhancing Comprehensive HIV Interventions: A practitioner driven consultation with Civil Society in South Asia*. The Global Fund to fight AIDS, Tuberculosis and Malaria (2009).

Dorabjee, J. *Mid term review of the Cambodian Red Cross Community HIV and Harm Reduction Project.* Australian Red Cross and Cambodian Red Cross (2009).

Dwyer R, Topp L, Maher L, **Power R, Hellard M,** Walsh N, Jauncey M, Conroye A, Lewis J, **Aitken C.** *Prevalences and correlates of non-viral injecting-related injuries and diseases in a convenience sample of Australian injecting drug users*. Drug and Alcohol Dependence, 100: 9–16 (2009).

El-Hayek C, Horyniak D, Pedrana A, Gouillou M, Bergeri I, Stoové M, Hellard M. Age distribution of men who have sex with men (MSM) diagnosed with HIV in Victoria, 2008. Report prepared for the Victorian Department of Human Services, Melbourne (2009).

El-Hayek C, Horyniak D. *HIV/AIDS Surveillance Quarterly Report (Jan-Mar 2009)*. Victorian Infectious Diseases Bulletin (June 2009).

El-Hayek C, Pedrana A, Bergeri I, Higgins N, Breschkin A, Stoové M, Hellard M. *Changing age distribution of men who have sex with men diagnosed with HIV in Victoria*. ASHAM 21 Annual Conference Brisbane (September 2009).

El-Hayek C, Stoové M, Bergeri I, McDonald A, Ward K, Murray J, Giele C, Davey T, Kampen R, Knibbs P, Coleman D, Hellard M, Kaldor J. Not the usual suspects: Trends in heterosexual transmission of HIV in Australia. ASHAM 21 Annual Conference, Brisbane, (September 2009).

Feigin A, Hellard M, Dietze P, Higgs P. Khat Use and Its Impact on African Communities in Melbourne. APSAD (November 2009).

Feng G, Aitken E, Yosaatmadja F, Kalilani L, Meshnick SR, **Jaworowski A**, Simpson JA, and Rogerson SR. *Antibodies to variant surface antigens of Plasmodium falciparum infected erythrocytes associated with protection from treatment failure and development of anaemia in pregnancy*. J. Infect. Dis. 200:299-306 (2009).

Feuerriegel S, **Cox HS**, Zarkua N, Karimovich H, Braker K, Rusch-Gerdes S, Niemann S. *Sequence analysis of just four genes to detect extensively drug-resistant mycobacterium tuberculosis strains in multidrug-resistant tuberculosis patients undergoing treatment.* Antimicrobial Agents and Chemotherapy, 53:8 (2009).

Ffrench R, Santoso S, **Goy K,** Bharadwaj M, **Hellard M, Aitken C.** *Memory B cell responses in 'seronegative immune' injecting drug users.* 16th International Symposium on Hepatitis C Virus and Related Viruses, Nice (October 2009). Ffrench, RA. Conference report; 6th Australasian Viral Hepatitis Conference. Future Virol 4(1);35-37 (2009).

Fielding JE, Higgins N, Gregory JE, Grant KA, Catton MG, **Bergeri I**, Lester RA, Kelly HA. *Surveillance and outbreak reports, Pandemic H1N1 influenza surveillance in Victoria, Australia, April – September 2009.* Eurosurveillance, Volume 14, Issue 42 (October 2009).

Franklin L, Armstrong S, Hellard M, Higgs P. *Viral Hepatitis Epidemiology and Prevention Program.* National Centre in HIV Epidemiology & Clinical Research, UNSW Sydney Australia. APSAD Conference (2009).

Franklin L, Horyniak D, Aitken C, Stoové M, Dietze P. *Female IDUs'* experience of violence: preliminary results from the Melbourne *Injecting Drug User Cohort Study (MIX)*. APSAD Conference, Darwin (November 2009).

Friedman S, Mateu-Gelabert P, Sandoval M, Meylakhs P, Meylakhs A, Gomez E, Rhodes T, Treloar C, Maher L, **Hellard M, Aitken C, Higgs P**, Zabransky T, Janikova B, Salmon A. *Forming an international research consortium on "Staying Safe"*. NIDA International Conference, Reno Nevada (June 2009).

Genton B, **Toole M**, Donnard JF. *Review of the National Malaria Strategic Plan of Madagascar*. Commissioned by the Global Fund to Fight AIDS, TB, and Malaria. Geneva (2009).

George J, **Kinner SA**. *Queensland Trends in Ecstasy and Related Drug Markets 2008: Findings from the Ecstasy and Related Drugs Reporting System (EDRS)*. Australian Drug Trends Series No. 36, National Drug and Alcohol Research Centre, University of New South Wales, Sydney (2009).

Giles M, Lewin SR, O'Brien M, Hellard M. The 'work' of women when considering and using interventions to reduce mother to child transmission (MTCT) of HIV. AIDS Care 21:1230-7 (2009).

Giles ML, **Pedrana A**, Jones C, Garland S, **Hellard M**, **Lewin SR**. *Antenatal screening practice for infectious diseases by general practitioners in Australia*. Aust NZ J Obstet Gynaecol 49:39-44 (2009).

Gold J, Dixon H, **Hellard M,** Lim M, Johnson E, Wakefield M, Ferrari G, Aitken C. *Scaling up the use of sms for health promotion to young people: successes and challenges of implementing the S5 project.* Australasian Sexual Health Conference, Brisbane, (September 2009).

Goller J. et al. Western Australian Evaluation of the Sexual Health and Blood-borne Virus Action Plans and Aboriginal Sexual Health Strategy 2006 to 2008. Communicable Disease Control Directorate, Department of Health, Perth, Western Australia (January 2009).

Gray L, Roche M, Churchill MJ, Sterjovski J, Ellett A, Poumbourios P, Sheffief S, Wang B, Saksena N, Purcell DFJ, **Wesselingh S**, Cunningham AL, Brew BJ, Gabuzda D, **Gorry PR**. *Tissue-specific sequence alterations in the HIV-1 envelope favoring CCR5-usage contribute to persistence of dual-tropic virus in brain.* J Virol 83:5430-41 (2009).

Gray N. Submission to NZ Parliamentarians' Group on Population and Development Open Hearing on Maternal Health in the Pacific. Wellington, New Zealand (2009).

Greengrass V, Lohman B, **Morris L, Plate M,** Steele PM, Walson JL, **Crowe SM.** Assessment of the low cost Cavidi ExaVirTM Load assay for monitoring HIV viral load in pediatric and adult patients. J Acquir Immune Defic Syndr 52:387-90 (2009).

Greengrass VL, Plate MM, Steele PM, Denholm JT, **Cherry CL, Morris LM, Hearps A, Crowe SM.** Evaluation of the Cavidi ExaVir™ Load version 3 assay for plasma HIV-1 viral load monitoring. J Clin Microbiol 47:3011-3 (2009).

Hearps AC, Greengrass V, Hoy JJ, **Crowe SM.** *An HIV-1 Integrase genotype assay for the detection of drug resistance mutations.* Sexual Health 6:305-9 (2009).

Hearps AC, Ryan CE, Morris LM, Plate MM, Greengrass V, Crowe SM. Stability of dried blood spots for HIV-1 drug resistance analysis. Current HIV Research (2009). Hellard M, Higgs P, Tracy S, Sacks-Davis R, Spelman T, Bharadwaj M, Aitken C. *Hepatitis C virus clearance and reinfection in injecting drug users*. Hepatology (2009).

Hellard M, Sacks-Davis R, Gold J. *Hepatitis C treatment for injecting drug users: a review of the available evidence.* Clinical Infectious Diseases (2009.)

Higgs P, Aitken C, Hellard M, Winter R, Maher L. *Drug user narratives on staying hepatitis C free*. International Harm Reduction Association Conference, Bangkok (April 2009).

Higgs P, Aitken C, Hellard M, Winter R, Maher L. *The impact of luck on hepatitis C infection: Perceptions from current injectors*. APSAD Conference, Darwin (November 2009).

Higgs P, Aitken C, Moneer S, Bharadwaj M, Maher L, **Hellard M.** *Misclassification bias in a cohort of hepatitis C negative injection drug users.* Journal of Gastroenterology & Hepatology 23 (Supp 6):344 (2009).

Higgs P, Dwyer R, **Duong D,** Thach M, **Hellard M, Power R,** Maher L. *Heroin-gel capsule cocktails and groin injecting practices among ethnic Vietnamese in Melbourne, Australia.* International Journal of Drug Policy, 20: 340-46 (2009).

Higgs P, Yoannes K, **Hellard M,** Maher L. *Factors influencing a selflimiting HIV outbreak among ethnic Vietnamese injecting drug users in Melbourne, Australia.* Qualitative Health Research (2009).

Hooker DJ and Cherry CL. Apoptosis: a clinically useful measure of antiretroviral drug toxicity? Expert Opin Drug Me 5:1543-53 (2009).

Hooker DJ, Gorry PR, Ellett AM, Wesselingh SL, Cherry CL. *Measuring and monitoring apoptosis and drug toxicity in HIV patients by ligation-mediated polymerase chain reaction.* Journal of Cellular and Molecular Medicine 13:948-58 (2009).

Horyniak D, Franklin L, Aitken C, Stoové M, Dietze P. *Recruiting Injecting Drug Users (IDUs) using Respondent Driven Sampling (RDS): Mixed experiences from the Melbourne Injecting Drug User Cohort Study (MIX)*. APSAD Conference, Darwin (November 2009).

Horyniak D, Guy R, Prybylski D, Hellard M, Kaldor J. *The role of Voluntary Counselling & Testing (VCT) data in estimating HIV prevalence: A systematic review.* ASHAM, 21 Annual Conference, Brisbane (September 2009).

Iser D, Lewin SR. *Future directions in the treatment of HIV-HBV co-infection.* HIV Therapy. (2009).

Iser D, Lewin SR. *Treatment of Hepatitis B Virus (HBV) in the Setting of HIV-HBV Co-infection.* Asian Biomedicine (2009).

Jaworowski A, Cheng WJ, Westhorpe CL, Abendroth A, Crowe SM*, Slobedman B*. [*Co-senior authors] *Enhanced monocyte Fc phagocytosis by a homologue of interleukin-10 encoded by human cytomegalovirus*. Virology 391:20-24 (2009).

Jaworowski A, Fernandes L, Yosaatmadja F, Feng G, Mwapasa V, Molyneux ME, Meshnick SR, Lewis J and Rogerson SJ. *The relationship between HIV-1 co-infection and anemia and levels and function of antibodies to variant surface antigens in pregnancy associated malaria.* Clin Vaccine Immunol 16:312-9 (2009).

Jenkinson R, Dietze P, Jolley D. *Weekend on the town: examining a 'session' of psychostimulant use among a sample of young 'socialites'*. APSAD Conference (2009).

Katsara M, Deraos G, Matsoukas J, **Apostolopoulos V.** *Towards a vaccine against Multiple Sclerosis. In: 30EPS, Peptides,* 2-14-182: 376-377 (2009).

Katsara M, Deraos G, Tselios T, Matsoukas M-T, Friligou M, Matsoukas J, **Apostolopoulos V.** *Design and synthesis of a cyclic double mutant peptide (cyclo(87-99)[A91,A96]MBP87-99) induces altered responses in mice after conjugation to mannan: implications in the immunotherapy of MS.* Journal of Medicinal Chemistry. 52:214-218 (2009).

Katsara M, Yuriev E, Ramsland PR, Tselios T, Deraos G, Lourbopoulos A, Grigoriadis N, Matsoukas J, Apostolopoulos V. Altered peptide ligands of myelin basic protein (MBP87-99) conjugated to reduced mannan modulate immune responses in mice. Immunology. 128:521-533 (2009).

Keating C, Hill MK, Hawkes DJ, Smyth RP, Isel C, Le S-Y, Palmenberg A, Marshall J, Marquet R, Nabel GJ, Mak J. *The A-rich RNA sequences of HIV-1 pol are important for the synthesis of viral cDNA*. Nucleic Acids Research 37:945-956 (2009).

Kong F, Guy R, Bergeri I, Boyle D, Hocking J, Merritt T, Britt H, Lau P, Pirotta M, Heal C, Brett T, Kaldor J, Donovan B, Hellard M. Chlamydia testing rates in general practices across Australia: the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance. ACCESS Oral presentation, Australasian Sexual Health Conference 2009, Brisbane (September 2009).

Kong FYS, Hocking JS, Link CK, Chen MY, **Hellard ME.** *Sex and sport: chlamydia screening in rural sporting clubs.* BMC Infectious Diseases 9:73 (2009).

Kulkarni H, Marconi VC, He W, Agan BK, Landrum ML, Okulicz JF, Crum-Cianflone N, Delmar J, Kazandjian D, Castiblanco J, Ahuja SS, **Wright EJ**, Weiss RA, Clark RA, Dolan MJ and Ahuja S K. *The Duffy-null state conveys survival advantage mainly to those HIV-infected persons of African ancestry who have leucopenia*. Blood 114:2783-92 (2009).

Kumar SM, **Dorabjee J**. *Phase III Facilitators Guide: Peer Led Methadone Maintenance Adherence Support Services Project*. International HIV/AIDS Alliance China (2009).

Kumar SM, **Dorabjee J.** *Phase IV Facilitators Guide: Peer Led Methadone Maintenance Adherence Support Services Project.* International HIV/AIDS Alliance China (2009).

Kumar SM, **Dorabjee J.** Assessment Report of Red Cross Methadone Clinics in Guangxi, PR China. International HIV/AIDS Alliance China and Guangxi Red Cross (2009).

Lazoura E, **Day SL, Apostolopoulos V.** *Applications for peptide-based cancer vaccine design.* Frontiers in Medicinal Chemistry, 4:541-561 (2009).

Lazoura E, Lodding J, Farrugia W, **Day S, Ramsland PA, Apostolopoulos V.** *Non-Canonical anchor motif peptides bound to MHC class I induce cellular responses*. Molecular Immunology. 46:1171-1178 (2009).

Lewin SR, Ribeiro RM, Avihingsanon A, Bowden S, Matthews G, Marks P, Locarnini SA, Ruxrungtham K, Perelson AS, Dore GJ. Viral dynamics of hepatitis B virus (HBV) DNA in HIV-1-HBV co-infected individuals: similar effectiveness of lamivudine, tenofovir or combination therapy. Hepatology 49:1113-21 (2009).

Lewin SR, Sharma L, Cornall A, Solomon A, Cameron P, Gorry P, Crowe SM. A novel, rapid method to detect infectious HIV-1 from plasma of HIV-1 infected individuals. Journal of Virological Methods (2009).

