



NATIONAL CENTRE IN
HIV EPIDEMIOLOGY &
CLINICAL RESEARCH



ANNUAL REPORT 2009





Contents

Foreword	1
Research activities	
Surveillance program	2
Therapeutic and Vaccine Research Program	7
HIV Epidemiology and Prevention Program	10
Viral Hepatitis Clinical Research Program	13
Viral Hepatitis Epidemiology and Prevention Program	16
Sexual Health Program	19
Aboriginal and Torres Strait Islander Health Program	22
Biostatistics and Databases Program	25
Immunovirology and Pathogenesis Program	30
International projects	34
Advisory committees	38
External boards, committees and advisory groups	43
Staff, affiliated researchers and student placements	47
Education and training	50
Collaborating organisations	52
Disclosure of financial relationships and consulting	57
Funding	58
Research grants	60
Conference presentations	62
Publications	68

Foreword

The National Centre in HIV Epidemiology and Clinical Research had a very solid year in 2009, with substantial recognition of our work from the National Health and Medical Research Council, and other infrastructure support.

An exciting collaboration between our organisation and the Universities of Melbourne, Adelaide and Western Australia was brought to fruition by a substantial NHMRC program grant for a program titled HIV and HCV Vaccines and Immunopathogenesis. The five-year grant began in January 2009 and addresses the urgent global health priorities concerning the development of vaccines and better treatments for HIV and hepatitis C. The program brings together a team of researchers with skills in basic virology and immunology with those providing expertise in translating findings in the lab into human clinical trials. Output for the first year of the program grant has been one book, six book chapters and 27 journal publications co-authored by the CIs from the program grant – a great measure of the collaborative effort.

Another substantial five-year NHMRC Program Grant, to begin in 2010, is titled Sexually Transmitted Infections: Causes, Consequences and Interventions. National Centre investigators will work with colleagues at the University of Melbourne to examine methods of prevention and management of sexually transmitted infections, which are important causes of serious illness and death in Australia and overseas; particularly affected in Australia are young people, Aboriginal and Torres Strait Islander communities, and homosexual men.

In addition, during 2009 we joined with St Vincent's Centre for Applied Medical Research to form an Institute, with the working name Institute of Virology, which we hope will enhance our joint research efforts. An independent organisation with a joint management structure, the Institute brings together our overlapping research, clinical and laboratory services.

This year we farewelled our longtime Administrator, Bronwen Turner. Bronwen made an immeasurable contribution to the development and life of the National Centre over 18 years and her presence is greatly missed.

The National Centre's achievements can in part be measured by the achievements of our staff in the lists of publications and presentations and other measures of professional recognition noted in this annual report. I thank all of them for their contribution, and I also thank the Faculty of Medicine at The University of New South Wales for its continuing support for our work.



DAVID COOPER

Director's office



Janette Button



Damien Cordery



John Wilkinson



Louisa Wright

Surveillance and Evaluation Program for Public Health

2009 saw the formation of the Surveillance and Evaluation Program for Public Health (SEPPH) with

Associate Professor David Wilson as its head. David had been with NCHECR's Biostatistics and Databases Program for two years and is recognised both nationally and internationally for his outstanding contribution to the mathematical modelling of infectious diseases.

The Surveillance and Evaluation Program for Public Health monitors the pattern of transmission of HIV, viral hepatitis, and specific sexually transmissible infections in Australia, in collaboration with the Department of Health and Ageing, State and Territory health authorities and collaborating networks. SEPPH extends to the assessment of past and expected epidemiological trends, and evaluates the epidemiological impact and cost-effectiveness of public health intervention strategies and programs. Methods used in the assessment often include the use of mathematical modelling, health economics, and impact assessment techniques. SEPPH is also involved in building research capacity in the areas of epidemiology, biostatistics, mathematical modelling, and other biomedical research associated with HIV/AIDS in Southeast Asia and the Pacific.

The thirteenth successive issue of the *HIV, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report* was formally released at the 21st Australasian Society for HIV Medicine (ASHM) Annual Conference, held in Brisbane in September. The *Bloodborne viral and sexually transmitted infections in Aboriginal and Torres Strait Islander People: Surveillance and Evaluation Report 2009*, the third in a series, was also

formally released at the ASHM conference in September. These are the key reports informing the government, community and research communities of the epidemiological trends of blood-borne viruses and sexually transmissible infections in Australia.

Trends in the population rate of new HIV diagnoses published in the Annual Surveillance Report 2009 indicated that the annual number of new HIV diagnoses has remained relatively steady at about 1,000 over the past three years. This level of HIV diagnoses was last recorded in Australia in 1994, indicating the need for strengthening safer sexual and injecting messages to minimise the risk of HIV infection. Despite the number of new infections, HIV prevalence in Australia remains one of the lowest in the world, at about 0.1 percent.

The pattern of HIV transmission in the Aboriginal and Torres Strait Islander population differs from that in the non-Indigenous population. The reports indicated that HIV infection among Aboriginal and Torres Strait Islander people was attributed to injecting drug use in 22% of cases over the past five years in contrast to 3% in the non-Indigenous population. Hepatitis C infections have declined by about half in the past decade, particularly in younger age groups. However despite this, hepatitis C prevalence remains high among injecting drug users across Australia and the burden of advanced liver disease continues to grow among infected people.

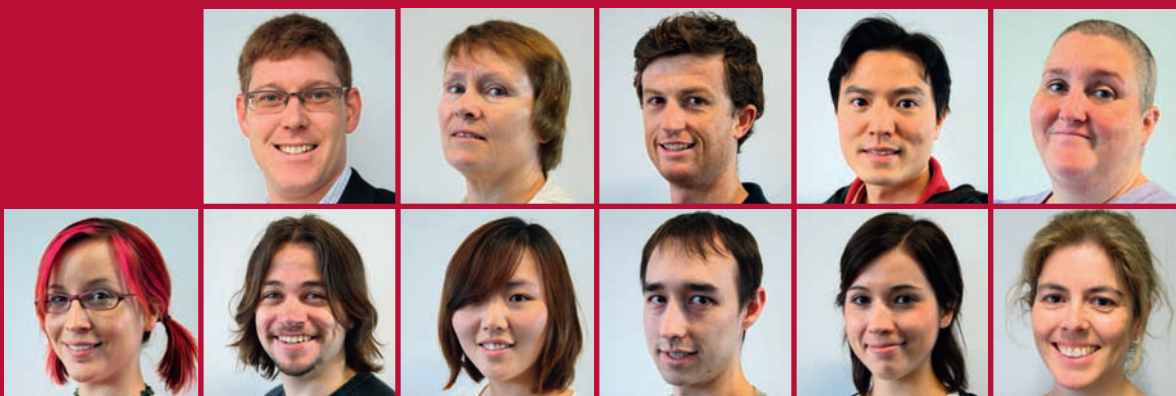
2009 saw a number of major projects come to fruition. The *Return on Investment 2* project, which crossed numerous NCHECR programs, estimated the epidemiological and economic effectiveness of needle and syringe programs in preventing

transmissions of HIV and HCV among Australian injecting drug users. It was estimated that these programs directly prevented more than 32,000 cases of HIV infection and almost 100,000 cases of hepatitis C over the last decade, at an estimated national saving in healthcare costs of \$1,280 million.

The first phase of the National Gay Men's Syphilis Action Plan was developed based on detailed mathematical modelling evidence and social research on acceptability of potential interventions. This research identified strategies likely to be the most effective and feasible to control syphilis among Australian gay men. The National Gay Men's Syphilis Action Plan has been endorsed and is being implemented across all Australian jurisdictions from March 2010 until the end of 2012.

SEPPH also completed a project and policy brief on the potential impact of the global economic crisis (GEC) on HIV epidemics in Cambodia and Papua New Guinea, using mathematical modelling. The analysis indicated that the GEC is likely to have a modest impact on HIV epidemics. The results in the report highlight the importance of maintaining funding for HIV programs.

A/Prof Wilson was successful in the inaugural round of the ARC Future Fellowship scheme for funding until 2013. His project title was *Using mathematical modelling to inform HIV/AIDS public health policy*, designed to inform HIV/AIDS policy officials on the most effective strategies for preventing new cases in HIV in the community. Other SEPPH success in grants included an ARC Discovery Project, two NHMRC Project Grants, and a component of an NIH Centre of Excellence Grant.



Surveillance and Evaluation Program for Public Health

(left to right)
David Wilson
Ann McDonald
Richard Gray
Lei Zhang
Melanie Middleton
Kel Heymer
James Jansson
Amy Kwon
Alex Hoare
Karen Schneider
Louise Causer

National surveillance co-ordination and information dissemination

■ Support for national surveillance committees

Ongoing monitoring of new diagnoses of HIV infection and AIDS, viral hepatitis and sexually transmissible infections in Australia was co-ordinated by the National Blood Borne Viruses and Sexually Transmissible Infections Surveillance Committee during 2009. The role of the Committee is to develop new initiatives in case surveillance, new analyses of surveillance data, standardised surveillance procedures across State and Territory health jurisdictions and to facilitate feedback of surveillance outputs.

Status: During 2008, the National Blood Borne Viruses and Sexually Transmissible Infections Surveillance Committee developed new procedures for standardisation across State/Territory health jurisdictions of notification of HIV infection that had been previously diagnosed interstate. A revised national HIV notification form was developed, following a detailed review of current HIV and AIDS case notification forms. The revised HIV notification form was introduced for routine reporting of cases of HIV infection newly diagnosed in Victoria from January 2007 and in New South Wales from July 2008; other health jurisdictions have also agreed to provide the information sought on the revised notification form. The value of ongoing monitoring of new AIDS diagnoses in Australia was questioned, now that combination antiretroviral treatment for HIV infection minimises progression to AIDS. The National Association of People living with HIV/AIDS developed a governance statement for the use of information on HIV subtype and drug resistance mutations made available through antiretroviral drug resistance testing, following endorsement of a proposal for national monitoring of HIV subtype and resistance genotype. Procedures were reviewed for the transfer from State/Territory health authorities to the National Notifiable Diseases Surveillance System of information obtained through enhanced surveillance for gonorrhoea, syphilis of less than two years duration and donovanosis, and enhanced surveillance for viral hepatitis. Methods were also reviewed for the exclusion of diagnoses of gonorrhoea, syphilis and chlamydia in children that were acquired non-sexually.

Personnel: Ann McDonald, Melanie Middleton, Rachel Deacon, Handan Wand, Basil Donovan, John Kaldor, David Wilson.
Collaborators: State and Territory health authorities; Australian Government Department of Health and Ageing; Australian Paediatric Surveillance Unit; Australian Institute of Health and Welfare;

networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections.

Funding: Commonwealth Department of Health and Ageing

■ HIV, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report

Detailed analyses and interpretations of national surveillance data on HIV, viral hepatitis and sexually transmissible infections are published in *HIV, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report*.

Status: Ongoing. The *Annual Surveillance Report* was published for the thirteenth successive year.

Personnel: Ann McDonald, Melanie Middleton, Rachel Deacon, Handan Wand, David Wilson

Collaborators: State and Territory health authorities; Australian Paediatric Surveillance Unit; Australian Institute of Health and Welfare; networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections.

Funding: Commonwealth Department of Health and Ageing

■ Australian HIV Surveillance Report

The *Australian HIV Surveillance Report* provides quarterly updates on the number of new diagnoses of HIV infection and AIDS and estimates of HIV incidence and prevalence through a network of sexual health clinics.

Status: Ongoing. The *Australian HIV Surveillance Report*, in its current format, has been published each quarter from July 1990.

Personnel: Ann McDonald, Melanie Middleton, Handan Wand

Collaborators: State and Territory health authorities; Australian Paediatric Surveillance Unit; Australian Institute of Health and Welfare; networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections.

Funding: Commonwealth Department of Health and Ageing

■ Bloodborne viral and sexually transmitted infections in Aboriginal and Torres Strait Islander People: Surveillance Report 2009

While the pattern of diagnosis of HIV/AIDS, viral hepatitis and sexually transmitted infections in the Aboriginal and Torres Strait Islander population is described in the *Annual Surveillance Report*, more detailed analyses and interpretations of national surveillance data for these infections were published separately in a single comprehensive report, for use by organisations and individuals with an interest in the health of Aboriginal and

Torres Strait Islander people.

Status: The third issue of *Bloodborne viral and sexually transmitted infections in Aboriginal and Torres Strait Islander People: Surveillance Report 2008* was released in 2009.

Personnel: James Ward, Ann McDonald, Melanie Middleton

Collaborators: State and Territory health authorities; Australian Paediatric Surveillance Unit; Australian Institute of Health and Welfare; networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections.

Funding: Commonwealth Department of Health and Ageing

Surveillance for HIV/AIDS

■ Monitoring cases of AIDS

The past pattern of HIV transmission, the pattern of illness associated with advanced HIV immunodeficiency and the impact of antiretroviral treatment on the pattern of illness is monitored through national AIDS surveillance.

Status: A case for denotification of AIDS has been made by the national bloodborne viral and STI surveillance committee. Until AIDS is denotified its monitoring is ongoing.

Personnel: Ann McDonald, Melanie Middleton, Handan Wand

Collaborators: State and Territory health authorities; Australian Paediatric Surveillance Unit; Australian Institute of Health and Welfare; networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections

Funding: Commonwealth Department of Health and Ageing

■ Monitoring cases of newly diagnosed HIV infection

The pattern of HIV transmission is monitored through national surveillance for newly diagnosed HIV infection, providing information on more recent patterns of HIV transmission than does AIDS surveillance.

Status: Ongoing

Personnel: Ann McDonald, Melanie Middleton, David Wilson

Collaborators: State and Territory health authorities; Australian Paediatric Surveillance Unit; Australian Institute of Health and Welfare; networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections

Funding: Commonwealth Department of Health and Ageing

■ Monitoring diagnoses of newly acquired HIV infection

Diagnoses of newly acquired HIV infection are monitored to provide an indication of the

current pattern of HIV transmission in Australia.

Status: Ongoing

Personnel: Ann McDonald

Collaborators: State and Territory health authorities; Australian Institute of Health and Welfare; networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections

Funding: Commonwealth Department of Health and Ageing

■ Monitoring perinatal exposure to HIV

The extent and outcome of perinatal exposure to HIV in Australia, including risk factors for perinatal HIV transmission, is monitored to indicate the rate of mother-to-child HIV transmission, the impact of interventions for reducing the risk of perinatal HIV transmission and HIV prevalence among childbearing women.

Status: Ongoing

Personnel: Ann McDonald

Collaborators: State and Territory health authorities; Australian Paediatric Surveillance Unit; Australian Institute of Health and Welfare; networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections

Funding: Commonwealth Department of Health and Ageing

■ Monitoring long-term outcome of newly acquired HIV infection

The long-term outcome of HIV infection is monitored among cases with a known date of HIV acquisition that have progressed to AIDS.

Status: Ongoing

Personnel: Ann McDonald

Collaborators: State and Territory health authorities; Australian Institute of Health and Welfare; networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections

Funding: Commonwealth Department of Health and Ageing

■ Monitoring HIV transmission through specialised tests for incident HIV infection

Specialised tests for diagnosing incident HIV infection are evaluated by comparison with the results of national surveillance for newly acquired HIV infection.

Status: Ongoing

Personnel: Ann McDonald

Collaborators: NSW State Reference Laboratory for HIV; State and Territory health authorities; Australian Institute of Health and Welfare; networks involved in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections

Funding: Commonwealth Department of Health and Ageing

Surveillance for viral hepatitis

■ Monitoring cases of newly diagnosed viral hepatitis

The pattern of transmission of viral hepatitis is monitored through national surveillance for newly diagnosed hepatitis B and hepatitis C infection, and newly acquired infections notified to the National Notifiable Diseases Surveillance System.

Additional information on newly acquired hepatitis B and C notifications and country of birth is obtained directly from State and Territory health authorities.

Status: Ongoing

Personnel: Rachel Deacon, Melanie Middleton, Lisa Maher

Collaborators: State and Territory health authorities; Australian Government Department of Health and Ageing

Funding: Commonwealth Department of Health and Ageing

■ Monitoring perinatally acquired hepatitis C infection and outcome in children

Clinicians on the Australian Paediatric Surveillance (APSU) mailing list are asked to notify newly diagnosed hepatitis C positive children as per case definition and complete a written de-identified questionnaire. The questionnaire asks clinicians to report hepatitis C risk factors, maternal hepatitis C risk factors, clinical assessment and management of positive cases. A follow up questionnaire is completed annually.

Status: Ongoing

Personnel: Ann McDonald, John Kaldor, David Wilson

Collaborators: Australian Paediatric Surveillance Unit; The Children's Hospital at Westmead; Royal Children's Hospital

Funding: Commonwealth Department of Health and Ageing

■ Monitoring long-term outcomes of chronic hepatitis B and C

Data is obtained from the Australian and New Zealand Liver Transplant Register on number and underlying cause (hepatitis B and C, other) for liver transplants performed.

Status: Ongoing

Personnel: Melanie Middleton, Greg Dore

Collaborator: Australia and New Zealand Liver Transplant Register

Funding: Commonwealth Department of Health and Ageing

Surveillance for sexually transmissible infections

■ Monitoring HIV prevalence and incidence through sexual health clinics

HIV prevalence and incidence is monitored among people seen at sexual health clinics who are voluntarily tested for HIV antibody as part of their clinical care.

Status: Ongoing

Personnel: Ann McDonald

Collaborators: Collaborative group on sentinel surveillance in sexual health clinics

Funding: Commonwealth Department of Health and Ageing

■ Monitoring HIV antibody prevalence among prison entrants in Australia

HIV transmission among people entering Australian prisons is monitored through reports received from State and Territory Departments of Corrections of the number of people received into prisons each quarter, the numbers who were voluntarily tested for HIV antibody and the numbers with diagnosed HIV infection.

Status: Ongoing

Personnel: Melanie Middleton, Ann McDonald

Collaborators: State and Territory Departments of Corrections

Funding: Commonwealth Department of Health and Ageing

■ Monitoring HIV and viral hepatitis among blood donors

Newly emerging patterns of transmission of HIV and viral hepatitis are monitored among blood donors, a subgroup of the population at low risk of infection who are compulsorily tested for blood-borne viruses.

Status: Ongoing

Personnel: Melanie Middleton, Ann McDonald

Collaborator: Australian Red Cross Blood Service

Funding: Commonwealth Department of Health and Ageing

SURVEILLANCE PROGRAM SENTINEL SURVEILLANCE NETWORK OF SEXUAL HEALTH CLINICS

Brisbane Sexual Health Clinic

Site principal: John Patten

Site co-ordinator: Henry Magon

Clinic 275

Site principal: Russell Waddell

Gold Coast Sexual Health Service

Site principal: John Chuah

Site co-ordinator: Wendy Fankhauser

RPA Sexual Health

Site principal and co-ordinator: Catherine O'Connor

Melbourne Sexual Health Centre

Site principals: Christopher Fairley, Ian Denham

Sydney Sexual Health Centre

Site principal: Basil Donovan, Lynne Wray

Site co-ordinator: Heng Lu

■ Evaluation of trends and strategies associated with HIV transmission among men who have sex with men in Australia

This project involves the use of impact evaluation techniques including mathematical modelling to assess the impact of various trends in behaviours and programs on epidemiological outcomes associated with HIV epidemics. Models are being used to assess the benefit of serosorting and accompanying risk-reduction strategies as well as behaviour change and the impact of effective combination antiretroviral therapies among other factors.

Status: Ongoing

Personnel: David Wilson, Alexander Hoare, Richard Gray, Kelly-Jean Heymer

Funding: NHMRC, Australian Research Council

■ Understanding the interaction between sexually transmitted infections and HIV transmission in Australia

This project involves quantitative analyses using the domains of epidemiology, mathematical modelling, and health economics to investigate the impact of sexually transmitted infections (STIs), and where applicable injecting drug use, on population level transmission of HIV. This project addresses populations of Aboriginal and Torres Strait Islanders, Australian men who have sex with men, and Papua New Guinea.

Status: Ongoing

Personnel: Richard Gray, David Wilson, James Ward, Jonathan Anderson, John Kaldor, Basil Donovan, Andrew Grulich

Funding: NHMRC, Australian Research Council

■ Estimating per-contact probability of HIV transmission in homosexual men in Sydney in the era of HAART

Using data from the Health in Men study, biostatistical modelling techniques are used to calculate the probability of HIV transmission among gay men according to unprotected penile-anal sex, differentiating between acts that are receptive with ejaculation, receptive without ejaculation, insertive with circumcision and insertive without circumcision.

Status: Analysis complete in 2009

Personnel: Jeff Jin, James Jansson, Mathew Law, Garrett Prestage, Iryna Zablotska, John Imrie, Susan Kippax, John Kaldor, Andrew Grulich, David Wilson

Funding: NHMRC, National Institutes of Health, Australian Research Council, Department of Health and Ageing

■ Review of HIV transmission risks and development of online calculators

This project involves (i) the review of all published studies on HIV transmission risks according to each route of exposure and (ii) the development of user-friendly software interfaces as online calculators of cumulative risk of HIV acquisition over all exposure events.

Status: Ongoing

Personnel: Victor Jauregui, David Wilson

Funding: NHMRC, Australian Research Council

■ Evaluating the epidemiological and economic implications of introducing rapid tests for HIV diagnosis in Australia

This project involves the conduct of meta-analyses and reviews of the published literature on rapid HIV tests as well as data from the Melbourne Sexual Health Centre and other networks of clinics and laboratories that conduct HIV tests. These sources of information are informing mathematical and economic models to evaluate the expected implications of the use of rapid tests in Australia.

Status: Ongoing

Personnel: David Wilson

Collaborators: AFAO, Melbourne Sexual Health Centre

Funding: NHMRC

■ Evaluating and predicting the epidemiological impact of health policies for reducing HIV in Melanesian and South-East Asian populations

This project involves collating epidemiological data and developing and analysing mathematical models to address the primary question: 'What intervention strategies and policies will be most effective and feasible in reducing the impact of the HIV epidemic in Papua New Guinea, Indonesia, and Cambodia?'

The following sub-questions are addressed:

- (i) What are the key behavioural drivers contributing to new HIV infections?
- (ii) What impact will interventions such as targeted antiretroviral treatment, early diagnosis, ABC sexual behaviour campaigns, and needle syringe programs have on HIV epidemics?

Status: Ongoing. Models are in final developmental stage.

Personnel: David Wilson, Alexander Hoare, John Murray, John Kaldor, Matthew Law, Richard Gray, Kelly-Jean Heymer, Amy Kwon

Collaborators: NCHADS (Cambodia), Institute for Medical Research (PNG), University of Indonesia

Funding: AusAID

■ Cost effectiveness and mathematical modelling of needle and syringe programs on viral transmission among injecting drug users in Australia

This project involved the development of dynamic mathematical models of HIV and hepatitis C transmission among Australian injecting drug users and the effectiveness as well as economic benefit of needle and syringe programs that distribute clean injecting equipment. This analysis was carried out at the national level as well as by each state and territory using detailed jurisdiction-specific data.

Status: Finished in 2009.

Personnel: David Wilson, Amy Kwon, Rosie Thein, Jonathan Anderson, Lisa Maher, Greg Dore, John Kaldor, Matthew Law
Collaborators: MACASSH, AFAO, Hepatitis Council, AIVL, NDARC, Australian Liver Association, ASHM, ANEX, Each State and Territory Health Department.

Funding: Commonwealth Department of Health and Ageing

■ Evaluating the potential impact of the global economic crisis on HIV epidemics in Southeast Asia

This project involved the review and evaluation of potential factors that could be influenced by the global economic crisis and how they may influence HIV epidemics. Mathematical models were designed to assess the potential extent to which the economic crisis could affect HIV epidemics in diverse regions.

Status: Finished in 2009.

Personnel: David Wilson, Richard Gray, Kelly-Jean Heymer, Alexander Hoare, Amy Kwon, Rosie Thein, John Kaldor

Collaborators: PNG IMR, NCHADS (Cambodia), WHO, FHI, Global Fund, London School of Hygiene and Tropical Medicine, Lowy Institute for International Development, AusAID.

Funding: AusAID

■ Epidemiological and economic impact of potential increased hepatitis C treatment uptake in Australia

This project is investigating the possible effects of increased rates of treatment, compared with current treatment rates, on the future health and economic burden of hepatitis C around Australia. Methods used include mathematical modelling and health economics.

Status: Finished in 2009, to be released and extended in 2010.

Personnel: Rosie Thein, David Wilson, Alexander Hoare, Amy Kwon, Greg Dore

Funding: Roche

■ Eco-pathogenomics of chlamydial infection of the human reproductive tract

This study aims to discover the essential correlates of chlamydial infection of the human reproductive tract in the human

reproductive tract. The project is conceived to prime effective translational research through the identification and characterization of antigens of relevance in the naturally infected host and pathogenetic mechanisms at play in the complex, natural environment of the female genital tract. To achieve this objective the project will leverage some of the most advanced and innovative methodologies in the study of bacterial infectious diseases. These include methodologies such as high throughput 16S rRNA sequencing, metatranscriptomics, the isolation of isogenic mutant-parent pairs and their functional analysis in a guinea pig model of chlamydial genital infection, and biomathematical modelling of chlamydial infection and disease in the guinea pig model and its correlates in humans. The composition of the genital flora, the occurrence of secondary infection, the application of antibiotic treatment are among the common variables that will be evaluated both longitudinally and cross-sectionally in humans and in the parallel guinea pig model.

Status: Ongoing

Personnel: David Wilson, Kelly-Jean Heymer

Collaborator: University of Maryland, University of Arkansas, Uniformed Services University

Funding: National Institutes of Health

■ Understanding the within-host inflammatory response of Chlamydia infection and modelling the impact of potential vaccines

This study uses quantitative techniques along with experimental data from animal models to understand the inflammatory response associated with Chlamydia infection. Mathematical models incorporating the within-host biology with sexual networks and epidemiology are used to explore the potential impact of targeted vaccines at an individual and population level.

Status: Ongoing.

Personnel: Richard Gray, Kelly-Jean Heymer, David Wilson

Collaborator: Queensland University of Technology, University of Arkansas

Funding: Australian Research Council, National Health and Medical Research Council, National Institutes of Health

■ Mathematical modelling of the impact of assumptions regarding immunity on chlamydia transmission

This study aims to use a mathematical model of chlamydia transmission, which incorporates recurrent cycles of infection, to investigate the impact of various assumptions regarding acquired immunity and susceptibility to infection at different levels of screening and treatment.

Status: Ongoing.

Personnel: David Regan, David Wilson

Collaborators: University of Melbourne, University of Arkansas

Funding: National Health and Medical Research Council

■ Developing evidence to inform a national gay men's syphilis action plan

The aim of this study was to use the Australian HIV partnership model of collaboration across government, community and research sectors to establish Australia's National Gay Men's Syphilis Action Plan in response to a resurgent syphilis epidemic among gay men. Evidence included the combination of mathematical modelling with quantitative and qualitative social research to explore the feasibility of different interventions (partner reduction, increased condom use, increased testing frequency, mass treatment, improved partner notification, and chemoprophylaxis) to reduce rates of syphilis. The study involved online surveys and focus groups to determine whether such interventions were likely to be acceptable to Australian gay men and a mathematical transmission model that simulated the target population was used to explore the potential epidemiological impact of each intervention.

Status: Completed in 2009. The national action plan is being implemented from 2010.

Personnel: David Wilson, Garrett Prestage, Basil Donovan, Richard Gray, Alexander Hoare, Pol Dominic McCann, Ian Down

Collaborators: NSW Health, AFAO, ACON, NCHSR, Melbourne Sexual Health Centre, Sydney Sexual Health Centre, ASHM, SA Health, Victorian AIDS Council, NAPWA, Taylor Square Private Clinic, Qld Association for Healthy Communities, Positive Life NSW, AIDS Council of NSW, Queensland Health

Funding: NSW Health, Victorian Department of Human Services, Australian Research Council, National Health and Medical Research Council

■ HIV treatment failure, therapeutic pathways, and clinical outcomes: understanding the present and planning for the future

This project will assist in the planning for the care and management of HIV-infected Australians in the future by mapping and forecasting antiretroviral treatment pathways and the population-level health burdens of clinical morbidities affecting Australians living with HIV. The study involves extensive meta-analyses and modelling.

Status: Ongoing.

Personnel: James Jansson, David Wilson, Jonathan Anderson, Kathy Petoumenos

Collaborators: NAPWA

Funding: NAPWA (seed funding), National Health and Medical Research Council

■ Mathematical modelling and cost-effectiveness of HIV epidemics and programs in Thailand

This study uses mathematical transmission models, individual-based simulation models, and health economic analyses to describe HIV epidemiology among numerous groups at risk of HIV infection and infected in Thailand. It is evaluating the epidemiological and economic implications of past, present, and potential programs and strategies.

Status: Ongoing

Personnel: Karen Schneider, Alexander Hoare, David Wilson

Collaborator: HIV-NAT

Funding: Australian Research Council, National Health and Medical Research Council

■ Evaluation of HIV trends and programs in China

This project involves the use of quantitative methods including biostatistics, mathematical modelling, epidemiology, and health economics to assess the key drivers of HIV epidemics in China, the impact of intervention strategies, and forecast future epidemic trajectories.

Status: Ongoing

Personnel: Lei Zhang, David Wilson

Funding: UNSW

■ Evaluation of the epidemiological impact of hard reduction programs across Vietnam

This project involves the use of mathematical modelling techniques to evaluate the likely epidemiological impact of peer-education based harm reduction programs (distribution of condoms and needles and syringes) across numerous provinces in Vietnam.

Status: Ongoing

Personnel: David Wilson, Lei Zhang, Richard Gray, Rosie Thein

Funding: World Bank, UNSW, NHMRC

Therapeutic and Vaccine Research Program

2009 was a year of new initiatives for the Therapeutic and Vaccine Research Program. We were very honoured to be the recipient of a substantial award from the Bill and Melinda Gates Foundation to support a research project with the potential to extend drug therapy to millions of HIV-affected people worldwide. The project, dubbed ENCORE (for Evaluation of Novel Concepts in Optimization of antiRetroviral Efficacy), will study the effectiveness of optimised doses of HIV drug treatment. If proven effective, it would allow governments and NGOs to purchase more supplies for the same budgets, and ease the pressure on manufacturing capacity to meet the growing demand for ART. Dose reduction could then release enhanced funding for further treatment, care and prevention work. More than three million people in developing countries currently receive drug therapy for HIV infection, and the World Health Organisation estimates that this will rise

three-fold to nine million by 2015. The focus of care for HIV-infected people is the continued scale-up of access to ART, but the success of the roll-out of ART is putting enormous pressure on both the ability to pay for the drugs and the capacity to manufacture them. Drug therapy for HIV not only extends and improves the quality of life of people with HIV and also may reduce the likelihood of that person infecting others, so the roll out of HIV drug therapy supports the work of HIV/AIDS prevention. Another major initiative for TVRP this year was the start of the Second Line clinical trial, which is now set up and ready to start enrolling patients in the first quarter of 2010. This study is designed to answer a very important question raised by treatment roll-out in the developing world: in the absence of the test results used in the developed world to establish viral load levels and resistance, what do we do for patients who have failed first-line

regimens? Taking a public health approach and assisted by the availability of raltegravir, this study will examine the benefits of moving patients who have failed their first line therapy straight to a combination of raltegravir and a booster protease inhibitor, in contrast with the current recommendation of a switch to two nucleosides and one booster protease inhibitor. The study's principal investigators hope to enrol 700 patients in sixty centres in 28 countries. 2009 also saw considerable progress in planning the START study, for which the NCHECR is a co-ordinating centre for Australian, New Zealand, Thailand, Singapore, Israel, Argentina and Chile. We have started to enrol the first patients in START, which hopes to answer the last remaining strategic question in HIV medicine in relation to ongoing treatment: when is the best time to start treatment? Does starting earlier save more lives?

Therapeutic and Vaccine Research Program

- (left to right)
 Sean Emery
 Mark Boyd
 Helen Byakwaga
 Dianne Carey
 Fraser Drummond
 Sarah Pett
 Rebekah Puls
 Cate Carey
 Allison Humphries
 David Courtney-Rodgers
 Hila Haskelberg
 Enmoore Lin
 Simone Jacoby
 Nisha Seneviratne
 Megan Evans
 Natalie Espinosa
 Cathy Sajjadi
 Kymme Courtney-Vega
 Jessica Taylor
 Jose Aurelio Vieira Vulcao
 Wendy Lee
 Maja Berilazic
 Rosemary Robson
 Alexis Shambrook
 Margaret Allen
 Absent:
 Maria Arriaga
 Christoph Boesecke
 Emma Butler
 Kate Clezy
 Carlo Dazo
 Sarah Field
 Jennifer Hoy
 Leanne Kearney
 Wendy Lee
 Claudette Satchell



THERAPEUTIC AND VACCINE RESEARCH PROGRAM STUDIES

ANTIRETROVIRAL THERAPY

Studies recruiting during 2009

■ PHIDISA I

A prospective epidemiological cohort study of HIV and risk-related co-infections in the South African National Defence Force (SANDF).
Status: Recruitment opened January 2004.
Sites: 6 military medical sites in Republic of South Africa
Enrolled/target: 5,120/unlimited
Personnel: Sean Emery
Funding: US National Institutes of Health; US Department of Defense; South African National Defence Force

■ PHIDISA II

A randomised, open-label 2x2 factorial study to compare the safety and efficacy of different combination antiretroviral therapy regimens in treatment-naïve patients with advanced HIV disease and/or CD4+ cell counts < 200 cells/ μ L.
Status: Recruitment opened January 2004.
Sites: 6 military medical sites in Republic of South Africa
Enrolled/target: 1,473/2,800
Personnel: Sean Emery
Funding: US National Institutes of Health; US Department of Defense; South African National Defence Force

■ ENCORE3

Pharmacokinetics of plasma lopinavir/ritonavir over a 12-hour dosing interval following administration of 400/100, 200/150, and 200/50 mg twice daily to HIV-negative healthy volunteers.
Status: 24 recruited, closed to recruitment
Sites: one, Chelsea & Westminster Hospital, London, United Kingdom
Target: 18 HIV-1-negative subjects
Personnel: Rebekah Puls, Carlo Dazo, Enmoore Lin, Natalie Espinosa, Jessica Taylor, Janaki Amin
Funding: to be decided

Studies closed to recruitment or completed during 2009

■ ALTAIR

A randomised open-label study comparing the safety and efficacy of three different combination antiretroviral regimens as

initial therapy for HIV infection.

Status: Recruitment January 2007 to February 2008, week 48 data lead to inclusion of week 144 follow-up visit.
Sites: 37 sites in 15 countries
Enrolled/target: 329/300
Personnel: Rebekah Puls, Christoph Boesecke, Maria Arriaga, Carlo Dazo, Hila Haskelberg, Kathy Petoumenos, Chris Duncombe
Funding: Gilead Sciences

■ PINT

A study of the effects of the integrase inhibitor, raltegravir, on viral reservoirs in those treated at primary HIV-infection compared to those treated during chronic infection.

Status: The trial was fully enrolled at 16 patients. All patients completed the initial phase of trial (52 weeks) and are in two-year extension phase.

Personnel: Anthony Kelleher, Linda Gelgor, Christophe Boesecke, Sean Emery, Wendy Lee, Janaki Amin, David Cooper

Collaborators: Robert Finlayson, Taylor Square Private Clinic; Mark Bloch, Holdsworth House Private Practice; Robert McFarlane, 407 Doctors; John Zaunders, Kat Marks, Kate McGhie, Julie Yeung, St Vincent's Hospital, Sydney, John Murray, School of Mathematics, Faculty of Science, UNSW
Funding: Merck & Co Inc

Studies in preparation during 2009

■ ENCORE1

A randomised, double-blind, placebo-controlled clinical trial to determine the safety and efficacy of reduced dose efavirenz (400mg qd) versus standard dose efavirenz (600mg qd) as part of combination therapy in treatment naive individuals with HIV infection.

Status: in development
Sites: approximately 50
Target: approximately 700
Personnel: Rebekah Puls, Janaki Amin
Funding: to be decided

■ ENCORE2

Pharmacokinetics of plasma lamivudine (3TC), and its active intracellular anabolite 3TC-triphosphate over a 24 hour dosing interval following administration of 3TC 300 mg and 150 mg once daily to HIV-negative healthy volunteers.

Status: in development
Sites: one, Chelsea & Westminster Hospital, London, United Kingdom
Target: 24 HIV-1-negative subjects
Personnel: Rebekah Puls, Janaki Amin
Funding: to be decided

■ SECOND-LINE

A randomised open-label study comparing the safety and efficacy of ritonavir boosted lopinavir and 2-3N(t)RTI backbone versus ritonavir boosted lopinavir and raltegravir in participants virologically failing first-line NNRTI/2N(t)RTI therapy.

Status: Open to enrolment in all sites in Australia and New Zealand; all other sites expected to be open by Q3 2010
Sites: 48
Target: 550

Personnel: Mark Boyd, Alli Humphries, Natalie Espinosa, Nisha Seneviratne, Torsak Bunupuradah, Maria Arriaga, Rosemary Robson, Wendy Lee

Funding: UNSW, Merck, Abbott, amfAR

IMMUNE-BASED THERAPIES AND VACCINES

Studies recruiting during 2009

■ STALWART

A randomised, open-label, phase II, international study of sc IL-2 with and without concomitant antiretroviral therapy in patients with HIV-1 infection and CD4+ cell counts \rightarrow 300 cells/ μ L: study of aldesleukin with and without antiretroviral therapy.
PURPOSE OF EXTENDED FOLLOW-UP: To continue unblinded safety assessments of participants in groups that received IL-2 compared to the group that did not receive IL-2.

Status: Enrolment closed 30 June 09. Main study data collection ended on 28 February 2009. Extended follow-up phase began 01 March 2009 for a further two-year period through to 28 February 2011

Sites: 13
Enrolled/target: 267 patients (worldwide) with an equal allocation among the three study groups. All participants randomised into main study are eligible for the extended follow-up. (5 sites in Australia, 3 sites in Thailand, 6 sites in Argentina)
Personnel: Cate Carey, David Courtney-Rodgers, Chris Duncombe
Funding: US National Institutes of Health

Studies closed to recruitment or completed during 2009

■ The STEP Study Rollover HVTN 540

This was an observational rollover study for The STEP Study, the volunteers enrolled in STEP were asked to consent to 3-monthly follow-up offering increased HIV testing and exploring attitudes and any negative aspects for them following their participation in STEP.

Status: Study completed and closed at end of December 2009.

Sites: 1

Enrolled/target: 2,057/3,000 globally; 11/18 in Australia

Personnel: Fraser Drummond, Anthony Kelleher

Funding: Merck Sharp & Dohme, Australia, HIV Trials Network US National Institutes of Health

■ ART Intensification with raltegravir and hyper-immune bovine colostrum (CORAL)

A randomized, double-blind, placebo controlled multi-centre study to measure the effect on CD4+ outcomes of combination antiretroviral therapy intensification with or without passive immunotherapy to reduce immune activation in HIV-infected individuals with persistent CD4+ T-cell count <350 cells/μL despite prolonged HIV plasma viraemia <50 copies/mL for at least 12 months on combination antiretroviral therapy.

Status: Recruitment commenced March 2009 and concluded August 2009.

Sites: 20 Australian sites

Enrolled/target: 75/72

Personnel: Helen Byakwaga, Hila Haskelberg, Kymme Courtney-Vega, Janaki Amin

MISCELLANEOUS

■ Strategic Timing of Antiretroviral Therapy (START)

An open-label randomised multicentre trial to examine the safety and efficacy of commencing combination antiretroviral therapy at a CD4+ cell count of > 500 cells/mm³ versus commencing at a CD4+ cell count of <350 cells/mm³. This initiative includes several substantial substudies designed to determine the effects of treatment with ART on neurological manifestations of HIV disease, cardiovascular complications, bone mineral metabolism, chronic obstructive pulmonary disease and abbreviated forms of informed consent documentation.

Status: Recruitment opened April 2009.

Sites: 100 in the pilot phase with 17 sites in the Sydney region (sites coordinated by NCHECR), to be expanded in the definitive phase.

Target: pilot phase enrolment 900 patients with 220 from sites coordinated by NCHECR; enrolment in the definitive phase will be 4000 (with approximately 1000 from sites coordinated by NCHECR)

Personnel: Sarah Pett, Cate Carey, Megan Evans, Simone Jacoby,

Funding: US NIH, NHMRC

■ STEAL CVD biomarker Sub-study

An analysis of biomarkers related to cardiovascular disease in patients recruited and followed in the STEAL study.

Status: Analysis of stored blood samples

Sites: All that participated in the main STEAL study and collected storage samples

Target: All participant storage samples collected at week 0, 12, 24 and 48

Personnel: Allison Humphries, Sean Emery, Janaki Amin, David Cooper, Anthony Kelleher

Funding: Gilead Sciences

■ STEAL Bone biomarker Sub-study

An analysis of biomarkers related to bone disease in patients recruited and followed in the STEAL study.

Status: In development.

Sites: All that participated in the main STEAL study and collected storage samples

Target: All participant storage samples collected at week 0, 12, 24, 48, 72 and 96

Personnel: Hila Haskelberg, Sean Emery, Andrew Carr, Jennifer Hoy, Janaki Amin, Peter Ebeling

Funding: NCHECR, UNSW and Dept Immunology, St Vincent's Hospital

■ FLU002

An International Observational Study to Characterize Adults with Influenza A – Pandemic H1N1 (H1N1v) INSIGHT H1N1v Outpatient Study (FLU 002)

Status: vs. 2.0 06-Nov-2009, open at sites with community transmission of H1N1

Sites: 75 sites globally; in Sydney region: 22 sites (in Thailand, Argentina, Chile and Australia)

Target: 696/5000; enrolment in Sydney region n=7

Personnel: Sarah Pett, Sean Emery, Rose Robson

Funding: NIAID

■ FLU003

An International Observational Study to Characterize Adults Who Are Hospitalized with Complications of Influenza A – Pandemic H1N1 (H1N1v) INSIGHT H1N1v Hospitalization Study (FLU 003)

Status: vs. 1.0 18-Aug-2009, open at sites with community transmission of H1N1

Sites: 88 globally; 18 in Sydney region (in Thailand, Argentina, Chile, Hong Kong and Australia)

Target: 1600; total enrolment; enrolment in Sydney region n=1

Personnel: Sarah Pett, Sean Emery, Rose Robson

Funding: NIAID

■ RESTORE

An observational study to explore reconstitution of immunity in patients with

advanced HIV-1-infection commencing combination antiretroviral therapy

Status: In development; expected start date June 2010.

Sites: To be confirmed, 6-8 sites in Australia; 1 site in Thailand

Target: 125-150 patients

Personnel: Sarah Pett, Sean Emery, Anthony Kelleher

Funding: NHMRC

■ SPARTA

A randomised, open-label, cross-over study to examine the pharmacokinetics and short-term safety and efficacy of two dosing strategies of raltegravir plus atazanavir in HIV-infected patients.

Status: Recruitment open July 2009; and closed April 2010

Sites: 2

Target: 24

Personnel: Dianne Carey

Funding: UNSW

HIV Epidemiology and Prevention Program

The HIV Epidemiology and Prevention Program (HEPP) conducts research into the transmission and prevention of HIV and sexually transmissible infections (STIs), and work on the cancers that occur in people with HIV.

The extraordinary productivity arising from the Health in Men study continued in 2009. More than 30 peer reviewed publications have now arisen from this ground-breaking work. In 2009, results were published on the association of HIV infection with risk reduction behaviours, receipt of non-occupational post-exposure prophylaxis, and use of illicit drugs. Other findings were published on sexually transmissible infections including on the high prevalence of anal human papillomavirus infection (the cause of anal cancer) and on syphilis.

The Gay Community Periodic Surveys continued to provide the primary method of monitoring sexual risk behaviour among gay men in Australia. Supplementing this activity, we have initiated several studies investigating in further detail key indicators of HIV infection. These have included studies of recent seroconverters, and men participating in highly sexually active gay community subcultures, and investigations

of the motivations for risk behaviour and beliefs around HIV and AIDS among gay men. In 2009, funding was obtained to extend the HIV Seroconversion Study to all Australian states and territories through 2012.

Scientists in HEPP conduct a range of work on the intersection of infection, immunity and cancer to inform our knowledge of the types of cancer that might be expected to occur at increased rates in people with HIV. In 2009, our finding of a wide range of cancers occurring at increased rates in people with HIV infection were presented through invited presentations at several national and international scientific meetings and invited reviews in specialist journals. The latest analysis of cancer in people with HIV in Australia published in 2009 revealed that rates for most cancers were declining due to antiretroviral therapy, but that rates for some cancers, for example anal cancer, did not appear to be declining despite immune reconstitution. This means that anal cancer will be an increasing focus of our work in future years. Data were published on the risk factors for immune deficiency-related cancers in organ transplant recipients, including cancer of the lip, melanoma, and non-Hodgkin lymphoma.



HIV Epidemiology and Prevention Program

(left to right)
Andrew Grulich
Garrett Prestage
David Templeton
Iryna Zablotska
Jeff Jin
Ian Down
Pól McCann
Marina van Leeuwen
Jack Bradley
Ali Ayoub

HIV transmission and prevention research

■ HIV vaccine preparedness cohort study (Health in Men study)

A vaccine preparedness cohort study of HIV-negative homosexual men.

Status: During 2001-2004, 1,427 HIV negative men were enrolled and active follow up ceased in 2007. In 2009, data analysis and reporting continued.

Personnel: Andrew Grulich, Garrett Prestage, Mary Poynten, David Templeton, Jeff Jin

Collaborators: National Centre in HIV Social Research; Australian Federation of AIDS Organisations; AIDS Council of NSW

Funding: NHMRC; NSW Health Department.

■ HIM (Health in Men) study: circumcision and sexually transmissible infections and HIV infection

A cohort study to examine the interaction between circumcision and incidence of sexually transmissible infections and HIV among initially HIV-negative homosexual men.

Status: All 1,427 men enrolled in the study had been previously asked about their circumcision status. Analysis and final reporting occurred in 2009.

Personnel: Andrew Grulich, Garrett Prestage, Jeff Jin, Basil Donovan, David Templeton

Collaborators: National Centre in HIV Social Research; Australian Federation of AIDS Organisations; AIDS Council of NSW

Funding: NHMRC; NSW Health Department; Becton Dickinson Pty Ltd; GlaxoSmithKline Australia

■ The HIM (Health in Men) study: post-exposure prophylaxis and HIV infection

A cohort study to examine the use of non-occupational prophylaxis against HIV, and its association with future HIV seroconversion among initially HIV-negative homosexual men.

Status: All men under follow up in the study were asked about their use of post-exposure prophylaxis during the annual interviews. Analysis and final reporting occurred in 2009.

Personnel: Andrew Grulich, Garrett Prestage, Jeff Jin, Mary Poynten

Collaborators: National Centre in HIV Social Research; Australian Federation of AIDS Organisations; AIDS Council of NSW

Funding: NHMRC; NSW Health Department

■ The HIM (Health in Men) study: risk reduction behaviours and risk of HIV infection

A cohort study to examine behavioural risk factors for HIV infection among initially HIV-

negative homosexual men.

Status: All 1,427 men enrolled in the study underwent a detailed interview about sexual risk behaviour. Analysis and final reporting occurred in 2009.

Personnel: Andrew Grulich, Garrett Prestage, Jeff Jin

Collaborators: National Centre in HIV Social Research; Australian Federation of AIDS Organisations; AIDS Council of NSW

Funding: NHMRC; NSW Health Department

■ Risk factors for HIV seroconversion

A study of risk factors for HIV infection among people with newly acquired HIV infection.

Status: During 2009, online and direct enrolment continued in Queensland, Victoria, New South Wales and Western Australia, and was extended to South Australia. In total, 201 men with recent primary HIV infection have been enrolled. Preliminary analysis and reporting has commenced and is ongoing. Funding was sought to continue the study through 2012 and extend to all states and territories.

Personnel: Garrett Prestage, Ian Down, Jack Bradley, Jeff Jin, Andrew Grulich

Collaborators: National Centre in HIV Social Research; Australian Research Centre in Sex, Health and Society; Curtin University; State AIDS Councils, State PLWHA organisations, and State Health Departments.

Funding: Queensland Health; Victorian Department of Health; NSW Health Department; Western Australian Health Department; South Australian Department of Health.

■ Periodic surveys of HIV risk behaviour

A study of sexual risk behaviour, HIV and STI testing, and illicit drug use among gay men in Australia.

Status: In 2009, 9,009 surveys were completed in Sydney, Melbourne, Brisbane, Adelaide and Canberra, as well as in certain regional areas of Queensland and NSW. Ongoing analysis and reporting occurred in 2009.

Personnel: Garrett Prestage, Iryna Zablotska, Ian Down, Andrew Grulich

Collaborators: National Centre in HIV Social Research; State AIDS Councils; State PLWHA organisations; State Health Departments

Funding: State and Territory Health Departments

■ Group sex study

A study to investigate the motivations and circumstances of group sex behaviour among gay men, particularly those behaviours that may contribute to HIV transmission.

Status: Data collection is completed: In total, 994 men completed the study questionnaire and sixteen men were

interviewed in depth. Analysis and reporting is ongoing.

Personnel: Garrett Prestage, Jack Bradley.

Collaborators: The University of Sydney; AIDS Council of New South Wales; Victorian AIDS Council; Queensland Association of Healthy Communities.

Funding: NSW Health Department; Victorian AIDS Council; Queensland Association of Healthy Communities.

■ The PASH (Pleasure and Sexual Health) Study: understandings of risk among gay men

A study of beliefs and attitudes about risks and consequences of HIV infection in Australian gay men.

Status: During 2009, funding was obtained to extend the study to South Australia. Interview schedules and questionnaires were finalised. In total, 4125 men were referred to the survey, of whom 2306 provided sufficiently complete survey questionnaires for inclusion in analysis. 40 men were interviewed in depth. Data analysis and reporting is ongoing.

Personnel: Garrett Prestage, Jack Bradley, Pol McCann, Ian Down

Collaborators: Australian Research Centre in Sex, Health and Society; Curtin University; National Centre in HIV Social Research; State AIDS Councils, State PLWHA organisations, and State Health Departments.

Funding: Victorian Department of Health; NSW Health Department; Western Australian Health Department; South Australian Department of Health.

■ Modelling interventions to prevent syphilis infection and their acceptability among gay men

This study uses mathematical modelling to estimate the likely impact of a range of interventions designed to reduce rates of syphilis infection among gay men, and uses both quantitative and qualitative research methods to assess how acceptable such interventions would be to the target population.

Status: During 2009, gay men were recruited to answer specific questions about their knowledge of syphilis and their attitudes toward a range of possible interventions through an online survey and were then invited to participate in focus groups in Sydney and Melbourne. Data from mathematical models were considered alongside the findings from the acceptability study. Data analysis and reporting is ongoing.

Personnel: Garrett Prestage, Pol McCann, Jack Bradley, Ian Down.

Collaborators: Australian Research Centre in Sex Health and Society.

Funding: Commonwealth Department of Health and Ageing, NSW Health Department, Victorian Department of Health.

■ Sexually adventurous men's study

A study to document and record the work of the Sexually Adventurous Men's Projects of the Victorian AIDS Council and PLWHA Victoria, and to investigate the beliefs and behaviours among gay men in sexually adventurous networks in Melbourne.

Status: Processes and record-keeping documentation were established in 2009, and data collection has commenced. Survey questionnaire has been developed and will be administered during 2010. Analysis and reporting will commence in 2010.

Personnel: Garrett Prestage.

Collaborators: Australian Research Centre in Sex Health and Society; Victorian AIDS Council; PLWHA Victoria.

Funding: Victorian Health Department.

■ Defining risk and mechanisms of permucosal transmission of acute HCV infection within high-risk populations

A study of HCV transmission and its risk factors among homosexual men.

Status: The study samples have been stored and will undergo batch analysis in 2010. During 2009, five patients have been enrolled prospectively into the study and have consented to the qualitative interview study. Recruitment is ongoing.

Personnel: Garrett Prestage, Ian Down, Jack Bradley, Mark Danta, Gail Matthews, Tanya Applegate

Funding: NHMRC

HIV-related cancer research

■ Anal intraepithelial neoplasia (AIN) and anal human papillomavirus (HPV) infection in homosexual men

A prevalence study of AIN and anal HPV infection in HIV-negative and HIV-positive homosexual men.

Status: Analyses and reporting were completed in 2009.

Personnel: Andrew Grulich, Garrett Prestage, Marina van Leeuwen

Collaborators: UNSW Cancer research Centre; Dorevitch Pathology - Mayne Health; Sexually Transmitted Infections Research Centre; St Vincent's Hospital, Sydney; Cytoc Corporation Australia Pty Ltd
Funding: UNSW

■ Cancer in people with long standing HIV infection

A data linkage study examining rates and risk factors for cancer in people with HIV. A particular focus of the study is to examine rates of cancer in those with long-term mild immune deficiency.

Status: Analysis and reporting were completed in 2009.

Personnel: Marina van Leeuwen

Collaborators: UNSW Cancer Research Centre; Australian Institute of Health and Welfare; AHOD investigators (see *Biostatistics and Databases Program*)

■ International pooled analysis of immune risk factors for lymphoma

A pooled analysis of case-control studies of immune risk factors for lymphoma.

Status: All twelve member studies sent data on a pooled total of 12,982 cases and 16,441 controls, and results on auto-immune disease as a risk factor for non-Hodgkin lymphoma (NHL) were reported. Analyses on the association between atopic disease, birth order, and infectious conditions and NHL risk were ongoing.

Personnel: Andrew Grulich

Collaborators: UNSW Cancer Research Centre; University of Southern California; German Cancer Research Centre; Feinberg School of Medicine, Northwest University; Centre for Study and Prevention of Cancer; Aviano Cancer Centre; Catalan Institute of Oncology; University of California, San Francisco; David Geffen School of Medicine, University of California, Los Angeles; University of York; British Columbia Cancer Registry; School of Medicine, Yale University
Funding: Leukaemia Foundation of Australia

■ Cancer in kidney dialysis patients and kidney transplant recipients

A project to link the Australian and New Zealand Dialysis and Transplant Register (ANZDATA) with the national cancer register to allow the identification of cancers that occur at increased rates, and the identifications of risk factors for development of cancer.

Status: Analysis of risk factors for specific cancers continued. Reporting occurred for risk factors for lip cancer, melanoma, non-Hodgkin lymphoma and cancers in people during dialysis.

Personnel: Andrew Grulich, Matthew Law, Marina van Leeuwen

Collaborators: UNSW Cancer Research Centre; Australian and New Zealand Dialysis and Transplant Registry (ANZDATA); University of Otago; Westmead Hospital
Funding: NSW Cancer Council

■ Cancer in primary immune deficiency

A project to describe the incidence of malignancies in people with primary (congenital) immune deficiencies and to compare this with the incidence of malignancy in people with HIV/AIDS and in those with organ transplants.

Status: Ethics approvals were obtained, and linkage with the National Cancer Statistics clearing house occurred.

Personnel: Andrew Grulich, Matthew Law, Marina van Leeuwen

Collaborator: UNSW Cancer Research Centre; Australian Primary Immunodeficiency Disease Register, The University of Sydney
Funding: NHMRC fellowship

Viral Hepatitis Clinical Research Program

2009 was a rewarding year for the Viral Hepatitis Clinical Research Program (VHCRP) with several of the program's large studies reaching completion and being published. The program was also successful in being awarded an NHMRC Partnership Grant. The Hepatitis C Incidence and Transmission Study incident case cohort (HITS-i) funded by the UNSW Strategic Research Grant commenced recruitment and follow-up of incident cases through St. Vincent's Hospital and community outreach.

An NHMRC Project entitled *Defining risk and mechanisms of permucosal transmission for acute HCV infection within high-risk populations* (RAMPT-C Study) commenced recruitment at St. Vincent's Hospital, Sydney with Dr Mark Danta as the study Principal Investigator and Dr Gail Matthews as Co-Investigator. The study will also be conducted at the Alfred Hospital in Melbourne in collaboration with A/Prof Margaret Hellard. The Enhancing Treatment for Hepatitis C in Opiate Substitution Settings (ETHOS) study commenced recruitment at six hepatitis assessment and treatment clinics established within existing drug and alcohol clinics across

NSW. The program was successful in its NHMRC Partnership Grant and was awarded \$1,495,000 from NHMRC and an additional \$1,000,000 from NSW Health for 2010-2014 to expand and extend the ETHOS project activity. The program established HepBank, a large hepatitis C sample repository and established a hepatitis C laboratory research program through the NHMRC Program Grant. Dr Tanya Applegate joined the program as a senior lecturer and began research into hepatitis C mixed infection and protease and polymerase resistance in collaboration with Silvana Gaudieri (Royal Perth Hospital and Murdoch University). Finally, the International Collaboration of Incident hepatitis C in Injecting Cohorts (InC³) Collaborative Group was founded in 2009 by researchers from eight cohorts in Australia, Canada, Europe and the United States, with Greg Dore and Jason Grebely having a leading role in the development of this project. The aim of the collaboration was to create a merged multi-cohort project of pooled data from well characterised cohorts of IDUs with acute HCV infection, facilitate new in-depth studies not possible from each individual study and bring together researchers across disciplines.

Viral Hepatitis Clinical Research Program

(left to right)
 Greg Dore
 Gail Matthews
 Rosie Thein
 Jason Grebely
 Pip Marks
 Alexa Gillman
 Ineke Shaw
 Barbara Yeung
 Brendan Jacka
 Amanda Erratt
 Patrick McGrath
 Jennifer Moore
 Natalie Espinosa
 Absent:
 Tanya Applegate
 Lara Cassar
 Carolyn Day
 Marianne Jauncey
 Maryam Salehi Alavi



■ **Cancer Council STREP Grant**

Understanding hepatocellular carcinoma in NSW

Status: Ethics approval for NSW HBV and HCV linkage study (linkage to NSW Central Cancer Registry, Mortality data from Registry of Births Deaths and Marriages and Australian Bureau of Statistics, NSW Admitted Patient Data Collection) was granted from the NSW Population & Health Services Research Ethics Committee and the UNSW HREC during 2009. A probabilistic linkage of NSW Notifiable Diseases Database, Admitted Patient Data Collection, Central Cancer Registry and deaths was completed at the end of 2009. The linkage was carried out by the Centre for Health Record Linkage (CHeReL).

Personnel: Rosie Thein, Heather Gidding, Janaki Amin, Matthew Law, Greg Dore

Collaborators: Kate Ward (NSW Health)

Funding: The Cancer Council NSW

■ **HCV modelling and health outcomes**

The objective was to evaluate the potential epidemiological impact and expected cost-effectiveness of increased hepatitis C treatment uptake in Australia over the next 30 years (2010-2039).

Status: Mathematical modelling and economic evaluation was completed at the end of 2009.

Personnel: Rosie Thein, Alex Hoare, Greg Dore, David Wilson

Collaborators: Murray Krahn (University of Toronto, Canada)

Funding: Roche Products (Australia) Pty Ltd.

■ **Australian Trial in Acute Hepatitis C (ATAHC)**

A study examining the natural history, safety and efficacy of pegylated interferon therapy for acute and newly acquired hepatitis C among injecting drug users.

Status: Recruitment commenced July 2004, was completed November 2007 and follow-up completed in February 2009.

Sites: 20 sites

Enrolled/target: 168/240

Personnel: Barbara Yeung, Pip Marks, Patrick McGrath, Gail Matthews, John Kaldor, Greg Dore

Collaborators: Macfarlane Burnet Institute for Medical Research and Public Health; School of Pathology, UNSW; South-East Area Laboratory Service, Prince of Wales Hospital; St Vincent's Hospital, Sydney; Prince Alfred Hospital; The Alfred Hospital; Kirketon Road Centre; Australian Hepatitis Council; Australian Injecting and Illicit Drug Users League (AIVL); Australian network of primary care and hospital-based hepatitis clinics

Funding: US National Institutes of Health; Roche Products Pty Ltd

■ **Australian collaborative study in chronic hepatitis C genotype 1 (CHARIOT)**

A randomised active control arm study examining the safety and efficacy of high dose induction pegylated interferon therapy, in combination with ribavirin, for chronic hepatitis C genotype 1 infection.

Status: Follow-up completed June 2008.

Sites: 51 (33 Australia, 3 New Zealand, 5 Canada, 3 Thailand, 4 Argentina, 3 Mexico)

Enrolled/target: 896 (702 Australia, 29 New Zealand, 165 internationally)/816

Personnel: Natalie Espinosa, Ineke Shaw, Pip Marks, Gail Matthews, Jennifer Moore, Greg Dore

Collaborators: Stuart Roberts, The Alfred Hospital; Australian and international network of hospital-based liver and hepatitis clinics

Funding: Roche Products Pty Ltd.

■ **UNSW Hepatitis C Virus Vaccine Initiative: Natural history and clinical trials**

The UNSW Hepatitis C Vaccine Initiative is a collaborative program of research which aims to establish a comprehensive community, clinical and laboratory framework for candidate hepatitis C vaccine evaluation. The natural history and clinical trials arm will establish a hepatitis C incident case cohort (HITS-i), with subjects drawn from prison (HITS-p) and community (HITS-c) -based hepatitis C seronegative cohorts, and from St Vincent's Hospital, Sydney. HITS-i will examine the time-course and immunovirological predictors of hepatitis C clearance. Hepatitis C modelling studies will examine the impact of potential hepatitis C vaccines at a population level based on various scenarios of efficacy and uptake.

Status: Commenced recruitment in May 2009

Personnel: Greg Dore, Pip Marks, Natalie Espinosa, Rosie Thein.

Collaborators: AIDS Council of New South Wales; Australian Injecting and Illicit Drug Users League; Hepatitis Australia; Hepatitis C Council of NSW; Inflammatory Diseases Research Unit, School of Medical Studies, UNSW; Kirketon Road Centre; National Centre in HIV Social Research; National Drug and Alcohol Research Centre; NSW Community Restorative Centre; NSW Users and AIDS Association; School of Biotechnology and Biomolecular Sciences, UNSW, St. Vincent's Hospital Sydney

Funding: UNSW Strategic Research Grant

■ **Enhancing Treatment of Hepatitis C in Opiate Substitution Settings (ETHOS)**

A series of research projects which aims to increase the number of people with chronic hepatitis c virus (HCV) who access and complete HCV treatment in the pharmacotherapy setting. Within the

pharmacotherapy setting the project included; education and training of health care workers; an evaluation of client and practitioner's knowledge and attitudes; development of a network of HCV assessment and treatment clinics and the development of the ETHOS Cohort study.

The cohort aims to examine HCV treatment uptake, treatment response and incidence of reinfection among clients with chronic HCV and a history of injection drug use.

Status (ETHOS cohort): Commenced recruitment February 2009

Target (ETHOS cohort): 300

Personnel: Marianne Jauncey, Jason Grebely, Greg Dore, Alexa Gillman, Pip Marks, Rosie Thein

Collaborators: Drug and Alcohol Services, Royal Prince Alfred Hospital; Faculty of Medicine, The University of Sydney; National Centre in HIV Social Research, UNSW; Australasian Society for HIV Medicine, Hepatitis NSW, Australian Injecting and Illicit Drug Users League; Hepatitis Australia; NSW Users and AIDS Association.

Funding: Australian Government Department of Health and Ageing; NSW Health Department

■ **Liver Disease and HIV/HBV Coinfection in the era of HAART (COLD)**

A prospective cohort of people with HIV/hepatitis B co-infection to examine the impact of highly active antiretroviral therapy on liver disease progression and provide a means for surveillance of resistance to hepatitis B active agents.

Status: Recruitment of 150 individuals completed in Australia and the US in 2004-2006. Cohort expanded to include 47 individuals from Thailand in 2008.

Enrolled/target: 197/200

Sites: 5 (3 Australia, 1 United States, 1 Thailand)

Personnel: Gail Matthews, Amanda Erratt, Pip Marks, Patrick McGrath

Collaborators: Johns Hopkins University; Victorian Infectious Diseases Reference Laboratory; The Alfred Hospital; Royal Melbourne Hospital; St Vincent's Hospital, Sydney, HIV-NAT, Bangkok, Thailand

Funding: US National Institutes of Health

■ **Hepatitis B epidemiology and disease burden in Vietnam and Australia**

This project undertakes estimates and projections of hepatitis B-related liver disease burden including liver cancer in Australia and Vietnam.

Status: Completed (PhD submitted)

Personnel: Van Thi Thuy Nguyen (PhD student)

Collaborator: School of Public Health and Community Medicine, UNSW

■ Defining Risk and Mechanism of Per mucosal Transmission for acute HCV Infection within high-risk populations (RAMPT-C Study)

The study aims to characterize per mucosal transmission of HCV among HIV-positive and HIV-negative MSM, through clinical and molecular epidemiological analysis, with qualitative socio-behavioural and biological studies to explore the transmission mechanisms. The Study consists of three parts: Part I –Phylogenetics analysis, Part II –semen analysis, and Part III – Behavioural mechanism interview. An eligible patient can participate in Part I only or all three parts. **Status:** Recruitment started in November 2009 at St. Vincent’s Hospital, NSW. The Alfred Hospital, VIC will start recruitment in March 2010.

Enrolled/target: Part I – prospective component: 5/50; Part II – 3/65; Part III – 3/20

Personnel: Natalie Espinosa, Barbara Yeung, Pip Marks, Dr Mark Danta, Dr Gail Matthews, Prof. Greg Dore

Collaborator: The Macfarlane Burnet Institute for Medical Research and Public Health, St. Vincent’s Hospital, NSW. Funding: National Health and Medical Research Council Project Grant and St. Vincent’s Clinic Foundation Research Grant.

■ The International Collaboration of Incident hepatitis C in Injecting Cohorts (InC3)

Collaborative Group This merged collaborative project aims to evaluate aspects of the epidemiology, natural history, virology, immunology and treatment of HCV among injection drug users with well-defined acute HCV infection. This is the largest consortium of investigators ever assembled to investigate acute HCV infection.

Status: The first data merger occurred in September 2009.

Enrolled: 539 participants

Personnel: Andrew Lloyd, Lisa Maher, Margaret Hellard, Julie Bruneau, Naglaa Shoukry, Kimberly Page, Maria Prins, Arthur Kim, Barbara McGovern, Georg Lauer, Andrea Cox.

Collaborators: University of New South Wales, the Burnet Institute, Université de Montréal, University of California San Francisco, the University of Amsterdam and Public Health Service of Amsterdam, Harvard, Johns Hopkins.

VIRAL HEPATITIS CLINICAL RESEARCH PROGRAM (VHCRP) CLINICAL TRIALS NETWORK (AUSTRALIAN SITES)

Each site listed below has recruited and/or followed at least one subject in a VHCRP research protocol during 2009.

NEW SOUTH WALES

St Vincent’s Centre for Applied Medical Research – Clinical Research Program (SVC for AMR-CRP)

Site principal: Greg Dore, Mark Danta
Site co-ordinators: Rebecca Hickey, Dianne How Chow

Clinic 36

Site principal: Paul Haber
Site co-ordinators: Frances Tenison, Janice Pritchard-Jones

Regent House

Site principal: Paul Haber
Site co-ordinators: Ann Taylor, Janice Pritchard-Jones

Hunter Pharmacotherapy Services

Site principal: Adrian Dunlop
Site co-ordinators: Susan Hazelwood and Raka Tierney

Kite Street Community Clinic, Orange

Site principal: Annie Balcomb
Site co-ordinators: Tim Lynch, Josephine Buckerfield and Fiona D’Aquino

Rankin Court Treatment Clinic

Site principal: Alex Wodak
Site co-ordinators: Dianne How Chow and Catherine Andrews

VICTORIA

Macfarlane Burnet Institute for Medical Research and Public Health

Site principal: Margaret Hellard
Site co-ordinator: Sally von Bibra

The Alfred Hospital

Site principals: Margaret Hellard,
Site co-ordinators: Sally von Bibra

INTERNATIONAL

Thailand

Thai Red Cross AIDS Research Centre HIV-NAT

Viral Hepatitis Epidemiology and Prevention Program

During 2009 screening and recruitment continued for the Hepatitis Incidence and Transmission Study – community (HITS-c), a new prospective observational study of anti-HCV negative people who inject drugs being conducted in six sites throughout Sydney. Part of a program of preparedness for clinical trials of candidate hepatitis C vaccines under the auspices of the NSW Hepatitis C Vaccine Initiative, in 2009 VHEPP and a group of international collaborators were awarded an NHMRC Project Grant to continue the cohort as part of our HCV Vaccine preparedness research. In 2009, Jenny Iversen and her team successfully conducted the largest ever annual Australian NSP Survey, recruiting 2680 participants and collecting data on HIV and HCV antibody prevalence and associated risk factors, and needle and syringe coverage. The survey continues to value-add to Australia’s internationally recognised surveillance system, with the publication of a paper modelling the impact of NSPs on HCV well received by policy-makers and resulting in a NSW Health policy direction to remove restrictions on the availability of sterile injecting equipment and increase distribution. VHEPP staff (Jenny Iversen, Bethany White and Lisa Maher) also contributed to the Return on Investment Report released this year. Recruitment continued into the Hepatitis B Acceptability and Vaccine Incentives Trial (HAVIT), a two-arm randomised clinical trial examining the efficacy of financial incentives in increasing hepatitis B immunisation completion in IDUs. The trial is being conducted with partners at the Kirketon Road Centre and Redfern Drug Health Service and during 2009 was co-ordinated by Brian Acraman and Dr Rachel Deacon, with assistance from Mofi Islam and Anna Doab,

while Kathy Barnes is on maternity leave. This year saw the completion of the community-based participatory research component of the Indigenous Resilience Project led by Dr Julie Mooney-Somers and the production of a final report and several publications from the Townsville site. With the appointment of Dr Anna Olsen in mid 2009, the project is now moving into the final phase with plans to conduct a survey of BBV/STI risk and resilience among young Aboriginal people during 2010. Other projects in 2009 included a NSW Health-funded study of hepatitis C seroconversion in collaboration with the National Centre in HIV Social Research, a longitudinal study of Culture and HIV Prevention in Cambodia funded by the National Institutes of Health and CIHR-funded research examining the social and environmental influences on injection drug use conducted with collaborators at the BC Centre for Excellence in HIV/AIDS in Vancouver. Also in 2009, NHMRC post-doctoral fellows Dr Jo Kimber and Dr Peter Higgs continued work on their respective projects, with Jo analysing data from the Edinburgh cohort and Peter continuing to interview long-term anti-HCV negative injectors as part of the Staying Safe collaboration. In 2010 VHEPP will welcome its third NHMRC post-doctoral fellow with Dr Anna Olsen awarded a fellowship to study hepatitis B in Indigenous communities. VHEPP also had two PhD graduations in 2009 with Heidi Coupland and Allison Salmon awarded PhDs in May and Susan Hudson submitting her thesis in December. During 2009 VHEPP staff submitted 41 papers for publication in peer-reviewed scientific journals; 25 of which were published with a further seven in press and nine under review.



VHEPP

(left to right)

Lisa Maher
 Anna Olsen
 Joanne Kimber
 Julie Mooney-Somers
 Brian Acraman
 Anna Bates
 Rachel Deacon
 Jarliene Enriquez
 Jenny Iversen
 Len Liao
 Rachel McCleave
 Bethany White

Absent:

Kathy Barnes
 Anna Doab
 Aylza Donald
 Peter Higgs
 Ekramul Hoque
 Martlene Thompson
 Mofi Islam
 Anh Pham
 Kerri Shying

■ Australian Needle and Syringe Program Survey

Annual cross-sectional surveys are conducted at selected needle and syringe programs (NSPs) throughout Australia during a one to two week period in October. All clients attending participating NSP sites during the survey period are invited to complete a self-administered questionnaire, and to provide a capillary blood sample for HIV and hepatitis C antibody testing. NCHECR maintains the national database on behalf of the Collaboration of Australian Needle and Syringe Programs, and develops and carries out analyses of data and prepares surveillance reports and papers for publication. In 2009, 50 NSP sites and almost 2,700 respondents participated in the survey.

Status: Ongoing

Personnel: Jenny Iversen, Kerri Shying, Lisa Maher

Collaborators: State and Territory health authorities; NSP services involved in HIV and hepatitis C surveillance; St Vincent's Hospital, Sydney; Association for Prevention and Harm Reduction Programs Australia (ANEX); Australian Injecting and Illicit Drug Users League (AIVL); Centre for Health Research in Criminal Justice, National Drug Research Institute

Funding: Australian Government Department of Health and Ageing

■ The role of resiliency in responding to blood-borne viral and sexually transmitted infections in Indigenous communities

A collaborative project between Australia, Canada and New Zealand to examine resilience to blood-borne viruses (BBVs) and sexually transmissible infections (STIs) in Indigenous communities. With a focus on adolescents and young adults in urban settings, the Australian component of the study seeks to identify factors that protect against acquisition of BBV/STI and promote access to prevention and treatment, and provide capacity building opportunities for Indigenous researchers and Aboriginal Community Controlled Health Services.

Status: Ongoing

Personnel: Julie Mooney-Somers, Anna Olsen, Marlene Thompson, Lisa Maher, John Kaldor

Collaborators: Townsville Aboriginal and Islanders Health Service Ltd; The Aboriginal Medical Service Coop Ltd, Redfern; Derbarl Yerrigan Health Service, Perth; Centre for Infectious Disease Prevention and Control, Health Canada; Canadian Aboriginal AIDS Network; University of Ottawa; Ngā Pae o te Māramatanga, University of Auckland; Auckland University of Technology; University of Otago Medical School

Funding: Tripartite Cooperation Agreement between Canadian Institutes of Health

Research (CIHR); National Health and Medical Research Council of Australia (NHMRC); Health Research Council of New Zealand (HRC).