Li J, Hu XF, **Loveland BE, Xing PX**. *Pim-1 expression and monoclonal antibody targeting in human leukemia cell lines*. Exp Hematol 37:1284-94 (2009).

Li S, Floess S, Hamann A, Gaudieri S, Lucas A, Hellard M, Roberts S, Paukovic G, Plebanski M, Loveland BE, Aitken C, Barry S, Schofield L, Gowans EJ. Analysis of FOXP3+ regulatory T cells that display apparent viral antigen specificity during chronic hepatitis C virus infection. PLoS Pathog 5:e1000707 (2009).

Lim M, Goller J, Guy R, Gold J, Fairley C, Hocking J, Fielding J, Higgins N, Sheehan P, Owen L, Hellard M. *Risk factors for Chlamydia trachomatis infection in a primary care sentinel surveillance network.* London ISSTDR Conference (June 2009).

Lim M, Goller J, Sacks-Davis R, Horyniak D, Aitken CK, Stoove M, Quinn B, Higgins N, Hellard M. Victoria's five Hepatitis C surveillance systems – strengths, weaknesses, costs and necessity. Journal of Gastroenterology and Hepatology (2009)

Lim M, Hocking J, Aitken C, Hellard M. Community-based surveillance of sexual behaviour in Australia, 2005-2008. 18th International Society for STD Research Conference, London (June –July 2009).

Lim M, Hocking J, Aitken C, Hellard M. Discrepancies between young people's self-reported sexual experience and their perceptions of 'normality'. Sexual Health, 6(2) (2009).

Lim M, Sacks-Davis R, Aitken C, Hocking J, Hellard M. A randomised controlled trial of paper, online and SMS diaries for collecting sexual behaviour information from young people. Australasian Sexual Health Conference, Brisbane (September 2009).

Martyn JC, Cardin AJ, Wines BD, Cendron A, Li S, Mackenzie J, Powell M, Gowans EJ. Surface display of IgG Fc on baculovirus vectors enhances binding to antigen-presenting cells and cell lines expressing Fc receptors. Arch Virol 154: 1129-38 (2009).

Matthews GV, Seaberg E, Tang Y, Philp F, Sasadeusz J, Marks P, Bowden S, Locarnini SA, **Lewin SR**, Dore GJ, Thio C. *Combination HBV therapy is linked to greater HBV DNA suppression in a cohort of lamivudine-experienced HIV/HBV co-infected individuals*. AIDS 23:1707-15 (2009).

McBryde E, **Bergeri I, van Gemert C,** Rotty J, Headley EJ, Simpson K, Lester RA, Hellard M, Fielding JE. *Early transmission characteristics of influenza A(H1N1)v in Australia: Victorian state*, *16 May – 3 June 2009.* Eurosurveillance, Volume 14, Issue 42, (October 2009).

Meshkat Z, Audsley M, Beyer C, **Gowans EJ, Haqshenas G.** *Reverse* genetic analysis of a putative, influenza virus M2 HXXXW-like motif in the p7 protein of hepatitis C virus. J Viral Hepatitis 16:187-94 (2009).

Otto B, Hughes C, Toole M, Young F. Investing in HIV prevention for men who have sex with men Averting a Perfect Storm. Policy brief prepared for USAID, Health Policy Initiative in the Greater Mekong Region and China (September 2009).

Otto B, Hughes C, Toole M. *Investing in HIV prevention for men who have sex with men: Averting a 'Perfect Storm'*. Policy Brief for the United States Agency for International Development. Bangkok, Thailand (2009).

Otto B, Hughes C, Toole M. Men Who Have Sex with Men: Estimates of Resource Needs to Scale Up HIV Prevention Services in the Greater Mekong Region and China (Yunnan and Guangxi Provinces). Burnet Institute/Health Policy Initiative. Commissioned by the United States Agency for International Development. Bangkok, Thailand (2009).

Papanastasiou C, Kirwan A, Winter R, Power R. *The potential and viability of establishing a supervised injecting facility in Melbourne.* Position Paper to the Yarra Drug and Health Forum (November 2009).

Pedrana A, Aitken C, Higgs P and Hellard M. *High incidence of hepatitis C virus resolution and re-infection in a cohort of injecting drug users.* International Harm Reduction Association Conference, Bangkok (April 2009).

Pedrana A, Aitken C, Higgs P, Spelman T, Bowden D, Bharadwaj M, **Hellard M.** *High incidence of Hepatitis C virus resolution and re-infection in a cohort of injecting drug users*. International Harm Reduction Conference, Bangkok Thailand (April 2009).

Pedrana A, Stoové M, Guy R, El-Hayek C, Prestage G, Wilson K, Best B, **Hellard M.** *"Suck it and See..." Estimating HIV prevalence and unrecognised HIV infection among men who have sex with men in Victoria.* Report to Victorian Department of Health, BBV/STI Program (August 2009).

Pedrana A, Stoovè M, Guy R, Wilson K, Best S, **Hellard H.** *Estimating HIV Prevalence And Unrecognised Infection Among Men Who Have Sex With Men In Victoria.* 9th ICAAP Conference.

Peduru Hewa TM, **Tannock GA**, Mainwaring DE, Harrison S, Fecondo JV. *The detection of influenza A and B viruses in clinical specimens using a quartz crystal microbalance*. Journal of Virological Methods 162:14-21 (2009).

Phimpachanh C, Menorah S, Sychareun V, Manivong S, Phengsavanh A, Liddell S, **Fischer A, Chanlivong N,** Thomson N, Santavasy B, **Power R.** *Amphetamine type stimulant use and sexually transmitted infection risk among young people in Vientiane Capital and Vientiane Province, Lao PDR.* Research findings. AusAID (2009).

Plate MM, Louzao R, Steele PM, Greengrass V, Morris LM, Lewis J, Barnett D, Warrino D, Hearps AC, Denny T, Crowe SM. Evaluation of Blood Stabilizers TransFix® and Cyto-Chex® BCT for low cost CD4 T cell methodologies. Viral Immunol 22:329-32 (2009).

Powell MB, Cavezza C, Hughes-Scholes CH, **Stoové MA**. *Examination* of the consistency of interviewer performance across three distinct interviews. Psychology, Crime and Law (2009).

Price P, **Lewin SR**, Murdoch D, Agarwal U, Elliot J, French M. *Immune Restoration Disease is a collection of syndromes with distinct immunopathological aetiologies*. Clinical Microbiology Reviews Clin Microbiol Rev 22:651-63 (2009).

Reid G, **Higgs P.** *Vietnam moves forward with harm reduction: an assessment of progress.* Global Public Health (2009).

Ryan CE, Kama M, Darcy A, **Aleksic E**, Mirza T, Chaudhary A, Oelrichs RB, Rogers GD, **Crowe SM**. *HIV type 1 in Fiji caused by subtypes C and B*. AIDS Res Hum Retroviruses 25:1355-8 (2009).

Sadler A, Latchoumanin O, **Hawkes DJ, Mak J**, Williams BRG. *An antiviral response directed by PKR phosphorylation of the RNA helicase A*. PLoS Pathogens 5:e1000311 (2009).

Schmich L, Seru Puamau E, Power R. et al. *Pacific Drug & Alcohol Research Network. Workshop report to the ANCD*. Vanuatu (2009).

Shehu-Xhilaga M, Rhodes D, **Wightman F,** Liu HB, **Solomon A, Saleh S,** Dear A, **Cameron PU, Lewin SR.** *The novel histone deacetylase inhibitors metacept-1 and metacept-3 potently increase HIV-1 transcription in latently infected cells.* AIDS 23:2047-50 (2009).

Sheng KC, vanSpriel AB, Gartlan K, Sofi M, **Apostolopoulos V**, Ashman L, Wright MD. *Tetraspanins CD37 and CD151 differentially regulate antigen presentation and T cell co-stimulation by dendritic cells. European Journal of Immunology*. 39:50-55 (2009).

Sheridan S, Phimphachanh C, **Chanlivong N**, Manivong S, Khamsyvolsvong S, Lattanavong P, Sisouk T, Toledo C, Scherzer M, **Toole M**, et al. *HIV prevalence and risk behaviour among men who have sex with men in Vientiane Capital, Lao People's Democratic Republic, 2007.* Aids 23, 409-414. (2009).

Sinclair A, **Winter R**, Jatkar U, Ai**tken C.** *Were community concerns realised in the establishment of an NSP?* ANEX Conference Melbourne (2009).

Sinclair, A, **Winter R**, Jatkar, U, **Higgs P**, **Aitken C**. *2008 Were community concerns realized in the establishment of an NSP?* Australian Drugs Conference, RACV Club Melbourne (October 2009).

Sonza S, Johnson A, Tyssen D, Spelman T, Lewis GR, Paull JRA, Tachedjian G. Enhancement of human immunodeficiency virus type I replication is not intrinsic to all polyanion-based microbicides. Antimicrobial Agents and Chemotherapy 53:3565-3568 (2009).

Stevens W, **Crowe SM.** *Quantifying HIV for Monitoring Antiretroviral Therapy in Resource Poor Settings.* J Infect Diseases In Press (2009).

Stoove M, Hellard M. Age and trends in risk behaviour among gay men in Victoria, 2004-2008. DHS (April 2009).

Stoové M, Winter R, Fischer A, Higgs P, Kelsall J, Brogan D, Gao Y, **Power R**. *Evaluation of the Queensland Health Injecting Network's Mix Up Project*. Centre for Population Health and VIVAIDS, Melbourne (2009).

Tang CK, Sheng KC, Esparon S, Pietersz GA, Apostolopoulos V. *Molecular basis of improved immunogenicity in DNA vaccination mediated by a mannan based carrier*. Biomaterials. 30:1389-1400 (2009).

Toole M, Broughton B. Pandemics and Emerging Infectious Diseases Strategy (2006-2010): Review of Funded Activities. Component 1 -Desk review of 15 programs. Commissioned by the Australian Agency for International Development. Canberra (2009).

Toole M, Coghlan B, Simmonds S. *Review of barriers to polio eradication in Afghanistan*. Report to the Director General of the World Health Organization. Geneva (2009).

Toole M, Patel M, Murray G. *Pandemics and Emerging Infectious Diseases Strategy (2006-2010). Component 2 – Synthesis Report.* Commissioned by the Australian Agency for International Development. Canberra (2009).

Toole M, Patel M, Murray G. *Pandemics and Emerging Infectious Diseases Strategy (2010 – 2015) and Performance Assessment Framework.* Commissioned by the Australian Agency for International Development. Canberra (2009).

Toole M, Sackett P. *Community Event Based Surveillance (CEBS): A Qualitative Evaluation of Four Pilot Sites.* Commissioned by WHO and CARE Laos. Vientiane, Laos (2009).

Van der Meulen J, Mifsud NA, Abud D, Paul E, Varney MD, Lewin SR, Cameron PU, Kotsimbos TC. *Differential dynamics of donor DC and non-DC peripheral blood mononuclear cell microchimerism in lung transplantation*. Clin Immunol 133:179-83 (2009).

van der Windt DJ, Bottino R, Casu A, Campanile N, Smetanka C, He J, Murase N, Hara H, Ball S, **Loveland BE**, Ayares D, Lakkis FG, Cooper DK, Trucco M. Long-term controlled normoglycemia in diabetic nonhuman primates after transplantation with hCD46 transgenic porcine islets. Am J Transplant 9:2716-26 (2009).

van Dooren K, Page A, **Kinner SA**. *Risk of death in young, female and indigenous ex-prisoners: a systematic review and meta-analysis.* Australian and New Zealand Journal of Public Health (2009).

Van Gemert C, Gold J, Sacks-Davis R, Stoové M, Vally H, **Hellard M.** *Hazardous and Binge Drinking Among Young People: Does a National Campaign Reach this At-Risk Group?* APSAD (2009).

van Rooijen LB, Greengrass V, Morris LM, Plate MM, Gouillou M, Tachedjian G, Sluis-Cremer N, Hearps AC, Crowe SM. *Effect of reverse transcriptase inhibitors and mutations on the low-cost Cavidi reverse transcriptase viral load assay.* J Acquir Immune Defic Syndr 52:527-9 (2009).

van Spriel AB, Sofi M, Gartlan KH, van der Schaaf A, Verschueren I, Torensma R, Raymakers RA, **Loveland BE**, Netea MG, Adema GJ, Wright MD, Figdor CG. *The tetraspanin protein CD37 regulates IgA responses and anti-fungal immunity.* PLoS Pathog 5:e1000338 (2009).

Warrilow D, **Tachedjian G**, Harrich D. *Maturation of HIV reverse transcriptase complex: putting the jigsaw together*. Reviews in Medical Virology 19:324-337 (2009).

Westhorpe CLV, Webster NL, Kalionis B, Lewin SR, Jaworowski A, Muller WA, Crowe SM. *Effects of HIV-1 infection in vitro on transendothelial migration by monocytes and monocyte-derived macrophages.* J Leuk Biol 85:1027-1035 (2009).

Winter R, Liddell S, Wain D, Aitken C, Power R. Local solutions to public injecting drug use: components of a comprehensive community response. Australian Drugs Conference, RACV Club Melbourne (October 2009).

Winter R, White B, Guy R, Lewis J, **Spelman T, Hellard M.** *Evaluation of the Victorian Public Health Prisoner Health Initiative*. Final report to the Department of Human Services Victoria (August 2009).

Wright, E. Neurological disease: The effects of HIV and antiretroviral therapy and the implications for early antiretroviral therapy initiation. Curr Opin HIV AIDS 4:447-452 (2009).

Presentations

National:

Anderson, JL. *HIV-1 restriction by cellular TRIM5* α *proteins*. Department of Microbiology Seminar Series, Monash University, Clayton (2009).

Andrews J, Wade J, Forsyth S, Russell G, **Kinner S.** *Drug Related Mortality after Release from Prison*. Public Health Association of Australia, Canberra, Australia (September 2009).

Barber B, **Jenkinson R, Stoové M, Hellard M**. *HIV and other sexually transmitted infections among men who have sex with men: knowledge and practices of general practitioners in Victoria*. ASHM Conference, Brisbane, Australia (September 2009).

Bellamy-McIntyre A, Bär S, Ludlow L, **Drummer HE**, and **Poumbourios P**. Evidence that the disulfide-bonded region of HIV-1 gp41 acts as a sensor of fusion activation signals emanating from receptor-bound gp120. AVG 2009, 5th Australian Virology Group meeting, Lorne (December 2009).

Bellamy-McIntyre A, Drummer HE, Poumbourios P.