■ UNSW Hepatitis C Vaccine Initiative

The UNSW Hepatitis C Vaccine Initiative is a collaborative program of research which aims to establish a comprehensive community, clinical and laboratory framework for candidate hepatitis C vaccine evaluation. The Social Epidemiology and Prevention Studies arm aims to consult with affected communities and key stakeholders; establish a community-based cohort of people who inject drugs; determine hepatitis C incidence; identify factors associated with acquisition of, or protection from, hepatitis C infection; assess levels of follow-up and factors associated with retention; and identify attitudes towards research and willingness to participate in candidate hepatitis C vaccine trials.

Status: Ongoing. Two papers based on formative ethnographic research submitted, one in press. During the first year of recruitment, the Hepatitis C Incidence and Transmission Study – community (HITS-c) enrolled 108 anti-HCV negative participants, with 76% retention at six months.

Personnel: Jarliene Enriquez, Aylza Donald, Anna Bates, Anh Pham, Len Liao, Bethany White, Lisa Maher

Collaborators: AIDS Council of New South Wales; Australian Injecting and Illicit Drug Users League; Hepatitis Australia; Hepatitis C Council of NSW; Inflammatory Diseases Research Unit, School of Medical Studies, UNSW; Kirkeaton Road Centre; National Centre in HIV Social Research; National Drug and Alcohol Research Centre; NSW Community Restorative Centre; NSW Users and AIDS Association; SEALS, School of Biotechnology and Biomolecular Sciences, UNSW; Sydney South West Area Health Service.

Funding: UNSW Strategic Research Fund.

■ Hepatitis B Acceptability and Vaccine Incentives Trial (HAVIT)

This study seeks to determine the efficacy of incentive payments in increasing hepatitis B vaccine completion among injecting drug users (IDU). Using a two-arm randomised controlled trial design, a 3-dose accelerated HBV schedule (0, 7, and 21 days) will be offered to eligible IDUs allocated to either an incentive payment or standard of care condition. Participants allocated to the incentive payment condition will receive a \$30 incentive payment after each dose of the vaccine. Secondary objectives are to (i) Determine the cost effectiveness of incentive payments relative to standard care as a method of improving vaccine-induced immunity as measured at three months and rates of

successful series completion; (ii) Identify the correlates of immunity; (iii) Assess the acceptability of vaccines, including HBV vaccines, barriers to immunisation uptake and willingness to participate in vaccine trials; and (iv) Document hepatitis B-related knowledge in this group.

Status: Ongoing. To date a total of 66 eligible participants have been enrolled in the trial (41 at the Kirkeaton Road Centre and 21 at Redfern Drug Health Service). A third site, drawing on the HITS-c study, was initiated in south-west Sydney in November 2009 and has enrolled 4 participants to date.

Personnel: Brian Acraman (to April 2009), Rachel Deacon (from April 2009), Mofizul Islam (from June 2009), Anna Doab (from November 2009), Lisa Maher

Collaborators: National Centre in HIV Epidemiology and Clinical Research (NCHECR); University of New South Wales (UNSW); Kirkeaton Road Centre (KRC); National Drug and Alcohol Research Centre (NDARC); Sydney South West Area Health Service, Redfern Drug Health Service

Funding: NHMRC Project Grant.

■ How do long-term injecting drug users avoid exposure to hepatitis C infection?

Building upon an existing cohort of injecting drug users, this study seeks to investigate the behavioural, social, environmental and economic factors that distinguish IDUs with and without hepatitis C exposure. It will identify, from the narratives of HCV negative injectors, strategies that may help in the development of interventions for injectors to remain HCV free. A series of up to 3 interviews has been conducted with long term injectors. Results will be compared with similar studies underway in New York and London as part of an international collaboration.

Status: Ongoing. A series of in-depth interviews with long term HCV uninfected injectors (n=25) is almost complete with data analysis to commence in 2010.

Personnel: Peter Higgs, Lisa Maher
Collaborators: National Development and Research Institutes, New York, London School Hygiene Tropical Medicine, University of London; The Centre for Population Health, Burnet Institute
Funding: NHMRC Training Fellowship; UNSW Faculty of Medicine Small Grant Scheme.

■ Culture and HIV Prevention in Cambodia

This study assesses two cultural measures particular to Asian cultures, 'harmonious control' and 'fatalism' and their association with HIV infection and related risk and preventive behaviour, including adherence to a preventive vaccine regimen, among young women working in the sex and

entertainment industry in Phnom Penh, Cambodia. Phase 1 consists of a formative qualitative phase to assess the constructs of harmonious control and fatalism, risk behaviours, and attitudes toward biomedical prevention technologies. Phase 2 consists of a prospective observational study with clinical and serological assessments for HIV and other STIs, risk behaviours and measurement of adherence to a multidose preventive HPV vaccine series.

Status: Ongoing. Training workshops conducted, data collection and analyses in progress

Personnel: John Kaldor, Lisa Maher

Collaborators: University of California San Francisco, NCHADS, Cambodian Women's Development Association

Funding: National Institutes of Health.

■ Hepatitis C Seroconversion: Using qualitative research to enhance surveillance

This study was designed to improve existing surveillance and contribute to prevention of hepatitis C in NSW, by improving mechanisms for identifying cases of newly acquired hepatitis C infection and conducting a targeted qualitative study of HCV seroconverters. Aims were to (i) consult with NSW Health, area public health units, laboratories and high case-load doctors to determine acceptable liaison and referral pathways for recruitment; (ii) pilot the recruitment methodology and interview on a small sample of seroconverters; (iii) conduct a targeted study of people with recently acquired HCV infection; and (iv) assess the feasibility of a laboratory-based methodology in increasing the identification of newly acquired cases in NSW.

Status: This study was completed in 2009 and the final report submitted to NSW Health.

Personnel: Rachel Deacon, Lisa Maher

Collaborators: National Centre in HIV Social Research, NSW Users and AIDS Association (NUAA), Hepatitis C Council of NSW, SEALS, Lavery Symbion pathology

Funding: NSW Health Department.

■ Ethno-epidemiology of psychostimulant-related harms in Australia

Multi-disciplinary research which aims to identify factors underlying the rising prevalence of psychostimulant use in Australia and implications for public health. Conducted in Sydney, Melbourne and Perth, the study utilises ethnographic and epidemiological research methods and techniques to access psychostimulant users in a range of settings.

Status: Data collection finalised; analyses and integrative modelling ongoing

Personnel: Susan Hudson (PhD student), Lisa Maher

Collaborators: National Drug Research Institute, Curtin University; Monash University; Australian National University

Funding: NHMRC Project Grant.

■ Examination of injecting drug use life course and estimating prevalence and health consequences of a dynamic population

This project examines longitudinal and health surveillance datasets of injecting drug users from the UK and Australia taking into account periods of injecting and non-injecting. This will allow for more valid projections of injecting drug use health consequences and associated health impacts and costs of interventions.

Status: Analysis of Edinburgh Addiction Cohort data set ongoing

Personnel: Jo Kimber, Lisa Maher

Collaborators: University of Bristol; MRC Biostatistics Unit, Cambridge; Muirhouse Medical Group, Edinburgh; London School of Hygiene and Tropical Medicine

Funding: NHMRC (Sidney Sax) Training Fellowship.

Sexual Health Program

The Sexual Health Program undertakes research and surveillance designed to inform strategies to reduce the impact of sexually transmissible infections (STIs) and HIV, and to conduct trials to directly reduce the impact of STIs. The program had leading roles in developing new national surveillance networks for genital chlamydia, genital warts, and other STIs, as well as planning to implement large randomised controlled trials in STI prevention.

The SHP works with the Surveillance and Evaluation Program for Public Health (SEPPH) to refine the reporting of routine STI notification data. The SHP also leads a project that has established a sentinel surveillance network for ano-genital warts in high-risk populations. The SHP is also involving in developing international guidelines for the use of de-tuned assays for the surveillance of incident HIV infections. The program is currently involved in molecular epidemiology studies of *Neisseria gonorrhoeae* (with the WHO Collaborating Reference Laboratory at Prince of Wales Hospital) and *Chlamydia trachomatis* (with the Microbiology Department of the Royal Women's Hospital in Melbourne). In projects led by the modelling team at NCHECR, the SHP consults on syphilis, chlamydia and HPV transmission dynamic

studies and models of STI screening interventions among sex workers.

The SHP is involved in extensive studies of the health and welfare of Australian *prisoners* (with the School of Public Health and Community Medicine at UNSW and Curtin University), sex workers (with the Faculty of Law at UNSW and the School of Population Health at the University of Melbourne), backpackers and travellers (with the Sydney Sexual Health Centre), Aboriginal Australians (with the Aboriginal and Torres Strait Islander Program in NCHECR and the NHMRC-funded CCRE in Aboriginal Sexual Health), and homosexually active men (with the HIV Epidemiology and Prevention Program in NCHECR). The SHP is also part of national collaborations that are developing three large randomised controlled trails investigating the efficacy of enhanced best-practice in STI management in remote Aboriginal communities (STRIVE Trial); the feasibility and effectiveness of enhanced chlamydia screening in primary care (ACCEPT Trial); and the efficacy of chemoprophylaxis with doxycycline in preventing syphilis in HIV positive men Syphilaxis Trial). With SEPPH and HEPP, on behalf of DoHA, the program has recently been developing a national plan for the control of syphilis in homosexual men.

Sexual Health Program

(left to right)
Basil Donovan
Rebecca Guy
Joanne Micallef
Neil Franklin
Karen Schneider
Kel Heymer
Candace Mitchell

Absent:
Christine Harcourt
Rashmi Fotedar
Karen Schneider
Kirsty Smith



■ Australian Collaboration for Enhanced Chlamydia Sentinel Surveillance (ACCESS)

Chlamydia is the most commonly notified disease in Australia and is an important cause of pelvic inflammatory disease and tubal infertility in women. Chlamydia notifications have been increasing for over a decade. However, the basis of the increase is not well understood. The ACCESS program will determine chlamydia testing and positivity rates in priority populations nationally as well as establishing an ongoing surveillance system. Populations of interest include young heterosexuals, men who have sex with men, sex workers, pregnant women, and Indigenous people. The program involves national collaborative networks of selected services including sexual health clinics, antenatal clinics, Aboriginal Community Controlled Health Services, family planning clinics, general practices and laboratories.

Status: Ongoing data collection analysis and evaluation.

Personnel: Basil Donovan, John Kaldor, Rebecca Guy, Neil Franklin, James Ward, Andrew Grulich.

Collaborators: Burnet Institute, National Perinatal Statistics Unit, Australian Institute of Health and Welfare, National Serological Reference Laboratory, Australasian Chapter of Sexual Health Medicine, Sexual Health & Family Planning Australia (SH&FPA), Key Centre for Women's Health and Society, Department of General Practice, University of Melbourne, School of Population Health/University of Melbourne, Bettering the Evaluation and Care of Health (BEACH), National Aboriginal Community Controlled Health Organisation (NACCHO), The Royal Australian and New Zealand College of Obstetricians and Gynaecologists, eight family planning clinics, 27 general practices, nine antenatal clinics, 25 sexual health clinics, seven Aboriginal Community Controlled Health Services and fifteen laboratories across Australia.

Funding: Commonwealth Department of Health and Ageing (DoHA).

■ Long-term surveillance for genital warts through Australian sexual health services

A national program of human papilloma virus (HPV) vaccination of Australian teenage girls and young women requires systems that can provide long-term surveillance for trends in HPV-related diseases. Genital warts should only be prevented by quadrivalent vaccine that also covers HPV types 6 and 11. We intend to establish a system of enhanced sentinel surveillance for genital warts in ten larger sexual health clinics.

Status: Ongoing data collection analysis and evaluation.

Personnel: Basil Donovan, Andrew Grulich, Rebecca Guy, Neil Franklin.

Collaborators: Melbourne Sexual Health Centre, School of Population Health/University of Melbourne, CSL Ltd, Australasian Chapter of Sexual Health Medicine, ten sexual health clinics across Australia.

Funding: CSL Ltd.

■ A trial of chemoprophylaxis to prevent syphilis in men who have sex with men with HIV infection: Syphilaxis

A syphilis epidemic has recently re-emerged among MSM in Australia, particularly among those with HIV infection. Conventional control methods to curb the re-emergence of syphilis in MSM have not been successful. This trial will compare the incidence of syphilis in HIV infected men who have sex with men treated with 100mg of doxycycline once daily with those receiving placebo. The study will employ a randomised, double-blind placebo design. HIV-infected men who have sex with men will be recruited through designated research sites and followed over an 18 month period.

Status: Protocol development.

Personnel: Fraser Drummond, Rebecca Guy, Kathy Petoumenos, Andrew Grulich, Garrett Prestage, David Cooper, Basil Donovan, John Kaldor.

Collaborators: Clinics in Australia, USA, Canada and Peru

Funding: In negotiation

■ The effect of the law on the health and welfare of sex workers

Hostile legal and policing environments have the potential to adversely affect the health and welfare of sex workers. However, this hypothesis has never been investigated. This study aims to determine if legal attempts at prohibition of sex work (Western Australia), regulation through licensing (Victoria) or decriminalisation (New South Wales) are associated with differing health and welfare outcomes for sex workers. The study involves legal research, key informant interviews questionnaires with sex workers, and testing sex workers for STIs at their work-sites.

Status: Data collection completed, analysis underway.

Personnel: Basil Donovan, Christine Harcourt, Handan Wand, John Kaldor.

Collaborators: Faculty of Law, UNSW, School of Population Health, University of Melbourne, Fremantle Hospital Sexual Health Service, SWOP (Sydney), Magenta (Perth), RhED (Melbourne), Royal Women's Hospital, Melbourne.

Funding: NHMRC project grant.

■ Status reports on the female sex industry (WA and NSW)

The health and welfare of Australian sex workers has only been studied sporadically

over recent decades. This study is designed to review all of the data available on the health and welfare of sex workers in WA and NSW; and use these data to develop timely reports with recommendations for actions by state governments.

Status: Consultation with stake-holders ongoing. Reports in preparation.

Personnel: Basil Donovan, Chris Harcourt, Dana Paquette, Handan Wand, John Kaldor.

Collaborators: Faculty of Law UNSW, Melbourne Sexual Health Centre/School of Population Health, University of Melbourne, Fremantle Sexual Health Centre, Sydney Sexual Health Centre, SWOP/ACON

Funding: Health Departments of WA and NSW.

■ Sexual Health and Attitudes of Australian Prisoners (SHAAP) study

Little is known about the sexual behaviour, including sexual assault, of Australian prisoners. In addition, the consequences of introducing condoms and dental dams into prisons are unknown. This study is designed to qualify and quantify the sexual behaviour of male and female prisoners in all New South Wales and Queensland prisons. It also aims to assess the effects of NSW prisons introducing condoms and dental dams in 1997. This study involves computer-assisted telephone interviews with prisoners and key informant interviews.

Status: Data collection completed. Several reports in preparation.

Personnel: Basil Donovan, Karen Schneider.

Collaborators: NSW Justice Health, School of Public Health and Community Medicine UNSW, NSW Department of Corrective Services, National Drug Research Institute, Curtin University.

Funding: NHMRC project, NSW Health Department, NSW Department of Corrective Services, Queensland Department of Corrective Services, School of Public Health and Community Medicine, UNSW.

■ Chlamydia Incidence and Re-infection Study (CIRIS)

Chlamydia incidence and re-infection rates have never been studied in Australian women. We aim to determine the incidence of chlamydia in a cohort of young women who initially screen negative, along with determining the re-infection rate of women who initially screen positive, in order to inform future population screening programs. This study involves the establishment of a cohort of chlamydia-negative women attending a range of primary health care services.

Status: Ethics, protocol development, data collection to conclude in 2009.

Personnel: Basil Donovan, John Kaldor.

Collaborators: School of Population Health and Department of General Practice,

University of Melbourne, Canberra Sexual Health Centre, Melbourne Sexual Health Centre, Sydney Sexual Health Centre, Royal Women's Hospital, Melbourne.

Funding: Commonwealth Department of Health and Ageing.

■ A longitudinal study of bacterial vaginosis and *Mycoplasma genitalium* in young Australian women

Little is known about the epidemiology and natural history of bacterial vaginosis (BV) and nothing is known about *M genitalium* (MG) infection in Australian women. We seek to determine the prevalence, incidence and persistence of BV and MG in a general population of Australian women using the cohort established by the CIRIS study.

Status: Ethics, protocol development, data collection to conclude in 2009.

Personnel: Basil Donovan.

Collaborators: School of Population Health, University of Melbourne, Melbourne Sexual Health Centre, Royal Women's Hospital, Melbourne.

Funding: NHMRC project.

■ Surveillance of lymphogranuloma venereum types of *Chlamydia trachomatis* among men who have sex with men

Lymphogranuloma venereum (LGV) is caused by *Chlamydia trachomatis* [CT] serovars L1-L31. These serovars display tropism for the lymphatic system and are clinically much more severe than other chlamydia serovars. Since 2004, there has been a resurgence of LGV proctitis affecting predominantly men who have sex with men with HIV infection in the United Kingdom, Western Europe and the USA. The pattern of infection in Australia has not yet been described. The prevalence, clinical spectrum and risk factors of LGV among men who have sex with men attending the Melbourne and Sydney Sexual Health Centres, and the HIM/pH cohorts will be described.

Status: Data collection.

Personnel: Basil Donovan, Andrew Grulich.

Collaborators: Microbiology Department, Royal Women's Hospital, School of Population Health, University of Melbourne, Melbourne Sexual Health Centre, Sydney Sexual Health Centre.

Funding: NHMRC project.

■ The molecular epidemiology of gonorrhoea in Sydney

Gonorrhoea was re-established as an endemic STI among MSM in Sydney in the late 1990s. This study aims to determine the origin of the *Neisseria gonorrhoeae* strains circulating in Sydney among MSM and other populations in Sydney and to correlate these data with phenotypic and genotypic evidence of antibiotic resistance, clinical

presentation, and epidemiological data. In addition, blood-free culture media are being evaluated for their utility in diagnosis and genotyping studies of *N gonorrhoeae*.

Sequential isolates from the Sydney Sexual Health Centre are being assessed.

Status: Genotyping (NG-MAST) of isolates completed. Further protocol design underway.

Personnel: Rashmi Fotedar, Rebecca Guy, Basil Donovan.

Collaborators: WHO Collaborating Laboratory, Prince of Wales Hospital, Sydney Sexual Health Centre, Sydney Hospital.

Funding: Medical Advances without Animals (MAWA) PhD Scholarship.

■ Australian Chlamydia Control Effectiveness Pilot (ACCEPt)

Chlamydia notifications have been increasing for over a decade and approximately 80% of are among young men and women aged 15 to 29 years. Regular testing for chlamydia is recognised as a key public health control strategy. As chlamydia is mostly asymptomatic it can be transmitted unknowingly to others, thereby representing a hidden reservoir of infection if left undiagnosed. Furthermore without treatment, chlamydia may lead to severe clinical consequences such as pelvic inflammatory disease (PID) and infertility, ectopic pregnancy and pregnancy-related complications. Current national guidelines for GPs recommend all sexually active people aged 15–29 years old receive annual testing for chlamydia. More than 80% of 15–29 year olds attend a GP each year less however less than 10% are being tested for chlamydia by their GP. ACCEPt will involve a multifaceted intervention in the general practice setting to maximise testing rates and annual testing in sexually active 16–29 year olds and reduce the prevalence of chlamydia infections and its associated complications such as PID. In mid 2010 ACCEPt will be implemented. This is the first trial of this nature in Australia and is being led by the Centre for Women's Health, Gender and Society in collaboration with a large consortium of experts including a number of researchers from NCHECR. In addition, NCHECR has been contracted by the Centre for Women's Health, Gender and Society to develop the protocol for Program Evaluation and Mathematical Modelling and undertake these activities in collaboration with other ACCEPt investigators.

Status: Evaluation Protocol finalised in mid 2009. Trial implementation and data collection mid 2010 to mid 2013

Personnel: Basil Donovan, John Kaldor, Matthew Law, James Ward, Rebecca Guy, Kirsty Smith, David Regan, David Wilson

Collaborators: Centre for Women's Health, Gender and Society (leading agency), Department of General Practice/University of Melbourne, School of Population

Health/University of Melbourne, Melbourne Sexual Health Centre, University of Bern, Latrobe University, Deakin University, Victorian Cytology Service, Burnet Institute, Royal Women's Hospital, Bern University, Melbourne Sexual Health Centre.

Funding: Commonwealth Department of Health and Ageing (2008–2011).

Aboriginal and Torres Strait Islander Program

The Aboriginal and Torres Strait Islander Health Program works collaboratively across sectors to address the unacceptable disparity in health outcomes for Aboriginal and Torres Strait Islander peoples in the disciplines of prevention and treatment of sexually transmitted infections and blood-borne viruses.

The Program has four main areas of activity:

- Research: The conduct of culturally appropriate, scientific and ethical research in partnership with Aboriginal and Torres Strait Islander communities in the areas of STIs, HIV/AIDS and other blood-borne viruses (BBVs).
- Surveillance; to support existing surveillance activities and identify innovative new areas of surveillance that will benefit Aboriginal and Torres Strait Islander communities.
- Capacity building: to work with existing health services in enhancing capacity of systems and workforce in the areas of sexual health and BBV service delivery, research and surveillance.
- Information dissemination through the development of a comprehensive clearinghouse of Aboriginal and Torres Strait Islander sexual health initiatives including surveillance and research.

The program has a Memorandum of Understanding with the National Aboriginal Community Controlled Health Organisation (NACCHO) which provides a supporting environment for the conduct of research in partnership with Aboriginal communities. The program in 2009 published the 3rd *Bloodborne Viral and Sexually Transmissible Infections in Aboriginal and Torres Strait Islander People: Surveillance and Evaluation Report*. This report was launched jointly with the Australian Surveillance Report by Lizzie Adams of the Queensland Aboriginal and Islander Health Council.



Aboriginal and Torres Strait Islander Program

(left to right)
James Ward
Simon Graham
Candace Mitchell
Clint Arizmendi
Snehal Akre

■ **STRIVE: A randomised trial to control sexually transmitted infections in remote Aboriginal communities**

STRIVE is a community randomised trial designed to determine two questions: whether targeted support to primary health care services, including the implementation of a quality improvement package can improve the provision of sexual health clinical services in remote communities; and whether the attainment of best practice levels in clinical activity can reduce the prevalence of bacterial STIs in these communities. The trial will take place in 21 clusters comprised of more than 60 remote Aboriginal communities, of which seven will be randomly assigned in each of the three years of the trial to receive the tailored package.

Status: Commenced stage 1 – community engagement and planning 2009/2010.

Personnel: John Kaldor, James Ward, Rebecca Guy, Lisa Maher, Basil Donovan, Matthew Law

Collaborators: Menzies School of Health Research; University of South Australia; Central Australian Aboriginal Congress; Northern Territory Department of Health and Families; Aboriginal Medical Services Alliance Northern Territory

Funding: NHMRC Project Grant

■ **NSW Aboriginal Health Research Program**

This grant includes a trial aimed at enhancing clinical practice to reduce STIs in urban and regional Aboriginal primary health care settings in NSW and a general practice survey.

Status: Ongoing

Personnel: James Ward, John Kaldor and Simon Graham

Collaborators: Aboriginal Community Controlled Health Services in NSW

Funding: NSW Health

■ **Centre for Clinical Research Excellence in Aboriginal Health: Blood-borne viral and sexually transmitted infections.**

This CCRE was funded in 2009 and will bring together researchers from NCHECR, NACCHO and Aboriginal Community Controlled Health Services to conduct innovative research that will identify new approaches to diagnosing and managing STIs and BBVs while at the same time developing improved clinical guidelines and research capacity within the sector.

Status: Planning and Community Engagement

Personnel: John Kaldor, James Ward, Basil Donovan, Greg Dore, Sarah Potter

Collaborators: National Aboriginal Community Controlled Health Organisation; Aboriginal Health and Medical Research

Council of NSW; Aboriginal Health Council of South Australia, Aboriginal Medical Service Western Sydney, Durri Aboriginal Medical Service, Nunkawarrin Yunti of South Australia, Goondir Aboriginal Health Service, Victorian Aboriginal Health Service.
Funding: NHMRC CCRE Program

■ **Sexual Health and Relationship in Young Indigenous People**

The first Australian study assessing knowledge, risk behaviours and health service access in relation to sexually transmissible infections and blood-borne viruses of young Aboriginal and Torres Strait Islander people aged 16 to 30 years. During the next five years a cross sectional survey will be conducted across Aboriginal communities across Australia to determine risk behaviours, knowledge and health service use of young Indigenous people relating to STIs and BBVs.

Status: Planning and community engagement phases

Personnel: James Ward, John Kaldor, Clint Arizmendi

Collaborators: National Centre in HIV Social Research, UNSW; La Trobe University; National Aboriginal Community Controlled Health Organisation
Funding: Australian Research Council (ARC) Linkage Grant

■ **Evaluation and monitoring of six Commonwealth funded STI Youth Demonstration Projects**

NCHECR personnel are working to develop an evaluation framework and monitor evaluative outcomes for six demonstration youth STI projects nationally (two in the Northern Territory, three in NSW and one in Victoria).

Status: Ongoing

Personnel: James Ward, John Kaldor, Simon Graham

Funding: AIHW

Collaborations on STI, HIV and viral hepatitis projects

■ **STI Modelling Grant**

This grant will use mathematical models to assess the impact of interventions to reduce sexually transmitted infections in Australia. The aims of this project will be to develop dynamic mathematical models to describe the transmission of chlamydia, gonorrhoea and syphilis in Australian populations and further our understanding of their epidemiology. These will then be used to assess the impact of interventions and the cost effectiveness on the incidence and prevalence of chlamydia, gonorrhoea and syphilis in Australian populations. This

project has a specific component addressing Aboriginal and Torres Strait Islander populations.

Status: Ongoing

Personnel: D Regan, D Wilson, A Grulich, J Ward

Collaborators: University of Melbourne, UNSW SPHCM

Funding: NHMRC Project Grants

■ **Modelling the interaction between sexually transmitted infections and HIV transmission to inform public health policy**

This project will conduct quantitative analyses using the domains of epidemiology, mathematical modelling, and health economics to investigate the impact of sexually transmitted infections (STIs), and where applicable injecting drug use, on population level transmission of HIV.

Status: Establishment phase

Personnel: D Wilson, R Gray, J, Ward.

Collaborators: Rob Carter, Jonathon Anderson

Funding: NHMRC Project Grant

■ **ACCEPT: Design, Modelling and Evaluation of a Chlamydia Testing Pilot Program in General Practice**

The primary aims of this project are to assess the feasibility, acceptability and cost-effectiveness of an organised program for chlamydia testing in general practice. The secondary aim this project is to increase testing and awareness of Chlamydia in the Australian population.

Status: Establishment phase

Personnel: Jane Hocking, Basil Donovan, Rebecca Guy, John Kaldor, Matthew Law, David Wilson, James Ward, David Regan

Collaborators: University Of Melbourne, NACCHO, Selected Divisions of General Practice

Funding: Department of Health and Ageing

■ **Australian Collaboration for Enhanced Chlamydia Sentinel Surveillance (ACCESS)**

Chlamydia is the most commonly notified disease in Australia and is an important cause of pelvic inflammatory disease and tubal infertility in women. Chlamydia notifications have been increasing for over a decade. However, the basis of the increase is not well understood. The ACCESS program will determine chlamydia testing and positivity rates in priority populations nationally as well as establishing an ongoing surveillance system. Populations of interest include young heterosexuals, men who have sex with men, sex workers, pregnant women, and Indigenous people. The program involves national collaborative networks.

Status: Ethics, protocol development, site recruitment, development of data collection tools.

Personnel: Basil Donovan, John Kaldor, Rebecca Guy, Neil Franklin, James Ward, Andrew Grulich.

Collaborators: Burnet Institute, National Perinatal Statistics Unit, Australian Institute of Health and Welfare, National Serological Reference Laboratory, Australasian Chapter of Sexual Health Medicine, Sexual Health & Family Planning Australia (SH&FPA), Key Centre for Women's Health and Society, Department of General Practice, University of Melbourne, School of Population Health/University of Melbourne, Bettering the Evaluation and Care of Health (BEACH), National Aboriginal Community Controlled Health Organisation (NACCHO), The Royal Australian and New Zealand College of Obstetricians and Gynaecologists, eight family planning clinics, 21 general practices, eight antenatal clinics, five sexual health clinics, eight Aboriginal Community Controlled Health Services and eight laboratories.

Funding: Australian Government, Department of Health and Ageing

■ Increasing completeness of 'Aboriginality' in infectious diseases data through record linkage

The aim of this project is to improve availability and validity of epidemiological data on notifiable diseases in Aboriginal people in NSW so that incidence and prevalence of these diseases can be more accurately estimated. The objective of this project is to link records from the Notifiable Diseases Database (NDD) with other routinely collected population health databases to prepare a de-identified 'snapshot' dataset, with improved completeness of 'Aboriginality'.

Status: Ongoing

Personnel: James Ward

Collaborators: NSW Health; H Corner, M Bartlett, J McAnulty

Funding: NSW Health

■ Development and trial of key performance indicators for sexually transmitted infection control in clinical settings with high bacterial prevalence

A review of the literature has revealed a lack of performance indicators relevant to settings with a high prevalence of bacterial STI, such as in the Northern Territory (NT). This project aims to identify, develop, trial and endorse a core set of key performance indicators (KPI) relevant to STI control in the NT. This will improve monitoring of STI control programs allowing comparison between regions and services.

Status: Ongoing

Personnel: James Ward, John Kaldor

Collaborators: Menzies School of Health

Research; Northern Territory Department of Health and Families

Funding: NCHECR

■ Pelvic Inflammatory Disease in the Primary Health Care Setting: An Investigation of Clinical Management

A case note audit will be undertaken to review current clinical practice in relation to the management of women of reproductive age who present to remote community clinics in Central Australia with signs and symptoms of pelvic inflammatory disease and/or urinary tract infection. Secondly, a staff questionnaire will investigate the perceived barriers and facilitators to implementing recommended guidelines for the management of PID. This two fold approach will provide health services with quality data that can inform what improvements are required in the care that women are currently receiving when presenting with signs and symptoms of PID.

Status: Ongoing

Personnel: James Ward, John Kaldor

Collaborators: Menzies School of Health Research; La Trobe University, J Knox, J Boyle

Funding: NCHECR

Biostatistics and Databases Program

The Biostatistics and Databases Program continued and expanded its wide ranging activities during 2009. Cross-program biostatistical and database support was again a focus, with analyses of the STEAL and ALTAIR studies (see *Therapeutic and Vaccine Research Program*), and ATACH study (see *Viral Hepatitis Clinical Research Program*). Web-based data bases were developed for the ENCORE and Second Line studies (see *Therapeutic and Vaccine Research Program*) and further work on NCHECR's national HIV and AIDS surveillance databases was continued. The program also played a major, sometimes leading, role in a large number of collaborative projects, both nationally and internationally. The program was also awarded an NHMRC project grant to support methodological work looking at cluster analyses of HIV and other infections. Clinical observational cohorts continued to be a major research area in the program with the Australian HIV Observational Database, the TREAT Asia HIV Observational Database, the TREAT Asia Paediatric Observational Database, the TREAT Asia Studies Evaluating Resistance and the Australia Chronic Hepatitis C Observational Study all continuing to recruit and follow-up patients, and assess questions regarding the natural history of HIV/HCV

infections and treatment. Two Linkage studies were analysed, linking HIV-infected patients from AHOD, and HCV and HBV notifications in New South Wales, to hospitalisation data, providing population based data on rates of hospitalisations.

Sexually transmissible infections became an area of increasing interest for the Program during 2009. The program contributed to the design of the STRIVE and ACCEPt trials (see *Aboriginal and Torres Strait Islander Program*, and *Sexual Health Program*). Epidemic transmission models of HPV were developed, and the role of international travellers in transmission investigated. Models of Chlamydia transmission were developed and used to assess different screening and testing methods that might be implemented in the STRIVE trial. During 2009 the program, with the other researchers within NCHECR and externally, was awarded a Program Grant for clinical research in STIs that will underpin development of this area from 2010.

At the end of the 2009 the program moved offices to the UNSW Coogee campus. The move went extremely well, and the program benefited from improved and greater office space. The new offices will support the program's continued expected growth into 2010.

Biostatistics and Databases Program

(left to right)
 Matthew Law
 John Murray
 Janaki Amin
 David Regan
 Handan Wand
 Stephen Kerr
 Azar Kariminia
 Kathy Petoumenos
 Jialun Zhou
 Ben Hui
 Heather Gidding
 Awachana Jiamsakul
 Hamish McManus
 Rebecca Oyomipo
 Preeyaporn Srasuebkul
 Rossitza Chevkenova
 Greg Londish
 Courtney Bendall
 Noorul Absar
 Amit Achhra
 Ned Waters
 Absent:
 Sadaf Marashi Pour



■ The Australian HIV Observational Database (AHOD)

Observational cohort study of patients with HIV. Demographic, clinical and treatment data are aggregated twice each year via electronic data transfer.

Status: 2504 patients continued to be followed up during 2008.

Personnel: Sadaf Marashi-Pour, Hamish McManus, Kathy Petoumenos, Matthew Law

Collaborators: Network of clinical sites (GPs, hospitals and sexual health clinics) throughout Australia

Funding: Foundation for AIDS Research (amfAR) via a US National Institutes of Health grant through the International Epidemiologic Databases Evaluating AIDS collaboration; consortium of pharmaceutical companies.

■ The Data Collection on the Adverse Events of Anti-HIV Drugs Study (DAD)

Large, international, collaborative study aimed at assessing the medium to long-term effects of antiviral treatment of people with HIV in terms of possible increased risk of cardiovascular events.

Status: The study combines data from 11 cohorts, including more than 33,000 patients. Australia contributes 706 patients from the Australian HIV Observational Database. Follow up continued through 2008.

Personnel: Sadaf Marashi Pour, Kathy Petoumenos, Matthew Law

Collaborators: Network of clinical sites (GPs, hospitals and sexual health clinics) throughout Australia; Copenhagen HIV Programme, Hvidovre University Hospital

Funding: European Agency for the Evaluation of Medicinal Products (EMEA)

■ Myocardial infarction, assessment of Antiretroviral and Genetic factors in Human Immunodeficiency virus infection: MAGNIFICENT

International collaborative project of 17 Observational HIV Cohort Studies to evaluate the contribution of single nucleotide polymorphisms (identified in genome-wide association studies in the general population) and of combination antiretroviral therapy (cART), traditional acute coronary artery disease (CAD) risk factors, and HIV-related factors (CD4+ count, HIV RNA levels) to CAD events in HIV-infected individuals

Personnel: Courtney Bendall, Kathy Petoumenos

Collaborators: Network of clinical sites (GPs, hospitals and sexual health clinics) throughout Australia; Swiss HIV Cohort Study Group

■ Data from the highly specialised drugs program

Summary data of patients receiving antiretroviral treatments funded through the Highly Specialised Drugs Program are received from the Australian Government Department of Health and Ageing, and published in annual and biannual surveillance reports.

Status: Ongoing

Personnel: Sadaf Marashi-Pour

Collaborator: Highly Specialised Drugs Program, Special Access and Coordination Section, Pharmaceutical Access and Quality Branch, Australian Government Department of Health and Ageing

■ TREAT Asia HIV Observational Database (TAHOD)

Observational cohort study of patients with HIV at 17 sites throughout the Asia-Pacific region. Demographic, clinical and treatment data are aggregated twice each year via electronic data transfer.

Status: At the data transfer in September 2009, baseline and retrospective data from some 4,500 patients from 17 sites were aggregated. It is expected that follow up will continue for at least a further three years.

Personnel: Jialun Zhou, Rebecca Oyomopito, Julian Elliott, Preeyaporn Srasuekul, Matthew Law, David Cooper

Collaborators: Network of 17 clinical sites at countries throughout the Asia-Pacific region

Funding: American Foundation for AIDS Research (amfAR) via a US National Institutes of Health grant through the International Epidemiologic Databases Evaluating AIDS collaboration

■ TREAT Asia Quality Assurance Scheme (TAQAS)

To ensure capacity in HIV resistance testing in the Asia-Pacific region, a quality assurance scheme was implemented. Twice a year, HIV-infected blood samples are distributed to laboratories around the region, with returned HIV resistance test results compared to a consensus result.

Status: Two sets of blood samples were circulated in March and October to up to 17 laboratories. A one-day workshop evaluated results in Bangkok in October.