A functional link between the CD4 binding domain of HIV-1 gp120 and the membrane proximal ectodomain region (MPER) of gp41. Australian Centre for HIV and Hepatitis Virology Research (ACH2), Terrigal, NSW (June 2009). **Bergeri I,** Heywood SM, **El-Hayek C, Horyniak D,** Breschkin A, Fielding J, **Stoové M, Hellard ME**. *The changing pattern of HIV diagnoses in Victoria state: a 10 year analysis of surveillance data 1999-2008*. 21st Annual Conference of the Australasian Society for HIV Medicine, Brisbane, Australia (September 2009).

Bergeri, I. *Field epidemiology case study.* WHO GOARN regional training in Melbourne (March 2009).

Bergeri, I. *Health and evacuation on an international mission*. WHO GOARN regional training in Melbourne (March 2009).

Cherry, CL. *Touching a raw nerve – neuropathic pain and HIV.* Seminar with Prof A Rice organised by the Faculty of Pain Medicine, Melbourne (2009).

Crabb, B. *Invasion, virulence and an Achilles heel in the malaria parasite.* Department of Microbiology & Immunology, Melbourne University (April 2009).

Crabb, B. Virulence and an Achilles' heel in malaria. Bancroft Mackerras Medal Oration, ASP & ARC/NHMRC Research Network for Parasitology Annual Conference, (July 2009).

Crabb, B. *Virulence mechanisms in malaria: Invasion and cytoadherence*. Monash Infectious Diseases Society, Alfred Hospital (August 2009).

Crabb, B. *New insights into Plasmodium falciparum merozoite invasion.* Department of Biochemistry, La Trobe University (October 2009).

Crane M, Sirivichayakul S, Chang J, Avihingsanon A, Ubolyam S, Buranapradiktun S, Thantiworasit P, Wightman F, Locarnini S, Matthews G, Dore GJ, Ruxrungtham K, **Lewin SR.** *No change in HBV-specific T cells in HIV-1-HBV co-infection following HBV-active HAART.* Australian Centre for HIV and Hepatitis Virology Research (ACH2) 5th National workshop, Terrigal (June 2009).

Crowe, SM. *The regional HIV epidemic* (invited Grand Rounds speaker), The Alfred Hospital, Melbourne (2009).

Dean J, Boo I, Poumbourios P, Drummer HE. *Thiol isomerization is an essential stage of HCV entry.* 5th Australian Virology Group meeting. Lorne, Victoria (December 2009).

Dean J, Boo I, Talbot G, **Poumbourios P, Drummer HE**. Fusion activation triggers of Hepatitis C Virus envelope glycoproteins E1 and E2: potential role for thiol disulfide isomerization. Australian Centre for HIV and Hepatitis Virology Research (ACH2) 5th National workshop, Terrigal. (June 2009).

Dietze P, Jolley D, Room R, Chikritzhs T and Matthews S. *Harms attributed to alcohol in the Victorian population: First results from the GENACIS study.* Paper presented at the Annual Conference of the Australasian Professional Society on Alcohol and Drugs. Darwin (November 2009).

Dietze P, Kerr D, Kelly AM, Jolley D and Barger B. *Randomised Controlled Trial Comparing The Effectiveness and Safety of Intranasal and Intramuscular Naloxone For The Treatment Of Heroin Overdose*. Healthcare innovation in Victoria 2009 showcase conference (2009).

Drummer, HE. Modulation of the immune response by HCV glycoprotein E2 variable regions; can we design a vaccine for the prevention of HCV? 5th Australian Virology Group meeting, Lorne, Victoria (2009).

Drummer, HE. *Structure and Function of the HCV glycoproteins.* Latrobe University. Department of Microbiology, Melbourne (2009).

Drummer, HE. *Structure and Function of the HCV glycoproteins.* Monash University, Department of Microbiology, (Melbourne 2009).

Drummer, HE. The role of the variable regions of HCV glycoprotein *E2* in virus entry and modulation of immune recognition. CSL Ltd (2009).

Drummer, HE. *Towards the development of an HCV vaccine.* Monash Infectious Diseases Society (2009).

El-Hayek C, Pedrana A, Bergeri I, Higgins N, Breschkin A, **Stoové M, Hellard M.** *Changing age distribution of men who have sex with men diagnosed with HIV in Victoria.* ASHM Conference, Brisbane, Australia (September 2009).

Feigin A, Hellard M, Dietze P and Higgs P. *Khat use and its impact on African communities in Melbourne*. Paper presented at the Annual Conference of the Australasian Professional Society on Alcohol and Drugs. Darwin (November 2009).

Ffrench, R. *Immune responses to pandemic H1N1 influenza*. NHMRC workshop, Canberra, (December 2009).

Ffrench, R. Intradermal vaccination. Influenza vaccine workshop, Sanofi-Pasteur, Sydney (May 2009).

Fischer A, Schmich L, Dietze P. Alcohol use in the Pacific influencing the agenda? Annual Conference of the Australasian Professional Society on Alcohol and Drugs. Darwin (November 2009).

Flynn, J. *Reciprocal relationship between IFN-g and IL-10 production in acute hepatitis C virus infection*. ACH2 conference, Terrigal, Australia (June 2009).

Flynn, J. *Stimulation and maintenance of effector T cell responses in acute HCV infection.* AMREP postgraduate research symposium (November 2009).

Franklin L, Armstrong S, Hellard M and **Higgs P.** *Research conducted by mixed field teams: What have we learnt?* APSAD Conference Living on the Edge, Darwin (November 2009)

Franklin L, Horyniak D, Aitken C, Stoové M, Dietze P. *Female IDUs' experience of violence: preliminary results from the Melbourne Injecting Drug User Cohort Study (MIX)*. APSAD Conference, Darwin (November 2009).

Garcia, M. An Immunochromatographic test for Point-of-care Measurement of CD4 T cells. ACH2 5th Annual Workshop, Terrigal (June 2009).

Garcia, M. *Development of a rapid point-of-care immunochromatographic test for CD4 T-cells.* Victorian Infection and Immunity Network Symposium, Monash Medical School, Alfred Hospital, Melbourne (September 2009).

Gerondakis, S. ERK and NF-kB co-regulation of transcription in response to TLR signals. TLR OZ, Gold Coast, Queensland (2009).

Gerondakis, S. *Role of c-Rel in CD4 regulatory T cell development.* IgV Annual Conference, Yarra Valley, Victoria (2009).

Gold J, Dixon H, **Hellard M, Lim M,** Ferrari G, Johnson E, Wakefield M, **Aitken C.** *Scaling up the use of SMS for health promotion to young people: successes and challenges of implementing the S5 project.* Australasian Sexual Health Conference, Brisbane (September 2009).

Goller JL, Guy R, **El-Hayek C, Gold J, Gouillou M, Bergeri I,** Leslie D, BK Tee, Owen L, Roth N, Fairley CK, Higgins N, **Hellard M.** *Syphilis testing, diagnoses and reinfection in MSM in Victoria.* ASHM Conference, Brisbane (September 2009).

Goller JL, Guy R, Lim M, Gold J, Bergeri I, El-Hayek C, Gouillou M, Stoové M, Leslie D, Tee BK, Roth N, Fairley CK, Higgins N, Hellard M. Risk factors for HIV and STI infection in MSM in Victoria: Sentinel surveillance Results. ASHM Conference, Brisbane (September 2009).

Gorry, P. Alterations in HIV-1 envelope glycoprotein conformation influencing virus entry mechanisms and pathogenicity. Department of Microbiology and Immunology, University of Melbourne, Parkville (2009).

Gorry, P. Alterations in HIV-1 envelope glycoprotein conformation influencing virus entry mechanisms and pathogenicity. Department of Biochemistry and Molecular Biology, Monash University.

Higgs P, Aiken C, Hellard M, Winter R, Maher L. *The impact of luck on hepatitis C infection: Perceptions from current injectors*. APSAD Conference, Darwin (November 2009).

Hogarth, PM. *The interplay between Fc receptor organisation and IgA or IgG binding in leukocyte activation and inhibition: lessons for the future.* Ludwig Institute for Cancer Research, Melbourne (2009).

Horyniak D, Franklin L, Aitken C, Stoovè M and Dietze P. *Recruiting injecting drug users using respondent driven sampling (RDS): experiences from the Melbourne Injecting Drug User Cohort Study (MIX)*. Annual Conference of the Australasian Professional Society on Alcohol and Drugs. Darwin (November 2009).

Horyniak D, Guy R, Prybylski D, **Hellard M**, Kaldor J. The role of voluntary counselling and testing (VCT) data in estimating HIV prevalence: A systematic review, Australasian Society for HIV Medicine. ASHM Conference, Brisbane, Australia (September 2009).

Horyniak D, Larance B, Winstock A, Degenhardt L and **Dietze P**. The prevalence and correlates of buprenorphine smoking and snorting among opioid substitution therapy clients in Australia. Annual Conference of the Australasian Professional Society on Alcohol and Drugs. Darwin (November 2009).

Iuga A, Mueller I, Senn N, Nale J, Kiniboro B, Toporua O, **Reeder JC** and **Barry AE**. *The population genetics of Erythrocyte Binding Antigen 175 (eba175) on the north coast of Papua New Guinea*. Malaria in Melbourne Conference, Melbourne, Australia (October 2009).

Jaworowski, A. *HIV and malaria: a deadly combination*. Department of Microbiology and Immunology, University of Melbourne (2009).

Jaworowski, A. *HIV and malaria: a deadly combination*. University of Melbourne, Royal Melbourne Hospital/Western Hospital Consortium Seminar (2009).

Jenkinson R, Dietze P and Jolley D. *Weekend on the town: examining a 'session' of psychostimulant use among a sample of young socialites.* Annual Conference of the Australasian Professional Society on Alcohol and Drugs Darwin (November 2009).

Jones, KL. *X4 and R5 HIV have distinct post-entry requirement during HIV infection.* The Australian Centre for HIV and Hepatitis Virology, Terrigal, NSW (2009).

Kinner, S. *Monitoring and improving the health of ex-prisoners with and without intellectual disability: Preliminary findings of a randomised controlled trial. Australasian Society for the Study of Intellectual Disability (ASSID).* Queensland state conference, Brisbane (August 2009).

Kinner, S. Guest lecturer. *Monitoring and improving the health of ex-prisoners: A randomised controlled trial.* Graduate Diploma in Forensic Behavioural Science program, Monash University, Centre for Forensic Behavioural Science, Melbourne (2009).

Kirwan A, Winter R, Quinn B, Stoové M. 2009 Post-release prisoners with a history of injecting drug use: changes in drug use, service utilisation and health and wellbeing following release. Drugs in Hard Times; Australian Drugs Conference, RACV Club, Melbourne (October 2009).

Kong F, Guy R, Bergeri I, Boyle DJ, Hocking JS, Merritt T, Britt H, Lau P, Pirotta MV, Heal C, Brett T, Kaldor J, Donovan B, Hellard
M. Chlamydia testing rates in general practices across Australia: the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance. ACCESS Oral presentation, Australasian Sexual Health Conference 2009 Brisbane (September 2009).

Kong, F. *Ecstasy and related drugs reporting system (EDRS) preliminary results and changes.* Australian National Council on Drugs (ANCD) Meeting, Presentation, Melbourne (November 2009).

Lay CS, Bellamy-McIntyre A, Talbo G, Drummer HE, Poumbourios P. Structural and functional role of HIV-1 gp41 terminal interactions in the membrane fusion mechanism. Australian Centre for HIV and Hepatitis Virology Research (ACH2) Terrigal, NSW (June 2009).

Lewin, SR. *HIV latency and barriers to eradication*. (Invited plenary speaker). Australasian Society for HIV Medicine Conference, Brisbane (2009).

Lewin, SR. *HIV pathogenesis, treatment and resistance.* (Invited plenary speaker) Australian Society for Antimicrobials (ASA), Melbourne (2009).

Lewin, SR. *HIV: Will there ever be a cure?* (Invited plenary speaker), Royal Brisbane Hospital Health Care Symposium Brisbane (2009).

Lim M, Goller JL, Guy R, Gold J, Fairley CK, Hocking J, Fielding J, Higgins N, Sheehan P, Owen L, Hellard M. *Risk factors for Chlamydia trachomatis infection in a primary care sentinel surveillance network.* ASHM Conference, Brisbane, Australia (September 2009). Lim M, Sacks-Davis R, Aitkin C, Hocking J, Hellard M. A Randomised controlled trial of paper, online and SMS diaries for collecting sexual behaviour information from young people. ASHM Conference, Brisbane, Australia (September 2009).

Mak, J. Structural rearrangement of HIV Gag during virion maturation. The Australian Centre for HIV and Hepatitis Virology, Terrigal, NSW (2009).

Matthews S, **Dietze P**, Room R, Jolley D and Chikritzhs T. *Drinking attitudes and norms: Are there differences across drinker groups?* Paper presented at the Annual Conference of the Australasian Professional Society on Alcohol and Drugs. Darwin (November 2009).

Matthews S, **Dietze P**, Room R, Jolley D, and Chikritzhs T. *Who abstains from drinking and why?* Annual Conference of the Australasian Professional Society on Alcohol and Drugs. Darwin (November 2009).

Natoli, L. *Facilitation Skills training for Registrar Liason Officers.* General Practice Education and Training Limited, Canberra (2009).

Orlowski E, Chand R, Wong C, Yip J, Wright MD, Ashman LK, and **Jackson DE.** The tetraspanin superfamily member, *CD151* is required in thrombus growth and stability in vivo. AVBS meeting, Canberra, ACT (2009).

Papanastasiou C, Kirwan A, Winter R and **Power R.** *The potential and viability of establishing a Supervised Injecting Facility in Melbourne.* Anex 09 Drugs Conference: Drugs in Hard Times, Melbourne (October 2009).

Pedrana A, Aitken C, Higgs P, Spelman T, Bowden S, Bharadwaj M, **Hellard M.** *High incidence of hepatitis C virus resolution and reinfection in a cohort of injecting drug users*. APSAD Conference: Living on the Edge, Darwin (November 2009).

Pedrana A, Hellard M, Guy R, **Stoovè M.** Understanding Risk: Lessons from the evaluation of HIV prevention initiatives in Victoria and Learnings from men through a younger perspective. Abstract Submitted to 'Evolving knowledge and practice'. The 11th Social Research Conference on HIV, hepatitis C and related diseases, University of New South Wales (April 2010).

Pedrana A, Hellard M, Wilson K, Guy R, Prestage G, Best S, Dixon M, **Stoovè M.** *Estimating HIV prevalence and unrecognised HIV infection among men who have sex with men in Victoria.* Australasian Society for HIV Medicine- Australasian HIV/AIDS Conference, Brisbane (September 2009).

Poumbourios P, Laumaea A, Maerz A, Hill M, **Gorry P, Drummer HE.** *Evidence that engagement of alternative chemokine receptors by R5X4 gp120 evokes distinct fusion activation signals to gp41 that are sensed by the disulfide-bonded region.* 5th Australian Virology Group meeting (December 2009).

Quinn B, Jenkinson R, Johnston J, Brogan D. *Sniffer dogs: user perceptions and experiences*. APSAD Conference (2009).

Quinn B, Jenkinson R, Johnston J, Hazelwood P, Winford S and Brogan D. *Sniffer dogs: user perceptions and experiences*. APSAD Conference: Living on the Edge, Darwin (November 2009).

Quinn B, Kirwan A, Winter R, Stoové M. *A prospective cohort study of ex-prisoners with a history of injecting drug use: overlapping methodological and population-based complexities.* APSAD Conference (2009).

Ramsland, PA. A conserved host/pathogen recognition site on immunoglobulins. Comparative and Molecular Immunobiology Symposium, University of Technology, Sydney (November 2009).

Renkin, L. Support mechanisms for staff who travel: introducing a travel support program. The Science of Stress and the Art of Managing Wellbeing for Humanitarian Aid Workers, Antares Foundation Annual Forum, Melbourne (November 2009).

Rotty J, Anderson D, Garcia M, Diaz J, Van de Waarsenburg S, Lewin SR, Elliott J, Hoy J. Evaluation of treponema pallidum specific IGM antibody detection and a new rapid-point-of-care assay for the diagnosis of syphilis in HIV-1 infected patients. ASHM (September 2009). **Sacks-Davis R, Gold J, Hellard M.** *Treating Injecting Drug Users for Hepatitis C: Myths and Reality.* National Hepatitis Health Promotion Conference, Hobart (October 2009).

Sacks-Davis R, Van Gemert C, Bergeri I, Stoové M, Hellard M. *Hepatitis C surveillance: still a challenge 20 years on.* ASHM Conference, Brisbane, Australia (September 2009).

Saleh S, Sallmann G, Solomon A, Wightman F, Jones K, Mak J, Anderson J, Jaworowski A, Cameron P, Lewin S. *CCL19 leads to enhanced nuclear import of HIV in resting CD4+ T-cells: A path to establishing latent HIV infection in vitro*. Australasian HIV/AIDS conference (ASHM), Brisbane (September 2009).

Saleh S, Sallmann G, Solomon A, Wightman F, Jones K, Mak J, Anderson J, Jaworowski A, Cameron P, Lewin S. *CCL19 leads to enhanced nuclear import of HIV in resting CD4+ T-cells: A path to establishing latent HIV infection in vitro*. Australasian Virology group meeting, Lorne (December 2009).

Saleh S, Sallmann G, Solomon A, Wightman F, Jones K, Mak J, Cameron P, Lewin S. Latent HIV infection can be established in resting CD4+ T-cells in vitro following incubation with multiple diverse chemokines. Australian Centre for HIV and Hepatitis Virology Research (ACH2) 5th National workshop, Terrigal (June 2009).

Schultz L, Mueller I, Senn N, Ntsuke PO, Nale J, Kiniboro B, Toporua O, Reeder JC and Barry AE. *The spatial population genetics of Plasmodium falciparum on the north coast of Papua New Guinea*. Malaria in Melbourne Conference, Melbourne, Australia (October 2009).

Sharma L, Solomon A, Cornall A, **Gorry P, Cameron PU, Lewin SR.** *Use of SEVI for enhancing the infectivity of plasma HIV to be used in a co-receptor usage assay.* Oral presentation at the ACH2 Meeting conducted at Terrigal (June 2009).

Shehu-Xhilaga M, Rhodes D, **Wightman F,** Liu HB, **Solomon A, Saleh S,** Dear AE, **Cameron PU, Lewin SR.** *The novel HDAC inhibitors Metacept (MCT)-1 and MCT-3 have potent activity on HIV-1 transcription in latently infected cells*. Australasian HIV/AIDS conference (ASHM) Brisbane (September 2009).

Sheng, KC. *The ROS level defines two functionally distinct dendritic cell stages of ex vivo dendritic cell development from mouse bone marrow. TLROZ 2009.* Pattern Recognition Receptors in Health and Disease, Surfers Paradise, Qld (October 2009).

Sinclair A, **Winter R**, Jatkar U, **Aitken C**. *Were community concerns realised in the establishment of an NSP?* ANEX Conference, Melbourne (October 2009).

Sonza, S. Enhancement of HIV-1 replication is not intrinsic to all polyanion-based microbicides. Australian Centre for HIV and Hepatitis Virology Research (ACH2) 5th Annual Workshop, Terrigal, NSW (2009).

Sonza, S. *Lactic acid as a natural physiological microbicide for HIV.* 5th Australian Virology Group Meeting, Lorne (2009).

Stoové M, Pedrana A, El-Hayek C, Bergeri I, and **Hellard M**. *Getting the most out of cohort studies of MSM: Innovations and research capacity in Melbourne*. ASHM Conference, Brisbane, Australia (September 2009).

Tachedjian, G. *Microbicides for the Prevention of HIV and STIs.* Westmead Millenium Institute, Westmead, NSW (2009).

Tachedjian, G. SAR and mechanism of action of dendrimer microbicides. 5th Australian Virology Group Meeting, Lorne (2009).

Tewierek K, McCaffrey K, Boo I, **Drummer HE.** *The variable regions* of *Hepatitis C Virus glycoprotein E2 modulate virus entry and neutralization resistance of antibodies.* 5th Australian Virology Group meeting, Lorne (December 2009).

Toole, M. Linking HIV responses with the other Millennium Development Goals. "Meeting the Millennium Development Goals: Old Problems, New Challenges". La Trobe University, Melbourne (2009). Tyssen D, Johnson A, La J, Moore K, Srivastava S, Sonza C, Sterjovski J, Gray L, Zanin M, Roche M, Ramsland P, Gorry PR, Henderson S, Wesselingh S, McCarthy T, Lewis GR, Paull JR, Tachedjian G. *SAR and Mechanism of Action of Dendrimer Microbicides*. The 5th Scientific Meeting of the Australian Virology Group, Lome, Australia (December 2009).

Westhorpe C, Tippett E, Lichtfuss G, Zhou J, Lewin S, Sviridov D, Dart A, Jaworowski A, Crowe SM. *Markers of monocyte activation as correlates of cardiovascular disease in HIV patients*. Australian Centre for HIV and Hepatitis Virology Research (ACH2), Terrigal, NSW (2009).

Westhorpe, C. Effects of HIV-1 infection in vitro on transendothelial migration by cells of macrophage lineage. Monash University Clinical and Eastern School Postgraduate Symposium, Melbourne (2009).

Wightman F, Solomon A, Hoy J, Gorry P, Crowe S, Saksena N, Cameron P, Lewin, SR. *No decay in HIV-infected naïve CD4+Tcells following antiretroviral therapy (ART): a persistent long term reservoir.* Australasian HIV/AIDS Conference (ASHM), Brisbane (September 2009).

Winter R, Liddell S, Wain D, Aitken C, Power R. *Local solutions to public injecting drug use: components of a comprehensive community response*. Australian Drugs Conference; "Drugs in Hard Times", RACV Club Melbourne (October 2009).

Winter R, Sinclair A, Jatkar U, Higgs P and Aitken C. 2008 Were community concerns realised in the establishment of an NSP? Australian Drugs Conference; "Drugs in Hard Times", RACV Club Melbourne (October 2009).

Winter, R. *Local Solutions to Public Drug Use: Using Guidelines in Local Communities.* Department of Health Service Provider's Quarterly Conference. Prevention: Better than Cure.

Winter, R. Invited speaker. *Improving health and reducing drugrelated harm among ex-prisoners: A randomised controlled trial Anex 09.* Australian Drugs Conference: Drugs in Hard Times, Melbourne (October 2009).

Xue L, Lew AM and **Tannock GA**. *Immunological studies of coldadapted influenza vaccine viruses*. 5th Australian Influenza Symposium, Melbourne (September 2009).

International:

Anderson, DA. Development of a rapid, point-of-care immunochromatographic test for measurement of CD4 T-cells. Rush University, Chicago, joint Gastroenterology-Immunology seminar program (June 2009).

Anderson, DA. Development of a rapid, point-of-care immunochromatographic test for measurement of CD4 T-cells. Department of Internal Medicine, University of Iowa, Iowa City (September 2009).

Anderson, DA. Interactions of hepatitis viruses with polarized hepatocytes. University of Texas Medical Centre, Galveston, Texas (June 2009).

Anderson, DA. Interactions of viruses with polarized hepatocytes. Johns Hopkins School of Public Health, Baltimore (October 2009).

Aung Min Thein. *Linguistic and cultural barriers to raising awareness about MSM among NGO staff in Myanmar.* Oral presentation, 9th ICCAP Bali, Indonesia (August 2009).

Bellamy-McIntyre A, Drummer HE, Poumbourios P. A functional link between the CD4 binding domain of HIV-1 gp120 and the membrane proximal ectodomain region (MPER) of gp41. Cold Spring Harbor Symposium on Retroviruses 2009, Cold Spring Harbor (May 2009).

Bharadwaj M, Nivarthi U, Moneer S, **Aitken C**, Thammanichanond D, **Drummer H**, Bowden S, **Hellard M**, McCluskey J. *Hepatitis C* virus-specific TCD8 response in recurrently exposed intravenous drug users with diverse disease outcomes. European Congress of Immunology, Berlin (September 2009).

Bisibisera, L. *Improving Immunization and Newborn Health Project (birthdose HepB):* PNG WHO/UNICEF/GAVI 5th Annual Global Immunization Meeting: Technical Update on Progress, Geneva, Switzerland (2009).

Cherry CL, Affandi JS, Yunihastuti E, Vanar S, Imran D, Smyth K, Kamarulzaman A, Wadley A, Kamerman P, Price. *Predicting Neuropathy risk before Stavudine prescription: an algorithm for minimizing neurotoxicity in resource-limited settings.* 16th Conference on Retroviruses and Opportunistic Infections. Montreal, Canada (2009).

Crabb, B. *Exporting Plasmodium proteins*. Malaria Gordon Conference 2009, Oxford University, UK (September 2009).

Crabb, B. *Exporting Plasmodium Proteins*. Laboratory of Parasitic Diseases, National Institutes of Health, USA (October 2009).

Crabb, B. *New insights into signaling during Plasmodium falciparum merozoite invasion.* Harvard School of Public Health, Harvard University, USA (October 2009).

Crane M, Sirivichayakul S, Chang J, Avihingsanon A, Ubolyam S, Buranapradiktun S, Thantiworasit P, **Wightman F,** Locarnini S, Matthews G, Dore GJ, Ruxrungtham K, **Lewin SR**. *No change in HBV-specific T cells in HIV-1-HBV co-infection following HBV-active HAART*. International meeting on the Molecular Biology of Hepatitis B viruses, Loire Valley, France (August 2009).

Crowe, SM. *The role of monocytes in the development of HIV-related cardiovascular disease.* HIV Congress, Mumbai, India (2009).

Dean J, Boo I, Talbot G, **Poumbourios P,** and **Drummer HE**. Fusion activation triggers of Hepatitis C Virus envelope glycoproteins E1 and E2: potential role for thiol disulfide isomerization. 16th International meeting on HCV and related viruses. Nice, France (October 2009).

Dietze P, Kerr D, Kelly AM, Jolley D and Barger B. *2009 Randomised Controlled Trial Comparing The Effectiveness and Safety of Intranasal and Intramuscular Naloxone For The Treatment Of Heroin Overdose*. EMS today Conference, Baltimore, MD (2009)Dorabjee, J. Enhancing comprehensive IV interventions. Response Beyond Borders Satellite Session. 9th International Congress on AIDS in Asia and the Pacific, Bali, Indonesia (August 2009).

Dorabjee, J. *Regional Overview of HIV and Injecting Drug Use in the Pacific.* WHO Regional Harm Reduction Strategy Workshop, Kuala Lumpur, Malaysia (December 2009).

Dorabjee, J. *Response Beyond Borders*. 20th International Conference on the Reduction of Drug Related Harm, Bangkok, Thailand (April 2009).

Dorabjee, J. *Supporting regional alliances among civil society networks in Asia*. South Asia Regional Workshop on the prevention of HIV related to Drug Use, Kathmandu, Nepal (April 2009).

Dorabjee, J. *TB in Prisons.* WHO Opioid Dependence, TB and HIV Workshop, Kuala Lumpur, Malaysia (December 2009).

Dorabjee, J. *The role of networks in promoting harm reduction. Asia Pacific Village Community 'Wantylan' Dialogue Space.* 9th International Congress on AIDS in Asia and the Pacific, Bali, Indonesia (August 2009).

Drummer HE, Hill MK, Maerz AL, Wood S, **Mak J**, and **Poumbourios P.** *Allosteric modulation of the HIV-1 gp120-gp41 association interface by adjacent variable region 1 (V1) N-glycans linked to neutralization resistance*. 5th IAS Conference on HIV Pathogenesis, Treatment and Prevention, Capetown, South Africa (July 2009).

Ffrench R, Santoso D, Goy K, Bharadwaj M, **Hellard M, Aitken C.** *Memory B cell responses in 'seronegative immune' injecting drug users*. 16th International Symposium on Hepatitis C Virus and Related Viruses, Nice, France (October 2009).

Ffrench, R. *Intradermal vaccination*. Immunisation conference, Auckland, New Zealand (December 2009).

Fischer A, Hughes C, Usan J, Tokeimota, J. *Big Pla Spak, Lik Lik Money*': Non-commercial alcohol and HIV risk in Papua New Guinea. 20th International Conference on the Reduction of Drug Related Harm, Bangkok, Thailand (April 2009).

Hellard, M. 2009 Co-Convener, Acute hepatitis C IDU cohorts Workshop ISVHLD Washington.

Hogarth, PM. *How Ig and Fc receptors influence normal and pathological immunity: a Hungarian Rhapsody.* 15th Symposium of Signals and Signal Processing in the Immune System, Balatonoszod, Hungary (2009).

Jeremiah K, Steenhoff A, Mosepele M, Cherry CL, Lawler K. *HIV-associated neurocognitive disorders in Botswana: a pilot study.* 9th Annual AIDS Impact Conference, Gaborone, Botswana (2009).

Katsara, M. *Peptide mutants conjugated to reduced mannan shift immune responses in animal models.* 10th International Conference in Medicinal Chemistry: Drug Discovery and Design Conference. University of Patras, Patras, Greece (March 2009).