Personnel: Jialun Zhou, Rebecca Oyomopito, Matthew Law

Collaborators: Network of 17 laboratories; National Reference Laboratory, Melbourne; Stanford University

Funding: American Foundation for AIDS Research (amfAR)

■ TREAT Asia Studies Evaluating Resistance (TASER)

There are two studies: First, a surveillance study (TASER-S) examining rates of transmitted HIV-resistance in newly diagnosed HIV-infected subjects not

previously treated with antiretroviral drugs. Second, a monitoring study (TASER-M) assessing rates of developing HIV-resistance in patients starting antiretroviral treatments.

Status: Approximately 1000 patients were recruited to TASER-M and had baseline data transferred to NCHCR so far. Recruitment will continue during 2010 with approximately 4 new sites joining the study.

Personnel: Awachana Jiamsakul, Rebecca Oyomopito, Jialun Zhou, Matthew Law

Collaborators: Network of up to 8 sites initially

Funding: American Foundation for AIDS Research (amfAR) via a grant from the government of the Netherlands

■ Australian Chronic Hepatitis C Observational Study (ACHOS)

In collaboration with the Viral Hepatitis Clinical Research Program, ACHOS is a clinic-based study of chronically infected hepatitis C patients, with observational follow-up for data on predictors of treatment uptake and outcomes following treatment. Recruitment was completed in December 2009 and 1243 patients are now being follow-up until at least the end of 2010.

Personnel: Heather Gidding, Janaki Amin, Matthew Law, Greg Dore

Collaborators: Network of 25 sites around Australia

Funding: State and Territory Health Departments

■ Morbidity in people with hepatitis B and C in New South Wales

This is a population-based data linkage study. Notification records for cases of hepatitis B and/or hepatitis C in New South Wales have been linked to their hospital, death, and HIV/AIDS records by The Centre for Health Record Linkage (CHeReL). Hospitalisation rates and standardised hospitalisation ratios have been calculated for all cause and cause specific admissions. For people with hepatitis C mono-infection, rates were 42% higher than in the NSW population overall and the greatest excess was in 15-19 year olds. Lifestyle factors accounted for the highest absolute and relative rates in young adults whilst liver disease contributed the greatest burden in older adults. Further analyses will examine the relative impact of hepatitis and HIV co-infection on morbidity.

Personnel: Heather Gidding, Janaki Amin, Matthew Law, Greg Dore

Collaborators: New South Wales Health, Centre for Health Record Linkage (CHeReL)

Funding: University of New South Wales

■ TREAT Asia Paediatric HIV Observational Database (TAPhOD) is a collaborative cohort of HIV-infected children

in the Asia-Pacific region. The study participants are recruited from TREAT Asia clinical sites. Demographic, clinical and treatment data are aggregated twice each year via electronic data transfer. Currently, 14 sites in six countries have agreed to participate and 12 sites transferred their data to the NCHECR for aggregation.

Status: Data for around 3000 patients from 12 sites in 5 countries were aggregated in September 2009. Further recruitment is planned for 2010 and follow-up for at least three years. Two sites in Vietnam will transfer their data in 2010.

Personnel: Azar Kariminia, Matthew Law

Collaborators: Network of 8 sites initially throughout the Asia-Pacific region

Funding: TAPHOD is funded by The Foundation for AIDS Research (amfAR), the Austrian AIDS Life Association, and the U.S. National Institute of Child Health and Human Development (NICHD).

■ Biostatistics and database support

Writing clinical trial databases, and providing biostatistical input to the design and analysis of all NCHECR projects.

Status: During 2009, members of the Program actively contributed to the design of, or analysed data from, the STEAL, ALTAIR, ENCORE and Second line studies (see *Therapeutic and Vaccine Research Program*); the ATAHC study (*Viral Hepatitis Clinical Research Program*); the ACCEPt study (*Sexual Health Program*); the STRIVE study (*Aboriginal and Torres Strait Islander Study*); the NSP survey (*Viral Hepatitis Epidemiology and Prevention Program*); and national surveillance activities, including a number of novel back-projection analyses (*Surveillance and Evaluation Program for Public Health*).

Personnel: Noorul Absar, Janaki Amin, Rossitza Chevkenova, John Murray, Rebecca Oyomopito, Kathy Petoumenos, Preeyaporn Srasuebkul, Handan Wand, Jialun Zhou

Collaborators: Other Programs at NCHECR

Funding: Project-specific grants

■ Mathematical modelling of human papillomavirus transmission

This research involves the design, implementation and analysis of mathematical models for assessing the health-economic impact of Human papillomavirus (HPV) vaccination, screening and testing policies in Australia.

Status: Modelling framework is at an advanced stage of development. Analyses have been conducted investigating the potential impact of unvaccinated international travellers on the incidence and prevalence of genital warts in the local Australian population in the vaccine era. This work was presented at the 25th

International Papillomavirus Conference in Malmo Sweden in May, 2009, and a manuscript is at an advanced stage of preparation. A model of genital warts transmission in Australia has been developed and calibrated to estimate the impact of vaccination. This model constitutes the first stage in the development of a full multi-type model of HPV transmission and progression to disease, both cervical and non-cervical, in men and women. A PhD project is underway (Edward Waters) involving the development of an individual-based model to examine the ability of current and proposed HPV surveillance programs to detect and respond to a potential increased burden of disease due to non-vaccine HPV types.

Personnel: David Regan, Matthew Law, Andrew Grulich, John Kaldor, Gregory Londish, Edward Waters

Collaborators: CSL Limited, Victorian Cytology Service Incorporated, Australian National University, University of Melbourne, La Trobe University

Funding: Australian Research Council, CSL Limited, Victorian Cytology Service Incorporated

■ Mathematical modelling of bacterial STIs in Australian sub-populations

This research involves the design, implementation and analysis of mathematical models for assessing the health economic impact of public health interventions for the control and prevention of chlamydia, gonorrhoea, syphilis and trichomoniasis in different populations in Australia. The models will address the STIs that are of most importance in heterosexual, MSM, and indigenous populations, respectively.

Status: A model of chlamydia transmission in the Australian heterosexual population has been developed to investigate the effect of early treatment on acquired immunity to reinfection. This work was presented at the 18th ISSTD (International Society for Sexually Transmitted Disease Research) Conference in London in June, 2009, and a manuscript is at an advanced stage of preparation. Models are under development to estimate the potential impact on incidence and prevalence of gonorrhoea and chlamydia in remote indigenous communities under a range of screening and testing strategies.

Personnel: David Regan, David Wilson, Ben Hui, Matthew Law, Rebecca Guy, Basil Donovan, John Kaldor

Collaborators: UNSW School of Public Health and Community Medicine, University of Melbourne, La Trobe University, Deakin University

Funding: National Health and Medical Research Council

■ Analyses of the National Creutzfeldt-Jakob Disease Registry

Biostatistical and epidemiological advice and support is provided for the analysis and interpretation of Registry data.

Status: Ongoing

Personnel: Handan Wand

Collaborator: The Australia National Creutzfeldt-Jakob Disease Registry

■ INSIGHT NWCS for FIRST (CPCRA 058) banked plasma samples

The effects of Protease Inhibitor and Non-Nucleoside Reverse Transcriptase Inhibitor – based Highly Active Antiretroviral Therapy (HAART) on Biomarkers of Inflammation and Microbial Translocation in HAART naïve, HIV-infected subjects in CPCRA study 058 (FIRST)

Status: ongoing

Personnel: Handan Wand (associate investigator)

Collaborator: Professor Daniel Nixon, DO, PhD, US Richmond (CPCRA 018) SCC Leader

■ Spatial and temporal clustering of chlamydia infection among men who have sex with men (MSM) attending sexual health services in Australia (ACCESS study)

Status: ongoing

Personnel: Handan Wand (chief investigator)

Collaborators: Rebecca Guy, Basil Donovan, David Wilson (SHS network)

■ Developing and Validating a Self-assessment optimal screening score for Hepatitis C virus infection among injecting drug users

Status: ongoing

Personnel: Handan Wand (chief investigator)

Collaborators: Lisa Maher, David Wilson

■ Trends in prevalence of sexually transmitted diseases among injecting drug users who attended Sydney Sexual Health Clinic during the period of 1998-2009.

Status: ongoing

Personnel: Handan Wand (chief investigator)

Collaborators: Lisa Maher, Basil Donovan and David Wilson (Sydney Sexual Health Clinic database 1998-2009)

■ Developing and Validating a Self-assessment screening score for sexually transmitted diseases for men-who-have sex with men, injecting drug users, sex workers who attended Sydney Sexual Health Clinic during the period of 1998-2009.

Status: ongoing

Personnel: Handan Wand (chief investigator)

Collaborators: Lisa Maher, Basil Donovan

and David Wilson (Sydney Sexual Health Clinic database 1998-2009)

■ IRD case-control study in INITIO

Status: ongoing

Personnel: Handan Wand (associate investigator)

Collaborator: Martyn French

■ Various back-projection projects using Australian Surveillance database.

Status: ongoing

Personnel: Handan Wand (Chief investigator)

Collaborator: Matthew Law

■ Various projects using data from Durban, South Africa

Status: ongoing

Personnel: Handan Wand (Chief investigator)

Collaborator: Gita Ramjee (Medical Research Council)

■ Various projects using data from Goroka, Papua New Guinea

Status: ongoing

Personnel: Handan Wand (Chief /associate investigator)

Collaborator: IMR

■ INSIGHT for SMART

Plasma Levels of Soluble CD14 Independently Predict Mortality in HIV Infection

Status: ongoing

Personnel: Handan Wand (associate investigator)

Collaborator: Daniel Douek and Netanya Sandler (NIH Vaccine Research Center)

■ INSIGHT NWCS for CPCRA 059 banked serum samples

Treatment with recombinant interleukin-2 (rIL-2) does not reduce gut microbial translocation or systemic inflammation biomarkers in antiretroviral treated HIV-infected subjects.

Status: ongoing

Personnel: Handan Wand (associate investigator)

Collaborator: Daniel Nixon, US Richmond (CPCRA 018) SCC Leader

■ Diagnosis of paediatric HIV infection in a resource-limited setting

In order to develop clinical guidelines for testing children for HIV serostatus at Port Moresby General Hospital, Papua New Guinea, factors associated with testing for HIV serostatus and factors associated with

positivity amongst those tested are investigated using retrospective and prospective methods.

Status: Retrospective study completed.

Recruitment for prospective study completed in October 2008. Final data analysis ongoing. Final report February 2009.

Personnel: Wari Allison, John Kaldor, Handan Wand

Collaborator: Department of Paediatrics, Port Moresby General Hospital, Papua New Guinea

■ Diagnosis of tuberculosis in HIV infected and HIV uninfected children in Papua New Guinea with a T-cell based assay: a prospective cohort study

This study is designed to (1) investigate the performance of the QuantiFERON-TB Gold assay with TST in the diagnosis of active TB disease and latent TB infection in children in a high TB prevalence hospital setting; and (2) compare the QuantiFERON-TB Gold assay to TST in the diagnosis of active TB disease or latent TB infection in HIV infected children and to evaluate the correlation of the QuantiFERON-TB Gold assay with clinical outcomes in children commenced on TB treatment

Status: Ongoing

Personnel: Wari Allison, John Kaldor, Handan Wand

Collaborator: Department of Paediatrics, Port Moresby General Hospital, Papua New Guinea, Centre for International Child Health, Melbourne

Funding: Tibotec Research and Education in HIV/AIDS for Resource-Poor Countries (REACH) Grant 2008

AUSTRALIAN HIV OBSERVATIONAL DATABASE (AHOD) NETWORK

NEW SOUTH WALES

Blue Mountains Sexual Health and HIV Clinic
Site principal: Eva Jackson

Dr Ellis, General Medical Practice
Site principal: David Ellis

East Sydney Doctors
Site principal: David Baker
Site coordinator: Robyn Vale

Holden Street Clinic
Site principal: Debbie Allen

Holdsworth House Medical Practice

Site principal: Mark Bloch
Site coordinators: Teo Franic, Shikha Agrawal, Nicky Cunningham
Illawarra Sexual Health
Site principal: Katherine Brown
Site coordinator: Nina Skobalj

Lismore Sexual Health & AIDS Services
Site principal: David Smith
Site coordinators: Cherie Mincham, Cecily Gray

Nepean Sexual Health and HIV Clinic
Site principal: Tong Liang

Royal Prince Alfred Sexual Health
Site principals: Dave Templeton, Catherine O'Connor

St Vincent's Centre for Applied Medical Research - Clinical Research Program, St Vincent's Hospital
Site principals: David Cooper, Andrew Carr
Site coordinators: Gary Keogh, Karl Hesse, Richard Norris

Sydney Sexual Health Centre
Site principal: Lynne Wray
Site coordinator: Heng Lu

Tamworth Sexual Health Service
Site principal: Miriam Gotowski
Site coordinators: Sharon Taylor, Lydia Stuart-Hill

Taylor Square Private Clinic
Site principal: Robert Finlayson
Site coordinator: Isabel Prone

NORTHERN TERRITORY

Communicable Diseases Centre, Royal Darwin Hospital
Site principal: Anuja Kulatunga
Site coordinator: Peter Knibbs

QUEENSLAND

AIDS Medical Unit, Queensland Health
Site principal: Mark Kelly
Site coordinators: Abby Gibson, Henry Magon

Clinic 87
Site principal: David Sowden
Site coordinators: Karen McGill, Alan Walker

Gladstone Road Medical Centre
Site principal: David Orth
Site coordinator: David Youds

Gold Coast Sexual Health Clinic
Site principal: John Chuah
Site coordinators: May Ngieng, Bridget Dickson

The Dolls House, Cairns Base Hospital
Site principal: Darren Russell
Site coordinator: Sandra Downing

SOUTH AUSTRALIA

The Care and Prevention Programme

Site principal: William Donohue

VICTORIA

Melbourne Sexual Health Centre

Site principal: Tim Read

Site coordinator: Julie Silvers

Monash Medical Centre

Site principals: Ian Woolley, Michelle Giles

Site coordinator: Masud Salehin

Northside Clinic

Site principal: Richard Moore

Site coordinators: Sian Edwards, Sally

Carson, Peter Locke

Prahran Market Clinic

Site principal: Norman Roth

Site coordinator: John Nicholson

The Alfred Hospital

Site principal: Jennifer Hoy

Site coordinator: Kerrie Watson, Sally Price,

Mellissa Bryant

WESTERN AUSTRALIA

Department of Clinical Immunology, Royal Perth Hospital

Site principal: David Nolan

Site coordinators: Claire Forsdyke, Jenny Skett

Immunovirology and Pathogenesis Program

During 2009 the Immunovirology and Pathogenesis Program (IVPP) continued to provide laboratory support the other programs within the Centre. The trials section of the laboratory was audited by NATA and was re-accredited for another 3 years in addition to continuing its high level of performance in the external quality assurance program of the Immunovirology Research Network. The first year of the PINT trial with its demanding and complex laboratory components was successfully completed and all assays for the planned analysis at the end of the first year of follow-up were well underway. The laboratory completed its role in the long running ESPRIT, SILCAAT and STEP trials. It provided logistical support for the conduct for a range of other trials such as CORAL, PrIRIS and SPARTAC and for sub studies for completed studies such as ALTAIR and STEAL. Immunopathogenesis work continued apace, especially as part of the PINT and PrIRIS studies supported by the commencement of an NHMRC Program grant. The long-term non-progressor cohort recruited a large number of new participants under the leadership of Linda Gelgor. Collaborations using the unique T-cell assays developed and patented by staff of the

IVPP blossomed allowing the insights from these assays to be applied to other infectious diseases such as Hepatitis C, CMV and tuberculosis infections, as well as to autoimmune diseases such as Coeliac disease. These studies were made possible by external grants from the Institute of Laboratory Medicine at St Vincent's Hospital in Sydney and the Coeliac Research Fund and a major equipment grant from UNSW. Development of siRNAs as possible therapeutic for stabilizing HIV reservoirs continued and was supported by the awarding of an NHMRC project grant and Research Infrastructure Support Services Grant from the Department of Innovation Industry Science and Research. Sarah Sasson and Oliver Distler were awarded their doctorates and Laura Cook was awarded the University Medal in Medical Microbiology and Immunology for her work on cloning and characterising antigen Specific T regulatory cells. Her supervisor, Nabila Seddiki, was awarded a prize for her presentation at the Federation of Clinical Immunology Societies (FOCIS) conference, as was Michelle Bailey for her presentation at the Australasian Flow Cytometry Group conference.



Immunovirology and Pathogenesis Program

(left to right)
 Anthony Kelleher
 Kersten Koelsch
 Nabila Seddiki
 Mee-Ling Munier
 Patricia Grey
 Michelle Bailey
 Susanna Ip
 Chansavath Phetsouphanh
 Ansari Shaik
 Yin Xu
 Lucy Watchirs-Smith
 Sanjay Swaminathan
 Chris Weatherall
 Linda Gelgor
 Absent:
 Lydia Jauncey
 Nigel McCathy

■ **Primary HIV and early disease research– Australian cohort (PHAEDRA) Extension**

A systematic mechanism to follow up the PHAEDRA and Core01 cohorts in Sydney and Melbourne with acute and early HIV-1 infection.

Status: 147 patients were enrolled in this extension study by Dec 2009.

Personnel: Pat Grey, Ansari Shaik, David Cooper, Anthony Kelleher.

Collaborators: Robert Finlayson, Taylor Square Private Clinic; Mark Bloch, Holdsworth House General Practice; Cassy Workman, AIDS Research Initiative; Robert McFarlane, East Sydney Doctors; Dr B.K. Tee, The Centre Clinic; Norman Roth, Prahran Market Clinic; Phillip Cunningham, John Zaunders, St Vincent's Hospital, Sydney; The Alfred Hospital; Tim Read, Melbourne Sexual Health; Sydney Sexual Health; John Murray, School of Mathematics, Faculty of Science, UNSW

Funding: NHMRC Program Grant

■ **Randomised trial in primary HIV infection looking at three forms of intervention (SPARTAC)**

SPARTAC (short pulse antiretroviral treatment at seroconversion) looks at the effect on CD4 T-cells of three interventions at primary HIV infection, either treating with antiretroviral therapy for 12 or 48 weeks or not treating at all until CD4 declines to <350 cells.

Status: Enrolment ceased in June 2007 by which time 37 patients had been screened. 31 patients continue to be followed up in 2009

Personnel: Anthony Kelleher, Pat Grey.

Collaborators: Medical Research Council (UK); Jonathon Weber, Sarah Fidler, Imperial College; Robert Finlayson, Taylor Square Private Clinic; Mark Bloch, Holdsworth House Medical Practice; Robert McFarlane, East Sydney Doctors; Cassy Workman, AIDS Research Initiative; Dr Nick Doong, Burwood; Professor David Cooper, St Vincent's Hospital; Mark Kelly, AIDS Medical Unit; Norman Roth, Prahran Market Clinic; Dr BK Tee, The Centre Clinic; Richard Moore, Carlton Clinic; Philip Cunningham, Kate McGhie, Julie Yeung, St Vincent's Hospital, Sydney

Funding: Wellcome Trust

■ **PINT**

This study is described in the report of the Therapeutic and Vaccine Research Program.

■ **Australian Long-Term Non-progressor Study**

The Australian long-term non-progressor cohort study was established in 1994 and is still ongoing. Studies focussing on identifying the reason this rare group of

people with prolonged HIV infection remain healthy, with virtually no damage to their immune system are extremely important for understanding the pathogenesis of HIV and for developing new antiretroviral therapy and preventative vaccines.

Status: In 2009, 25 new patients were recruited to this cohort, this is the largest number recruited since the inception of the study in 1994. Of the 141 participants recruited to this cohort 52 individuals (sustained non-progressors) are still treatment naïve.

Personnel: Linda Gelgor, Anthony Kelleher, John Kaldor, David Cooper

Collaborators: Long-Term Non-progressor Study Group, including clinical sites in Sydney, Port Kembla, Canberra, Brisbane and Melbourne; Kat Marks, St Vincent's Hospital, Sydney; Stephen Kent and Ivan Stratov, University of Melbourne.

International collaboration includes Elite Controller Collaborative Project and the International AIDS Vaccine Initiative (IAVI).

Funding: NHMRC

■ **Laboratory service and support: specimen receipt and processing for clinical trials and natural history studies**

The laboratory provides a service to other NCHECR programs encompassing the separation of blood components including but not limited to; cryopreservation of serum, plasma and PBMC, archiving and on shipping of samples. The service also includes database management of the storage of these samples. Staff in this laboratory service have also had experience with the implementation assays which are not offered by local diagnostic laboratories. This service contributes to the overall smooth running of clinical trials and natural history studies.

Status: Ongoing

Personnel: Anthony Kelleher

Collaborators: Kate Merlin, Julie Yeung, Maria Piperias, Bertha Fsadni, St Vincent's Hospital, Sydney

Funding: Project specific grants.

■ **Immuno-phenotyping of T-cell subsets**

Many NCHECR clinical trial and natural history protocols involve immunological sub studies. The laboratory supports these sub studies as a semi-routine service.

Status: Routine use of 6-10 colour multiparameter flow cytometry. Intensive assays were performed as part of the PINT and CORAL studies, including analysis of Stem cells.

Personnel: Nabila Seddiki, Mee-Ling Munier (PhD student), Michelle Bailey, Chansavath Phetsouphanh, Yin Xu, Anthony Kelleher

Collaborator: John Zaunders, St Vincent's Hospital, Sydney

Funding: Project-specific grants

■ **Assays of T-cell function, proliferation and cytotoxicity, and identification of antigen-specific T-cells**

A range of flow cytometric assays for assessing CD4+ and CD8+ T-cell function are worked up in the Laboratory. The measures of antigen-specific T-cells include T cell proliferation, activation and cytokine secretion. Such assays are important for understanding HIV pathogenesis and in responses to vaccines, and therefore are included in the protocols of clinical trials and natural history studies carried out by NCHECR.

Status: Continued analysis of samples from PHAEDRA and the long-term non-progressor cohorts. Intensive assays were performed as part of the phase 1 trial of P04112, and the PINT trial of therapy with the integrase inhibitor, Raltegravir. These studies have now also been extended to the PHIIDO observational study of primary HIV infection. These assays are also being validated in 2 clinical trials: assessing latent TB infection; and CMV re-activation and Adenovirus infection following paediatric bone marrow transplantation, respectively.

Personnel: Nabila Seddiki, Mee-Ling Munier, (PhD student), Michelle Bailey, Yin Xu, Chansavath Phetsouphanh, Celine Yan, Anthony Kelleher

Collaborators: John Zaunders, St Vincent's Hospital, Sydney; Mahila Namasivayam, Tony Walls and John Ziegler, Sydney Children's Hospital

Funding: NHMRC, St Vincent's Hospital

■ **HIV drug resistance**

This project involves the development of expertise in the application of a number of methods of detecting antiretroviral drug resistance through genotypic testing of HIV isolates. We have three major projects: evaluation and conducting commercially available genotype testing for Protease, Reverse Transcriptase regions; development of new in-house genotyping method from blood dry-spot from the patients as a starting material of genotype assay, which will be transferred to collaborator in south-east countries; and developing assay for the determination of CCR5 tropism of patient's HIV isolates and establishing the HIV tropism genotype test in our laboratory.

Status: We finished evaluation of ViralSeq HIV-1 Genotyping kits. Currently Over 700 HIV-1 resistance genotypes were performed based on the commercial based resistant assays (TrueGene HIV-1 Genotyping kit and ViralSeq HIV-1 Genotyping kit). New In-house genotyping method is under development for Protease, Reverse Transcriptase, and Integrase regions using plasma samples as a starting material. We are confirming sensitivity of the current developed assay and we will start to use dry-blood samples for genotyping assay. We

just started evaluation of CCR5 tropism assay, which was developed in the laboratory of Prof. Richard Harrigan, Director of Research Laboratories at the British Columbian Centre for Excellence in HIV/AIDS in Vancouver, Canada. We will compare this new tropism assay to the TrofileTM assay, which is currently used as the standard assay.

Personnel: Anthony Kelleher, Celine Yan, Kerstin Koelsch, Yong Pan.

Collaborators: Kazuo Suzuki, Philip Cunningham, Leon McNally, Alexander Carrera, St Vincent's Hospital, Sydney

Funding: NSW Health Department and ViiV.

■ Laboratory surveillance of incident HIV infection

Laboratory markers are used to determine incident from established HIV infection to monitor the trends in newly acquired infections, forming an important sentinel surveillance tool. The application of the 'detuned' and BED ELISAs, and analysis of other routine laboratory markers used in the diagnosis of HIV infection, is used in monitoring new infections.

Status: All newly identified cases of HIV infection at the NSW State Reference Laboratory for HIV at St Vincent's Hospital were analysed on BED assays. Protocols were finalized for the adaptation of dried bloodspots for nucleic acid testing.

Personnel: Anthony Kelleher

Collaborators: Philip Cunningham, St Vincent's Hospital, Sydney; Sara Evans, Celine Yang, Kazuo Suzuki, Jane Cornwall, NSW State Reference Laboratory for HIV, St Vincent's Hospital, Sydney

Funding: NSW Health Department

■ Pathogenesis research Evolution of immune responses in primary infection and long-term non-progressors

This study furthers mechanisms of viral escape from cytotoxic T-lymphocyte responses, and particularly the events leading up to escape from the HLA-B27 mediated T-cell response at the level of Tcell receptor usage. It employs samples and data gathered during the follow-up of the long-term non-progressor (LTNP) cohort, and samples collected from the PHAEDRA cohort.

Status: T-cell receptor repertoire was defined on a range of HLA-B27+ LTNP, analysis is ongoing.

Personnel: Anthony Kelleher, Linda Gelgor

Collaborators: Peter Doherty, Stephen Turner, Department of Microbiology and Immunology, The University of Melbourne; Daniel Douek, David Price, Vaccine Research Centre, US National Institutes of Health; Miles Davenport, Vanessa Venturi, Centre for Vascular Research, UNSW, John

Murray, School of Mathematics, Faculty of Science, UNSW

Funding: US National Institutes of Health; NHMRC

■ MicroRNAs and Long-term non-progression

The reasons for long-term non-progression are unclear. MicroRNAs (miRNAs) are a newly described RNA species derived from noncoding DNA that regulate protein synthesis by interfering with translation. Their role in B and T cell maturation and differentiation, and their role in regulating HIV-1 replication is only just starting to be understood. Their expression in vivo in different groups of patients with HIV-1 infection (especially long term non-progressors) has not been described. The expression of microRNAs in T cell subsets in healthy controls, long term non-progressors and rapid progressors is being compared.

Status: Patterns of expression of miRNAs in the three described groups have been elucidated. In vitro experiments to determine biological significance of these patterns are in progress. Potential targets of these miRNAs are also being sought to explain their biological significance in HIV-1 infection.

Personnel: Sanjay Swaminathan (PhD student), Anthony Kelleher

Collaborator: Kazuo Suzuki, St Vincent's Hospital, Sydney, Warren Kaplan and Mark Cowley, Garvan Institute of Medical Research

Funding: NHMRC

■ IL-7 receptor modulation

The impact of IL-7 and the expression of its receptor on T-cell subsets, T-cell homeostasis, CD4 T-cell recovery postHAART and developing lymphoma are being explored using both in vitro and ex vivo techniques. These studies have been extended to include the cell biology of the IL-7 receptor modulation.

Status: Studies of IL-7 receptor on malignant B cells in lymphomas and leukaemias were published. Sarah Sasson completed her Ph.D.

Personnel: Anthony Kelleher, Sarah Sasson (PhD student)

Collaborators: John Zaunders, Sandy Smith, Sam Milliken, John Moore, Keith Stanley, St Vincent's Hospital, Sydney

Funding: NHMRC

■ Definition of T regulatory subsets

Studies carried out to define a novel and more rigorous way of defining human T regulatory cells.

Status: Novel assay was developed and accepted as a provisional patent. Assay development was completed, and was used for the sorting of functional subsets for in

vitro suppression assays and epigenetic studies of the granzyme B gene. We have also used this assay to enumerate antigen-specific regulatory and effector T cell subsets in a longitudinal study of HIV-infected patients with low CD4 count before and after starting anti-retroviral therapy (PrIRIS). The use of the assay was extended to non-human primates in therapeutic vaccine trials and also currently used in Hepatitis C cohorts.

Personnel: Nabila Seddiki, Anthony Kelleher, Laura Cook (PhD student), Chansavath Phetsouphanh (PhD student).

Collaborators: John Zaunders, St Vincent's Hospital, Sydney; Stephen Kent, Rosemarie Mason, Robert de Rose, Department of Microbiology and Immunology, The University of Melbourne; Sudha Rao, Australian National University, Andrew Lloyd, Elizabeth Keoshkerian, UNSW

Funding: NHMRC

■ Novel assays for assessing T-cell function

Assays designed to amplify small 'primed' responses, and also simplified methodologies that may be applicable in the field in developing countries where large scale vaccine trials are likely to be run.

Status: The methodology for priming assays was published. A patented methodology for a simplified T-cell assay has been employed in a range of studies exploring T cell responses to Hepatitis C, Coeliac disease, tuberculosis and CMV infection.

Personnel: Mee Ling Munier (PhD student), Michelle Bailey, Nabila Seddiki, Yin X, Anthony Kelleher

Collaborators: John Zaunders, St Vincent's Hospital, Sydney; Stephen Kent, Department of Microbiology and Immunology, The University of Melbourne Andrew Lloyd UNSW, Bob Anderson, WEHI and Nextpep, John Zeigler Sydney Children's Hospital. Marshall Plit, Sandy Smith and Craig Leeman, St Vincent's Hospital.

Funding: NHMRC, Coeliac research Fund, UNSW, Institute of Laboratory Medicine St Vincent's Hospital

■ B cell subsets, neutralizing antibodies and auto-antibodies at primary HIV-1 Infection

Studies of overlap between neutralising antibodies and auto-antibodies at primary infection and the subsets of B cells producing these responses.

Status: Characterisation of the B cell subsets responding to HIV-1 during primary infection was commenced in 2007. Analysis of the carriage of neutralizing assays for HIV-1 and anticariolin antibodies in →300 primary infection patients was completed in 2008. Methods for the delineation of Follicular T helper cells and B cell subsets

In parallel in humans and macaques were extensively explored.

Personnel: Chris Weatherall (PhD student), Anthony Kelleher

Collaborators: John Zaunders, St Vincent's Hospital, Sydney; Damian Purcell, Department of Microbiology and Immunology, The University of Melbourne; Stuart Tangye, Immunology and Inflammation Program, Garvan Institute of Medical Research, Stephen Kent, Department of Microbiology and Immunology, The University of Melbourne

Funding: NHMRC

■ Immunopathogenesis of immune reconstitution disease

Studies of the immunopathogenesis of immune reconstitution disease (IRD) based on the samples studied *ex vivo* from patients suffering this disease.

Status: A study exploring the causes of this dysregulation, with particular focus on the role of T regulatory cells. Studies commenced in 2006 and were formalised to recruit all patient commencing CART late in the disease with a natural history study called PrIRIS. The study is still ongoing and 17 patients have been recruited (aim 20). Assays performed real time aimed to look at the phenotype (6 flow cytometry panels) at intracellular cytokine secretion and at antigen-specific regulatory and effector T cells.

Personnel: Nabila Seddiki, Anthony Kelleher, Chansavath Phetsouphanh, Sarah Pett
Collaborator: Debbie Marriott, St Vincent's Hospital, Sydney

Funding: NHMRC

■ Viral reservoirs

Currently available antiretroviral therapy has little impact on HIV viral reservoirs. The site, size and components of these reservoirs is poorly understood. Also, the impact of integrase inhibitors on latently infected cells, including residual viremia which is tightly connected to these cells, is currently unclear.

Status: Assays to quantify the DNA species of HIV-1: total DNA, integrated DNA and episomal DNA, were established in the laboratory and validation of these assays has been completed. These assays will be used to analyze patient samples from the PINT study; week 52 samples from this trial have become ready for analysis. A second study which has recently commenced is aimed at determining the preferential infection of CD4+ T cell subsets during chronic HIV infection. Another assay which is currently under development is a highly sensitive assay for the quantitation of plasma HIV-1 RNA (single copy assay). Once the validation of this assay is complete, it will be used for quantitation of low level (below 50 copy) viremia in patients currently enrolled in the CORAL study.

Personnel: Kersten Koelsch, Michelle Bailey, Kristin McBride (PhD student), Claudia Mische (practicum student)

Collaborators: John Zaunders, Kat Marks, St Vincent's Hospital, Sydney; John Murray, School of Mathematics, UNSW

Funding: NHMRC, Merck

■ iRNA inducing viral latency

This project is related to siRNA gene silencing for HIV-1 and SIV infection. siRNAs targeting viral promoter DNA region induce transcriptional gene silencing (TGS) of viral genes in infected cells. The study has been extended to two major objectives: delivery system of siRNA and mechanism gene silence. To develop and evaluate delivery system including lentiviral and non-viral delivery system to be used for mouse HIV-1 infection model; and to define the pathways by which dsRNAs targeting the promoter regions of HIV-1 and SIV.

Status: Constructs applicable for use in HIV-1 infection are under development. The constructs will be incorporated into lentiviral delivery vector and the delivery system will be assessed *in vitro*. Epigenetic changes induced by siRNAs targeting HIV-LTR will be defined. The role of Ago1 in nucleus in this process will be determined by confocal microscope using tagged Ago1 and labelled siRNA.

Personnel: Anthony Kelleher, Chantelle Hood, Sanjay Swaminathan (PhD student)

Collaborators: Kazuo Suzuki, St Vincent's Hospital, Sydney, Takaomi Ishida, Makoto Ymamagisi, Toshiki Watanebe, The University of Tokyo, Tokyo

Funding: NHMRC

IMMUNOVIROLOGY AND PATHOGENESIS PROGRAM CLINICAL TRIALS NETWORK

Each site listed below has recruited or followed at least one subject in a research protocol investigating primary HIV infection during 2009.

NEW SOUTH WALES

East Sydney Doctors

Site principal: David Baker

Site co-ordinator: Robyn Vale

AIDS Research Initiative

Site principal: Cassy Workman

Site co-ordinator: Vanessa Rees

Burwood Road General Practice

Site principal: Nicholas Doong

Site co-ordinator: Jeff Hudson

Holdsworth House General Practice

Site principal: Mark Bloch

Site co-ordinators: Nicky Cunningham, Kate Beileiter

Immunology B Ambulatory Care Clinic, St Vincent's Hospital

Site principal: David Cooper

Site co-ordinators: Richard Norris, Mark Rollason

Taylor Square Private Clinic

Site principal: Robert Finlayson

Site co-ordinators: Sophie Dinning, Isabel Prone

VICTORIA

Carlton Clinic

Site principal: Jonathan Anderson

Site co-ordinator: Sian Edwards

Clinical Research Section, Infectious Diseases Unit, The Alfred Hospital

Site principal: Jennifer Hoy

Site co-ordinator: Janine Roney

Melbourne Sexual Health Centre

Site principal: Tim Read

Site co-ordinators: Julie Silvers, Helen Kent

Prahran Market Clinic

Site principal: Norman Roth

Site co-ordinator: Helen Lau

The Centre Clinic

Site principal: B.K Tee

Site co-ordinator: Helen Lau

QUEENSLAND

AIDS Medical Unit

Site principal: Mark Kelly

Site co-ordinator: Abby Gibson

Gladstone Road Medical Centre

Site principal: David Orth

Site co-ordinator: David Youds

International projects

Over the past decade, the National Centre has extended its public health, surveillance and clinical work into the Asia-Pacific region. Now well established in Thailand and Cambodia, our work has more recently expanded to Indonesia and Papua New Guinea. Projects in the region vary depending on the health priorities and needs of different communities and range from capacity building to skills transfer to support for existing government programs. We have also worked closely with The World Health Organization for many years and in 2009 work started on an international guidance document on HIV incidence assays.



(left to right)
John Kaldor
Skye McGregor
Stephen Kerr

International studies

■ Survey epidemiological cohort studies and specimen sample sets and development of technical guidance documents for HIV incidence assays

The goal of the project is to advance assay identification and development for both the detection of acutely HIV infected persons and for the identification of specimens from recently HIV infected persons. This project will add to the knowledge of how existing and developing science can lead to such assays and build resources that can be used for the evaluation and validation of assays. A Request for Proposals (RFP) will be created to stimulate the development of new assays.

Status: Project commenced 2009

Personnel: John Kaldor, Joanne Micallef

Collaborators: Timothy Mastro, Connie Sexton, Mary Lynn Baniecki, John Kaldor, JMG Calleja, Gaby Vercauteren, Family Health International

Funding: Gates Foundation Grant

■ Research and education in HIV/AIDS for resource-poor countries: REACH Initiative Diagnosis of tuberculosis in HIV infected and HIV uninfected children in Papua New Guinea with a T-cell based assay: a prospective study

Diagnosis of PTB in children in settings such as Papua New Guinea (PNG) is therefore usually made on the basis of a combination of contact history, clinical findings, tuberculin skin test (TST) and radiological findings if available. This approach can lack sensitivity and specificity, particularly in young children who are the most susceptible group to TB disease in childhood. As a result, children may be either under- or over-treated. The project aims to investigate the role of the QFN test in the management of paediatric TB in PNG.

Status: Ongoing

Personnel: Wari Allison, John Kaldor

Collaborators: Hong Van Tieu, Dr Jintanat, Dr Thanyawee, John Vince, Prof Tefuarani, Mobumo Kiromat

Funding: Tibotec Virco Virology BVBA

■ HIV Consortium for Partnerships in Asia and the Pacific

Status: The HIV Consortium for Partnership in Asia and the Pacific was established in 2007 and has nine member organisations comprising a broad range of HIV advocacy and technical expertise from Australia. The Consortium and its members are responsible for implementing AusAID's Regional HIV Capacity Building Program.

Personnel: Louise Casuer, John Kaldor

Collaborators: ASHM, IHRG, NRL, La Trobe University, Scarlett Alliance, AFAO, AIVL

Funding: AusAID

■ Preventing mother to child transmission of HIV in PNG

Status: Commenced late 2009

Personnel: John Kaldor

Collaborators: Heather Worth, Angela Kelly

Funding: AusAID Australian Development Research Award

■ Male circumcision for HIV prevention among at-risk men and women in Papua New Guinea: Acceptability, epidemiological impact, cost-effectiveness and options for implementation

The continuing expansion of a heterosexual HIV epidemic in Papua New Guinea requires that the acceptability, cost-effectiveness and like epidemiological impacts of new technologies for HIV prevention are urgently investigated. This project is a three-year multi-disciplinary community-based research program among at-risk men and women at two sites in PNG: Port Moresby, National Capital District (NCD) and Goroka, Eastern Highlands Province (EHP).

Status: Phase one commenced 2009 with phase two expected to commence early 2010

Personnel: John Kaldor

Collaborators: Lisa Fitzgerald, Geraldine Maibani, Angela Kelly, Peter Hill, Megan Jennaway

Funding: AusAID Australian Development Research Award

Thailand

The HIV Netherlands, Australia, Thailand Research Collaboration (HIV-NAT) is a partnership between NCHECR, the Thai Red Cross AIDS Research Centre in Bangkok and the International Antiviral Therapy Evaluation Centre in Amsterdam. The collaboration enrolled its first subject in 1996. HIV-NAT studies are numbered consecutively and HIV-NAT 098 is the most recent. Of the 98 studies conducted at HIV-NAT since 1996, 59 were active in 2007. Eleven of these were paediatric studies.

HIV-NAT's mission statement covers three broad areas: clinical research, access to quality HIV care and training. To these can be added community outreach. HIV-NAT paediatricians are particularly active in promoting care in the community for children with HIV, not just with medicine but also with financial and psycho-social support for families living with HIV. With donations from within Thailand and from abroad, HIV-NAT supports schooling, and activities to boost self-confidence, reduce stigma and help children with HIV live normal lives.

Efforts to improve access to appropriate and affordable antiretrovirals (ARVs) were focussed on bioequivalence studies of

generic ARVs and dose reduction studies to improve tolerability in a Thai population. In collaboration with the Government Pharmaceutical Organization of Thailand, the HIV-NAT pharmacokinetic laboratory assessed the bioequivalence of two generic protease inhibitors in healthy non-HIV infected volunteers. A combined analysis of five studies of low dose stavudine resulted in the World Health Organization recommending that the dose of this drug be reduced to 30mg bd. Two of the five studies in the analysis were conducted at HIV-NAT. There are 14 sites in the HIV-NAT clinical trials network; six in Bangkok, seven in regional Thailand and two in Phnom Penh, Cambodia. This report lists the projects in which NCHECR personnel play a substantive role.

■ HIV-NAT 006

A long-term follow-up study of safety and efficacy of antiretroviral therapy for patients who have previously participated in HIV-NAT study protocols.

Status: Recruitment opened June 2003, and is ongoing.

Site: HIV-NAT

Enrolled: 800

HIV-NAT study co-ordinator: Anchalee Avihingsanon

Personnel: Chris Duncombe, Stephen Kerr

Collaborator: Anchalee Avihingsanon

Funding: HIV-NAT; Thai Ministry of Public Health; Merck & Co Inc; Roche Thailand Limited

■ PREDICT and PREDICT substudies

Antiretroviral (ARV)-naïve, HIV-infected children between one and twelve years of age with mild or moderate disease severity (CDC clinical category class A or B), and with moderate immune suppression (CD4 lymphocyte percentage between 15% and 24%), are included in this study. They are randomised to one of two arms: Immediate ARV therapy (ARV initiated on Day 0 of study), or deferred ARV therapy (ARV initiated when CD4% is less than 15%).

There are three substudies. The first is a Neurodevelopment substudy that looks at the influence of HIV disease and antiretroviral treatment on neurodevelopment. The second is a T cell substudy that looks at the whether T cell subsets might predict progression of HIV disease. The third is a micronutrient substudy looking at the influence of trace elements on immunological and virological response, and neurocognition.

Status: Recruitment opened March 2006.

Sites: 8 (six Thailand, two Cambodia)

Enrolled/target: 300/300

HIV-NAT study co-ordinator: Thanyawee Puthanakit

Personnel: Stephen Kerr, Matthew Law

Collaborators: National Center for

HIV/AIDS, Dermatology and STDs; National Institute for Public Health; Thai Red Cross; National Pediatric Hospital
Funding: US National Institutes of Health via a grant to the Thai Red Cross; GlaxoSmithKline; Abbott; F Hoffmann-La Roche Ltd

■ HIV-NAT 079 (HIV STAR)

The HIV second-line therapy antiretroviral study in patients who failed NNRTI-based regimens.
Status: Approved by Institutional Review Board.
Site: 10 HIV-NAT
Target: 500
HIV-NAT study co-ordinator: Torsak Bunupuradah
Personnel: Stephen Kerr
Collaborators: Jintanat Ananworanich, Torsak Bunupuradah, Kiat Ruxrungtham, Bernard Hirschel, HIV-NAT and 10 sites in Thailand
Funding: The National Health Security Office, Thailand; The Swiss HIV Cohort Study

■ HIV-NAT 082

Predictors and outcome assessment of adherence to antiretroviral therapy in Thailand, as a resource constrained setting in Asia.
Status: This project is completed and analysis is ongoing.
Site: three Thailand
Enrolled/target: 150/150
Personnel: Stephen Kerr (study co-ordinator), Chris Duncombe
Collaborators: Kiat Ruxrungtham, Praphan Phanuphak, Anchalee Avihingsanon, Ploenchai Chetchotisakd, Opas Putcharoen, Maneerat Layton
Funding: UNSW

■ HIV-NAT 084 (POTENT Study)

A prospective randomized, open-labelled, multi-centre trial comparing the safety and efficacy of ritonavir-boosted tipranavir, (TPV/r) to that of darunavir (DRV/r) in three-class (NRTI, NNRTI, and PI) treatment-experienced patients with resistance to more than one PI.
Status: Recruitment opened in December 2007, and is ongoing.
Site: three Thailand
Enrolled/target: 15/20
Personnel: Stephen Kerr, Chris Duncombe
Collaborator: Atchriya Hemachandra
Funding: Boehringer Ingelheim

■ HIV-NAT 087

Early Access Program of raltegravir (MK-0518) in combination with an optimized background antiretroviral therapy in highly treatment experienced HIV-1 infected patients with limited to no treatment options.

Status: Recruitment opened in November 2007, and is ongoing.

Site: HIV-NAT

Enrolled/target: 12/20

Personnel: Stephen Kerr, Chris Duncombe

Collaborator: Atchriya Hemachandra

Funding: Merck & Co Inc

■ HIV-NAT 108

T-cell subsets in healthy children. This is a cross sectional study assessing the cellular subsets and immunoglobulins in health Thai children between the ages of 2 and 15.
Enrolled: 150
Personnel: Stephen Kerr
Collaborator: Jintanat Ananworanich (Study Coordinator)
Funding: The Thailand Research Fund

■ HIV-NAT 073

Pharmacokinetics of low dose Atazanavir /ritonavir (200/100mg) compared to standard dose (300/100mg) in HIV pre-treated Thai patients.
Enrolled: 22
Personnel: Stephen Kerr
Collaborator: Anchalee Avihingsanon (Study Coordinator)
Funding: Thai Social Security Office

■ HIV-NAT 093

An open-label, multiple dose, one-group trial assessing the pharmacokinetic profile and safety of generic lopinavir/ritonavir 200/50mg tablet formulation, (dosed at 400/100mg BID) in pregnant Thai HIV-infected women.
Enrolled: 20
Personnel: Stephen Kerr
Collaborator: Nittaya Phanuphak, Reshmie Ramautarsing, Anchalee Avihingsanon
Funding: The Thai Red Cross AIDS Research Centre.

■ SEARCH 003

Comparing the use of d4T-based regimen as lead-in for the first 6 months versus AZT-based and TDF-based first line regimens
Status: Enrolment commenced April 2008. 40/150 patients have been enrolled. Expected to finish end of 2011.
Personnel: Stephen Kerr
Collaborators: Jintanat Ananworanich, Nittaya Phanuphak, Cecilia Shikuma, Praphan Phanuphak, Thai Red Cross AIDS Research Centre, Queen Savang Vadhana Memorial Hospital
Funding: NIH, pharmaceutical companies

■ Impact of Pharmacogenomics on Antiretroviral Drugs (Atazanavir and Efavirenz) Concentration and Treatment Response in HIV-infected Adults

Pharmacogenetic differences dictate treatment responses to a range of drugs. The importance of these difference in making dosage adjustments to maximise treatment effect and reduce toxicity is the subject of intensive investigation. The aim of this study is to characterise the polymorphisms amongst the MDR-1 and CYP3A4/CYP3A5 genes in Thai patients and correlate these responses with the pharmacokinetics and toxicity of Efavirenz and Atazanavir.
Enrolled: 450
Personnel: Stephen Kerr
Collaborators: Kiat Ruxrungtham, Anchalee Avihingsanon, David Burger, Jintanat Ananworanich, Praphan Phanuphak, Nattiya Hirankarn, Sasiwimol Ubolyam
Financial support: Funding: The Royal College of Physicians, Thailand

■ Response to Non-Nucleoside Reverse Transcriptase Inhibitor (NNRTI)-based antiretroviral regimens in postpartum women who exposed to zidovudine (AZT) and single-dose nevirapine (sd-NVP) or Highly Active Anti-Retroviral Therapy (HAART) during pregnancy from MTCT-Plus programs, Thailand

Nevirapine is frequently used in HAART regimens in resource limited settings in Thailand. In addition, single dose nevirapine or NVP as part of HAART regimens is used for prevention of mother to child transmission of HIV. The aim of this study is to compare treatment efficacy of NNRTI-based regimens between postpartum women who received AZT and sd-NVP or HAART during pregnancy for the prevention of mother-to-child transmission of HIV. The data will be drawn from the Observational Cohort study of HIV-infected women who enrolled into the MTCT-Plus programs in Thailand between 1 February 2003 and 31 December 2007.
Status: beginning in November 2008.
Personnel: Stephen Kerr
Collaborators: Thidarat Jumpini, Nittaya Phanuphak, Faculty of Public Health, Mahidol University
Funding: Thai Red Cross AIDS Research Centre

Cambodia

NCHECR continued to support expansion of access to HIV treatment through an ongoing partnership with the National Center for HIV/AIDS, Dermatology and STDs (NCHADS). The main purpose of the program is to support the NCHADS Social Health Clinic (SHC) in Phnom Penh as a site for HIV voluntary counselling and testing, care and treatment, training and research, and to provide technical support to the National HIV program.

Access to treatment and care for Cambodians living with HIV/AIDS continued to expand during 2009. At the end of December 2009, there were 52 antiretroviral (ARV) treatment sites in 20 provinces. Paediatric care is provided at 29 sites. At the end of December 2009; 37,315 people, including 3638 children were receiving ARV therapy in the national program, which is >94% of the estimated number of people in need.

NCHECR contributed to the national program in a technical capacity, including support for SHC staff to mentor and train provincial staff working in HIV clinics, and provision for clinical training placements at the SHC. NCHECR and SHC staff in Cambodia participated in national HIV and STI working groups, and NCHECR staff have advised on the development of a new laboratory to be constructed at NCHADS. The NCHADS SHC research and data management team undertook regular visits to provincial ARV sites, analysed and presented data back to these sites, and centrally for the National Continuous Quality Improvement (CQI) program. The NCHADS Social Health Clinic (SHC) staff of 33, included five doctors, seven nurses, a six-member counselling and peer support team, three pharmacists, and a seven-member research and data management team. Since clinic commencement in 2004, a total of 2438 patients have enrolled at the SHC, and 1709 commenced on antiretroviral therapy.

Since 2008 when Voluntary Confidential Counselling and Testing was established at the SHC, VCCT has been performed for 1202 adults (403 tested HIV Ab positive) , 501 children (41 tested HIV positive) and infant dry blood spot DNA testing was performed on an additional 33 infants, of which 3 tested HIV positive.

Clinical research at the SHC included the generation and analysis of observational patient data, contribution to the TREAT Asia HIV Observational Database (TAHOD), and contribution of all paediatric data to the TREAT Asia Paediatric Observational Database (TApHOD). Patients continued to be enrolled in a prospective clinical cohort. Enrolment of patients into the PREDICT study closed mid 2008.

A Research Mentoring and Training Project (RMTP), under the *Support for Clinical and Epidemiological research capacity in Cambodia*, Funded by the AusAID Regional Capacity Building Program 2007-2011, commenced in 2009. Seven participants and two local mentors are involved, with additional facilitation by the onsite NCHECR staff member, and visiting support from NCHECR Sydney-based staff, which included a three-day statistics workshop in July 2009.

■ **Cambodia Treatment Access Program (CTAP)**

Increasing access to antiretroviral treatment in Cambodia through the establishment of treatment clinics and technical assistance to the national HIV treatment program.

Status: At 31 December 2009, 1657 adults and 90 children were actively enrolled at the SHC, including 1435 adults and 71 children on ART, of which 94% are on first line ART.

NCHADS site co-ordinator: Saphon Vonthanak

Personnel: Sarah Huffam, John Kaldor, David Cooper

Collaborators: National Center for HIV/AIDS, Dermatology and STDs; National Institute for Public Health; Phillip Cunningham, St Vincent's Hospital, Sydney

■ **The following projects are described in other sections of this report:**

Evaluating and predicting the epidemiological impact of health policies for reducing HIV in Melanesian and South-East Asian populations: p5

Evaluating the potential impact of the global economic crisis on HIV epidemics in South-East Asia: p5

Mathematical modelling and cost-effectiveness of HIV epidemics and programs in Thailand: p6

Evaluation of HIV trends and programs in China: p6

Evaluation of the epidemiological impact of hard reduction programs across Vietnam: p6

Hepatitis B epidemiology and disease burden in Vietnam and Australia: p14

Culture and HIV prevention in Cambodia: p17

TREAT Asia HIV Observational Database (TAHOD): p26

TREAT Asia Quality Assurance Scheme (TAQAS): p26

TREAT Asia Studies Evaluating Resistance (TASER): p26

TREAT Asia Paediatric HIV Observational Database (TApHOD): p26

Diagnosis of paediatric HIV infection in a resource-limited setting: p28

Diagnosis of tuberculosis in HIV infected and HIV uninfected children in Papua New Guinea with a T-cell based assay: a prospective cohort study: p28

Advisory committees

SURVEILLANCE COMMITTEES

Annual Surveillance Report Advisory Committee

John Kaldor PhD (Chair)
NCHECR

John Daye OAM

Co-convenor, Health, Treatments and Research Portfolio, National Association of People Living with HIV/AIDS, Sydney

Rachel Deacon BSc, PhD (from January to December)
NCHECR

Basil Donovan MB BS, MD, Dip Ven (London), FChSHM, FAFPHM, FRCPI
NCHECR

Andrew Grulich MB BS, MSc, PhD, FAFPHM
NCHECR

Phillip Keen BA, Dip Comm Ser (CommWork)

HIV Educator, Campaign and Resource Development, Gay Men's Education, Australian Federation of AIDS Organisations, Sydney

Lisa Maher PhD
NCHECR

Ann McDonald BSc, MPH
NCHECR

Tadgh McMahon

Manager, Multicultural HIV/AIDS and Hepatitis C Service, Sydney

Kate Robinson

Epidemiologist, Vaccine Preventable Diseases Surveillance, Surveillance Branch, Office of Health Protection, Department of Health and Ageing

Cindy Shannon BA, Grad Dip Ed (Tert), MBA, DSocSc

Chair, Indigenous Australians' Sexual Health Committee; Professor and Director, Centre for Indigenous Health, The University of Queensland

Helen Tyrrell RN, BA(Hons), MBA, FACHSE, CHE
Chief Executive Officer, Hepatitis Australia, Canberra

Russell Waddell MB BS, BSc, FChSHM
Director, STD Services, Royal Adelaide Hospital

Handan Wand MA, MSc, PhD
NCHECR

James Ward
NCHECR

David Wilson BSc, BInfTech, BAppSc(Hons), GradCert(Biostats), PhD
NCHECR

Iryna Zablotska MD, PhD

Research Fellow, National Centre in HIV Social Research, UNSW

Melanie Middleton BMedSc, MPH (Secretary)
NCHECR

National Bloodborne Virus and Sexually Transmissible Infections Surveillance Committee*

John Kaldor PhD (Chair)
NCHECR

Isabel Bergeri (from January)

Epidemiologist & Manager, Surveillance Section, Centre for Population Health Research, Burnet Institute, Melbourne

David Coleman BSc(Hons), Dip App Sc(EnvHlth)

Population Health, Department of Health and Human Services, Hobart

Joy Copland MSc, MPH

Manager, Disease Surveillance and Investigation Section, Communicable Disease Control Branch, Department of Health, Adelaide

Tess Davey Grad Dip (HealthCoun), Grad Dip Clin Epi, Cert Nursing

Manager, Surveillance Section, STD Services, Royal Adelaide Hospital

John Daye OAM

Co-convenor, Health, Treatments and Research Portfolio, National Association of People Living with HIV/AIDS, Sydney

Craig Davis (from January)

Epidemiologist, Communicable Disease Unit, Queensland Health

**Subcommittee of the Communicable Diseases Network Australia*

Rachel Deacon BSc, PhD (from January to December)
NCHECR

Basil Donovan MB BS, MD, Dip Ven (London), FChSHM, FAFPHM, FRCPI
NCHECR

Dominic Dwyer BSc(Med), MB BS, MD, FRACP, FRCPA

Staff Specialist, Centre for Infectious Diseases and Microbiology Laboratory Services, Institute of Clinical Pathology and Medical Research, Westmead Hospital, Sydney

Carol El-Hayek BSc MAE (from September)

Centre for Population Health Research, Burnet Institute, Melbourne

Christopher Fairley MB BS, PhD, FRACP, FChSHM, FAFPHM

Professor of Sexual Health, The University of Melbourne; Director, Melbourne Sexual Health Centre

Lisa Hall (to November)

Epidemiologist, Communicable Disease Unit, Queensland Health

Carolien Giele RN, RM, BSc(Hons), Grad Dip Clin Epi, MPH

Epidemiologist, Communicable Disease Control Directorate, Department of Health, Perth

Andrew Grulich MB BS, MSc, PhD, FAFPHM
NCHECR

Rebecca Guy BAppSc(Med Lab Sc), MAppEpid PhD

NCHECR

Margaret Hellard MB BS, FRACP, PhD, FAFPHM

Head, Centre for Population Health Research, Burnet Institute, Melbourne

Nasra Higgins BHLthSc(EnvHlth), Grad Dip Epid & Biostat, MEpid

Surveillance Officer, Epidemiology and Surveillance Program, Communicable Disease Control Unit, Public Health Branch, Department of Human Services, Melbourne

Kellie Kwan

Senior Research Officer, Sexually Transmitted Infections and Blood Borne Viruses, Communicable Disease Control Directorate, Department of Health, Perth

Annie Madden BA (Gender Studies & Asian Studies), Cert IV Community Work
Executive Officer, Australian Injecting and Illicit Drug Users League, Canberra

Lisa Maher PhD
NCHECR

Ann McDonald BSc, MPH
NCHECR

Michelle McPherson (from May to December)
HIV and STI Epidemiologist, Communicable Diseases Branch, NSW Health

Jo Murray RN, RM, Grad Dip Nursing
Clinical Nurse Consultant, AIDS Medical Unit, Queensland Health

Andrew Pengilly MBBS (from January to December)
Public Health Registrar, Health Protection Service, ACT Health

Kate Robinson
Epidemiologist, Vaccine Preventable Diseases Surveillance, Surveillance Branch, Office of Health Protection, Department of Health and Ageing

Cindy Shannon BA, Grad Dip Ed (Tert), MBA, DSocSc
Chair, Indigenous Australians' Sexual Health Committee; Professor and Director, Centre for Indigenous Health, The University of Queensland

Mark Stoové (from January)
Head, HIV/STI Research Group, Centre for Population Health Research, Burnet Institute, Melbourne

Jiunn-Yih Su MB, MPH
Surveillance Project Officer, Sexual Health and Blood Borne Viruses Unit, Centre for Disease Control, Northern Territory Department of Health and Community Services

John Tapsall MB BS, MD, FRCPA
Director, WHO Collaborating Centre for STD, Microbiology Department, The Prince of Wales Hospital, Sydney

Helen Tyrrell RN, BA(Hons), MBA, FACHSE, CHE
Chief Executive Officer, Hepatitis Australia, Canberra

Russell Waddell MB BS, BSc, FACHSHM
Director, STD Services, Royal Adelaide Hospital

James Ward
NCHECR

Kate Ward MPH
Blood Borne Viruses and Sexually Transmitted Infections Epidemiologist, Communicable Diseases Branch, NSW Health

David Wilson BSc, BInfTech, BAppSc(Hons), GradCert(Biostats), PhD
NCHECR

Melanie Middleton BMedSc, MPH (Secretary)
NCHECR

Australian Needle and Syringe Program Survey Advisory Group

Alex Wodak MB BS, FRACP, FACHAM (Chair)
Director, Alcohol and Drug Service, St Vincent's Hospital, Sydney

Jude Bevan BAppSc, Grad Dip HSc
Senior Policy and Planning Officer (Hepatitis C), Sexual Health and Blood Borne Virus Program, Department of Health, Perth

Tony Butler PhD
Associate Professor, National Drug Research Institute, Curtin University of Technology, Perth

Tracy Dobie
Manager, Needle and Syringe and Pharmacy Program, Directions, Canberra

Jenny Grant
Manager, Clean Needle Program, Drug and Alcohol Services South Australia, Adelaide

Tania Hunt Dip Soc Sc
Harm Reduction Coordinator, Tasmanian Council on AIDS, Hepatitis and Related Diseases

Roland Jauernig BA(Psych), MAppSc
Manager, Health Protection Services, Department of Human Services, Melbourne

John Kaldor PhD
NCHECR

Robert Kemp
Manager, Queensland Needle and Syringe Program, Queensland Health

Shayne Kilford
Needle and Syringe Program Coordinator, Northern Territory AIDS and Hepatitis Council
Stephen Lymb BA, Grad Dip Soc Sc
Manager, Population Programs, Drug and Alcohol Services South Australia, Adelaide

Lisa Maher PhD
NCHECR

Rose Mason, Grad Dip Mental Health Nurs.
Senior Policy Analyst, Harm Minimisation Unit, AIDS/Infectious Diseases Branch, NSW Department of Health, Sydney

Paola Nadich
Program Coordinator, NT AIDS and Hepatitis Council, Alice Springs

Greg Perry RN, RPN, Grad Dip Soc Sc
Nurse Unit Manager, Biala Alcohol and Drug Service, The Prince Charles Hospital Health Service District, Queensland Health

Fiona Poeder
Hepatitis C Education Program Manager, Australian Injecting and Illicit Drug Users League (AIVL), Canberra

John Ryan BA, LLB
Chief Executive Officer, Association for Prevention and Harm Reduction Programs Australia (Anex), Melbourne

Kerri Shying
NCHECR

Francine Smith
State Coordinator, Population Health, Department of Health and Human Services, Hobart

Libby Topp PhD
Senior Research Officer, Centre for Health Research in Criminal Justice, Justice Health, Sydney

Jenny Iversen BAppSc (Secretary)
NCHECR

NCHECR WORKING GROUPS

The Antiretroviral Working Group

Janaki Amin BSc(Hons), MPH(Hons), PhD
NCHECR

Jason Appleby
Policy Analyst, Australian Federation of AIDS Organisations, Sydney

Mark Bloch MB BS, MMed
General Practitioner, Holdsworth House General Practice, Sydney

Mark Boyd BA, BM, BS, DCTM&H, MHID, MD, FRACP (Convenor)
NCHECR

Suzanne Crowe MB BS, FRACP, MD
Professor and Head, AIDS Pathogenesis and Clinical Research Program, Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne

William Donohue MB BS, BMedSc
Director, The Care and Prevention Programme, Adelaide University

Chris Duncombe MB BS
Project Team Leader, HIV-NAT, Thailand

Dominic Dwyer BSc(Med), MB BS, FRACP, FRCPA
Staff Specialist, Medical Virology and Clinical Microbiology, Centre for Infectious Diseases and Microbiology Laboratory Services, Institute of Clinical Pathology and Medical Research, Westmead Hospital, Sydney

Sian Edwards RGN, BSc, MSc
HIV Research Nurse, Northside Clinic, Melbourne

Julian Elliott MB BS, FRACP
Assistant Head, Clinical Research, Infectious Diseases Unit, The Alfred Hospital, Melbourne

Beng Eu MB BS

General Practitioner and Director, Prahran Market Clinic, Melbourne

Martyn French MB ChB, FRACP, MD, FRCPath, FRCP (Chair)

Clinical Director, Department of Clinical Immunology and Biochemical Genetics, Royal Perth Hospital; Clinical Professor in Immunology, The University of Western Australia

Adeeba Kamarulzaman MB BS, FRACP

Consultant Physician in Infectious Diseases, Clinical Investigations Centre, University of Malaya Medical Centre, Kuala Lumpur, Malaysia

Graham Mills MB ChB, MTH, FRACP

Infectious Disease Physician, Respiratory and Infectious Diseases, Waikato Hospital, Hamilton NZ

Richard Moore MB BS, Dip RACOG, FRACGP, Dip Ven

General Practitioner, Carlton Clinic, Melbourne; Sessional HIV Specialist, Melbourne Sexual Health Centre; Clinical Assistant, Infectious Diseases Unit, The Alfred Hospital, Melbourne

Catriona Ooi BSc(Med), MB BS, FACHSHM, MM (HIV/STIs)

Staff Specialist, Hunter New England Health Service

Jeffrey Post MBBS (Hons 1) PhD FRACP

Senior Staff Specialist, Department of Infectious Diseases and Albion Street Centre, Prince of Wales Hospital, Randwick NSW Conjoint Senior Lecturer, UNSW

John Quin MB BS(Hons), PhD, FRACP, FRCPA (Deputy Chair)

Director of Clinical Immunology, HIV Medicine and Sexual Health, Liverpool Hospital, Sydney

Brett Ritchie BSc (Hons), MB BS, FRACP

Infectious Diseases Physician, Infectious Diseases Unit, Royal Adelaide Hospital, Adelaide

Don Smith MB ChB, MD

Associate Professor and Head of Research Development, Albion Street Centre, Sydney

Gilda Tachedjian PhD, BSc(Hons)

Head, Molecular Interactions Group, Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne

Olga Vujovic MB BS, FRACP

Infectious Diseases Physician, Infectious Diseases Unit, The Alfred Hospital, Melbourne

Bill Whittaker AM

Co-convenor, Health and Treatments Portfolio, National Association of People Living with HIV/AIDS, Sydney

Biomedical Prevention Working Group**Jonathan Anderson FRACGP, MSc, MPH**

Research Fellow, NCHECR
Adjunct Associate Professor, Discipline of General Practice, Central Clinical School, University of Sydney; general practitioner, Northside Clinic, Melbourne

Anna Pierce MB BS, FRACP (Chair)

Infectious Diseases Physician, Victorian NPEP Service, Alfred Health

Rebecca Guy MAppSc, MAppEpid, PhD (Acting Convenor)

Senior Lecturer, Sexual Health Program, NCHECR
NHMRC Post Doctoral Fellow

Louise Causer MB BS, MSc, DTM&H (Convenor)

Lecturer, Surveillance and Evaluation Program for Public Health, NCHECR

Christopher (Kit) Fairley FRACP PhD

Professor of Sexual Health, University of Melbourne
Director, Melbourne Sexual Health Centre

Janelle Fawkes BA

Chief Executive Officer, Scarlet Alliance, Australian Sex Workers Association, Sydney

Andrew Grulich MB BS, MSc, PhD, FAFPHM

Professor of Epidemiology, UNSW; Head, HIV Epidemiology and Prevention Program, NCHECR

John BF DeWit, MSc, PhD

Professor; Director, National Centre in HIV Social Research, UNSW

John M Kaldor PhD

Professor of Epidemiology, UNSW; Senior Principal NHMRC Research Fellow, NCHECR

Bernard Kealey (Deputy Chair, Acting Chair)

Vice President, National Association of People Living with HIV/AIDS, Sydney

Mike Kennedy

Executive Director, Victorian AIDS Council/Gay Men's Health Centre, Melbourne

Lisa Maher PhD

Professor of Epidemiology, UNSW; Head, Viral Hepatitis Epidemiology and Prevention Program, NCHECR

Kathy Petoumenos BSc, MA, MPH(Hons), PhD

Lecturer, Biostatistics and Databases Program, NCHECR

Primary HIV Infection Working Group**Philip Cunningham BAppSc(Med)**

Chief of Operations, St Vincent's Centre for Applied Medical Research, Sydney

Nicky Cunningham RGN, Dip BSc (Hons)

Clinical Research Manager, Holdsworth House Medical Practice

Chris Birch BSc, MSc, PhD (Chair)

Senior Scientist, Victorian Infectious Diseases Reference Laboratory, Melbourne

Peter Canavan

Senior co-ordinator Health Treatments & Research Unit, NAPWA

Doris Chibo

Senior scientist, VIDRL

Dale McPhee

Associate Professor, National Serology Reference Laboratory, Vic

Robert Finlayson MB BS, Dip Ven, FACHSHM

General Practitioner, Taylor Square Private Clinic, Sydney

John Murray BSc(Hons), MSc, PhD

Senior Lecturer, School of Mathematics, Faculty of Science, UNSW, Sydney

Cathy Pell MB BS, MM (Deputy Chair)

Specialist General Practitioner, Taylor Square Private Clinic, Sydney

Norman Roth MB BS, Dip Av Med, Dip Ven, FACHSHM

General Practitioner, Prahran Market Clinic, Melbourne

Simon Donohue

HIV Education and Health Promotion Officer, AFAO

John Zauzers BSc(Hons)

Senior Scientist, Centre for Immunology, St Vincent's Hospital, Sydney

Patricia Grey BA, Post Grad Dip App Sci, CNS, Dip (Counselling) (Convenor)

NCHECR

Toxicology/Pharmacology Working Group**Alan Brotherton BA**

Director, Client Services, AIDS Council of New South Wales, Sydney

Andrew Carr MD, FRACP, FRCPA

Associate Professor and Senior Staff Specialist, HIV, Immunology and Infectious Diseases Clinical Services Unit, St Vincent's Hospital, Sydney

Catherine Cherry MB BS, PhD, FRACP, Grad Dip (Clin Epi) (Chair)
Infectious Diseases Physician and Senior Burnet Fellow, Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne

John Daye
Convenor, Health and Treatments Portfolio, NAPWA

Jenny Duggan
HIV Education & Health Promotion Officer, AFAO

Jennifer Hoy FRACP, MB BS, GradDipEpiBio (Deputy Chair)
Head, Clinical Research, Infectious Diseases Unit, The Alfred Hospital

Debbie Marriott BSc(Med), FRACP, FRCPA
Senior Staff Specialist, Clinical Microbiology and Infectious Diseases, St Vincent's Hospital, Sydney

Richard Norris RN, Dip App Sci (Nur), BNur, HIV Cert, MBA
Co-ordinator, HIV Clinical Trials Unit and Clinical Nurse Consultant, Immunology B Ambulatory Care Clinic, St Vincent's Hospital, Sydney

Elizabeth J. Phillips, MD, FRCPC, FRACP
Professor & Director, Centre for Clinical Pharmacology & Infectious Diseases, Murdoch University, Perth; Consultant, Departments of Clinical Immunology & Infectious Diseases, Sir Charles Gairdner Hospital, Perth; Department of Clinical Immunology and Immunogenetics, Royal Perth Hospital, Perth

Rebekah Puls BSc(Hons), PhD (Convenor)
NCHECR

Tim Read MB BS, FACHSHM
Sexual Health Physician, Melbourne Sexual Health Centre

Handan Wand MA, MSc, PhD
NCHECR

Ian Woolley MB BS, FRACP
Deputy Director, Infectious Diseases Department, Monash Medical Centre, Melbourne

Oncology Working Group

Michael Boyle BMedSci, MB BS, MD, FRACP, FRCPA
Staff Specialist, Immunology and Infectious Diseases, John Hunter Hospital, Newcastle, NSW; Conjoint Associate Professor, University of Newcastle, Newcastle, NSW

Mitchell Chipman MB BS, FRACP
Medical Oncologist, The Alfred Hospital, Melbourne

Lyndal Daly BN Grad Dip (Crit Care)
Clinical Practice Consultant, Infectious Diseases Unit, Royal Adelaide Hospital, Adelaide

Grant Davies
Investigation's Manager, Office of the Aged Care Commissioner, Melbourne

Fraser Drummond MBChB DA(UK) MRCA (Convenor)
NCHECR

Andrew Grulich MB BS, MSc, PhD, FAFPHM
NCHECR

Richard Hillman BSc(Hons), MD, FRCP, FACHSHM (Chair)
Senior Lecturer and Senior Staff Specialist, Sexually Transmitted Infections Research Centre, Westmead Hospital, Sydney

David Menadue BA, BAEd
Vice President, National Association of People Living with HIV/AIDS, Melbourne

Sam Milliken MB BS, FRACP, FRCPA
Senior Lecturer and Senior Staff Specialist, Department of Haematology, St Vincent's Hospital, Sydney

Jialiu (Julian) Zhou, BMed, MPH, PhD
NCHECR

Immune-Based Therapies Working Group

Paul Cameron BMedSci(Hons), MB BS, PhD, FRACP, FRCPA (Deputy Chair)
Immunopathologist, Department of Pathology, The Alfred Hospital, Melbourne

Robert Center BSc, PhD
Senior Research Officer, Department of Microbiology and Immunology, University of Melbourne, Melbourne

John Chuah BSc(Med)(Hons), MB BS, FACHSHM
Director, Gold Coast Sexual Health, Miami, Qld

Miles Davenport MB BS(Hons), DPhil
Senior Research Fellow, Centre for Vascular Research, UNSW

Roger Garsia MB BS(Hons), PhD, FRACP, FRCPA (Chair)
Director of Clinical AIDS Services and Staff Specialist in Immunology, Department of Clinical Immunology, Royal Prince Alfred Hospital, Sydney

Philip Habel BSc(Hons), RN
Trial Nurse, ACT Division of General Practice HIV Program

Mina John MB BS, FRACP, FRCPA
Clinical Immunologist and Immunopathologist, Royal Perth Hospital

Anthony Kelleher BSc(Hons), MB BS(Hons), PhD, FRACP, FRCPA
NCHECR

Mark Kelly MB BS(Hons), FRACP
Senior Medical Officer, AIDS Medical Unit, Queensland Health

Stephen Kent MB BS, FRACP, MD
Associate Professor, Department of Microbiology and Immunology, The University of Melbourne

Matthew Law MA, MSc, PhD
NCHECR

Sharon Lewin MB BS (Hons), FRACP, PhD
Director, Infectious Diseases Unit, The Alfred Hospital, Melbourne; Professor, Department of Medicine, Monash University, Melbourne

Jenny McDonald Grad Dip Diets, BSc, Post Grad Dietetics
Treatment Officer, National Association of People Living with HIV/AIDS, Sydney

Dean Murphy BA (Hons)
Education and Biomedical Prevention Consultant, Australian Federation of AIDS Organisations, Sydney & Research Associate, National Centre in HIV Social Research, UNSW

Patricia Price PhD
Associate Professor, School of Surgery and Pathology, The University of Western Australia

Damian Purcell PhD
Senior Lecturer in Virology Head, Molecular Virology Laboratory, The University of Melbourne

John Sullivan PhD, MPH
Principal Scientist, Australian Red Cross Blood Service, Sydney; Associate Professor, Transfusion Medicine and Immunogenetics Research Unit, Central Clinical School, Faculty of Medicine, The University of Sydney