Kwarteng, T. *The Pacific Regional HIV Project - Broadening the HIV Response in the Pacific.* 9th International Congress on AIDS in Asia and the Pacific, Bali, Indonesia. (August 2009).

Lewin, SR. *HIV-HBV pathogenesis* (invited symposium speaker), 5th IAS Conference on HIV Pathogenesis, Treatment and Prevention. Capetown, South Africa (2009).

Lewin, SR. Complex interactions in immune response to HIV and HBV (invited speaker).US Japan Cooperative Medical Science Program "Co-infection with HIV and Hepatitis Viruses: an Asian Perspective", Portland, Oregon (September, 2009).

Maher L, Somanadhan S, **Higgs P**, Zwi A. *2009 Health and human rights: Challenges to scaling up HIV prevention with vulnerable populations in Asia*. International Conference on Realising the Rights to Health and Development for All, Hanoi (October 2009).

Mak, J. Snapshots of HIV assembly and uncoating. Departmental seminar, Department of Microbiology, Columbia University, New York, USA (October 2009).

Mak, J. *Snapshots of HIV assembly and uncoating.* Institutional Seminar, Aaron Diamond AIDS Research Centre, New York, USA (October 2009).

Nang Pann Ei Kham, Myo Kyaw Lynn. *Myanmar Drug Users Network: marching towards a meaningful future*. Oral Presentation, 9th ICCAP Bali, Indonesia (August 2009).

Otto, B. *RETA: Resource Estimation Tool for Advocacy.* Regional Consensus Meeting on Developing a Comprehensive Package of Services to Reduce HIV among Men who have Sex with Men and Transgender Populations in Asia and the Pacific, Bangkok, Thailand (June – July 2009).

Saleh S, Sallmann G, Solomon A, Wightman F, Jones K, Mak J, Cameron P, Lewin S. Latent HIV infection can be established in resting CD4+ T-cells in vitro following incubation with multiple diverse chemokines. 5th IAS Conference on HIV Pathogenesis, Treatment and Prevention, Cape Town, South Africa (August 2009).

Saleh S, Sallmann G, Solomon A, Wightman F, Jones K, Mak J, Cameron P, Lewin S. Latent HIV infection can be established in resting CD4+ T-cells in vitro following incubation with multiple diverse chemokines. Fourth International Workshop on HIV Persistence During Therapy, St Martin, West Indies (December 2009).

Samson L, Sarin E, **Dorabjee J,** Singh B, Sweat. *Health Status-at Baseline of a Cohort of Drug Injectors in New Delhi.* 9th International Congress on AIDS in Asia and the Pacific, Bali, Indonesia (August 2009).

Schultz L, Mueller I, Senn N, Ntsuke P, Nale J, Kiniboro B, Toporua O, **Reeder J** and **Barry A**. *The spatial population genetics of Plasmodium falciparum on the north coast of Papua New Guinea (ORAL)*. Papua New Guinea Medical Symposium, Papua New Guinea (July-August 2009).

Tachedjian, G. *Activity of acid stable dendrimer-based microbicides and lactic acid.* NIH Face to Face Meeting, Baltimore, MD, USA (2009).

Tachedjian, G. Enhancement of HIV-1 infection is not intrinsic to polyanion-based microbicides. Keystone Symposium on Prevention of HIV/AIDS, Keystone, Colorado, USA (March 2009).

Tachedjian, G. *SPL7013, a dendrimer microbicide, does not specifically enhance HIV replication and demonstrates a high genetic barrier for the development of drug-resistant HIV-1.* Cold Spring Harbor Retroviruses Meeting, Cold Spring Harbor, New York, USA (May 2009).

Tannock, GA. *Live attenuated vaccines against influenza; Australian studies over 20 years.* Talk delivered at Weatherall Institute for Molecular Medicine, John Radcliffe Hospital, University of Oxford, UK (November 2009).

Ting Aung Win, Nwe Mar N, **Aung Min Thein, Benton K,** Weinstein B, Aung Thant Zin, Htay Maung. *Training is not enough. Challenges in empowering field workers to provide psycho-social support for PLHIV in Myanmar.* 9th ICCAP Bali, Indonesia (August 2009).

Wightman F, Solomon A, Hoy J, Gorry P, Crowe S, Saksena N, Cameron P, Lewin SR. *No decay in HIV-infected naïve CD4+T-cells following antiretroviral therapy (ART): a persistent long term reservoir.* Fourth International Workshop on HIV Persistence During Therapy, St Martin, West Indies (December 2009).

Wright, E. When to START treatment- the neurological perspective. Third Meeting on HIV Infection and the Central Nervous System, Stresa, Italy (October 2009).

Academic Positions and Appointments Formal University Appointments/ Affiliations:

Anderson, DA. Visiting Professor, Rush University Medical Centre, Chicago, USA.

Apostolopoulos, V. Professor, School of Molecular Sciences, Victoria University; Adjunct Associate Professor, Department of Immunology, Monash University; Associate Professor, Department of Pathology, University of Melbourne.

Barry, A. Honourary Senior Lecturer, Monash University.

Cendron, A. Honorary appointment, Department of Pathology, University of Melbourne.

Cherry, CL. Senior Lecturer, Department of Medicine, Monash University.

Churchill, M. Senior Lecturer, Department of Medicine, Monash University.

Crabb, B. Adjunct Professor, Department of Medicine (Central Clinical School) and the Department of Immunology, Faculty of Medicine, Nursing and Health Sciences, Monash University; Adjunct Professor, Faculty of Medicine, The University of Melbourne (since 2008); Adjunct Professor, School of Molecular Sciences, La Trobe University (since 2009).

Crowe, SM. Consultant Physician in Infectious Diseases, The Alfred Hospital; Professor of Medicine, Monash University; NHMRC Principal Research Fellow.

Da Fonseca Pereira, C. Adjunct Senior Lecturer, Monash Micro Imaging, Department of Medicine, Faculty of Medicine, Monash University.

Dietze, P. Senior Research Associate, University of Melbourne, School of Psychology; Public Health Research Fellow, VicHealth, Public Health Research Fellowship Scheme; Career Development Fellowship, National Health and Medical Research Council; Registered Psychologist, Victoria, Psychologists Registration Board.

Drummer, HE. Honorary Lecturer, Department of Microbiology and Immunology, University of Melbourne; Adjunct Senior Lecturer, Department of Microbiology, Monash University. Ffrench, R. Adjunct Associate Professor, Department of Immunology, Monash University.

Gorry, P. Honorary Associate Professor, Department of Microbiology and Immunology, University of Melbourne; Adjunct Associate Professor, Department of Medicine, Monash University.

Gray, N. Adjunct Senior Lecturer, Department of Epidemiology and Preventive Medicine, Monash University.

Hellard, M. Honorary Associate Professor, Department of Epidemiology and Preventive Medicine, Monash University; visiting Infectious Diseases Physician, Royal Melbourne Hospital; visiting Infectious Diseases Physician, Alfred Hospital.

Hogarth, M. Professorial adjunct appointment with Monash University

Jackson, D. Associate Professor, University of Melbourne; Adjunct Professor, Monash University; Professor of Haematology, RMIT University.

Jaworowski, A. Adjunct Associate Professor, Department of Medicine, Monash University; Adjunct Associate Professor, Dept. of Immunology, Monash University.

Lewin, S. Professor of Medicine Monash University; Professor/ Director Infectious Diseases Unit, The Alfred Hospital; NHMRC Practitioner Fellow, SP2; Honorary Professor, Department of Microbiology and Immunology, The University of Melbourne.

Loveland, B. Adjunct Associate Professor, Department of Immunology, Central Clinical School, Faculty of Medicine, Nursing & Health Sciences, Monash University; Principal Fellow, Department of Pathology, University of Melbourne, Faculty of Medicine, Dentistry & Health Sciences; Principal Fellow, Department of Surgery, University of Melbourne - Austin and Northern Hospitals.

Mak, J. Associate Professor, Departments of Microbiology, Biochemistry and Molecular Biology, Monash University.

Natoli, L. Honorary Lecturer, Department of Epidemiology and Preventive Medicine, Monash University

O'Keeffe, M. Adjunct Senior Lecturer, Department of Immunology, Monash University.

Poumbourios, P. Adjunct Senior Lecturer, Department of Microbiology, Monash University.

Powell, M. Honorary appointment, Department of Pathology, University of Melbourne.

Power, R. Adjunct Professor, Department of Epidemiology and Preventive Medicine, Monash University; Professorial Fellow, School of Population Health, University of Melbourne.

Proudfoot, O. Honorary appointment, Department of Pathology, University of Melbourne.

Ramsland, PA. Honorary Principal Research Fellow (Associate Professor), Department of Surgery (Austin and Northern Health), The University of Melbourne; Adjunct Senior Lecturer, Department of Immunology, Monash University.

Reeder, J. Member, Scientific Organising Committee, Molecular Approaches to Malaria; Member, AusAID Malaria Reference Group; Member, Malaria Elimination Group, UCSF Global Health Sciences.

Renkin, L. Adjunct Senior Lecturer, Department of Epidemiology and Preventive Medicine, Monash University

Sonza, C. Adjunct Senior Lecturer, Department of Microbiology, Monash University.

Tachedjan, G. Adjunct Associate Professor, Department of Microbiology and Department of Medicine, Monash University.

Tannock, GA. Emeritus Professor of Virology, RMIT; Visiting Professor, Weatherall Institute for Molecular Medicine, Nuffield Department of Clinical Medicine, University of Oxford, (September-December 2009).

Toole, M. Professor, Department of Epidemiology and Preventive Medicine; Monash University.

Wines, B. Honorary appointment, Department of Pathology, University of Melbourne. Adjunct appointment, Department of Immunology, Monash University.

Other Professional Appointments:

Anderson, DA. Director, See-D4 Pty Ltd; Executive member, Australian Centre for HIV and hepatitis virology (ACH2) (since 2006).

Anderson, JL. Member, Management and Advisory Committee, Monash MicroImaging (since 2008).

Apostolopoulos, V. Patron, Women's Health Network in the West, Victoria University.

Asproloupos, D. Co-chair, Australian Council for International Development, Burma Working Group (2005-2010).

Brown, M. Advisor Monitoring and Evaluation Specialist, China-Australia Health and HIV/AIDS Facility; Burnet PNG representative Child Health Advisory Committee, National Department of Health, Papua New Guinea (since 2007); Burnet PNG representative Interagency Coordinating Committee (for vaccines and immunisation), Papua New Guinea.

Cherry, CL. Member, Alfred Health Research Review Committee (since 2008); Member, Victorian HIV Blood and Tissue Storage Bank Steering Committee (since 2007); Member, Australian National NeuroAIDS Brain and Tissue Storage Bank Steering Committee (since 2002); Chair, Toxicology and Pharmacology Working Group, National Centre for HIV Epidemiology and Clinical Research (NCHECR member since 2001, Chair since 2008); Gilead Sciences HIV Advisory Board (since 2007); Member, Australasian Society for HIV Medicine Models of Care Steering Committee (since 2007).

Churchill, M. Member, Australian National Centre for HIV Epidemiology and Clinical Research (NCHECR) Neurology Working Group (since 2006).

Crabb, B. Crowe, SM. Member, WHO Working Group on Delivery of HIV Prevention. Care and Treatment at Primary Health Centres in High Prevalence, Resource Constrained Settings and accompanying country Adaptation Guide (since 2007); Member, WHO Consultation on HIV Drug Resistance Prevention, Surveillance and Monitoring in the Western Pacific Region, Beijing (since 2007); Invited Member, WHO Technical Consultation on HIV Drug Resistance Prevention, Surveillance and Monitoring in the Western Pacific Region (since 2007); Head, Regional WHO Reference Laboratory for HIV Resistance testing (since 2007); Member, WHO Network for HIV and Health in the Western Pacific Region; Invited Member, WHO HIV Monitoring Technologies Working group Meeting, Chicago; Invited Member, Consensus Meeting on WHO Antiretroviral Therapy Guidelines for Adults and Adolescents, Geneva; Member, Forum for Collaborative Research (George Washington University); Member, Forum for Collaborative HIV Research External Validation of CD4 and Viral Load Assays (2007–2009). National Health and Medical Research Council (NH&MRC) - Program Grant Review Panel - Applied Research; Medical Services Advisory Committee (MSAC); Advisory Panel Member Genotypic Resistance Testing of Antiretrovirals in HIV (GART) (2008-2009).

Dietze, P. Chair, Drug Policy round table; Chair of the injecting drug harm reduction network (2006-2009); deputy Editor, Drug and Alcohol Review.

Dorabjee, J. Consultation Director, Response Beyond Borders, the1st Asian Consultation on the Prevention of HIV related to Drug Use, Goa, India; Chair, South East Asia Regional Workshop, Response Beyond Borders, Asian Consortium on Drugs, HIV & AIDS and Poverty (ACDHAP); member International Reference Group, Dutch Ministry for Development Cooperation, MOFA. Harm Reduction Donor Conference, The Netherlands; International Abstract Review Group, 9th International Congress on AIDS in Asia and the Pacific, (2008 – 2009); International Abstract Reviewer, 20th International Conference on the Reduction of Drug Related Harm, Thailand (2008 – 2009).

Drummer, HE. Treasurer, Australian Centre for Hepatitis Virology.

Ffrench, R. Secretary, Immunology Group of Victoria; Secretary, Australian Centre for Hepatitis Virology; Member, Australasian Society for Immunology; Member, Australian Society for Medical Research. **Gorry, P.** Chair, National Centre for HIV Epidemiology and Clinical Research Neurology Working Group; Member, Asia-Pacific NeuroAIDS Consortium (since 2002); Member, Pfizer Australia Scientific Advisory Board (maraviroc assay).

Hellard, M. InC3 – International Collaboration of Incidence Hepatitis S in Injection Drug users – member of collaboration and on Collaboration Working Group; International "Staying Safe" Collaboration; Hepatitis Expert Writing Group (2009 – 2012) National Strategies; Victorian Government Taskforces of the Sexual Health and Viral Hepatitis; Victorian Government HIV Prevention Evaluation Advisory Group; National HIV, hepatitis and STI Surveillance Committee; NCHECR Viral Hepatitis Working Group (chair); Australian Hepatitis Councils Health Reference Group; Public Health Prisoner Initiative Advisory Committee (Victoria); Justice Health Clinical Advisory Committee; Sidney Myer Health Scholarship Selection Committee.

Hogarth, M. Cancer Council, Venture Grants Committee (since 2008).

Hughes, C. Member Australian Council for International Development (ACFID) Gender Equity Working Group.

Kinner, S. Member, *Public Health Association of Australia (PHAA)* and *Prisoner Health Special Interest Group*; Member, *International Harm Reduction Association (IHRA)* (since 2005); Member, Conference Organising Committee, Justice Health in Australia: Beyond the convict era; Invited attendee, United Nations Office on Drugs and Crime (UNODC) Expert Group Meeting on Drug Data Collection, Vienna (July 2009); Reference Group member, *The Mental Health Problems of Aboriginal and Torres Strait Islander People in Custody* (2008-2009); Member, Technical Expert Group advising national *Prisoner Health Information Group* (since 2005).

Kwarteng, T. Member, Pacific Islands HIV & STI Regional Strategy Resource Group (RSRG) (since 2005); member Independent Grant Assessment Panel, Pacific Islands HIV & STI Regional Response Fund, Secretariat of the Pacific Community (since 2008); member Planning, Monitoring and Evaluation Technical Working Group for Pacific Regional HIV Response.

Lewin, SR. Member, Ministerial Advisory Committee on Blood Borne Viruses and Sexually Transmitted Infections; Deputy Chair, Grant Review Panel (Microbiology), NHMRC; Member, Immune Based Therapies Working Group, National Centre for HIV Epidemiology and Clinical Research (NCHECR); Member, Immunovirology Research Network, Australian Centre for HIV and hepatitis; Member, Basic Science Track, Scientific Organising Committee, 5th International AIDS Society Conference on HIV Pathogenesis, Treatment and Prevention, Cape Town, (2009); Member, Scientific Organising Committee, Fourth International Meeting on HIV-Hepatitis Coinfection, Lisbon (2009); Member, Basic Science Track, Scientific Organising Committee; International AIDS Conference, Vienna, Track A (2009); Invited Member, Immunology Interest Group for INSIGHT (since 2007); Member, Cellular Therapies Advisory Committee, National Health and Medical Research Council (since 2008); Deputy Chair, Grants Review Panel (Microbiology), National Health and Medical Research Council; Member, NHMRC Training Fellowship Review Panel; Member, Ministerial Advisory Committee on Blood Borne Viruses and Sexually Transmitted Infections (since 2008); Member, Immune Based Therapies Group, National Centre for HIV Epidemiology and clinical Research (NCHECR) (since 2004).

Mak, J. Vice President (Cooperate Affairs), Australian Society for Microbiology; Executive, Victorian Infection and Immunity Network.

Morgan, C. Fellow Royal Australian College of Physicians (Paediatrics) (since 2006); member Child Public Health Special Interest Group, RACP (since 2006); co-chair, Australian Council for International Development, Burma Working Group (2005-2010).

Otto, B. Burnet Institute representative AIDS Society of Asia and the Pacific; Purple Sky Network Regional Technical Board, Bangkok Thailand.

Power, R. Chair, Secretariat, Pacific Drug and Alcohol Research Network; International Harm Reduction Association, Program Committee Member; member ANEX Research Advisory Board; member Asia-Pacific Drug Issues Committee, Australian National Committee on Drugs. **Ramsland, PA.** Member of the Oversight Committee for the Bio21 Collaborative Crystallisation Centre; Member of the User Workgroup for the establishment of a Circular Dichroism Beamline at the Australian Synchrotron; Member of the Research Higher Degrees Committee, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne.

Reeder, J. Member of AusAID Malaria Reference Group; Member, Malaria Elimination Group, UCSF Global Health Sciences.

Renkin, L. Member Australian Council for International Development (ACFID) Gender Equity Working Group.

Sonza, S. Adjunct Senior Lecturer, School of Biomedical Sciences, Faculty of Medicine, Nursing and Health Sciences, Monash University.

Tachedjian, G. Adjunct Associate Professor, Monash University Dept of Microbiology and Dept of Medicine; Member of the Australian Society for Microbiology Research Trust Committee; Member of the National Centre for HIV Epidemiology and Clinical Research (NCHECR) Antiretroviral Working Group; ASMR Liaison to the Premiers Award for Health and Medical Research.

Tachedjian, G. Member, National Centre for HIV Epidemiology and Clinical Research (NCHECR) Antiretroviral Working Group (since 2004), Member, ASMR Medical Research Week Victorian Committee (since 2004); ASMR's Liaison to the Premiers Award for Health and Medical Research (since 2005).

Tannock, GA. Member, Australian Influenza Vaccine Committee of the Therapeutic Goods Administration; Consultant/site assessor, National Association of Testing Authorities.

Toole, M. Board Member of Médecins sans Frontières Australia; Board Member of the Three Diseases Fund for Burma/Myanmar. Yangon, Myanmar (since 2007); member of the Technical Review Panel, Global Fund to Fight AIDS, TB, and Malaria. Geneva, Switzerland. (since 2007).

Whitney, R. Co-convenor Australian Council for International Development Africa Working Group (since 2007).

Wright, E. Vice-President of ASHM (2009); Co-Director, Australian National NeuroAIDS Brain and Tissue Storage Bank (since 2002); Member, Victorian HIV Blood and Tissue Storage Bank Steering Committee (since 2005); Treatment Policy Advisor, National Association of People living with HIV/AIDS (since 2008); International Clinical Advisory Committee of Australasian Society of HIV Medicine (since 2010); Co-Chair INSIGHT Neurology Interest Group (since 2008); Member, National Centre HIV Epidemiology and Clinical Research Neurology Working Group (since 2002); Member, Victorian AIDS Council/Gay Men's Health Campaigns Reference Group (since 2009).

Journal Editorial Boards:

Aitken, C. Editorial Board member HIV Medicine Journal Club.

Apostolopoulos, V. Acta Biochimica et Biophysica Sinica (since 2006); Current Medicinal Chemistry (since 2006); Section Editor, Journal of Leukocyte Biology (since 2008); Expert Review of Vaccines (since 2006); Medicinal Chemistry (since 2004); Recent Patents Reviews on Anti-cancer Drug Discovery (since 2005); Self/Nonself: immune recognition and signaling (since 2008); Associate Editor Immunotherapy (since 2008); Regional Editor Recent Patents Reviews on Anti-cancer Drug Discovery (since 2008); Associate Editor Immunotherapy (since 2008); Regional Editor Recent Patents Reviews on Anti-cancer Drug Discovery (since 2009).

Cherry, CL. Editor, *Australasian Society for HIV Medicine Journal Club* (2007-2009); Editor *The Open AIDS Journal* (since 2007); Editorial Board, *The Open AIDS Journal* (since 2008); Editorial Board, *Journal of the International Association of Physicians in AIDS Care.*

Crabb, B. Advisory Board, Faculty1000 Biology Reports; Editorial Board, International Journal for Parasitology; Editorial Board, Journal of Biological Chemistry (since 2006).

Crowe, SM. Editorial Board of Management, *Sexual Health* (since 2003); Journal Editorial Board: *Current HIV Research* (since 2001); *Journal of Infectious Diseases* (since 2002); *Journal of Leukocyte Biology* (since 2008). Section Editor from January 2009; *ARHR* (2009).

Dietze, P. Associate Editor, International Journal of Drug Policy.

Gorry, P. *Current HIV Research* (since 2005); *The Open Microbiology Journal* (since 2007); *Retrovirology* (since 2007); *Infectious Diseases: Research and Treatment* (since 2008); *Immunology and Immunogenetic Insights* (since 2008).

Hogarth, M. *Faculty of 1000* (since 2006); *Journal of Biological Chemistry* (since 2006); *Monoclonal Antibodies Journal* (since 2008).

Jackson, D. Editorial Board Membership, Letters in Drug Design and Discovery. Bentham Science Publishing (since 2006); Editorial Board Membership, Open Hematology Journal. Bentham Science Publishing (since 2007).

Lewin, SR. Sexual Health (Editorial Board 2004); AIDS Care and Sexual Health (Editorial Board 2009); Clinical Immunology (2009).

Mak, J. Retrovirology (since 2004); Virology Journal (since 2004).

Ramsland, PA. Associate Editor, *Journal of Molecular Recognition* (since 2007); Associate Editor, *BMC Structural Biology* (2009); Editorial Board Member, *Molecular Biotechnology* (since 2006); Editorial Board Member, *Molecular Immunology* (2009).

Reeder, J. Scientific Editor, PNG Medical Journal.

Tachedjian, G. *International Journal of Virology* (since 2005); *Current HIV Research* (since 2005); *The Open Microbiology Journal* (since 2007); *AIDS Research and Human Retroviruses* (2009).

Tannock, GA. *Journal of Medical Virology* (since 2001); *Gene Vaccines and Therapy* (since 2003); *Journal of Biomedicine and Biotechnology* (since 2008); *The Open Veterinary Science Journal* (since 2008).

Awards and Prizes

Degrees Awarded:

PhD:

Chang, Judy. *HBV-specific T cell immunity.* Department of Microbiology and Immunology, The University of Melbourne. Primary Supervisor: Sharon Lewin.

Giles, Michelle. *HIV and pregnancy in Australia*. Department of Medicine, Monash University. Primary Supervisor: Sharon Lewin.

Gray, Lachlan. *Viral determinants in HIV neurotropism and neurovirulence.* Department of Microbiology and Immunology, University of Melbourne. Supervisors: P. Gorry and M. Churchill.

Jones, Kate. Host cell factors and reverse transcription of HIV-1 in its natural target cells. Monash University, Department of Biochemistry and Molecular Biology. Supervisor: Johnson Mak. Burnet Scholarship.

Kerr, Deborah. The effectiveness and safety of intranasal naloxone for the treatment of heroin overdose with a view to peer distribution. Monash University, School of Public Health and Preventive Medicine. Supervisor: Paul Dietze.

Lloyd, Belinda. *Longitudinal study of maternal depression and its impact on children.* University of Queensland. Supervisor: Stuart Kinner.

Sterjovski, Jasminka. *Pathogenesis of macrophage tropic HIV-1.* Monash University Department of Medicine, Supervisors: P. Gorry (Principal), M. Churchill, S. Wesselingh (NHMRC funded).

Tong, Yuh Koon. Expression and assembly of the HIV-1 GP 140-duck hepatitis B virus envelope chimeras for virus-like particle vaccines. Phd, Monash University. Co-supervisor with Elizabeth Grgacic. Monash University International Student Scholarship.

Honours:

Al-Hammad, Yousef. *Conformations and antigenicity of the HCV glycoprotein E2 receptor binding domain.* Monash University, Department of Microbiology, Supervisor: Heidi Drummer.

Feigin, Anita. *Khat Use and Its Impact on African Communities in Melbourne*. University of Melbourne; Department of Medicine. Supervisors: Margaret Hellard and Paul Dietze.

luga, Andreea. *Population structure of genes encoding erythocytebinding antigen 175 (EBA-175) in Papua New Guinea*. Monash University, Department of Immunology. Supervisor: Alyssa Barry.

Jeremiah, Josephine. *Neurological disease in HIV patients in Botswana*. Monash University Supervisors: Catherine Cherry (Burnet/Monash) and Andrew Steenhoff (Botswana).

Santoso, Devy. *B cell responses against Hepatitis C infection in injecting drug users.* Monash University, Department of Immunology, supervised by Rosemary Ffrench.

Telewatte, Sushama. Investigation of the Role of SR Proteins in HIV-1 replication and 2kb mRNA expression in Macrophages, Monash University, Department of Microbiology. Supervisors: S. Sonza (Principal) and G. Tachedjian.

Wong, Chin Long. *Investigating virion-associated host cellular factors in retroviruses.* Monash University, Department of Microbiology. Supervisor: Johnson Mak and Paula Ellenberg.

Degrees in Progress:

PhD:

Bellamy McIntyre, Anna. *Receptor activated conformations of the gp120-gp41 glycoprotein complex of HIV-1. Monash University. Department of Microbiology.* Supervisors: Andy Poumbourios (Principal) and Heidi Drummer. Monash Graduate Research Scholarship.

Bullen, Hayley. The characterisation of a novel family of invasion associated membrane proteins in Apicomplexan parasites with particular focus on those found in Plasmodium falciparum and Toxoplasma gondii. The University of Melbourne, Department of Medicine. Supervisors: Brendan Crabb and Paul Gilson

Chang, Christina. *The pathogenesis of cryptococcal immune restoration disease in HIV-infected patients in South Africa.* Monash University, Monash Postgraduate Fellowship, Principal Supervisor Sharon Lewin.

Cowley, Daniel. *Molecular studies of the astrocyte reservoir of HIV-1 in the central nervous system.* Monash University, Department on Medicine. Supervisors: Melissa Churchill, Steve Wesselingh.

Dean, Johanna. *Role of thiol disulfide isomerization in hepatitis C virus entry.* Monash University. Department of Microbiology. Supervisors: Heidi Drummer (Principal) and Andy Poumbourios. Monash Graduate Research Scholarship.

Desmond Christopher. *Relationship between HLA type and hepatitis B virus evolution.* Monash University. Principal Supervisor: Sharon Lewin. NHMRC postgraduate fellowship.

Evans, Vanessa. *DC-T cell interactions in HIV-1 Pathogenesis*. Monash University, Department of Medicine, Sharon R. Lewin (Principal Supervisor), Paul Cameron, Monash Graduate Scholarship.

Flynn, Jacqueline. *Stimulation and maintenance of effector T cell responses in acute Hepatitis C infection.* Co-supervisors: Rose Ffrench (principal supervisor) and David Anderson and Monash University, Department of Immunology. NHMRC Dora Lush Scholarship.

Gold, Judy. *The medium and the message: an investigation of how youth access, interpret and implement sexual health information.* Monash University, Department of Epidemiology. Supervisors: Margaret Hellard, Jane Hocking (Uni of Melb), Louise Keogh (Uni of Melb). APA Scholarship.

Gorzin, Ali. *The role of the NS2 protein in the Hepatitis C virus life cycle.* Monash University, Department of Microbiology, Eric Gowans (Principal Supervisor), Gilda Tachedjian, Paul Ramsland. Iranian Ministry of Health.

Gouklani, Hamed. Functional interactions of the structural and non structural proteins of HCV in virus entry and replication. Monash University. Department of Microbiology, Supervisor Heidi Drummer (Principal) and Andy Poumbourios. International student scholarship from the Ministry of Health, Iranian government.

Hawkes, David. Lipid biology of HIV, Monash University, Department of Biochemistry and Molecular Biology. Supervisor: Johnson Mak. Burnet Scholarship. **Iser, David.** *The pathogenesis of liver disease in HIV-HBV co-infection.* Department of Medicine, St Vincent's Hospital. University of Melbourne. Principal Supervisor Sharon Lewin, Co-supervisors: Paul Desmond, Stephen Locarnini.