Sarah Pett BSc(Hons), MB BS(Hons), DTM&H, FRCP (UK), FRACP (Convenor)
NCHECR

Neurology Working Group

Margaret Bain BSc(Psych), MCLinPsych, MCLinNeuropsych
Neuropsychologist, HIV Neuropsychology Service, St Vincent's Hospital, Sydney

Bruce Brew MB BS(Hons), MD, FRACP
Professor and Head, Department of Neurosciences and Neurology, St Vincent's Hospital, Sydney

Michael Buckland BSc(Med), MB BS, PhD, FRCPA

Head, Department of Neuropathology, Royal Prince Alfred Hospital, Sydney

Cate Carey RN, BA, MAppSc (Convenor)
NCHECR

Melissa Churchill BSc(Hons), PhD
Senior Research Fellow, Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne

Lucette Cysique PhD N. Psych
Postdoctoral Fellow, Brain Sciences UNSW; St Vincent's Clinical School, Sydney

Ian Paul Overall MB ChB (Hons), PhD, FRCPATH, FRCPsych
Cato Professor and Head, Department of Psychiatry, Faculty of Medicine, Dentistry & Health Sciences, The University of Melbourne

Paul Gorry PhD (Chair)
Head, HIV Molecular Pathogenesis Laboratory, Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne

Matthew Law MA, MSc, PhD
NCHECR

Patrick Li MB BS, FHKCP, FHKAM (Medicine), FRCP (London), FRCP (Edinburgh) (Deputy Chair)
Chief of Service, Department of Medicine, Queen Elizabeth Hospital, Hong Kong

Marilyn McMurchie OAM
Adjunct Associate Professor, Central Clinical School, Faculty of Medicine, University of Sydney and Director, East Sydney Doctors

Maggie Piper RN, BA, MBioEthics
Clinical Trials Co-ordinator, Centre for Infectious Diseases and Microbiology Laboratory Services, Institute of Clinical Pathology and Medical Research, Westmead Hospital, Sydney

Peter Sternhell MB BS
Lecturer, School of Psychiatry, St Vincent's Hospital, Sydney

Jo Watson
Executive Officer, National Association of People Living with HIV/AIDS, Sydney

Peter Watts
Health Promotion and Treatments Officer, Queensland Positive People, Brisbane

Edwina Wright MB BS, FRACP
Infectious Diseases Specialist, Department of Infectious Diseases and Microbiology, The Alfred Hospital, Melbourne

Viral Hepatitis Working Group

Anthony Allworth MB BS, FRACP, FRCPA, FACTM, MASM
Director, Infectious Diseases Unit, Royal Brisbane and Women's Hospital

David Baker MB ChB, DCH, Dip Med (Sexual Health)
General Practitioner, East Sydney Doctors, Sydney

Michael Beard PhD, NHMRC Senior Research Fellow
Head, Hepatitis C Virus Research Laboratory, SA Pathology and School of Molecular and Biomedical Science, The University of Adelaide, Adelaide

Scott Bowden PhD
Head of the Molecular Microbiology Laboratory, Victorian Infectious Diseases Reference Laboratory, Melbourne

Erol Digiusto BSc(Hons), PhD
Senior Research Fellow, National Drug and Alcohol Research Centre, UNSW

Nicholas Doong MBBS, MPH, DipObs, FRACGP
General Practitioner, Burwood Road General Practice

Greg Dore MB BS, BSc, PhD, FRACP, MPH
NCHECR
Michelle Giles MB BS (Hons) FRACP PhD
Infectious Diseases Physician, Infectious Diseases Unit, The Alfred Hospital, Melbourne

Margaret Hellard MB BS, FRACP, PhD, FAFPHM (Chair)
Head, Centre for Epidemiology and Population Health Research, Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne

David Iser MB BS (Hons), BSc(Med), FRACP
Hepatology Fellow, Infectious Diseases Unit, Alfred Hospital, Melbourne and Gastroenterology Unit, St. Vincent's Hospital, Melbourne

Andrew Lloyd MB BS, MD, FRACP
Professor and Consultant Infectious Diseases Physician, Department of Infectious Diseases, Prince of Wales Hospital, Sydney

Stuart Loveday
Executive officer, Hepatitis C Council of NSW, Sydney

Gail Matthews MB ChB, MRCP (Convenor)
NCHECR

Kathy Petoumenos BSc, MA, MPH(Hons), PhD
NCHECR

Zoë Potgeiter RN, CNS
Clinical Trial Co-ordinator, Immunology B

Ambulatory Care Clinic, St Vincent's Hospital, Sydney

Stuart Roberts MB BS, FRACP, MD
Deputy Director, Department of Gastroenterology, The Alfred Hospital, Melbourne

Joe Sasadeusz MB BS, FRACP, PhD
Infectious Diseases Physician, Royal Melbourne Hospital and The Alfred Hospital, Melbourne

David Shaw MB BS, FRACP
Director, Infectious Diseases and Infection Prevention Units, Royal Adelaide Hospital
Carla Treloar BSc(Hons), PhD
Deputy Director, National Centre in HIV Social Research, UNSW

Kumar Visvanathan MB BS, PHD, FRACP
Head of Research and ID Physician, Department of Infectious Diseases, Monash Medical Centre, Southern Health, Melbourne

Bethany White MPH, PhD candidate
NCHECR

Amany Zekry MBBS, PhD, FRACP
Head of Gastroenterology and Hepatology Department, St George Hospital, Senior Lecturer of Medicine, UNSW

NCHECR Working Groups ex officio

David Cooper AO, BSc(Med), MB BS, MD, DSc, FAA, FRACP, FRCPA, FRCP
NCHECR

Levinia Crooks AM, BA(Hons), Dip Ed
Chief Executive Officer, Australasian Society for HIV Medicine, Sydney

Anthony Cunningham MB BS, BMedSci(Hons), MD, FRACP, FRCPA, FASM
Director, Westmead Millennium Institute for Medical Research, Sydney; Director, Centre for Virus Research, Westmead Millennium Institute for Medical Research, Sydney

Sean Emery BSc(Hons), PhD
NCHECR

John M Kaldor PhD
NCHECR

Matthew Law MA, MSc, PhD
NCHECR

External boards, committees and advisory groups

2nd Coalition for Research to Improve Aboriginal Health (CRIA) Conference Scientific Advisory Committee (James Ward)

5th International AIDS Conference 2009, Basic Science Track Committee (Anthony Kelleher International Co-chair)

9th International Congress on Drug Therapy in HIV Infection Scientific Committee (HIV9) (David Cooper)

10th International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV Organising Committee (David Cooper)

11th Bangkok Symposium on HIV Medicine Organising Committee (David Cooper)

11th IUSTI World Congress, Cape Town, 2009, Scientific Committee (Basil Donovan)

20th Annual Meeting of the International Harm Reduction Association, International Program Advisory Group (Lisa Maher)

23rd International AIDS Conference 2009, Basic Science Track Committee (Anthony Kelleher International Co-chair)

Aboriginal Sexual Health Advisory Committee (James Ward)

ACCEPt Executive Committee (Rebecca Guy)

ACCESS Coordinating Committee (Rebecca Guy)

ACCESS family planning network steering committee (Rebecca Guy)

ACCESS general practice network steering committee (Rebecca Guy)

ACCESS sexual health service network steering committee (Rebecca Guy)

ACON Board (Garrett Prestage member)

ACON Ethics Committee (Garrett Prestage chair, Ian Down member)

ACON Research and Policy Advisory Committee (Garrett Prestage)

AH&MRC Hepatitis C Reference Group (James Ward)

AIDS Council of New South Wales Aboriginal Advisory Group (James Ward)

AIDS Council of New South Wales Board (Garrett Prestage)

AIDS Council of New South Wales Ethics Review Committee (Garrett Prestage)

AIDS Council of New South Wales HIV and Sexually Transmissible Infections Working Group (Garrett Prestage)

AIDS Council of New South Wales Lesbian Health Board Advisory Committee (Julie Mooney-Somers)

AIDS Editorial Board (Andrew Grulich member)

AIDS Editorial Board (Andrew Grulich)

Altair Trial Protocol Steering Committee (David Cooper, Sean Emery, Kathy Petoumenos, Rebekah Puls)

ANEX 09 Conference Reference Group (Lisa Maher)

Anex Research Advisory Committee (John Kaldor)

Australasian Health and Research Data Managers Association Executive Committee (Pip Marks)

Australasian Society for HIV Medicine, Antiretroviral Guidelines Panel (Fraser Drummond)

Australasian Society for HIV Medicine, *ASHM Journal Club* Editorial Committee (Lisa Maher)

Australasian Society for HIV Medicine, Board member (Mark Boyd)

Australasian Society for HIV Medicine, Education and Training Committee (Sarah Pett)

Australasian Society for HIV Medicine, Education Resources Advisory Committee (James Ward)

Australasian Society for HIV Medicine, *Hepatitis B for Primary Care Providers Monograph* Editorial Committee (Gail Matthews)

Australasian Society for HIV Medicine, HIV and the Body Steering Committee (Sarah Pett)

Australasian Society for HIV Medicine, National Clinical Subcommittee (Fraser Drummond)

Australasian Society for HIV Medicine, NSW

Hepatitis B Reference Committee (Gail Matthews)

Australasian Society for HIV Medicine, NSW Hepatitis C Reference Committee (Gail Matthews)

Australasian Society for HIV Medicine, NSW Hepatitis C Prescriber Trial Clinical Subcommittee (Greg Dore)

Australasian Society for HIV Medicine, NSW Viral Hepatitis Program Advisory Committee (Alexa Gillman)

Australasian Society for HIV Medicine, Program Building Committee (Anthony Kelleher)

Australasian Society for HIV Medicine, reviewer of abstracts (Anthony Kelleher)

Australasian Society for HIV Medicine, Standing Committee on Viral Hepatitis (Greg Dore, Chair; Lisa Maher)

Australasian Society for Infectious Diseases Annual Scientific Meeting Organising Committee (Chris Weatherall)

Australian Chlamydia Control Effectiveness Pilot (ACCEPt) Project Executive Committee (Basil Donovan, Rebecca Guy, John Kaldor)

Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS) Coordinating Committee (Basil Donovan, Rebecca Guy, John Kaldor)

Australian Collaboration on validation of oral fluid tests for HIV (Rebecca Guy)

Australian Federation of AIDS Organisations, Biomedical Prevention Policy Reference Group (Andrew Grulich, Garrett Prestage)

Australian Government Department of Health and Ageing, Chlamydia Program Implementation Committee (Basil Donovan, Andrew Grulich)

Australian Government Department of Health Ministerial Advisory Committee on Blood Borne Viruses and Sexually Transmissible Infections (Andrew Grulich member)

Australian Hepatitis Council Health Reference Group (Lisa Maher)

Australian HIV Observational Database Steering Committee (Matthew Law, Kathy

Petoumenos, Sadaf Marashi Pour, Hamish McManus)	Cooper, co-editor)	Committee (David Cooper co-chair)
Australian Injecting and Illicit Drug Users League, Vietnamese Hepatitis C and Injecting Drug Use Project Reference Group (Lisa Maher)	<i>Current Opinion in HIV and AIDS</i> Editorial Board (John Kaldor)	HIV Expert Writing Reference Group for the development of Australia's new national HIV strategy (David Wilson, member)
Australian Institute of Policy and Science (David Wilson, Associate Member)	<i>Drug and Alcohol Review</i> Editorial Board (Lisa Maher)	HIV Netherlands, Australia, Thailand Research Collaboration (HIV-NAT) International Advisory Board (David Cooper, Co-Director, Chris Duncombe)
Australian NSP Survey National Advisory Group (Lisa Maher)	<i>eJournal of the International AIDS Society</i> Editorial Board (John Kaldor)	HIV Star Data Safety Monitoring Board Committee (Matthew Law, Stephen Kerr)
Australian Radiation Protection and Nuclear Safety Agency Radiation Health and Safety Advisory Council (John Kaldor)	Enhancing Hepatitis C Treatment Uptake and Outcomes in Opiate Dependency Pharmacotherapy Settings Steering Committee (<i>ex officio</i>) (John Kaldor)	HIVNAT International Advisory Board (Sean Emery)
Australian Society of Immunology Conference, Abstract Review Committee (Nabila Seddiki)	ESPRIT Trial International Steering Committee (Matthew Law)	HPV Vaccine Forum, Sydney 2008 (Basil Donovan, Andrew Grulich, Neil Franklin)
Australian Society of Immunology Conference, Poster Judging Committee (Nabila Seddiki)	Expert Working Group to provide advice on Australian Government Department of Health and Ageing-funded HIV/AIDS, hepatitis C and sexually transmissible infections education and health promotion materials (John Kaldor)	IAS (International Aids Society) Conference Organising Committee Co-chair, Basic Science Track Committee, International AIDS Conference (Anthony Kelleher)
Biomedical Prevention Working Group (<i>ex officio</i>) (John Kaldor)	Faculty of Medicine, Research Management Committee (Anthony Kelleher)	leDEA Cancer Working Group (Matthew Law, Stephen Kerr)
Cancer Working group, international epidemiologic databases to evaluate AIDS (Andrew Grulich member)	<i>Future HIV Therapy</i> Editorial Board (David Cooper, John Kaldor)	leDEA Data Harmonization Working Group (Jialun Zhou, Rebecca Oyomopito)
Centre for Immunology UNSW Research degree review committee (Tony Kelleher)	Gardasil Advisory Board, CSL Ltd (Andrew Grulich, Basil Donovan)	leDEA Executive Committee (David Cooper, Matthew Law)
Chapter Committee, Education Committee, Assessment, Teaching and Learning Subcommittee, Site Accreditation/Clinical Educators Sub-Committee, Annual Sexual Health Conference 2009 organising committee (Fraser Drummond, member)	Gastroenterology Metropolitan Committee on Hepatitis C (Greg Dore)	leDEA Pharmacovigilance and Adverse Events Working Group (Jialun Zhou)
Cochrane Collaborative Review Group on HIV infection and AIDS, Biomedical Interventions Reviews Editor (John Kaldor)	Genital Herpes Advisory Board, Glaxo SmithKline (Basil Donovan, chair)	Immunovirology Research Network Steering Committee (Anthony Kelleher)
<i>Communicable Diseases Intelligence</i> Editorial Board (John Kaldor)	Genital Warts Surveillance Network (Basil Donovan, Andrew Grulich, Rebecca Guy, Neil Franklin, David Regan)	Indigenous Australian Sexual Health Committee (James Ward)
Communicable Diseases Network Australia (John Kaldor)	Gilead HIV Advisory Board (Sarah Pett)	<i>Infectious Disease Reports</i> (David Wilson, member, Editorial Board)
Communicable Diseases Network Australia, Human Papillomavirus (HPV) Surveillance Working Party (John Kaldor)	GlaxoSmithKline Advisory Board (Fraser Drummond)	INSIGHT network, Executive Committee (David Cooper, Sean Emery)
Communicable Diseases Network Australia, New Developments in HIV Surveillance Committee (John Kaldor, Chair)	Greater Metropolitan Clinical Taskforce (GMCT) Viral Hepatitis working party (Suzanne Polis)	INSIGHT network, Infrastructure Committee (Sarah Pett, Cate Carey)
Communicable Diseases Network Australia, Subcommittee on Surveillance of Bloodborne Viral and Sexually Transmitted Infections (John Kaldor chair, Melanie Middleton, Anne McDonald, Rebecca Guy, Basil Donovan)	NSW Hepatitis C Antiviral Treatment MDS (Suzanne Polis)	INSIGHT network, Monitoring Group Committee (David Courtney-Rodgers, Nisha Seneviratne)
Comprehensive International Program for Research on AIDS (CIPRA) HIV Research Program in Thailand and Cambodia International Steering Committee (David Cooper)	<i>Harm Reduction Journal</i> Editorial Board (Lisa Maher)	INSIGHT network, Quality Oversight and Performance Evaluation Committee (David Courtney-Rodgers)
<i>Current HIV/AIDS Reports</i> Editorial Board (David Cooper, Honorary Member)	Hepatitis C Victoria & White Lion Youth Services - <i>Young Women's Hepatitis C Prevention and Early Intervention Project</i> (Peter Higgs)	INSIGHT network, Training Committee (Cate Carey)
<i>Current Opinion in HIV and AIDS</i> (David	Hepatitis C Victoria Research Advisory Committee (Peter Higgs, chair)	International Conference on the Reduction of Drug Related Harm: 2009 Bangkok, Joint co-ordination of the <i>Film Fest</i> Stream (Peter Higgs)
	Hepatitis C Victoria, Board of Directors (Peter Higgs, Vice-president)	International Consortium of Investigators Working on Lymphoma Epidemiologic Studies (InterLymph), Immunology Working Group (Andrew Grulich member)
	Hepatitis C Council of NSW Medical Research Advisory Panel (Greg Dore)	International Epidemiologic Databases to Evaluate AIDS Cancer Working Group (Stephen Kerr)
	HIV Consortium for Partnership in Asia and the Pacific Management Committee (John Kaldor, Louise Causer)	<i>International Journal of Drug Policy</i> Editorial Board (Lisa Maher)
	HIV DART 2008 Conference Organising	

<i>International Journal of STD & AIDS</i> Editorial Board (Basil Donovan)	National Association of People Living with HIV/AIDS, HIV Medication Working Group (Dianne Carey)	NSW Health Statewide Review of AIDS Funded Services (James Ward)
International Programme Advisory Group, 20th Annual Meeting of the International Harm Reduction Conference (Lisa Maher)	National BBV and STI Surveillance Committee (Rachel Deacon, Lisa Maher, James Ward, David Wilson)	NSW Hepatitis Committee (James Ward)
International Union against Sexually Transmitted Infections, Executive Committee (Basil Donovan, Senior Counsellor)	National Centre for HIV/AIDS, Dermatology and STD (NCHADS) Steering Committee for Cambodian Treatment Access Program (CTAP) and AusAID funded HIV projects (John Kaldor)	NSW Ministerial Advisory Committee on Hepatitis (MACH) (Lisa Maher, Greg Dore, James Ward)
<i>Journal of Acquired Immune Deficiency Syndromes</i> Editorial Board (David Cooper)	National Centre for Immunisation Research and Surveillance of Vaccine Preventable Disease Scientific Advisory Committee (John Kaldor)	NSW Ministerial Advisory Committee on HIV/AIDS and Sexually Transmissible Infections, Health Promotion Subcommittee (Andrew Grulich chair)
<i>Journal of Criminology and Criminal Justice</i> International Advisory Board (Lisa Maher)	National Centre in HIV Social Research (NCHSR) Scientific Advisory Committee (Lisa Maher)	NSW Ministerial Advisory Committee on HIV/AIDS and Sexually Transmissible Infections (James Ward)
<i>Journal of Drug Issues</i> Editorial Board (Lisa Maher)	National Gay Men's Syphilis Action Plan Steering Committee and Monitoring and Evaluation Subcommittee (David Wilson, member)	NSW Population and health services research ethics committee (Andrew Grulich member)
<i>Journal of Hepatology</i> Editorial Board (Greg Dore)	National Health and Medical Research Council Centres of Research Excellence Grant Review Panel (John Kaldor)	NSW STI & HIV Committee (James Ward)
<i>Journal of HIV Medicine</i> Editorial Board (Andrew Grulich)	National HIV Surveillance Committee (Rebecca Guy)	NUAA Policy & Campaigns Advisory Committee (Ian Down)
<i>Journal of HIV Therapy</i> Current Trends Advisory Board (David Cooper)	National STI Surveillance Committee (Rebecca Guy)	Open Family Australia research advisory committee member (Peter Higgs)
Leukaemia and Lymphoma Editorial Board (Andrew Grulich)	National Syphilis Action Plan monitoring and evaluation working group (Rebecca Guy)	OpiCare Leadership Team (Greg Dore, Jason Grebely)
Lionel Murphy Foundation (Board of Trustees) (Lisa Maher)	National Syphilis Action Plan Technical Working Group (Andrew Grulich, Rebecca Guy, Garrett Prestage)	Positive Life (NSW) Board Advisory Group (Garrett Prestage, Mark Boyd)
Lotus House Refuge Management Committee (Lisa Maher)	National Viral Hepatitis Surveillance Committee (Rebecca Guy)	Practical Advances in Treating HIV (PATH II) Steering Committee (Sean Emery, Chair)
<i>Medicine Today</i> Board of Editorial Consultants (Basil Donovan)	NHMRC Grant Review (Immunology) (Anthony Kelleher)	Prevention Science Track Committee, International AIDS Society Conference, Vienna, 2010 (Andrew Grulich)
Medicines Australia Monitoring Committee (Anthony Kelleher)	NHMRC Indigenous Health Review Panel (James Ward)	Project Management Group Randomised Control Trial, Tobacco Control AH&MRC (James Ward)
Menzies School of Health Research Advisory Group (James Ward)	NSW Aboriginal Sexual Health Advisory Committee (James Ward, Chair)	Project Reference Group NSW STI Campaign (James Ward)
MGM Interagency (Iryna Zablotska)	NSW Chapter of Sexual Health Medicine Annual Scientific Meeting Organising Committee (Fraser Drummond)	ProPrems Trial Data Safety Monitoring Committee (John Kaldor)
Mid Term Review Steering Committee NSW Health AIDS Branch Strategies HIV STI HCV Aboriginal Implementation Plan (James Ward)	NSW Chief Health Officer Report Special Topic: STI (David Wilson, advisory group member)	Public Health Association of Australia - Justice Health Special Interest Group (Peter Higgs)
<i>MIMS Annual</i> Honorary Editorial Board (Basil Donovan)	NSW Department of Corrective Services Ethics Committee (John Kaldor)	Public Health Association of Australia, Conference Program Committee (Peter Higgs)
Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis (MACASHH), HIV/AIDS and Sexually Transmissible Infections Subcommittee (Andrew Grulich)	NSW Health Chopped Liver Reference Group (James Ward)	Repatriation Medical Authority (John Kaldor)
Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis (MACASHH), Hepatitis C Subcommittee (Greg Dore)	NSW Health Shared Scientific Advisory Committee (Fraser Drummond expert reviewer)	Review panel for Sydney University Master of Medicine (HIV/STI) degree program (David Templeton committee member external)
Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis (MACASHH) Indigenous Australians' Sexual Health Committee (James Ward)	NSW Health Shared Scientific Assessment Committee (Fraser Drummond)	Sax Institute, Coalition for Research to Improve Aboriginal Health (CRIA) Steering Committee
Multicultural HIV and Hepatitis Service Advisory Group (Lisa Maher, Chair)		Sax Institute, representative for NCHECR (David Wilson)
NACCHO Sexual Health and Bloodborne Virus Advisory Committee (James Ward)		SESIHNS Clinical Services Expert Advisory Group (Suzanne Polis)
NAPWA Treatments Policy Advisory Group (Fraser Drummond, Sarah Pett)		SESIHNS Hepatitis C Governance Committee (Suzanne Polis)

Sexual Health (David Cooper, Editor)

Sexual Health Editorial Board (Basil Donovan, Andrew Grulich, John Kaldor)

Sexually Transmitted Infections, Editorial Board (David Cooper)

Sexually Transmitted Infections, Elsevier, New Delhi (Basil Donovan, Section Editor)

Sexually Transmitted Infections in Gay Men Action Group (Jeff Jin member)

Sidney Myer Health Scholarship Selection Committee (Peter Higgs)

SIRFLOX Independent Data and Safety Monitoring Board Committee (Matthew Law)

SPARTAC Trial Steering Committee (David Cooper, Anthony Kelleher)

SSDV Interagency (Ian Down)

St Vincent's Centre for Applied Medical Research/ UNSW Research degree review committee (Anthony Kelleher)

St Vincent's Hospital Campus Institutional Biosafety Committee (Anthony Kelleher)

St Vincent's Hospital Clinical School Teaching Committee (Fraser Drummond)

St Vincent's Hospital Human Research Ethics Committee (Claire Vajdic, Deputy Chair; Handan Wand)

St Vincent's Research & Biotechnology Precinct Hub Governance Council (David Cooper)

Steering Committee for NHMRC grant under the International Collaborative Indigenous Health Research Partnership (John Kaldor)

STIGMA - NSW Implementation committee for the National Syphilis Action Plan (Rebecca Guy)

STIGMA (Iryna Zablotska)

Suicide Prevention Australia Reference Group on Suicide and self-harm amongst the GLBTI communities (Garrett Prestage member)

Sydney HIV Interagency (Garrett Prestage)

Thai A/E Clade HIV Vaccine Trial Protocol Steering Committee (David Cooper, Sean Emery, Anthony Kelleher, Rebekah Puls)

The Cancer Council NSW Cancer Research Committee (Andrew Grulich member)

The Data Collection on Adverse Events of Anti-HIV Drug Study International Steering Committee (Matthew Law)

The Sax Institute (Andrew Grulich member)

TREAT Asia HIV Observational Database Steering Committee (Matthew Law, Jialun Zhou)

TREAT Asia Paediatric HIV Observational Database Steering Committee (Matthew Law)

TREAT Asia Quality Assurance Scheme Steering Committee (Matthew Law, Jialun Zhou)

TREAT Asia Steering Committee (David Cooper)

TREAT Asia Studies Evaluating Resistance Steering Committee (Matthew Law)

UNSW Faculty of Medicine Research Committee, Bachelor of Science (Medicine) Subcommittee (Greg Dore)

UNSW Faculty of Medicine Research Grant/Early Career Grant Review (Anthony Kelleher)

UNSW Health Data Linkage committee (Matthew Law)

UNSW Hepatitis C Vaccine Initiative Steering Committee (John Kaldor)

UNSW Human Research Ethics Advisory Panel: Medical/Community (Greg Dore, Lisa Maher, Mark Boyd)

VAC/GMHC Sexually Adventurous Men's Project Committee (Garrett Prestage member)

Vietnamese Australian Buddhist Assistance Trust (Lisa Maher)

Working Group, International Agency for Research on Cancer Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 100: A Review of Human Carcinogens (Andrew Grulich)

World Health Organisation Strategic and Technical Advisory Committee for HIV/AIDS (David Cooper)

World Health Organisation Working Group on Incidence Assays for HIV Infection (John Kaldor Co-Chair)

World Health Organisation/UNAIDS HIV Vaccine Advisory Committee (David Cooper, Chair)

Staff

Director's office

Director and Scientia Professor of Medicine

David Cooper AO, BSc(Med), MB BS, MD, DSc, FAA, FRACP, FRCPA, FRCP

Executive Assistant

Janette Button

Research Assistant

Damien Cordery BSc(Hons), MPH, PhD

Vaccines program grant co-ordinator

John Wilkinson BSc(Hons), PhD

Manager, Research Communication

Louisa Wright M Journalism, MPH

Therapeutic and Vaccine Research Program

Head and Professor

Sean Emery BSc(Hons), PhD

Associate Professor

Jennifer Hoy MB BS, Grad Dip Epi Bio, FRACP (part time) (to July)

Senior Lecturer

Mark Boyd BA, BM, BS, DCTM&H, MHID, MD, FRACP

Lecturers

Christoph Boesecke MD

Helen Byakwaga MB ChB

Dianne Carey BPharm, MPH

Kate Clezy MB BS, FRACP (part time)

Fraser Drummond MB ChB, MRCA, DA (UK)

Sarah Pett BSc(Hons), MB BS(Hons),

DTM&H, MRCP (UK), FRACP

Rebekah Puls BSc(Hons), PhD

Senior Clinical Project Co-ordinators

Cate Carey RN, BA, MAppSc(Research)

Allison Humphries BSc, MSc(Med), Grad Dip PH

Clinical Project Co-ordinators

Maria Arriaga BSc, MScMed(STD/HIV)

David Courtney-Rodgers

Carlo Dazo BMedSc(Hons)

Hila Haskelberg BSc

Leanne Kearney RN, GradCert INH, PHC (from February)

Enmoore Lin BA/BSc(Hons) PhD (from March)

Simone Jacoby BSc, Dip Nutrition, Adv Dip Bot Med

Claudette Satchell BSc(Hons) (to January)

Nisha Seneviratne BMedSc, BBus

Megan Evans BAppSc HIM (Health Information Management)

Natalie Espinosa BS (Biomed), MA.AppSc (Ex&Sc)

Program Manager

Cathy Sajjadi Dip Bus (from July)

Margaret Allen (to April)

Data Managers

Kymme Courtney-Vega Dip Sp Th

Wendy Lee

Jose Aurelio Vieira Vulcao BA

Administrative Assistants

Maja Berilazic BEd

Emma Butler BA(Hons), MA (part time)

Rosemary Robson

Alexis Shambrook

Sarah Field

HIV Epidemiology and Prevention Program

HIV Epidemiology and Prevention Program Head and Professor

Andrew Grulich MB BS, MSc, PhD, FAFPHM

Senior Lecturers

Garrett Prestage BA(Hons), PhD

David Templeton MB ChB, Dip Ven, Grad

Cert ForensMed, MACLM, FACHSHM

Iryna Zablotska PhD, MD, MPH

Lecturer

Jeff Jin BMed, MPH, PhD (to June)

Post Doctoral Research Fellow

Jeff Jin BMed, MPH, PhD (from June)

Research Assistants

Ian Down (from April)

Pól McCann BA (Hons), PhD

Marina van Leeuwen BSc(Hons), MPH (to November)

Project Officer

Jack Bradley

Viral Hepatitis Clinical Research Program

Head and Associate Professor

Greg Dore MB BS, BSc, PhD, FRACP, MPH

Senior Lecturers

Gail Matthews MBChB MRCP(UK), FRACP PhD (from July)

Tanya Applegate, BSc (Hons), PhD

Lecturers

Carolyn Day BSc(Hons), PhD (part time) (to January)

Marianne Jauncey BMed, Grad Dip App Epi, MPH(Hons), FAFPHM (part time) (from August)

Gail Matthews MBChB, MRCP (UK), FRACP (to July)

Rosie Thein MD, MPH, PhD

Jason Grebely, BSc, PhD

Clinical Trials Manager

Pip Marks BSc

Clinical Project Co-ordinators

Natalie Espinosa BAppSc, MHSc (to July)

Alexa Gillman BSc(Hons)

Ineke Shaw BSc, Grad Cert BioStats

Barbara Yeung RN, BHSc(Nursing), MPH

Senior Research Assistant

Brendan Jacka BSc(Hons) (from December)

Research Assistants

Amanda Erratt ADip (Admin)

Maryam Salehi Alavi (BSc), (MSc)

Data Manager

Patrick McGrath BA, Dip Ed

Administrative Assistant

Jennifer Moore

Lara Cassar (to July)

Viral Hepatitis Epidemiology and Prevention Program

Professor and Head

Lisa Maher PhD

Lecturer

Ekramul Hoque (to January)

Anna Olsen (from August)

Post Doctoral Research Fellow

Peter Higgs PhD, MA, BSW

Joanne Kimber BSc, PhD

Senior Project Co-ordinator

Marlene Thompson BSc (to March 2009)

Qualitative Research Co-ordinator

Julie Mooney-Somers BSc(Hons), PhD

Clinical Trial Co-ordinator

Kathy Barnes RN (maternity leave from June)

Research Assistants

Brian Acraman (to April)

Anna Bates BA

Rachel Deacon BSc, PhD

Anna Doab RN, MPH

Aylza Donald BSSc, BA

Jarliene Enriquez

Mofi Islam

Jenny Iversen BAppSc

Anh Pham

Len Liao

Kerri Shying (from March)

Administrative Assistant

Rachel McCleave BA(Hons), BEd(Prim)

Surveillance and Evaluation Program for Public Health

Head and Associate Professor

David Wilson BSc, BInfTech, BAppSc(Hons), GradCert(Biostats), PhD

Senior Research Officer

Ann McDonald BSc, MPH

Lecturer

Louise Causer MB BS, MSc, DTM&H

Richard Gray BSc(Hons)

Lei Zhang BSc(Adv Hons), MSc, PhD, MPH
(from May)

HIV Surveillance Officer

Melanie Middleton BMedSci, MPH

Research Assistants

Kel Heymer BSc (to February)

James Jansson BTeach, BSc(Hons) (part-time)

Amy Kwon BSc

Administrative Assistant

James Jansson BTeach, BSc(Hons) (part-time)

Biostatistics and Databases Program

Head and Associate Professor

Matthew Law MA, MSc, PhD

Associate Professor

John Murray BSc(Hons), MSc, PhD (part time)

Senior Lecturer

Janaki Amin BSc(Hons), MPH(Hons), PhD

David Regan BA, BSc(Hons), PhD (from July)

Handan Wand MA, MSc, PhD (from July)

Lecturers

Azar Kariminia BSc, MSc, PhD (from August)

Kathy Petoumenos BSc, MA, MPH(Hons), PhD

David Regan BA, BSc(Hons), PhD (to July)

Handan Wand MA, MSc, PhD (to July)

Jialun Zhou BMed, MPH, PhD

Associate Lecturer

Ben Hui BE(computer engineering),

MBiomedE

Statisticians

Heather Gidding BAppSc, Grad Dip Epid

Biostat, MAppEpid, MPHAA

Awachana Jiamsakul BSc, MS (from August)

Azar Kariminia BSc, MSc, PhD (to August)

Sadaf Marashi Pour BSc, MSc

Hamish McManus BEcon, BAActS, MBIOS

(from October)

Rebecca Oyompito BSc, Grad Dip Med Stat

Preeyaporn Srasuebku BSc, MSc, PhD (to

October)

Computer Systems Officers

Noorul Absar BTech, Grad Dip(Inf Sc),

MComp(SW Engg)

Rossitza Chevkenova BSc

Research assistant

Greg Londish BSc(Hons) (from April)

Program co-ordinator

Courtney Bendall DipBus

Immunovirology and Pathogenesis Program

Head and Senior Lecturer

Anthony Kelleher BSc(Hons), MB BS(Hons),

PhD, FRACP, FRCPA

Lecturers

Linda Gelgor PhD, MSc

Kersten Koelsch MBBS, MD

Nabila Seddiki PhD

Senior Scientist

Nigel McCarthy BSc(Hons), MSc

Clinical Project Co-ordinators

Patricia Grey BA, Post Grad Dip App Sci,

CNS, Dip (Counselling)

Mee-Ling Munier BSc, Grad Dip Epi, MSc

Research Assistants

Michelle Bailey BSc(Hons)

Susanna Ip BSc

Chansavath Phetsouphanh BSc, MSc

Yin Xu MSc (Research), MSc

Data Administrator

Ansari Shaik BA, MBA

Administrative assistants

Lucy Watchirs-Smith BA

Lydia Jauncey BA

Sexual Health Program

Head and Professor of Sexual Health

Basil Donovan MB BS, DipVen (*Lond*), MD,

FAFPHM, FRCPI, FACHSHM

Senior Lecturer and NHMRC Post-doctoral Fellow

Rebecca Guy BAppSc, MAppEpid, PhD

Senior Research Fellow

Christine Harcourt MA(Hons), PhD (to July)

Lecturer

Joanne Micallef PhD

Project Co-ordinator

Neil Franklin BSc (Hons), MPH

Senior Research Assistant

Kirsty Smith RN DipHealthSci DipEd MPH

(to June 2009)

Research Assistants

Kel Heymer BMath, BAppSci(Hons)(Part time)

Karen Schneider BSc(Hons), MPH (Part-time)

Rashmi Fotedar PhD

Administrative assistant

Candace Mitchell

Aboriginal and Torres Strait Islander Program

Program Manager

Head and Senior Lecturer

James Ward

Research Manager

Simon Graham M Appl Epid

National Co-ordinator

Clint Arizmendi PhD

Research Assistant

Snehal Akre MBBS, MPH

Administrative assistant

Candace Mitchell

Public Health Interventions Research Group

Head and Professor of Epidemiology

John Kaldor PhD

Program co-ordinator

Skye McGregor BA, BSc, MA

Internationally-based staff

Senior Lecturers

Chris Duncombe MB BS, RAC GP (HIV-NAT, Thailand)

Sarah Huffam MB BS, MPH&TM, FRACP, FACHSHM (NCHADS, Cambodia)

Stephen Kerr BPharm(Hons), MIPH, PhD (HIV-NAT, Thailand)

Finance and Administration

Manager

Bronwen Turner BA (to December)

Business Manager

Annie Tung MPA

Finance Managers

Gina Lam BA(Hons), EMBA

Patricia Xu BEc, EMBA, CPA

Librarian

Coralie Kronenberg BA, Dip IM Lib, AALIA

Human Resources Advisor

Brigette Sharp BA(Hons)

Computer Systems Officers

Lisa Howard Dip IT

Charles Tran BCompSc

Finance Administrator

Teresa Wong BAAcc, CPA

Office Administrator

Yvette Toole

Administrative assistants

Ian Brodie BEc, Grad Dip Ed, Ass Dip Hlth Sc

Dhara Kothary (from August)

Receptionist

Rata Joseph

Researchers affiliated to NCHECR

Visiting Professor

Jennifer Hoy MB BS, Grad Dip Epi Bio, FRACP

Senior Visiting Fellow

Philip Cunningham BAppSc(Med)

Chief of Operations, St Vincent's Centre for

Applied Medical Research

St Vincent's Hospital, Sydney

Visiting Fellows

Bruce Brew MB BS(Hons), MD, FRACP

Professor of Medicine

St Vincent's Hospital, Sydney

Nick Crofts MB BS, MPH, FAFPHM

Professor and Director

Turning Point Alcohol and Drug Centre,

Melbourne

Cathy Pell MB BS, MM

Specialist General Practitioner

Taylor Square Private Clinic, Sydney

Don Smith MB ChB, MD

Associate Professor and Head of Research

Development

Albion Street Centre, Sydney

Mark Sullivan BSc

Chief Operating Officer

VivaGel™ Microbicide Development

Consortium
Medicines Development Limited, Melbourne
Alex Wodak MB BS, MRACP, FRACP, MRCP,
FAFPHM, FACHAM
Director
Alcohol and Drug Service
St Vincent's Hospital, Sydney

Training or student placements at NCHECR

Bachelor of Medicine/Bachelor of Surgery (Honours) student

Kai Brown

Bachelor of Medicine/Bachelor of Surgery Independent Learning Project students

Adam Honeybrook (from May) (at HIV-NAT)

Amy Julian (to March)

Song Yui Lee (from May)

Gerard Moynihan (to March)

Bachelor of Science (Honours) student

Yuan Gao

Doctor of Philosophy students

Wari Allison BSc(Hons), MB BS

Oliver Distler BSc(Hons), MSc

Kelly Heymer (from August)

Alexander Hoare BSc(Hons)

Susan Hudson BSW, PG Cert Addictions, MSW

Heidi Lim BSc(Hons)

Mee-Ling Munier BSc, Grad Dip Epi, MSc

Mary Poynten MB BS, Dip Child Health,

MPH(Hons) (from March)

Allison Salmon BPsych, MPH (from

September)

Sarah Sasson BA, BSc(Hons)

Preeyaporn Srasuebkul BSc, MSc

Sanjay Swaminathan MB BS, BMedSc

David van Bockel BBiotech(Hons)

Marina van Leeuwen BSc(Hons), MPH

Chris Weatherall MB BS, BMedSc, FRACP

Doctor of Philosophy practicum students

Mohdaram Nematollahi BSc, MSc (Iran University of Medical Sciences, Iran) (from November to December)

Sulaman Yotthanoo BA, MSc (Prince of Songkla University, Thailand) (from April to May)

International training placement

Valeria Colleselli (Innsbruck Medical University, Austria) (September)

Master of Biomedical Science practicum student

Louise Dekker (Vrije University, The Netherlands) (at HIV-NAT)

Master of International Public Health practicum students

Cecilia de Bustos (Vrije University, The Netherlands) (at HIV-NAT)

Sabine Heus (Vrije University, The Netherlands) (at HIV-NAT)

Education and training

Students supervised or co-supervised by NCHECR staff

Supervisor(s) in brackets

■ Masters of Public Health by research

Anna Farr (UNSW)

Public health surveillance and evaluation of the HIV epidemic in the Philippines (David Wilson)

William Coorey

Aboriginal Men's Business: Perspectives on Sexual Health and Sexual Health Services in Western Sydney (Julie Mooney-Somers)

■ Doctor of Philosophy awarded

Wari Allison

Diagnosis and treatment of paediatric HIV infection in a resource-limited setting (John Kaldor, Matthew Law)

Michael Burke

Factors influencing participation in prevention of mother to child transmission (PMTCT) of HIV programs in Tanzania, East Africa.