Khasawneh, Ashraf. *Studies on the activation mechanism of the HIV-1 membrane fusion glycoprotein, gp41.* Monash University. Department of Microbiology, Supervisors: Andy Poumbourios (Principal) and Heidi Drummer. International student scholarship from Hashemite University of Jordan.

Khoury, Gabriela. *Naive T cell homeostasis in the setting of HIV.* Sharon Lewin and Paul Cameron (Supervisors); NHMRC Biomedical Research Postgraduate Scholarship.

Kim, Hyunsuh. An analysis of mechanisms for the enhancement of yields of influenza B viruses in the preparation of human vaccines. RMIT University. G.A. Tannock (Principal Supervisor), S. Rockman (CSL Ltd), D. Anderson, Fully funded grant from CSL Ltd.

La, Jennifer. *Identification of small molecule inhibitors of the HIV-1 reverse transcriptase.* Monash University, Faculty of Pharmacy and Pharmaceutical Sciences. Supervisors: David Chalmers (Principal) and Gilda Tachedjian (Joint Supervisor 50:50), Monash Faculty Scholarship.

Latour, Phillipe. Optimisation of an Immunotherapy to treat persistent Hepatitis C Virus infection. Monash University, Department of Microbiology. Supervisors: Shuo Li (Principal) and Eric Gowans. Burnet Institute Scholarship.

Lichtfuss, Gregor. *HiACT - Signals though ITAM*. Monash University, Dept. of Medicine, Supervisors: Suzanne Crowe (Principal), Anthony Jaworowski, Sharon R. Lewin. Monash International Postgraduate Scholarship.

McCaffrey, Kathleen. Biochemical characterization of the HCV glycoprotein E2 minimal core domain for vaccine studies. Melbourne University. Department of Microbiology and Immunology. Supervisors: Heidi Drummer (Principal) and Andy Poumbourios; Departmental Supervisor: B. Coulson. NHMRC Dora Lush Postgraduate scholarship.

Pedrana, Alisa. Understanding HIV risk among men who have sex with men in Victoria. Monash University, Department of Epidemiology and Preventative Medicine. Supervisors: Mark Stoove (principal), Margaret Hellard, Rebecca Guy. NHMRC Postgraduate Scholarship and Sidney Myer Public Health Scholarship.

Quinn, Brendan. *The Un-MET Study: Understanding the barriers to health service and treatment utilisation for methamphetamine users.* Monash University, Monash Institute of Health Services Research. Superisors: Paul Dietze, Mark Stoove. NHMRC Scholarship.

Raijasuriar, Reena. Biological determinants of immune reconstitution following long-term suppressive antiretroviral therapy (ART). Monash University, Department of Medicine. Supervisors: Sharon Lewin (Principal), Paul Cameron, Malaysian Government.

Roche, Michael. H/V Entry and Its Inhibition. Monash University Department of Medicine, Supervisors: P. Gorry and M. Churchill.

Smyth, Redmond. *Retroviral recombination*. Monash University, Department of Biochemistry and Molecular Biology. Supervisor: Johnson Mak. Kings College London Northcote Scholarship.

Taechalertpaisam, Tana. *Investigation of human erythrocyte invasion by Plasmodium falciparum.* The University of Melbourne. Supervisors: Brendan Crabb and Paul Gilson.

Tippett, Emma. *The role of the 16+ monocyte subset in pathogenesis of HIV-1.* Co-supervisors: Sharon Lewin and Paul Cameron. Monash University.

Wapling, Johanna. The role of highly conserved reverse transcriptase (*RT*) residues in *RT* dimerisation, maturation and HIV-1 replication. Monash University, Department of Microbiology. Supervisors: Gilda Tachedjian (Principal) and Peter Wright, APA and Burnet funded.

Wong, Sook San. *Studies of the ion channel activity of M protein of dengue virus.* University of Melbourne. Supervisor: Eric Gowans.

Yang, Eunice. *Targeting oncoproteins by combined immunotherapy for breast and prostate cancers*. University of Melbourne, Pathology Department. Supervisor: Associate Professor Bruce Loveland.

Yap, Soo Huey. Novel drug resistance mutations in the HIV-1 reverse transcriptase. Monash University, School of Applied Sciences, Supervisors: Gilda Tachedjian (Principal), Nicholas Deacon, Rose Ffrench. Monash Graduate Scholarship (International).

Masters:

Andrews, Jessica. Masters of Public Health, Monash University, School of Epidemiology and Preventative Medicine.

Bowring, Anna. *Masters of Applied Epidemiology*. Australian National University, National Centre for Epidemiology and Population Health.

Kong, Ying Ying. *Function of immune cells in a cancer environment.* Monash University, Department of Immunology, Vasso Apostolopoulos and Magdalena Plebanski, (Lab funded).

Lau, Wai. Development of a novel assay to determine HIV co-receptor use. Faculty of Business and Economics, Monash University. Principal Supervisor Sharon Lewin.

Martinez, Natalia. Development of a novel assay to determine HIV co-receptor use. Faculty of Business and Economics, Monash University. Principal Supervisor Sharon Lewin. Full-time.

Perret, Jennifer. *Immune responses and cytokines in chronic obstructive pulmonary disease.* University of Melbourne, Department of Pathology, Vasso Apostolopoulos and Christine McDonald, (Lab funded).

Pfeifer, Sanne. Uncoating of HIV through visualization of multiple HIV proteins and host cell factors. Wageningen University, Department of Microbiology, the Netherlands. Full-time. Supervisors Johnson Mak and Candida da Fonseca Pereira.

Sacks Davis, Rachel. Master of Public Health (coursework), Monash University, Department of Epidemiology and Preventative Medicine.

van Gemert, Caroline. Masters of Applied Epidemiology, National Centre for Epidemiology and Population Health, Australian National University.

Wilkinson, Anna. *Incidence of Chlamydia in MSM: an analysis of existing sentinel surveillance data.* Masters of Public Health, School of population health, University of Melbourne.

Winter, Rebecca. Master of Public Health (coursework), Latrobe University, School of Public Health, Faculty of Health Sciences.

Honours:

Hall, Katie. Sex on the Beach: a feasibility study of outreach sexual health testing among Victorian schoolies. University of Melbourne. Supervisor: Margaret Hellard.

Heaton, Steve. *Structural and functional analysis of retroviral Gag polyproteins.* Monash University, Department of Biochemistry and Molecular Biology. Supervisors: Johnson Mak and Marcel Hijnen.

Ngo, Chloe. Structural and Functional Investigation of Evasion of IgA Immunity by Staphylococcus Aureus. The University of Melbourne, Department of Pathology, Supervisors: Ramsland, P.A. (principal supervisor) and Wines, B.D.

O'Neill, Anthea. Understanding ligand-induced high-affinity IgE receptor (FceRI) stabilisation. University of Melbourne, Department of Pharmacology. Supervisors: Mackay, G. and Wines, B.D.

Tan, Yick Siew. Lactic acid as a natural microbicide against human immunodeficiency virus. Monash University, Department of Microbiology. Supervisors: Gilda Tachedjian (Principal), Con Sonza and Jenny Anderson.

Other Awards and Prizes:

Cherry, CL. National Health and Medical Research Council Career Development Award. *Understanding the side effects of HAART in HIV patients:* \$90,500 per year (2009-2012).

Crabb, B. Bancroft-Mackerras Medal, Australian Society for Parasitology; Melbourne Top 100 most Influential People, The Age Magazine.

Cowley, D. Young Investigator Award, Conference on Retroviruses and Opportunistic infections, Montreal: USD\$1500; Young Investigator Travel Award, International Conference on Neurovirology, Miami: USD\$1500; Monash Postgraduate Travel Award: \$2115. **Dean, J.** Young Investigator Travel Award, International HCV Conference: \$1900; Burnet Virology Travel Award: \$3500; Australian Virology Group Student Award: \$500.

Drummer, HE. Inaugural Gust-McKenzie Award, Burnet Institute: \$2,000.

Eduard V and Ryan C. Best Basic Science Oral presentation ASHM, Australasian HIV/AIDS Conference: \$600.

Flynn, J. ACH2 Hepatitis award: \$500; Alfred Research week Infectious Diseases poster prize: \$200; AMREP postgraduate research symposium: \$100; FIMSA postgraduate workshop travel award: \$750; Monash postgraduate travel award, International HCV conference: \$2165.

Gorry, P. NHMRC Level 2 Career Development Award: \$400,000 (2009–2012).

Gray, L. Young Investigator Award, Conference on Retroviruses and Opportunistic infections, Montreal, Canada: US\$1500.

Greengrass, V. Oral Presentation award, Australasian HIV/AIDS conference: \$700.

Jones, K. Harold Mitchell Post-Doctoral Travel Award: \$5,000; Australian Society for HIV and Hepatitis Virology Junior Post-Doctoral Award: \$1,000.

Kinner, S. Australian Public Health Post-Doctoral Training Fellowship (2006 – 2009); *Monitoring and improving the health of ex-prisoners*. NHMRC Travelling Award: \$12,500.

Lichtfuss, G. ASHM Conference Travel Award: \$1,500; Best Basic Science Oral presentation, Australasian HIV/AIDS conference: \$600.

Rajasuriar, R. Young Investigator Award 2009. Conference on Retroviruses and Opportunistic Infections, Montreal, Canada: USD\$1500.

Renkin, L. Ian Potter Foundation scholarship, Asialink Leaders Program 2009: \$3500.

Roche, M. ACH2 Student Award; Qiagen Junior Scientist Award: \$500.

Sterjovski, J. ACH2 2009 Conference Presentation Award: \$500.

Tannock, GA. Short-term grant from the Royal Society, Weatherall Institute for Molecular Medicine, John Radcliffe Hospital, University of Oxford: UK £3,910 (September-December 2009).

Tippett, E. Best Basic Science Oral presentation ASHM, Australasian HIV/AIDS Conference: \$600.

Wang, SS. Monash University Postgraduate Travel Award for 16th International Symposium on Hepatitis C Virus and Related Viruses, Nice, France: \$2,100.

Westhorpe, C. 1st prize for oral presentation, *Effects of HIV-1 infection in vitro on transendothelial migration by cells of macrophage lineage.* Monash University Clinical and Eastern School Postgraduate Symposium: \$400.

Wright, E. Research Project Award by the Victorian Branch of PLWHA (2009).

In appreciation of those who support our work

Our Ambassadors

The Burnet Institute acknowledges the support of two recently appointed Ambassadors. Collingwood footballer Heritier 'Harry' O'Brien joined the Institute as a Youth Ambassador and travelled to Mozambique to experience first-hand Burnet's work there.

Elite athlete and HIV-positive mother of two, Deanna Blegg, recently joined us as an Ambassador to promote our programs in PNG and the 'Go for your life' Melbourne City Romp.

Heritier recently remarked that "...I like it that Burnet does not tell young people what to do but builds qualities like assertiveness, confidence, and respect for the opposite sex...while giving them the knowledge to protect themselves."



Burnet's Ambassador Deanna Blegg and Youth Ambassador Heritier 'Harry' O'Brien at a Burnet World AIDS Day fundraiser.



Harry chats with 'Cats' fan and Burnet staff member, Dyson Simmons, at a footy grand final event at Burnet.



Deanna Blegg with the women of the Waterais village in Markham Valley, during her trip to PNG.

Our Donors

The Burnet Institute was delighted to be the recipient of a number of major gifts and more than **1,500 donations** during 2009. The impact that these donations make to the Institute is enormous, enabling our scientists and public health staff to initiate new and progress many existing programs as well as to purchase equipment needed to keep the Institute abreast with technological advances.

We would like to especially acknowledge all of our donors and in-kind supporters for their generosity, especially at a time when the impact of the Global Financial Crisis was being felt by many around the world. In addition, a special acknowledgement and thank you to those supporters who left a **legacy to the Institute in their Will.** This level of commitment and support for our on-going work is very much appreciated and we feel especially honoured to receive such gifts. Leaving a bequest to the Institute does help us plan well into the future and provides funding for the establishment of many new programs.



Counsellor training manuals written in both Portuguese and English make a huge difference in curbing the spread of HIV and AIDS in Mozambique.

• Every year, we rely on the generosity of our donors to help us continue our work; every contribution, no matter how small, assists us to make a tangible and sustainable impact on people's health. 9 We were delighted to receive donations from a number of schools especially Methodist Ladies College and Mowbray Secondary College, the students of which nominated Burnet to be the recipient of special fundraisers for **World AIDS Day**. The willingness to help and the level of concern by these young people for those people living with HIV and AIDS in resource-poor communities, is enormously inspiring.

Of special note, we would like to acknowledge the generosity of the Janina and Bill Amiet Foundation in assisting in funding the fit-out of the Bio-organic and Medicinal Chemistry Laboratory in our new building, salaries of a number of senior cancer research staff and the purchase of a number of items of equipment. The Foundation's thoughtfulness and its willingness to support our work is most appreciated.



In memory of the late Mrs Janina Amiet, the Janina and Bill Amiet Foundation has generously supported the Institute for many years.

We also acknowledge the Drakensberg Trust for the financial support of the Institute's program in Mozambique, helping to strengthen the civil-society response to HIV and AIDS. This support has enabled the Institute to build the capacity of local non-government organisations to respond to the many issues associated with the HIV epidemic in this country. This funding has enabled the Institute to continue its training programs; **provide peer education** with sex workers and their clients; implement community education and counselling on issues associated with HIV and AIDS; and provide treatment for sexually transmitted infectious diseases through our night clinic in Manica Province.

These are just few examples of how financial support received from our donors can help to make a huge difference to the lives of many people in the world whether through direct public health programs or through specific research programs that provide a tangible benefit for the community.



Laboratory tours and donor luncheons are a great way to show our appreciation.

In Appreciation: our very generous donors

Individuals

\$50,000+ Amiet, JW Xipell, E

\$20,001 – \$50,000 Flower, MJ

\$5,001 – \$20,000 Savage, J

\$1,001 – \$5,000 Alabaster, RL Allen, D

Baevski, I Bartlett, PW Bowman, MM Cameron, E Cherry, E & D Edwards, MJ & SE Gantner, N Gjergja, GS Goddard, BH Harrison, J Lacey, T Paterson, IH Phiddian, H Reid. MC Sawyer, B Smith, BM Tabak, M & R Thomas, J Yeung, DC

\$501 – \$1,000 Ashcroft, RW

Athersmith, F Awburn, V Blair, GR Cherry, K Clarke, RJ Cogswell, BG Cumming, J Di Paola, G Gordon, S Guilfoyle, H Keir, W Kilcullen, M Magree, F Millard, J Miller, WH Moss. RI & GK Moxham, EK Murphy, F Pawsev, I Roach, LI Stringer, J Vaughan, C \$101 - 500 Abbot, A & J

Albiston, M Allison. B Anderson, D Anderson, MI Andrew, M Annand, AS Anson. R Bailev. D Bailey, LJ Bainbridge, IK Barry, P Bartholomeusz, K Baumber, JM Beaman. S Beecher, D Beever, CI Belcher, NC Bender, R Bernhard, WK Berry, PI & I Berryman, N Blackmore, D Bland, IW Borsitzky, B Bos, D Bouris, A Bourke, J Brennan, S Bromley, J Brooke, DB Brown, M Brown, N Bullen, P Butt, EM Cairns, EJ Carroll, H Carvell, J Castles, J Cattach, K Champness, J Chang, M Charlton, WE Charlwood, AC Chen. M Christie, R Clarke, T Cochaud, L Cole, J Coppel, M Coulson, H Coulson, S Courtenay, GE Cousland, P Crosby, FM Crowe, S Crutch, R Cubbins, JL Darby, P Davey, G

Day, ES Dillon, E Dixon, T Dowsev. G Easton, BA & EM Emmerson, JM, QC Enting, G Fairweather, G Fethers, B Firestone, A Foo, T Fowler, EA Francis, P Furneaux, C Gabor, S Gains. P Gawler, D Gee. M George, L Gibb, DDV Glascodine, BL Goodrich, RA & A Grail, B Grail, M Grave, PA Gray, YM Greening, RA Guinness, E Hagger, M Haig, DA Hall. UI Harbig, R Hargreaves, E & G Harris, JM Harrison, L Haskett, N Hatch, K Heaton-Harris, DJ Heitmann, HM Henderson, ME Herring, ML Hewitt Lees, B Hopkins, TJ Hotton. G Hoult, R Howey, HM Hyams, SH Iseli, C Jacka, P Jamieson, RGA Janes, MR Jeffs, V Joffe, N Johnson, D & L Johnston, N Kellv. M Kennan, H Kimpton, SF Kimpton, ZM

Kostopoulos, N Kovacs, [&] Lander, IM Lawry, B Lazarus, LS Le. P Lemon, P Lenders, J Linsten, D & BM Loder. R Lush, M Mabbitt, MH, OAM MacDonald, R Macindoe, A Marek, I McCloskev, I McCulloch, RS McDougall, M McKellar, SE Mellen, T Mijch, A Miller. GF Miller, N Miller, RG Miller, SP Milliken, EP Milne, J Moir, G Moore, J Morgan, T Morsby, N Murray, GA & BA Newman, M Northrop, R Parker, J Parnell, B & J Paskos, DB Pelling, W Poulton, S Power, F Probert, JKS Punshon, KJ Rathbone, P Ray, K Richards, R Riddell, P Riddiford, ESR Riley, GA Roberts-Thomson, P Robinson, I Rodd, NH Rogers, JJ Ross, CS & CM Rowlev, P Saddington, AR Sanderson, IG Sandland, M Saunder, A Savige, S

Scaife, E Scarff. AW Secomb, G Semler. R Sharman, GS Sharpe, KE Shaw, A Sheehan. K Shepard, PJ Silverstone, M Sime, H Slutzkin, J Smith, S Sprague, AA Spry, M Stewart, ME Sutton, A & B Swain, E Swan, G Sweet. B Taft, R Tapsall, MA Taylor, AG Taylor, B Taylor, I & S Taylor, R Taylor, RB Tymms, AGM Van Veenendaal. A Ward, N Weatherly, RE Wells. M Westaway, NM Whitehall, E Whitney, R Wicks, WG Williams, EM Wilson, CW Wilson, G Wilson, MJ Wilson, WP Wood, FE Woodside, J Woollev, I Wratten, G Zerbe, EL

Corporates

Arnold Bloch Liebler Binks & Associates Pty Ltd JWR & MM Bristow Pty Ltd Byfields Accountants & Financial Advisers Delta Sales Pty Ltd Maximum Adventure Morton Nominees Pty Ltd NAB Personal Banking, Marketing & Research Team National Australia Bank - BPA Marketing Dept Oxygené Branding and Communications Qmani Rapid Ascent - Rainforest Ride **Ritchies Stores** SmartSalary Pty Limited Springwaters Pty Ltd

Estates

Thomas John Beresford Will Trust Estate of Jack Frederick Gale Estate of Kenneth Walter Holmes Estate of Nada Hunter Estate of Edna May Hutty Estate of Rona Dorothy Robertson

Schools and Organisations

All Souls Opportunity Shop Beauties and the Beast Methodist Ladies College Motafrenz Car Club Inc Mowbray College Order of the Amaranth Victorian Bridge Association

Trusts and Foundations

ANZ Trustees Foundation – Pat La Manna OAM Cancer/Stroke Research Legacy ANZ Trustees Foundation - Wadham Family Gift Account Bachrach Charitable Trust Bell Charitable Fund **BHP Billiton Matched Giving Program Bradshaw Foundation Trust** CASS Foundation Ltd Commonwealth Bank Staff **Community Fund Drakensberg Trust** Felix Hiller Charitable Trust **Finkel Foundation** Fonda Family Charitable Foundation Gandel Charitable Trust Goldman Sachs JBWere Foundation Goldschlager Family Charitable Foundation Harold and Cora Brennen Trust Harold Mitchell Foundation Helen Macpherson Smith Trust Invergowrie Foundation Ivy H Thomas and Arthur A Thomas Trust Janina and Bill Amiet Foundation Joe White Bequest Joyce Adelaide Healey Charitable Trust Fund Kel and Rosie Day Foundation **Kimberley Foundation**

Lord Mayor's Charitable Foundation Matsarol Foundation Melbourne Community Foundation Miller Foundation Nancy E Pendergast Charitable Trust Fund Orloff Family Charitable Trust Ray and Joyce Uebergang Foundation Rebecca L Cooper Medical Research Foundation Ltd Robert Christie Foundation S.T.A.F. – Thomas & Fraser Samuel Nissen Charitable Foundation Snowy Nominees Pty Ltd William Angliss (Vic) Charitable Fund

Charitable Foundation

Gifts in Kind

Bosom Buddies Ball

2XU AJA Akita Annette Sanfilippo Millinery Art Arthur Murray Dance Studios Australian Diamond Company Aveda Belgian Beer Café Eureka Bendon Berwick Tattslotto and Fine Jewellery **Big Chunks Bob Jane T-Marts BodyPhysics** Brad Blaze Clamms Seafood Contours Hawthorn **Cooper's Freight Management David Nutter Ford** Debra Cooper Design Trio on Bourke Fifth Avenue Collection Fiona's of Mornington Boutique FOG Bar & Restaurant Geoff and Di Double **Glenmar** Cottages **Glenmar Financial Services Glenmar Wines** Go West Tours Golf Australia Harry O'Brien InterContinental Hotels Group Jane Kempe Japanese Mountain Retreat Jewish Museum of Australia Jills Talking Heads Joy Voice Pty Ltd Kaye Jones and Ginia lingerie La Cacciatore Laika Man Alive Social Interactions McMillan Shakespeare Ltd/Maxia My Car Melway Mt Buller Resort Napoleon Perdis Nine Network Australia Oakfern Tree Care Paris GO Bistro Penguin Peter Rowland Catering Puffing Billy

QTgirl Revlon Robert Piccoli Photography **Rockford Wines** Sanela Diambegovic Sharp Corporation of Australia St Anne's Winerv Subaru Melbourne Tahbilk The Bouzy Rouge Hotel The Chocolate Master The Computer Initiatives Thrive Personal Training Trimmings and Remnants Village Cinemas Knox Western Bulldogs FC Yiannis Tavern

Golf Day – Melbourne

Arbormaster Parks and Gardens Artist Photographer Berwick Village Travel & Cruise **Bob Jane T-Marts Cannings Outdoor Power Equipment** Cell to Cell Mobile Phones **David Nutter Ford** Fashion Brands Oakfern Tree Care Piccoli Photography RACV **Rankins Direct** Seasol Pty Ltd Spring Valley Golf Club St Kilda Road Parkview Hotel Stay Cool Heating & Air conditioning Subaru Fountain Gate The Metropolitan Golf Club Victoria Pty Ltd Xerox Business Centre South East



Burnet engages in many and varied activities to promote the important work we undertake here in Australia and globally. Whether it's a major event like the Melbourne City Romp or a presentation to a Secondary College, engaging with the community assists us to raise our profile and also the much needed funds to keep our work going. Below are a few examples of the activities we undertook during 2009.



for Population Health a valuable opportunity to gather data on sexual risk behaviour and drug use.

3. Potential students chat to Centre for Population Health staff about undertaking studies at Burnet. 4. A golf day at prestigious Kingston Heath raised funds for

Burnet's breast cancer research. 5. David Bridie and the Moab String Band visit Burnet as part of

the Australasian World Music Expo 6. Burnet's stand at the Anaconda Adventure Race Series,

Lorne

7. John Rosenthal from the Rotary Club of Berwick presents Brendan Crabb and Mark Hogarth with a cheque at the 2009 Bosom Buddies Ball.

Burnet Oration – an annual key-note lecture aimed at a wide community audience, addressing topical health and research issues. Sir Gustav Nossal presented the 2009 Burnet Oration.

Sex, Drugs and Rock'n'Roll at the Big Day Out – Burnet's study of sexual health, drug risk behaviour/s in young people attending a music festival; this serves also as a forum for raising awareness of Burnet's research in these areas and elicits strong support amongst festival attendees.

Burnet offers **post-graduate training** by actively teaching more than nine subject areas in the Masters of Public Health offered by Melbourne and Monash Universities. This teaching capability allows the training of public health students for the implementation of public health strategies and programs in national and international settings.

Annual Golf Days – Melbourne and Gold Coast – Primarily fundraisers for Burnet's work with breast cancer, the event also promotes awareness of the general work of the Institute. As a rule the events engage with those from medium to small enterprises.

Australasian World Music Expo – AWME is the Australia-Pacific region's premier music industry conference and showcase of Indigenous, roots and world music. In 2009 the event attracted more than 9,000 participants and Burnet was their preferred charity and promoted its work throughout the four-day event.

Anaconda Adventure Race Series and Rainforest Ride – Rapid Ascent have chosen Burnet as the charity partner for their series of off-road sporting events including the Anaconda Adventure Race International Series. These national events involve swimming, kayaking, mountain biking and running. We promote Burnet's work from a marquee, and fundraise by selling merchandise and raffle tickets. We are also involved in the same capacity with Rapid Ascent's Annual Rainforest Ride.

Bosom Buddies Ball – This annual black-tie fundraiser is in its 16th year with funds and awareness focused on Burnet's work with breast cancer.



Support our Work



A Bequest – vital for our future research

Your support is very important...

At Burnet, everything we do is focused on making a sustainable difference to people's health, in Australia and around the world.

Burnet's culture links innovative discovery-oriented research with development and humanitarian action. We integrate our world-class laboratory and field-based research into multidisciplinary programs to prevent, detect and treat diseases of global significance. This unique approach allows us to make a tangible and sustainable impact on health in both developed and developing countries.

... and this is why we need your support

Every year, we rely on the generosity of Australians' to enable us to continue our work. Scientists at Burnet are working hard to study, through innovative programs, the prevalence, transmission and impact of infectious diseases (such as hepatitis, HIV, influenza, malaria and tuberculosis), cancers (such as breast, ovarian, prostate and blood cancers), and autoimmune diseases (such as rheumatoid arthritis and lupus).

Did you know that infectious diseases such as HIV, malaria and turberculosis cause the dealth of some 11 million people every year? Many of these deaths can be prevented with adequate education, vaccination or treatment programs.

In addition to working with long-established diseases, we must also be ready for outbreaks of potentially catastrophic new diseases such as the H1N1 (swine flu) pandemic.

At Burnet, we also undertake innovative epidemiological research, working at international and regional levels, and with governments, civil society and communities in more than 15 countries. We build capacity and strengthen health services to reduce the impact of major health problems

Our scientists have implemented clinical trials for hepatitis C and cancer vaccines, and developed a range of drugs and vaccines for other infectious diseases – tangible benefits for use world-wide.

We hope you can consider these opportunities to help Burnet when you sit down to write your Will.

You can be assured that your bequest, regardless of form or amount, will make a real difference to Burnet's future planning and programs.

A Will declared **before your death** gives the Burnet the chance to thank you, and allow you to be specific about its application – if you wish.

Suggested wording:

I bequeath the sum of \$ (or, part/total of the estate's revenue) to the Macfarlane Burnet Institute for Medical Research and Public Health Ltd to be applied, at the discretion of, and for the purposes of the Burnet Institute (or as directed by the donor).



Australia

Head Office 85 Commercial Road, Melbourne, Victoria 3004 T: + 61 3 9282 2111 F + 61 3 9282 2100 E: info@burnet.edu.au

www.burnet.edu.au

A.B.N. 49 007 349 984

Overseas Offices

The Burnet Institute has offices in Africa, South East Asia, The Pacific region and China (Tibet).

For more information about our work overseas or to contact our international offices please email **info@burnet.edu.au** or call us on **+ 61 3 9282 2111**

FIJI – BURNET PACIFIC REGIONAL OFFICE

Suva PO Box 2372, Government Building Suva, Fiji

THAILAND – BURNET ASIA REGIONAL OFFICE Bangkok

United Center, Level 43, 323 Silom Road Bangrak, Bangkok 10500, Thailand

BURMA (MYANMAR) No 226, 4th Floor, 226 Wizaya Plaza U Wisara Road, Bahan Township Yangon, Myanmar

CHINA (TIBET)

Baofa Hotel, No 6 Hong Qi Road Lhasa 850000, TAR China

INDONESIA

Jalan Raya Bypass Ngurah Rai No. 287 Sanur, Bali 80228 Indonesia

Jakarta Jalan Bendungan Asahan II No 7

Bendungan Hilir Jakarta Pusat 10210, Indonesia

LAO PDR Luangprabang Road, Building 06,2A/03 Ban Sihom, Vientiane, Lao PDR

MOZAMBIQUE

Maputo Praceta Tomà Ndude No 22 1st floor, Maputo Mozambique

Chimoio Rua 16 de Junho, 360 Chimoio/Manica, Mozambique

PAPUA NEW GUINEA Port Moresby Bank South Pacific (BSP) Building Level 2, Nita Street, Boroko, Port Moresby

Kokopo PO Box 1458, Kokopo Post Office East New Britain