(Sue Kippax, John Kaldor)

Alexandra Calmy

Prevention and management of long term toxicities of antiretroviral treatment (David Cooper, Matthew Law)

Heidi Coupland

Prevention and management of hepatitis C infection among Indo-Chinese injecting drug users

(Lisa Maher)

Oliver Distler

Molecular and cellular mechanisms for HIV protease inhibitor associated hyperlipidaemia

(David Cooper, Anthony Kelleher)

Julian Elliott

Expanded use of antiretroviral therapy in resource-limited settings (John Kaldor, David Cooper)

Heidi Lim

Effect of nucleoside reverse transcriptase inhibitors on apidocyte mitochondrial function (Anthony Kelleher, Kazuo Suzuki)

Van Thi Thuy Nguyen

Hepatitis B natural history and liver disease burden among Vietnamese populations in Thai Binh province and Australia (Greg Dore, Matthew Law)

Allison Salmon

Policy and public health: an evaluation of

the Sydney Medically Supervised Injecting Centre

(Lisa Maher, John Kaldor)

Sarah Sasson

Dysregulation of the IL-7/R system in HIV-1 infection and implications for T-cell homeostasis

(Anthony Kelleher, John Zaunders)

Karina Razali

Estimates and projections of HIV and hepatitis C virus in Australia and the Asia-Pacific region

(Matthew Law, John Kaldor)

David Templeton

Interventions to reduce HIV transmission in homosexual men

(Andrew Grulich, Basil Donovan)

David van Bockel

Comparison within long term non-progressors of T-cell factors contributing to control of viral infection

(Anthony Kelleher)

Marina van Leeuwen

The epidemiology of cancer in people with acquired and iatrogenic immune deficiency (Claire Vajdic, Andrew Grulich)

■ Bachelor of Science (Honours) awarded

Laura Cook (University Medal)

Studies of antigen specific T reg clones (Anthony Kelleher, Nabila Seddiki)

■ Doctor of Philosophy candidates

Amit Achhra

Predictors of outcomes in HIV infection (Janaki Amin, David Cooper, Matthew Law)

Jonathan Anderson

The role of economic evaluation in decision-making about HIV

(David Cooper, Sean Emery, Kathy Petoumenos)

Michael Burke

Factors influencing participation in prevention of mother-to-child transmission of HIV programs in Tanzania, East Africa (John Kaldor)

Helen Byakwaga

Antiretroviral therapy and the management of HIV/AIDS

(Sean Emery, David Cooper, Mark Boyd)

Dianne Carey

Optimising therapeutic outcomes in HIV-infected subjects

(Sean Emery, David Cooper)

Charisse Farr

Evaluation of HIV in the Philippines (David Wilson, primary supervisor)

James Fetherston, Curtin University
Modelling hepatitis C transmission in Australian prisons

(David Wilson, secondary supervisor)

Jacqueline Flynn (Monash University)

The stimulation and maintenance of T-cell responses in acute hepatitis C infection (Greg Dore)

Rashmi Fotedar

Molecular epidemiology of *Neisseria gonorrhoeae* in Sydney, Australia (Basil Donovan, Rebecca Guy)

Kathleen Falster

Treatment experience and long term morbidity and mortality outcomes among a cohort of HIV-infected patients in Australia and the Asia-Pacific region in the era of combination antiretroviral treatment

(Matthew Law, Basil Donovan)

Heather Gidding

HCV epidemiology, treatment and outcomes in Australia

(Matthew Law, Greg Dore, Janaki Amin)

Rachel Green (Curtin University of Technology)

An ethnographic study of psychostimulant drug use and related harms among young people in Perth

(Lisa Maher)

Rebecca Guy

The use of routine HIV testing data as a basis for planning and evaluating public health interventions

(Andrew Grulich)

Kelly-Jean Heymer

Using modelling to evaluate drivers and predict trajectories of HIV and STI epidemics in South East Asia and Australasia

(David Wilson, Matthew Law)

Alexander Hoare

Modelling HIV/AIDS epidemics in South East Asia

(David Wilson, Matthew Law)

Jeff Hudson (The University of Sydney)

Fluid sexuality: Married men who have sex with men

(Garrett Prestage)

Susan Hudson

Sex, Drugs and 'Ugly Mugs': An ethnographic study of women who inject psychostimulants and engage in street-based sex work in Kings Cross, Sydney.

(Lisa Maher)

Robert Kemp (University of Queensland)

Development of the Needle and Syringe Program in Queensland
(Lisa Maher)

Amy Kwon

Mathematical modelling of viral epidemics among injecting drug users in the Asia-Pacific region

(David Wilson, Rosie Thein)

Stephen Lambert (The University of Queensland)

A study of *Chlamydia trachomatis* in the Australian Defence Force
(Basil Donovan)

Maneerat Layton (Khon Kaen University)

Patient-Healthcare Provider Communication: The Patients' Perspectives.
(Stephen Kerr)

Gregory Londish

The Impact of a Male Circumcision Intervention on HIV Epidemics
(John Murray, Matthew Law)

Gail Matthews

Therapeutic strategies in HIV/viral hepatitis coinfection
(Greg Dore, David Cooper)

Kristin McBride

Characterising viral reservoirs
(David Cooper, Kersten Koelsch, Anthony Kelleher)

Mee Ling Munier

CD4 T-cells in primary HIV infection
(Anthony Kelleher, John Zaunders)

Rebecca Oyomopito

HIV-1 drug resistance in treatment-naïve and combination antiretroviral therapy exposed patients in Asia
(Matthew Law, Anthony Kelleher)

Alisa Pedrana (Burnet Institute)

Molecular epidemiology of *Neisseria gonorrhoeae* in Sydney, Australia
(Rebecca Guy)

Sarah Pett

Aspects of HIV-1 treatment: An exploration of the positive and negative physiological aspects of host-directed treatments for HIV-1 infection
(David Cooper, Sean Emery, Anthony Kelleher)

Suzanne Polis

Adherence to hepatitis B therapies
(Lisa Maher)

Mary Poynten

Biological and behavioural methods of prevention of HIV transmission
(Andrew Grulich, John Kaldor, Jeff Jin)

Karen Schneider

Mathematical modelling of HIV epidemiology, treatment and drug-resistance in Thailand
(David Wilson, Basil Donovan, Matthew Law)

Sowbhagya Somanadhan

Influence of civil society on HIV policies and services in India and the participation of people living with HIV/AIDS
(Lisa Maher)

Sanjay Swaminathan

Transcriptional silencing of HIV by siRNA
(Anthony Kelleher, Kazuo Suzuki)

Edward Kyle Waters

The ecology of human Papillomavirus infection: implications for surveillance
(David Regan)

Chris Weatherall

Characterisation of B-lymphocyte responses in primary HIV infection-neutralising antibodies and immune tolerance
(Anthony Kelleher, David Cooper)

Bethany White

Hepatitis C vaccine preparedness
(Lisa Maher)

Henry Zheng

Walking interventions to prevent CHD in Australia: quantifying effect size, dose-response and cost savings.
(Janaki Amin)

■ **Doctor of Public Health candidate**

Catherine O'Connor (The University of Sydney)

The sexual health of ethnic communities in the inner western suburbs of Sydney
(Basil Donovan)

■ **Master of Applied Epidemiology (Indigenous Health) awarded**

Simon Graham (Australian National University)

(John Kaldor)

■ **Master of International Public Health awarded (practicum supervision)**

Cecilia de Bustos (Vrije University, The Netherlands)

Efficacy and safety of two different doses of zidovudine as part of combination antiretroviral therapy, compared to a stavudine-containing regimen as control
(Chris Duncombe)

Sabine Heus (Vrije University, The Netherlands)

Pharmacokinetics of baby dose ritonavir in combination with different protease inhibitors in different dose regimens in Thai HIV-1 infected patients
(Chris Duncombe)

■ **Master of Public Health by research awarded**

Arunthia Zaidi Urni

Assessment of stigma, discrimination and violence associated with the disclosure of HIV positive serostatus: Service providers' perspective
(Garrett Prestage)

Infectious Diseases Fellow

Dr Benjawan Nantiyakul
Clinical progression after highly-active antiretroviral therapy in HIV-infected Thai patients with CD4 cell counts 200-250 cells/mm³ compared to CD4 cell counts <200 cells/mm³ and >250 cells/mm³
(Stephen Kerr)

■ **International practicum placements**

Andrea Gonnermann

(Handan Wand)

Christin Riedeberger

Real-time PCR for HIV DNA quantitation
(Kersten Koelsch)

Claudia Mische

Post-doctoral researcher
HIV DNA sequencing assay
(Kersten Koelsch)

Maneerat Layton

Department of Pharmacy Practice, Faculty of Pharmaceutical Sciences, Khon Kaen University, Patient-Healthcare Provider Communication: The Patients' Perspectives.
(Stephen Kerr)

Collaborating organisations

National

Association for Prevention and Harm Reduction Programs (ANEX), Melbourne

Australasian Chapter of Sexual Health Medicine, Sydney

Australasian Professional Society on Alcohol and other drugs (APSAD)

Australasian Society for HIV Medicine, Sydney

Australasian Society of Clinical Immunology and Allergy (ASCIA) Primary Immunodeficiency Register, Sydney

Australia and New Zealand Cardiothoracic Transplant Registry, Sydney

Australia and New Zealand Dialysis and Transplant Registry (ANZDATA), Adelaide

Australia and New Zealand Liver Transplant Registry, Brisbane

Australian Agency for International Development (AusAID), Canberra

Australian Centre for Hepatitis and HIV Virology Research (ACH2), UNSW, Sydney

Australian Federation of AIDS Organisations, Sydney

Australian Gonococcal Surveillance Program, Sydney

Australian Government Department of Health and Ageing, Canberra

Australian Injecting and Illicit Drug Users League (AIVL), Canberra

Australian Institute of Health and Welfare, Canberra

Australian Liver Association, Sydney

Australian Paediatric Surveillance Unit and its contributors, Sydney

Australian Red Cross Blood Service, Melbourne

Australian Red Cross Blood Service, Sydney

Australian Research Centre in Sex, Health and Society, La Trobe University, Melbourne

Communicable Diseases Network Australia, Canberra

Drug and Alcohol Nurses of Australasia (DANA)

Federal Department of Health and Ageing, Canberra

Hepatitis Australia, Canberra

Immunovirology Research Network (IVRN), UNSW, Sydney

National Aboriginal Community Controlled

Health Organisation, Canberra

National Association of People Living with HIV/AIDS, Sydney

National Drug Research Institute, Curtin University of Technology, Perth

National Centre for Epidemiology and Population Health, Australian National University, Canberra

National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases, Sydney

National Centre in HIV Social Research, UNSW, Sydney

National Drug and Alcohol Research Centre, UNSW, Sydney

National Serology Reference Laboratory, Australia, Melbourne

Office of Aboriginal and Torres Strait Islander Health (OATSIH), Canberra

Phase Forward Pty Ltd, Sydney

Royal Australian and New Zealand College of Psychiatrists

Therapeutic Goods Administration, Canberra

Australian Capital Territory

ACT Corrective Services, Canberra

ACT Health

Canberra Sexual Health Centre

Canberra Sexual Health Clinic, Canberra Hospital

Communicable Disease Control Program, ACT Health, Canberra

Directions ACT, Canberra

Interchange General Practice, Canberra

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

Sexual Health and Family Planning ACT

The Canberra Hospital, Canberra

New South Wales

Aboriginal Health and Medical Research Council of NSW

Aboriginal Medical Service Co-op Ltd, Sydney

Aboriginal Medical Service Western Sydney, Mount Druitt Village

AIDS Council of NSW (ACON), Sydney, Lismore, Newcastle, Penrith, Port Macquarie

and Wollongong

AIDS Research Initiative, Sydney

Albion Street Centre, Sydney

Albury Community Health Centre, Albury

Area Health Services, NSW Health, Sydney

Bigge Park Medical Centre, Sydney

Blacktown Methadone Unit, Blacktown

Blacktown Needle and Syringe Program Services, Sydney

Blue Mountains Sexual Health Clinic, Katoomba

Brindabella Family Practice, Queanbeyan

Burwood Road General Practice, Sydney

Central Access Service, Sydney (formerly St George Hospital Needle and Syringe Program)

Centre for Addiction Medicine, Westmead Hospital

Centre for Health Research in Criminal Justice, Justice Health, NSW Health Department, Sydney

Centre for Infection and Inflammation Research, School of Medical Sciences, UNSW

Centre for Immunology, St Vincent's Hospital, Sydney

Centre for Transplant and Renal Research, Westmead Millennium Institute for Medical Research, Sydney

Centre for Values, Ethics and the Law in Medicine, University of Sydney

Charlestown Family Medical Services, Charlestown

Communicable Diseases Branch, NSW Health Department, Sydney

Coffs Harbour Sexual Health Clinic

Concord Hospital, Sydney

Dubbo Sexual Health Centre, Dubbo

Durri Aboriginal Corporation Medical Service, Kempsey

East Sydney Doctors, Sydney

Faculty of Science, University of Sydney

Fleet Street Opioid Treatment Unit, Parramatta

First Step Program, Port Kembla and Nowra

Garvan Institute of Medical Research, Sydney

Gateway Opioid Treatment Service Clinic, Nepean Hospital

Goulburn River Group Practice, Goulburn

General Medical Practice, Coffs Harbour
 Grafton Sexual Health Clinic, Grafton
 Greater Southern Area Health Service
 Harm Reduction Program, Liverpool
 Harm Minimisation Program, Newcastle
 Health ConneXions, Sydney
 Hepatitis NSW (formerly Hepatitis C Council of NSW), Sydney
 Holden Street Clinic, Gosford
 Holdsworth House Medical Practice, Sydney and Byron Bay
 Hunter Harm Reduction Services, Newcastle
 Hunter New England Sexual Health Service
 Illawarra Sexual Health, Port Kembla
 Indo-Chinese Outreach Network (ICON), Sydney
 John Hunter Hospital, Newcastle
 Justice Health, NSW Health Department, Sydney
 K2 Health Service, Sydney
 Kellyclose Mt Druitt Needle and Syringe Program Services, Sydney
 Kirketon Road Centre, Sydney
 Kite Street Community Health Centre, Orange
 Laverty Pathology
 Lismore Base Hospital, Lismore
 Lismore/ Tweed Heads Sexual Health & AIDS Services
 Liverpool Hospital, Sydney
 Liverpool Sexual Health Clinic, Sydney
 Livingstone Road Sexual Health Centre, Marrickville
 Manly Sexual Health Clinic
 Multicultural HIV/AIDS and Hepatitis C Service, Sydney
 Needle and Syringe Program, Gosford and Long Jetty
 Nepean Hospital, Sydney
 Nepean Sexual Health Clinic
 Newcastle FPNSW Centre, Cooks Hill
 Newcastle Pharmacotherapy Services, Newcastle
 North Coast Area Health Service, Harm Reduction Services
 North Sydney Medical Practice, North Sydney
 Northern Sydney Central Coast Area Health Service, NSW Health Department, Sydney
 Northern Sydney Sexual Health Service, St Leonards
 NSW Centre for Health Record Linkage, Sydney
 NSW Department of Corrective Services
 NSW Health Department, Sydney
 NSW Health Department, AIDS and Infectious Disease Branch, Sydney
 NSW State Reference Laboratory for HIV/AIDS, St Vincent's Hospital, Sydney

NSW Users and AIDS Association (NUAA), Sydney
 Orange Sexual Health Clinic
 Parramatta Needle and Syringe Program Services, Sydney
 Perinatal and Reproductive Epidemiology Research Unit, incorporating the National Perinatal Statistics Unit, UNSW
 Positive Life NSW
 Prince of Wales Hospital, Sydney
 Rankin Court Treatment Centre, Sydney
 Resource and Education Program for Injecting Drug Users (REPIDU), Sydney
 Responsive User Services in Health (RUSH), Sydney
 Royal North Shore Hospital, Sydney
 Royal Prince Alfred Hospital, Sydney
 Royal Prince Alfred Hospital Clinic 36 Outreach Clinic, Sydney
 Royal Prince Alfred Hospital (RPA) Drug Health Services, Sydney
 Royal Prince Alfred Hospital Regent House Outreach Clinic, Sydney
 Royal Prince Alfred Hospital (RPA) Sexual Health Clinic, Sydney
 Sax Institute, Sydney
 School of Medical Sciences, UNSW, Sydney
 School of Public Health, University of Sydney
 School of Public Health and Community Medicine, UNSW, Sydney
 Sex Workers Outreach Project (SWOP), Sydney
 Sexual Health and Infectious Diseases Service (SHAIDS), Lismore
 Sexually Transmitted Infections Research Centre, Westmead Hospital, Sydney
 South Court Primary Care Needle and Syringe Program, Sydney
 South Eastern Area Laboratory Services (SEALS), Prince of Wales Hospital
 South Eastern Sydney and Illawarra Area Health Service, NSW Health Department, Sydney
 South Eastern Area Laboratory Services, South Eastern Sydney and Illawarra Area Health Service, Sydney
 South West Area Health Service, Eastern Division
 South West Area Health Service, Western Division
 St George Hospital, Sydney
 St George Hospital Short Street Sexual Health Clinic
 St Vincent's Hospital, Sydney
 St Vincent's Centre for Applied Medical Research
 St Vincent's Medical Imaging, Sydney
 Sydney Medically Supervised Injecting Centre, Sydney

Sydney Sexual Health Centre, Sydney
 Sydney South Illawarra Health Service
 Sydney South West Area Health Service, Sydney
 Sydney West Area Health Service, Sydney
 Sydney West Area Health Service HIV/Hepatitis C Prevention Service, Auburn, Blacktown, Merrylands, Mt Druitt and Parramatta
 Sydney West Area Health Service Clinical Sexual Health Services
 SydPath, Sydney
 Tamworth Sexual Health Service, Tamworth
 Taree Manning Clinic
 Taylor Square Private Clinic, Sydney
 The Byrne Surgery, Sydney
 The Cancer Council NSW, Sydney
 The Cancer Institute NSW, Sydney
 Tweed Heads Sexual Health Service
 University of Sydney – Discipline of Addiction Medicine, Sydney
 UNSW Cancer Research Centre, integrated cancer research group
 Western Sydney Aboriginal Medical Service Mt Druitt
 Westmead Hospital, Sydney
 Westmead Millennium Institute for Medical Research, Sydney
 Woodlands Clinic, Blue Mountains Anzac Memorial Hospital, Katoomba

Northern Territory

AIDS/STI Program, Disease Control, Department of Health and Community Services, Darwin
 Alice Springs Hospital
 Alice Springs Harm Reduction Program, Alice Springs
 Alice Springs Sexual Health Service Clinic 34
 Communicable Disease Centre, Royal Darwin Hospital, Darwin
 Danila Dilba Health Service, Darwin
 Darwin Harm Reduction Program, Darwin
 Darwin Sexual Health Service
 Family Planning Northern Territory, Coconut Grove
 Northern Territory Sexual Health and BBV Unit
 Northern Territory AIDS and Hepatitis C Council, Alice Springs, Darwin and Palmerston
 Northern Territory Correctional Services Department of Justice, Darwin
 Northern Territory Department of Health and Families
 Palmerston Needle and Syringe Program, Palmerston
 Royal Darwin Hospital

Queensland

AIDS Medical Unit, Queensland Health, Brisbane
Biala Alcohol and Drug Services, Brisbane
Brisbane Sexual Health Clinic, Brisbane
Cairns Base Hospital, Cairns
Cairns Base Hospital NSP Services, Cairns
Cairns Sexual Health Service, Cairns Base Hospital, Cairns
Carbal Medical Service, Toowoomba
Chancellor Park Family Medical Practice, Sippy Downs
Clinic 87, Sunshine Coast-Wide Bay Health Service District, Nambour
Communicable Disease Unit, Queensland Health, Brisbane
Department of Corrective Services, Brisbane
Dolls House Sexual Health Clinic, Cairns
Family Planning Queensland, Toowoomba
Gladstone Road Medical Centre, Brisbane
Gold Coast Hospital, Southport
Gold Coast Sexual Health Clinic, Miami
Goondir Health Service, Dalby
Kewarra Family Practice, Kewarra Beach
Kobi House, Toowoomba
Nambour Medical Centre, Nambour
Prince Charles Hospital, Brisbane
Princess Alexandra Hospital, Brisbane
Princess Alexandra Sexual Health, South Brisbane
Queensland Health, Brisbane
Queensland Injectors Health Network (QIHN), Brisbane, Gold Coast and Sunshine Coast
Queensland Medical Laboratory (QML), Brisbane
Queensland University of Technology, Brisbane
Royal Brisbane and Women's Hospital, Brisbane
School of Population Health, University of Queensland
Sunshine Coast and Cooloola HIV/Sexual Health Service, Nambour
Townsville Aboriginal and Islanders Health Services Ltd, Townsville
Townsville ATODS
Townsville Health Services
West Moreton Sexual Health Service, QLD

South Australia

AIDS Council of South Australia (ACSA), Adelaide
Drug and Alcohol Services South Australia (DASSA), Adelaide

The Care and Prevention Program, Adelaide University, Adelaide
Clinic 275, Adelaide
Communicable Disease Control Branch, SA Health
Department of Health
Flinders Clinical Trials Pharmacy, Adelaide
Flinders Medical Centre, Adelaide
Harm Minimisation Program, Hindmarsh Centre, Adelaide
Infectious Diseases Laboratories, Institute of Medical and Veterinary Science, Adelaide
Noarlunga Community Health Service, Adelaide
Northern Metropolitan Community Health Service NSP and Shopfront, Salisbury; SA
Nunkuwarrin Yunti of South Australia Inc, Adelaide
O'Brien Street Practice, Adelaide
Parks Community Health Service, Adelaide
Port Adelaide Community Health Service, Port Adelaide
Royal Adelaide Hospital, Adelaide
Royal Adelaide Hospital Clinic 275
Sexually Transmitted Diseases (STD) Services, Internal Medicine Service, Royal Adelaide Hospital
Shine SA (Sexual Health Information Networking and Education Inc)
South Australian Health Department
South Australian Voice for Intravenous Education (SAVIVE) Noarlunga, Norwood, Parks, Port Adelaide
Shopfront Youth Health and Information Services, Adelaide
South Australian Prison Health Services, Adelaide
Women's and Children's Hospital Adelaide

Tasmania

Clarence Community Health Service, Hobart
Corrective Services Division, Department of Justice, Hobart
Department of Health and Human Services Tasmania
Devonport Community Health Centre, Devonport
Family Planning Tasmania, Hobart
Hobart, Devonport and Launceston Sexual Health Service
Hobart Sexual Health Service
Royal Hobart Hospital
Salvation Army Launceston, Launceston
Tasmanian Council on AIDS, Hepatitis and Related Diseases (TasCAHRD), Hobart and Glenorchy
The Link Youth Health Service, Hobart

Victoria

Association for Prevention and Harm Reduction Programs Australia (Anex), Melbourne
Barwon Drug and Alcohol Services, Geelong
Bendigo NSP Services, Bendigo
Brighton Medical Clinic, Brighton
Centre for Population Health, Burnet Institute, Melbourne
Centre for Women's Health, Gender and Society, Melbourne School of Population Health, University of Melbourne
Darebin Community Health Centre, Northcote
Deakin Health Economics Unit, Deakin University, Melbourne
Department of Human Services, Victoria
Department of Microbiology and Immunology, The University of Melbourne, Melbourne
Genesis Medical Centre, Brighton
Health Information Exchange, Salvation Army, Melbourne
Health Works, Footscray
Inner Space, Melbourne
Key Centre for Women's Health in Society, University of Melbourne, Melbourne
Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne
Melbourne Pathology, Melbourne
Melbourne Sexual Health Centre
The Microbiological Diagnostic Unit, University of Melbourne
Middle Park Clinic, Melbourne
Monash Medical Centre, Melbourne
Monash University, Melbourne
Mooroopna Medical Centre, Mooroopna
Nexpep, Victoria
North Richmond Drug Safety Program, Melbourne
Northcote Clinic, Melbourne
Northcote Needle and Syringe Program Services, Melbourne
Northside Clinic, Fitzroy North
People Living with HIV/AIDS (PLWHA), Melbourne
Prahran Market Clinic, Melbourne
Royal Melbourne Hospital, Melbourne
Royal Women's Hospital, Melbourne
School of Population Health, The University of Melbourne, Melbourne
Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS), Melbourne
South East Alcohol and Drug Service, Dandenong
St Vincent's Hospital, Melbourne
The Alfred Hospital, Melbourne

The Carlton Clinic, Melbourne
The Centre Clinic, Melbourne
Victorian Aboriginal Health Service, Fitzroy
Victorian AIDS Council/Gay Men's Health Centre (GMHC), Melbourne
Victorian Cytology Service Inc, Melbourne
Victorian Infectious Diseases Reference Laboratory, Melbourne
Wellness Centre Medical Clinic, Malvern East
Walter and Eliza Hall Institute, Melbourne, Victoria

Western Australia

AK medical/dental Clinic, Kelmscott
Centre for Clinical Immunology and Biomedical Statistics, Perth
Communicable Diseases Control Branch, Department of Health, Perth
Curtin University of Technology
Data Linkage Western Australia, Perth
Department of Corrective Services, Perth
Department of Health, Western Australia
Derbarl Yerrigan Health Service, Perth
Duncraig Medical Centre, Duncraig
Fremantle Hospital
Fremantle Hospital Sexual Health Service
Geraldton Regional Aboriginal Medical Service, Geraldton
Murdoch University, Perth
National Drug Research Institute, Curtin University of Technology
Quarry Health Centre for under 25s, Fremantle;
Royal Perth Hospital, Perth
Royal Perth Hospital Sexual Health Clinic
Royal Perth Hospital, Department of Clinical Immunology
Sexual Health and Blood Borne Virus Program, Department of Health, Perth
University of Western Australia, Perth
Western Australian AIDS Council (WAAC), Perth
Western Australian Substance Users Association (WASUA), Perth

International

Academic Medical Centre, University of Amsterdam, Amsterdam
AIDS Clinical Centre, International Medical Centre of Japan, Tokyo
AIDS Malignancy Consortium, Birmingham, USA
American Foundation for AIDS Research (amfAR), New York
Angkor Hospital for Children, Siem Reap, Cambodia
Arkansas Children's Hospital

Aviano Cancer Centre, Aviano, Italy
Bamrasnaradura Hospital, Bangkok
Beijing Ditan Hospital, Beijing
British Columbia Cancer Registry, Vancouver
British Columbia Centre for Disease Control, Vancouver, Canada
British Columbia Centre for Excellence in HIV/AIDS, Vancouver, Canada
Brown University, Providence, USA
Calgary Regional Health Authority, Canada
Cambodia NCHADS
Canadian Trials Network (CTN), Vancouver
Catalan Institute of Oncology, Barcelona
Centre for Research on Drugs and Health Behaviour, London School of Hygiene & Tropical Medicine, UK
Centro de Asistencia e Investigacion Clinica de Inmunocomprometidos (CAICI), Rosario, Argentina
Chelsea and Westminster Hospital, London
Chaing Mai University, Chaing Mai, Thailand
Chiang Rai Regional Hospital, Chiang Rai, Thailand
Children Hospital No. 1, Ho Chi Min City, Vietnam
Chinese Center for Disease Control and Prevention, Beijing
Chonburi Regional Hospital, Chonburi, Thailand
Chris Hani Baragwanath Hospital, Soweto, South Africa
Chulalongkorn Hospital, Bangkok
Cipto Mangunkusumo General Hospital, Jakarta
Community Research Initiative of New England, Boston
Concerted Action on Seroconversion to AIDS and Death in Europe (CASCADE) and its contributors, Coordinating Unit, London
Copenhagen HIV Programme, Hvidovre University Hospital, Copenhagen
Cornell University, New York
Department of HIV/GUM Research, Brighton, UK
Department of Life Science & Medical Bio-Science, School of Advanced Science and Engineering, Waseda University, Tokyo, Japan
Department of Social Medicine, University of Bristol, UK
Division of Infectious Diseases, Department of Internal Medicine, Yonsei University College of Medicine, Seoul
Division of Statistics, School of Public Health, University of Minnesota, Minneapolis, USA
Evangel Hospital, Jos, Nigeria
Duke Clinical Research Institute, Duke University, Durham, North Carolina, USA
Faculty of Medicine, Udayana University and

Sanglah Hospital, Denpasar, Bali, Indonesia
Fred Hutchinson Cancer Research Center, Seattle
Fundacion Arriaran, Santiago, Chile
Fundacion Centro de Estudios Infectologicos (FUNCEI), Clinica La Sagrada Familia, Buenos Aires
Gemeinschaftspraxis Jessen, Berlin, Germany
geneOmbio Technologies Pvt Ltd, Pune, India
German Cancer Research Center, Heidelberg
Hadassah Medical Centre, Jerusalem
Harvard University, Boston
HIV Netherlands, Australia, Thailand
Research Collaboration (HIV-NAT), Bangkok
Hôpital Saint-Louis, Paris
Hospital Almenara, Lima, Peru
Hospital Central, Mendoza, Argentina
Hospital de Clinicas Jose de San Martin, Buenos Aires
Hospital Dos de Mayo, Lima, Peru
Hospital de Enfermedades Infecciosas FJ Muniz, Buenos Aires
Hospital General de Agudos JM Ramos Mejia, Buenos Aires
Hospital General de Agudos Juan A Fernandez, Buenos Aires
Hospital General de Agudos Teodoro Álvarez, Buenos Aires
Hospital General de Guadajajara, Mexico
Hospital General de Leon, Mexico
Hospital Interzonal de Agudos San Juan de Dios, La Plata, Argentina
Hospital Interzonal General de Agudos Oscar Alende, Mar del Plata, Argentina
Hospital Italiano de Buenos Aires, Buenos Aires, Argentina
Hospital Kuala Lumpur, Malaysia
Hospital Paroissien, Buenos Aires, Argentina
Hospital Pulau Pinang, Malaysia
Hospital Likas, Kota Kinabalu, Malaysia
Hôpital Pitié-Salpêtrière, Paris
Hospital Nacional Prof Dr Alejandro Posadas, Buenos Aires
Hospital Raja Perempuan Zainab II, Kelantan, Malaysia
Hospital Rawson, Bajada Pucara, Argentina
Hospital San Borja-Arriaran, Santiago, Chile
Hospital Sungai Buloh, Kuala Lumpur
Imperial College, St Mary's Hospital, London
Infections and Immunity, Avenir Group, Hôpital Pitié Salpêtrière, Université Pierre et Marie Curie-Paris, France
Institute of Infectious Disease, Pune, India
Instituto de Medicina Tropical Alexander von Humboldt, Lima, Peru

Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City
 Integrated Treatment Centre, Hong Kong
 International AIDS Society, Geneva
 International Consortium of Investigators Working on Non-Hodgkin's Lymphoma Epidemiologic Studies (InterLymph)
 Johns Hopkins University, Baltimore
 Joint Clinical Research Centre, Kampala, Uganda
 Jos University Teaching Hospital, Jos, Nigeria
 JOSHUA Research, Bloemfontein, South Africa
 JW Goethe Universität, Frankfurt
 Kaplan Medical Centre, Rehovot, Israel
 Khon Kaen University, Khon Kaen, Thailand
 Kumamoto University, Japan
 Laboratory of Tumour Cell Biology, Department of Medical Genome Sciences, Graduate School of Frontier Sciences, The University of Tokyo, Tokyo, Japan
 Massachusetts General Hospital, Boston
 Mater Misericordiae University Hospital, Dublin
 McGill University
 Medical Group Practice, Berlin
 Medical Research Council, Durban, South Africa
 Medical Research Council Clinical Trials Unit, London
 Ministry of Public Health, Bangkok
 Muirhouse Medical Group, Edinburgh, UK
 Nagoga Medical Center, Nagoga, Japan
 National Cancer Institute, National Institutes of Health, Bethesda, USA
 National Center for AIDS/STD Control and Prevention, Beijing, China
 National Center for HIV/AIDS, Dermatology and STDs (NCHADS), Phnom Penh
 National Center for Tuberculosis and Leprosy Control, Phnom Penh, Cambodia
 National Health Laboratory Services, University of Witwatersrand, Johannesburg
 National Heart, Lung and Blood Institute, National Institutes of Health, Bethesda, USA
 National Hospital of Pediatrics, Hanoi
 National Institute for Public Health, Phnom Penh
 National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, USA
 National Institute of Infectious Disease, Tokyo
 National Institute on Drug Abuse, National Institutes of Health, Bethesda, USA
 National Pediatric Hospital, Phnom Penh
 National Taiwan University Hospital, Taipei
 New Hope for Cambodian Children, Phnom Penh
 Nuffield Department of Medicine, University of Oxford
 Osaka National Hospital, Japan
 Papua New Guinea Institute for Medical Research, Goroka, Papua New Guinea
 Papua New Guinea National AIDS Council
 Partners AIDS Research Center, Boston
 Pediatric Institute, Hospital Kuala Lumpur, Kuala Lumpur
 Penang Hospital, Malaysia
 Plateau State Specialist Hospital, Jos, Nigeria
 Port Moresby General Hospital, Papua New Guinea
 Providence Health Care, Vancouver
 Public Health Service (GGD), Amsterdam, the Netherlands
 Queen Elizabeth Hospital, Hong Kong
 Queen Mary Hospital, Hong Kong
 Ragon Institute of MGH, MIT and Harvard, Boston, USA
 Ramathibodi Hospital, Mahidol University, Bangkok
 Rambam Medical Centre, Haifa, Israel
 Research Institute for Health Science, Chiang Mai, Thailand
 Research Institute for Tropical Medicine, Manila
 Rikshospitalet, Oslo, Norway
 Shanghai Municipal Center for Disease Control and Prevention, China
 Siriraj Hospital, Bangkok
 Srinagarind Hospital, Khon Kaen, Thailand
 Stanford University, Stanford, USA
 State Key Laboratory of Virology, Wuhan University, China
 Swiss HIV Cohort Study, Copenhagen
 Taipei Veterans General Hospital and AIDS Prevention and Research Centre, National Yang-Ming University, Taipei, Taiwan
 Tan Tock Seng Hospital, Singapore
 Tel Aviv Sourasky Medical Centre, Israel
 Thai Red Cross Society, Bangkok
 Toronto General Research Institute, Toronto, Canada
 Toronto Health Economics and Technology Assessment Collaborative (THETA), Toronto, Canada
 Toronto Western Hospital, Toronto, Canada
 Toronto Hospital, Canada
 TREAT Asia, American Foundation for AIDS Research (amFAR), Bangkok, Thailand and New York, USA
 Uduyana University, Sanglah Hospital, Bali
 UNAIDS, Geneva
 Université de Montréal, Montreal, Canada
 University Health Network, Toronto, Canada
 University of Malaya Medical Centre, Kuala Lumpur
 University of Basel, Switzerland
 University of British Columbia
 University of California, Los Angeles
 University of California, San Francisco
 University of California, San Francisco, Vietnam Campus, Ho Chi Min City, Vietnam
 University of Detroit
 University of Guelph, Ontario, Canada
 University of Indonesia, Jakarta
 University of Maryland, Baltimore, USA
 University of Minnesota, Minneapolis, USA
 University of Toronto, Canada
 University of Waterloo, Canada
 Vietnam AIDS Council
 Waikato Hospital, Hamilton NZ
 Wayne State University, Detroit, USA
 The World Bank
 The World Health Organisation, Geneva
 Worldwide Orphans Foundation (WWO), Ho Chi Min City
 Wuhan University, Wuhan, China
 YRG Centre for AIDS Research and Education, Chennai, India

Pharmaceutical and biomedical industry

Abbott Australasia Pty Ltd, Sydney
 Boehringer Ingelheim Pty Ltd, Sydney
 Bristol-Myers Squibb Pharmaceuticals, Melbourne
 Calimmune, USA
 CSL Limited, Melbourne
 Gilead Sciences, Foster City, California
 GlaxoSmithKline Australia, Melbourne
 Janssen-Cilag Pty Ltd, Sydney
 Johnson & Johnson Research Pty Ltd, Sydney
 Merck Research Laboratories, West Point, USA
 Merck Sharp and Dohme, Sydney
 Pfizer Australia Pty Ltd, Sydney
 Roche Pharmaceuticals
 Roche Products Pty Ltd, Sydney
 Schering Plough Pty Ltd, Sydney

Disclosure of financial and other relationships with industry

In relation to the companies indicated, staff members listed below either served on advisory boards or received individual travel grants, consultancy payments or honoraria during 2009.

No staff member was a personal recipient of a tied or untied grant or had ownership in intellectual property related to any company that funded NCHCR's research program during 2009. Abbreviated forms of the company names have been used for ease of recognition.

Tanya Applegate
SpeeDx

Mark Boyd
Abbott
Janssen-Cilag
Merck
Roche

David Cooper
Abbott
Bristol-Myers Squibb
Gilead
GlaxoSmithKline
Janssen-Cilag
Johnson & Johnson
Merck
Pfizer

Basil Donovan
CSL
GlaxoSmithKline
Sanofi-Pasteur MSD

Greg Dore
Roche
Schering-Plough
Abbott
Merck
Novartis

Fraser Drummond
GlaxoSmithKline

Jason Grebely
Schering-Plough

Andrew Grulich
CSL
GlaxoSmithKline

Anthony Kelleher
Becton Dickenson
Virax

Matthew Law
Sirtex Technology

Pip Marks
Roche

Gail Matthews
Gilead

Sarah Pett
Boehringer-Ingelheim
Bristol-Myers Squibb
Gilead
GlaxoSmithKline
Janssen-Cilag
Merck
ScheringPlough

Funding

■ Australian Government Department of Health and Ageing

Research activities for blood borne virus and sexually transmissible infections 2008/9 to 2010/11	4,290,402
The Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS) Project	207,370
Current status of the female sex industry in Western Australia	15,000
Developing evidence to inform a national syphilis action plan: mathematical modelling, conducting focus group, host technical workshop	54,716
Increasing access to hepatitis C treatment through opiate dependency settings	51,000
The Cost Effectiveness and Mathematical Modelling of Needle and Syringe Programs on Viral Transmission among Injecting Drug Users in Australia	124,664

■ Other grants and contracts from public sources

American Foundation for AIDS Research:	
TREAT Asia Studies to Evaluate Resistance (TASER)	182,616
TREAT Asia Quality Assurance Scheme (TAQAS)	170,055
TREAT Asia Pediatric HIV Observational Database (TApHOD)	131,228
AusAID: Evaluation of the potential impact of the global economics crisis on HIV epidemics in Southeast Asia	39,819
Australian Institute of Health and Welfare: Evaluation of the improving sexual health in Aboriginal and Torres Strait Islander youth demonstration projects	8,679
Australian Research Council (ARC):	
Allocating scarce HIV/AIDS antiretroviral drugs in resource-constrained countries	38,222
Planning female and male vaccination and cervical screening strategies to achieve optimal prevention of HPV-related disease (Project)	149,094
Planning female and male vaccination and cervical screening strategies to achieve optimal prevention of HPV-related disease (APAI)	26,669
Sexual health and relationships in young Indigenous people	107,126
Using mathematical modelling to inform HIV/AIDS public health policy	87,538
Australian Society for HIV Medicine:	
Consortium to Implement AusAID's Regional Capacity Building Program 2007-2011 – Cambodia	396,123
Consortium to Implement AusAID's Regional Capacity Building Program 2007-2011 – Indonesia	397,890
European Medicines Evaluation Agency: Data Collection on Adverse Events of Anti-HIV Drugs Study	60,824
Family Health International Subcontract funded from the Bill and Melinda Gates Foundation : Development of Assays for Acute HIV Infection and Estimation of HIV Incidence in Populations	107,873
Medical Research Council, UK: SPARTAC Study	41,511
National Association of People Living with HIV/AIDs: Modelling historical HIV antiretroviral treatment pathways in Australia and predicting future trends in treatment demand by geographical region	56,017
NHMRC	
Career Development Award - David Wilson	94,250
CCRE in Aboriginal Health: Blood borne viral and sexually transmitted infection	500,000
International Collaborative Indigenous Health Research Partnership Grant	296,820
Practitioner Fellowship for Basil Donovan	100,975
Practitioner Fellowship for Greg Dore	84,175
Practitioner Fellowship for Tony Kelleher	72,150
Program Grant - HIV & HCV vaccines and immunopathogenesis	1,785,244
Project Grant - A randomised trial to control sexually transmitted infections in remote Aboriginal communities	316,900
Project Grant - Defining risk and mechanisms of permucosal transmission for acute HCV infection within high-risk populations	136,175
Project Grant - Randomised Controlled Trial of Hepatitis B Vaccine Completion in Injecting Drug Users	183,453
Project Grant - Randomised trial to determine the safety and efficacy of early versus deferred treatment of adult HIV infection (START)	234,226
Project Grant - SiRNA induced TGS of retroviruses : Elucidation of underlying mechanisms and their application in animal models	128,242
Public Health Fellowship for Rebecca Guy	71,250
Public Health Fellowship for Peter Higgs	71,250
Research Fellowship - PRF - Andrew Grulich	135,500
Research Fellowship - SPRF - Lisa Maher	112,000

Research Fellowship - SPRF - John Kaldor	153,250
Sidney Sax Fellowship - Joanne Kimber	71,250
NHMRC - Program Grant Subcontract	
University of Sydney: Mathematical Modelling for improved planning of infectious disease control policy	60,000
University of Sydney: Building research capacity for health interventions to improve Aboriginal health	106,406
University of Melbourne: Using mathematical models to assess the impact of interventions to reduce sexually transmitted infections in Australia	120,000
NSW Health Department	
Australian Chronic Hepatitis C Observational Study (ACHOS)	297,500
Australian Chronic Hepatitis C Observational Study (ACHOS) South Australian Arm	31,000
Developing evidence to inform a national syphilis action plan	29,793
Expert services in HIV/AIDS, viral hepatitis and sexually transmissible diseases	100,000
Hepatitis C seroconversion: Using qualitative research to enhance surveillance	149,105
High risk men who have sex with men and understandings of risk study (PASH)	147,719
Increasing access to HCV treatment in NSW through opiate pharmacotherapy settings – pilot clinics project (ETHOS)	200,000
NSW Aboriginal Sexual Health and BBV Research Study - Stage One	257,400
Prevalence, incidence and risk factors for hepatitis C in HIV negative and HIV positive homosexual men in Sydney	53,560
Status report on the female sex worker industry in Sydney	81,081
Queensland Health: Australian Chronic Hepatitis C Observational Study (ACHOS)	85,240
South Australia Health: Evaluation of the South Australian HIV Epidemic	4,545
The Cancer Council NSW - Strategic Research Partnership Grant with University of Sydney – Towards a strategic partnership (STREP)	50,000
The University of Melbourne - Collaborative Agreement from Department of Health & Ageing – Evaluation of Chlamydia Pilot in General Practice (ACCEPT)	102,062
University of Minnesota: SILCAAT Study	294,315
US National Institutes of Health Subcontract	
American Foundation for AIDS Research: TREAT Asia HIV Observational Database (TAHOD)	254,426
Johns Hopkins University: Liver Disease and HIV-HBV Coinfection in the HAART Era	46,096
University of California, San Francisco Institute for Global Health, Culture and HIV Prevention in Cambodia	21,477
University of Minnesota: ESPRIT Study	494,463
University of Minnesota: INSIGHT Study	276,408
University of Minnesota: START Study	122,655
University of Minnesota: STALWART Study	77,055
Victorian Cytology Service: ARC Linkage Partner: Planning female and male vaccination and cervical screening strategies to achieve optimal prevention of HPV-related disease	4,620
Victoria Health: Australian Chronic Hepatitis C Observational Study (ACHOS)	67,064

Finance and Administration

(left to right)
 Annie Tung
 Patricia Xu
 Coralie Kronenberg
 Brigette Sharp
 Lisa Howard
 Charles Tran
 Teresa Wong
 Yvette Toole
 Ian Brodie
 Rata Joseph
 Bronwen Turner
 Absent:
 Dhara Kothary
 Gina Lam



Pharmaceutical Industry Funding

Boehringer Ingelheim Pty Ltd	1,440
Bristol-Myers Squibb Pharmaceuticals (Australia)	4,700
CSL Limited	320,707
CSL Limited (ARC Linkage Partner)	66,967
Gilead Science Inc	2,447,560
Gilead Science Pty Ltd	500,000
GlaxoSmithKline Pty Ltd	25,000
Janssen-Cilag Pty Ltd	19,975
Merck Sharp & Dohme	434,849
Pfizer Australia Pty Ltd	11,999
Pfizer Inc via Quintiles Pty Ltd	58,780
Quintiles Pty Ltd	12,499
Roche Products Pty Ltd (Australia)	62,619
Tibotec Pharmaceuticals Ltd via Quintiles Pty Ltd	12,924
Tibotec Virco Virology BVBA	118,919
	18,924,472

Research grants

Ashton LA, CM Vajdic, TA O'Brien, AJ Dodds, K Bradstock. NHMRC Project grant: Second cancers after haematopoietic stem cell transplantation. \$1,181,250 (2009-2011).

Bavoil PM, Ravel J, Rank R, Maurelli A, Myers G, Wilson DP. National Institutes of Health Center for Excellence. Eco-pathogenomics of chlamydial infection of the human reproductive tract. US\$12,207,835 (2009-2013).

Butler T, MH Levy, JM Kaldor, F Al-Yaman, K Wilhelm K, M Dodson M, D Gray, S Allsop. NHMRC Capacity building grant: From Broome to Berrima: Building Australia wide research capacity in Indigenous offender health and health care delivery. \$2,315,190 (2009).

Cooper DA, Emery S. Merck, Sharp and Dohme Australia Pty Ltd. A randomised open-label study comparing the safety and efficacy of ritonavir boosted lopinavir and 2N9t RTI backbone versus the same ritonavir boosted lopinavir and raltegravir in patients virologically failing first-time NNRTI/2N(t)RTI therapy: the SECOND-LINE study. US\$1,100,000 (2009-2011).

Cooper DA, Kent SJ, Lloyd A, Dore GJ, Emery S, Kelleher AD, French MAH, Beard M, Purcell D. NHMRC Program Grant. HIV & HCV vaccines and immunopathogenesis. \$17,734,213 (2009-2013).

Danta M. NHMRC Project Grant. Defining risk and mechanisms of permucosal transmission for acute HCV infection within high-risk populations. \$380,050 (2009-2011).

Donovan B. NHMRC Practitioner fellowship. Sexually transmissible infections: causes, consequences, and interventions. \$504,875 (2009-2013).

Donovan B. NSW Health. Status report on the female sex worker industry in Sydney. \$81,081 (2009).

Dore G. NHMRC Program Grant. HIV & HCV vaccines and immunopathogenesis. \$1,832,535 (2009-2013).

Dore G. The Cancer Council NSW - Strategic Research Partnership Grant with University of Sydney. Epidemiology, prevention and management of liver cancer in NSW: Towards

a strategic partnership (STREP). \$250,000 (2009-2013).

Emery S, Hoy J, Pett SL, Roth N, Wright E. Randomised trial to determine the safety and efficacy of early versus deferred treatment of adult HIV infection. NHMRC Project Grant 2009. \$405,401 (2009-2010).

Emery S. NHMRC Program Grant. HIV & HCV vaccines and immunopathogenesis (CORAL). \$1,832,535 (2009-2013).

Grulich A. NHMRC Research fellowship: \$677,500 (2009-2013).

Hocking J, Gunn J, Fairley CK, Kaldor JM, Donovan B, Low N. Australian Department of Health and Ageing. Australian Chlamydia Control Effectiveness Pilot (ACCEPT). \$2,053,346 (2009-2011).

Hocking J, Regan D, Wilson D, Philip D, Smith A. NHMRC Project Grant. Using mathematical models to assess the impact of interventions to reduce sexually transmitted infections in Australia. \$539,775 (2009-2011).

Kaldor J, Allison W. Research and education in HIV/AIDS for Resource-Poor Countries REACH Initiative. Diagnosis of tuberculosis in HIV infected and HIV uninfected children in Papua New Guinea with a T-cell based assay: a prospective study. Tibotec Virco Virology BVBA, 2009, \$118,919

Kaldor J, Causer L. Australian Society for HIV Medicine. Consortium to Implement AusAID's Regional Capacity Building Program 2007-2011 - Support for Clinical and Epidemiological HIV Research Capacity in Indonesia. \$208,650 (2009).

Kaldor J, Donovan B. The University of Melbourne - Collaborative Agreement for funding from Department of Health & Ageing. Evaluation of Chlamydia Pilot in General Practice (ACCEPT). \$255,154 (2009-2011).

Kaldor J. Family Health International. Subcontract funded from the Bill and Melinda Gates Foundation - Development of Assays for Acute HIV Infection and Estimation of HIV Incidence in Populations. \$166,626 (2009).

Kaldor J. National Institute of Health (NIH) - Subaward Agreement with University of

California, San Francisco. Syphilis chemoprophylaxis in homosexual men with HIV infection using Doxyxylone. \$32,809 (2009-2010).

Kaldor JM, Ward J, Delaney-Theile D, Cousoz S, Hunt J, Scrimgeour D, Donovan B, Dore G. NHMRC. Centre for Clinical Research Excellence (CCRE) in Aboriginal health: sexually transmitted and blood-borne viral infections. \$2,500,000 (2009-2013).

Kaldor JM, Ward J. NHMRC Project Grant. A randomised trial to control sexually transmitted infections in remote Aboriginal communities (STRIVE). \$1,746,789 (2009-2013).

Kaldor JM. NHMRC Research fellowship, Senior principal research fellow. \$766,250 (2009-2013).

Kelleher A. NHMRC Program Grant. HIV & HCV vaccines and immunopathogenesis. \$1,832,535 (2009-2013).

Kerr TH, Shannon K, Maher L, Shoveller J, Small W, Wood E. Canadian Institutes of Health Research: Exploring the natural history of injection drug use. CAN\$261,051 (2009-2012).

Law M. NSW Health. Australian Chronic Hepatitis C Observational Study (ACHOS) South Australian Arm \$31,000 (2009).

Law M. University of Basel. Swiss HIV Cohort Study - Myocardial infarction, assessment of antiretroviral and genetic factors in human immunodeficiency virus infection MAGNIGICENT. (2009).

Law M. Victoria Health. Australian Chronic Hepatitis C Observational Study ACHOS Victoria. \$67,064 (2009).

Lloyd A, Cooper DA. NHMRC Program Grant. HIV & HCV vaccines and immunopathogenesis. \$1,832,535 (2009-2013).

MacIntyre R, Dwyer D, Nga N, Ferguson N, McLaws M, Maher L, Seale H, Wood J, Newall A. ARC. Economic, social and cross cultural issues in non-pharmaceutical protection of front line responders to pandemic influenza and emerging infections. \$185,000 (2009-2012).

- Maheer L, I van Beek, C Day, L Topp, M Shanahan, H Wand. NHMRC Project grant. Hepatitis acceptability and vaccine incentives trial: HAVIT. \$270,875 (2009-2010).
- Maheer L. Australian Government Department of Health and Ageing. Viral hepatitis surveillance and research. \$287,306 (2009).
- Maheer L. NHMRC Research fellowship. \$560,000 (2009-2013).
- Maheer L. NSW Health. Hepatitis C seroconversion: Using qualitative research to enhance surveillance. \$149,105 (2009).
- Mastro T, C Sexton, ML Baniecki, JM Kaldor, JMG Calleja. Gates Foundation Grant. Identification and Development of Assays for Acute HIV Infection and Estimation of HIV Incidence in Populations \$717,574 (2009).
- Mooney-Somers J. UNSW Faculty of Medicine Post Doctoral Research Grant. Preventing sexually transmitted infections in same-sex attracted young women: An examination of perceived vulnerability and safer sex negotiation. \$7200 (2009).
- Pett S. The Regents of the University of Minnesota. International Network for Strategic Initiatives in Global HIV Trials (INSIGHT FLU 002 and FLU 003) - Site advances. US\$174,182 (2009-2010).
- Pett S. The Regents of the University of Minnesota. International Network for Strategic Initiatives in Global HIV Trials (INSIGHT FLU 002 and FLU 003) - Site payments.
- Prestage G, Hurley M, Pitts M, Brown G. South Australian Department of Health. Study of Understandings of Risk among Gay Men in South Australia. \$22,000 (2009-2010).
- Prestage G, Jin J, Slavin S, Ellard J, Brown G. South Australian Department of Health. Study of Risk Factors for HIV Seroconversion among Gay Men in South Australia. \$10,450 (2009-2010).
- Prestage G, Korner H. NSW Health. HIV and risk among Thai gay men in Sydney. \$58,771 (2009).
- Prestage G. Government of Western Australia - Department of Health: Study of risk and HIV among men who have sex with men in Western Australia. \$36,675 (2009).
- Prestage G, McInnes D. NSW Health. High risk men who have sex with men and understandings of risk study (PASH). \$147,719 (2009).
- Prestage G. Victorian Department of Human Services. Study of sexually adventurous men in Melbourne. \$100,000 (2009-2010).
- Regan D, Wilson DP, Hocking J, Philip D, Smith A. NHMRC Project Grant. Using mathematical models to assess the impact of interventions to reduce sexually transmitted infections in Australia. \$350,000 (2009-2011).
- Rhodes T, Bonell C, Maheer L, Hope V, Treloar C, Friedman S Economic and Social Research Council UK: Staying Safe: A sociology of how injecting drug users avoid viral infection in the long-term. GBPE368,410.56 (2009-2011).
- Ward J, Worth H, Kaldor J, Smith A, Pitts M, Bryant J. Australian Research Council Linkage Grant. The first Australian study assessing knowledge, risk behaviours and health service access in relation to sexually transmissible infections and blood borne viruses of young Indigenous people. \$755,000 (2009-2013).
- White P, Cooper DA. NHMRC Program Grant. HIV & HCV vaccines and immunopathogenesis. \$60,000 (2009-2013).
- Wilson DP, Petoumenos K, Anderson J. National Association of People Living with HIV/AIDS. Modelling historical HIV antiretroviral treatment pathways in Australia and predicting future trends in treatment demand by geographical region. \$56,017 (2009).
- Wilson DP, Prestage GP, Donovan B. Australian Government Department of Health and Ageing and NSW Health: Developing evidence to inform a national syphilis action plan. \$54,716 (2009).
- Wilson DP, Thein R, Dore G. Roche Pharmaceuticals: Economic evaluation of current and future costs of hepatitis C in Australia and the potential impact of increased treatment uptake. \$62,619 (2009).
- Wilson DP. ARC Future Fellowship: Using mathematical modelling to inform HIV/AIDS public health policy. \$686,400 (2009-2013).
- Wilson DP. AusAID: Evaluation of the Potential Impact of the Global Economic Crisis on HIV Epidemics in Southeast Asia. \$39,819 (2009).
- Wilson DP. National Association of People Living with HIV/AIDS. Modelling historical HIV antiretroviral treatment pathways in Australia and predicting future trends in treatment demand by geographical region. \$56,017 (2009).
- Wilson DP. National Institute of Health (NIH) - Subrecipient Agreement with University of Maryland, Baltimore. Eco-Pathogenomics of Chlamydial Reproductive Tract Infection. US\$3240 (2009-2010).
- Wilson DP. NHMRC Career Development Award 1: Biomedical (Fellowship). Using modelling to evaluate STI epidemiology control strategies and investigate chlamydia within-host disease. \$370,000 (2009-2012).
- Wilson DP. South Australia Health. Evaluation of the South Australian HIV Epidemic. \$21,641 (2009).

Conference presentations

■ 12th Bangkok Symposium on HIV medicine (Bangkok, January)

Boyd M. Mythbusters: HIV, immune deficiency, ART and adverse events.

Grulich AE. AIDS and non-AIDS malignancies in the era of HAART .

Matthews GV: Preventing and managing hepatotoxicity.

■ SPARTAC Trial Management Committee Meeting (Sharm El Sheik, January)

Kelleher AD. A proposal for assessing the impact of viral reservoirs on Primary outcome measures in SPARTAC.

Kelleher AD. An update of the SPARTAC trial at the Sydney sites.

■ 16th Conference on Retroviruses and Opportunistic Infections (CROI) (Montreal, February)

Grulich AE. AIDS-related cancers. Lusso M, Abrams D and INSIGHT ESPRIT Study Group. Effect of Interleukin-2 on Clinical Outcomes in Patients with a CD4+ Cell Count of 300/mm3: Primary Results of the ESPRIT Study.

Lusso M, Abrams D and INSIGHT ESPRIT Study Group. Effect of Interleukin-2 on Clinical Outcomes in Patients with a CD4+ Cell Count of 300/mm3: Primary Results of the ESPRIT Study.

Lundgren J, Reiss P, Worm S, Weber R, El-Sadr W, De Wit S, **Law M**, d'Arminio Monforte A, Pradier C, Sabin C and Aquataine, AHOD, ATHENA, INSIGHT, EuroSIDA, ICONA, Nice, SHCS, St Pierre Cohorts & D:A:D Study Group. Risk of Myocardial Infarction with exposure to specific ARV from the PI, NNRTI and NRTI drug classes: The D:A:D study.

Puls R, Hemachandra A, Sirivichayakul S, **Kerr S**, Thanivorasit P, **Cooper DA**, **Emery S**, **Kelleher AD** Ruxrungtham K. A randomized Phase I/IIa trial of a Clade A/E Prime, Recombinant Fowlpox Virus Boost

HIV-1 Vaccine in Low-risk Thai Population.

Smith C and the D:A:D Study Group (**Law MG** a member of study group). Association between modifiable and non-modifiable risk factors and specific causes of death in the HAART era: The Data Collection on Adverse Events of Anti-HIV drugs study.

■ NCHECR International Clinical Research Network Meeting (satellite meeting of CROI 2009) (Montreal, February)

Boyd M. NCHECR International Clinical Research Network Presentation. The Second Line Study - an international, multi-centre, randomised, controlled clinical trial (satellite meeting of CROI 2009).

Puls R. 'The Altair Study - an update', Feb 10th, Inter-Continental Hotel, Montreal, Canada (satellite meeting of CROI 2009)

Puls R. 'The Encore Program - an update', Feb 10th, Inter-Continental Hotel, Montreal, Canada (satellite meeting of CROI 2009)

■ 5th Annual Canadian Association for the Study of the Liver Winter Meeting (Banff, Canada, February)

Conway B, Gallagher L, Knight E, Genoway K, Showler G, Tossonian H, Hosseina M, Duncan F, Viljoen M, Raffa JD, **Grebely J.** Safety and efficacy of substituting tenofovir for other nucleoside analogues in virologically controlled HIV-infected patients co-infected with hepatitis C virus: the TEN-switch study.

Conway B, Knight E, Ngai T, Genoway K, Showler G, Duncan F, Kraijden M, Dore G, Raffa JD, **Grebely J.** Low rate of persistent re-infection following sustained virological response among injection drug users treated for chronic HCV infection.

Grebely J, Hellard M, **Matthews GV**, Haber P, **Yeung B**, **Marks P**, **Petoumenos K**, van Beek I, McCaughan G, White P, Ffrench R, Rawlinson W, Lloyd A, **Kaldor J**, **Dore GJ.** Factors associated with response to

therapy during treatment for acute and early chronic HCV infection.

Grebely J, White P, **Matthews GV**, Flynn J, Renkin M, **Kaldor J**, Lloyd A, Hellard M, Ffrench R and **Dore GJ.** Partial protective immunity against hepatitis C virus reinfection in humans.

■ Social Science International Workshop on The Impact of HIV/AIDS and Antiretroviral Treatment in Asia (Chiang Mai, February)

Maher L, Pisith P, Elliott J, Hong T K, Huort T, Saramony S, Saphonn V, **Kaldor J**, **Vun M C.** HIV treatment beliefs and practices and adherence to antiretroviral therapy in Cambodia.

■ TREAT Asia Mid-Term Meetings (Bangkok, March)

Oyomopito R. TASER Study Update.

■ Symposium on HPV in the Immunocompromised Host and in Non-Cervical Cancers (Sydney, February)

Philp DJ, **Regan DG.** Modelling of HPV vaccination of boys.

■ 13th annual meeting of the Infectious Diseases Society of Hong Kong, March

Pett SL. New Treatments for HIV-1-infection.

■ 13th International Symposium on Viral Hepatitis and Liver Disease (Washington, March)

Dore G. Hepatitis C control among injecting drug users.

Grebely J, White P, **Matthews GV**, Flynn J, Renkin M, **Kaldor J**, Lloyd A, Hellard M, Ffrench R and **Dore GJ.** Partial protective immunity against hepatitis C virus reinfection in humans.

Hellard M, **Matthews G**, **Grebely J**, Haber P, **Yeung B**, **Marks P**, **Petoumenos K**, van Beek I, McCaughan G, White P, Ffrench R, Rawlinson W, Lloyd A, **Kaldor J** and **Dore G**. Impact of adherence on response to therapy during treatment for acute and early chronic HCV infection.

■ 2009 International Liver Congress (Copenhagen, April)

Baleriola C., W. Rawlinson, S. Chaverot, S. Stelzer-Braid, M. Yoshihara, B. Rizkalla, D. Dubois, W. Sievert, G. McCaughan, D.H.G. Crawford, M. Weltman, W.S.C. Cheng, **G.J. Dore**, S. Roberts. Impact of low-level hepatitis C viraemia at week 24 on HCV treatment response in genotype 1 patients.

Cheng W.S.C., S. Roberts, M. Weltman, D.H.G. Crawford, W. Sievert, G. McCaughan, W. Rawlinson, P. Desmond, M. Yoshihara, B. Rizkalla, J. DePamphilis, **P. Marks, G.J. Dore**. Efficacy and safety of peginterferon alfa-2a 360 Iq/week in combination with ribavirin in hepatitis C genotype 1 patients with cirrhosis: analysis from the Chariot Study.

Grebely J, Raffa JD, Lai C, Kraiden M, Fischer B, Kerr T, **Dore GJ** and Tyndall MW. Impact of hepatitis C virus infection on liver-related mortality in a large community-based cohort of inner city residents.

Roberts S., M. Weltman, D.H.G. Crawford, W.S.C. Cheng, W. Sievert, G. McCaughan, P. Desmond, W. Rawlinson, P. Marks, M. Yoshihara, B. Rizkalla, J. DePamphilis, G.J. Dore. High-dose peginterferon alfa-2a (40kd) induction therapy and standard ribavirin enhances early but not sustained virological responses in HCV genotype 1 patients: final Chariot Study results.

■ Cardiovascular Disease (CVD) in HIV Risk Research Workshop (Sydney, April)

Law MG. HIV infection, antiretroviral treatment and cardiovascular disease risk.

Law MG, Hoy J, Carr A. Faciliate Workshop feedback.

Law MG. Observational Cohort Studies.

■ International Harm Reduction Association Conference (Bangkok, April)

Higgs P, Aitken C, Hellard M, Winter R, **Maher L**. Drug user narratives on staying hepatitis C free.

Kimber J, Copeland L, Hickman M, Macleod J, McKenzie J, De Angelis D, Robertson J R. Natural history of injecting drug use: A longitudinal study of survival and long term injecting cessation.

Prestage GP, Hurley M. Sexual risk behaviour among gay men: Is drug use the cause or an effect?

Treloar C, **McCann P**, Byron P, **Maher L**. Concerns of injecting drug users and health workers regarding trials of hepatitis C vaccines.

■ PHAA Health Justice in Australia Conference (Melbourne, April)

Topp L, **Iversen J**, Kumar S, Treloar C, **Maher L**, Indig D. NSW prison inmates' use of community needle and syringe programs prior to incarceration.

Higgs P, Aitken C, Hellard M. Prison history of a Melbourne cohort of injection drug users, Justice Health: Beyond the Convict Era.

■ 18th biennial meeting of the International Society of Sexually Transmitted Disease Research (ISSTD) (London, June)

Guy R, Goller J, Leslie D, Thorpe R, Grierson J, Batrouney C, Kennedy M, Lewis J, Fairley C, Ginige S, Zablotska I, Hellard M. No increase in HIV or STI testing following a social marketing campaign among men who have sex with men in Australia.

Jin F, **Prestage GP**, **Templeton DJ**, **Donovan B**, Imrie J, Kippax S, Mindel A, Cunningham A, Cunningham P, **Kaldor JM**, **Grulich AE**. The impact of HIV risk reduction behaviours on sexually transmissible infections in HIV negative homosexual men.

■ 5th International Workshop on HIV and Hepatitis Coinfection (Lisbon, June)

Matthews, GV: The Epidemiology of Acute Hepatitis C (plenary)

Matthews GV; Avihingsanon A, Bowden, S, Lewin S.; Sasadeusz J, Thio CL, Ayres A, Locarnini SA; Ruxrungtham K, **Dore GJ**. Changes in quantitative HBsAg levels in Thai HIV-HBV coinfecting subjects following initiation of HBV-active HAART within a randomised clinical trial .

Jennifer Audsley, Joe Sasadeusz, Margaret

Littlejohn, Lilly Yuen, Chris Desmond, George Lau, **Greg Dore**, **Gail Matthews**, Anchalee Avihingsanon, Kiat Ruxrungtham, Stephen Locarnini, Chloe Thio, Sharon Lewin, Peter Revill. Virological characteristics of a longitudinal HIV/HBV co-infected cohort prior to initiation of HBV-active HAART.

Ribeiro, RM, Avihingsanon A, Bowden S, **Matthews G**, **Marks P**, Locarnini SA, Ruxrungtham K, Perelson AS, **Dore GJ**, Lewin SR. Modeling of viral dynamics of hepatitis B virus (HBV) DNA in HIV-1-HBV co-infected individuals: similar kinetic parameters compared to HBV mono-infected individuals.

Megan Crane, Sunee Sirivichayakul, J. Judy Chang, Anchalee Avihingsanon, Sasiwimol Ubolyam, Supraanee Buranapraditkun, Pattarawat Thantiworasit, Fiona Wightman, Stephen Locarnini, **Gail Matthews**, **Gregory J Dore**, Kiat Ruxrungtham, Sharon R Lewin. No change in HBV-specific T cells in HIV-1-HBV co-infection following HBV-active HAART

■ Australian Centre for HIV & Hepatitis Virology Research (ACH2) 5th National Workshop (Terrigal, June)

Cameron B, Elliott L, Ratnarajah S, Sugden P, Lloyd A, Haber P, Dolan K, Ffrench R, Rawlinson B, White P, Levy M, Kaldor J, Dore G, **Maher L**. Evaluation of potentially protective immunity against HCV in highly exposed, but uninfected prison inmates in the HITS study.

Luciani F, **Wilson D**, Teutsch S, Lloyd A (on behalf of the HITS investigators). Mathematical modelling of hepatitis C transmission dynamics in the prison environment: the Hepatitis C Incidence and Transmission Study (HITS). Evaluation of potentially protective immunity against HCV in highly exposed, but uninfected prison inmates in the HITS study.

Teutsch S, McCredie L, Bloomfield M, Levy M, Haber P, Lloyd A, Dolan K, Ffrench R, Rawlinson B, **Kaldor J**, **Dore G**, **Maher L**. HCV incidence in a follow-up study of high-risk IDU prison inmates – the HITS-p cohort.

■ International AIDS Society Conference (Cape Town, July)

Grulich AE. HIV, cancer and immune deficiency.

Miura T, Brumme Z, Brumme C, Block B, Brockman B, Trocha A, Pereyra F,

Kaufmann D, Iwamoto A, Jessen H, Rosenberg E, **Kelleher AD**, Markowitz M, Little S, Walker B, AIEDRP Network. Characterization of human immunodeficiency virus type 1 in the acute/early phase of infection in the individuals who subsequently become viremia controllers.

Mohanarama R S, Center R, Suzuki K, Gray L, Gorry P, **Kelleher AD**, Purcell D. Genotypic and phenotypic profiles of envelope glycoproteins derived from HIV-1 pre-seroconversion strains.

van Bockel D, Ammaranond P, Venturi V, Davenport M, Price D, Douek D, **Zaunders J, Gelgor L, Kaldor J, Cooper DA, Kelleher AD**. TCR clonotypes responding to an immunodominant HLA-B*27 restricted epitope are relatively stable over extended periods but their diversity does not correlate with viral escape in HIV-1 infected Long term non-progressors (LTNP).

■ NCHECR International Clinical Research Network (satellite meeting of IAS)(Cape Town, July)

Puls R. The Encore Program - an update.

■ INSERM Strasbourg (France, July)

Murray JM. In host dynamics of human immunodeficiency and hepatitis B viruses.

■ Universitätsklinikum Hamburg-Eppendorf (Germany, July)

Murray JM. In host dynamics of human immunodeficiency and hepatitis B viruses.

■ 26th NRL Workshop on Serology (Christchurch, August)

Yan C, Hanafi I, **Kelleher AD**, Carr A, McNally L, and **Cunningham P**. Lack of correlation at the lower limit of detection of three commercially available viral load assays for the quantitation of HIV-RNA.

■ 1st International Symposium on Hepatitis Care in Substance Users (Zurich, September)

A Gillman, J Grebely, M Jauncey, C Day, A Dunlop, P Haber, A Wodak and **GJ Dore**. Assessment and treatment of chronic hepatitis C virus (HCV) infection in a prospective, observational cohort of injection drug users (IDUs): the ETHOS Cohort

Conway B, Knight E, Storms M, Barrieshee A, Gallagher L, Duncan F, **Grebely J**. Treatment of Hepatitis C Virus (HCV) Infection in Active and Recent Injection Drug Users (IDUs): The Vancouver Experience.

Dore GJ, Hellard M, **Matthews GV, Grebely J**, Haber PS, **Petoumenos K, Yeung B, Marks P**, van Beek I, McCaughan G, White PA, Ffrench R, Rawlinson W, Lloyd AR and **Kaldor JM** for the ATACH Study Group. Treatment of recent hepatitis C virus infection in a predominantly injection drug user cohort: the ATACH Study.

Grebely J, Matthews GV, Petoumenos K, Pham ST, **Marks P**, Rawlinson W, Haber PS, **Kaldor JM**, Lloyd AR, Hellard M, Ffrench R, White PA and **Dore GJ** for the ATACH Study Group. Hepatitis C virus superinfection and reinfection in injection drug users.

Grebely J, Raffa JD, Knight E, Storms M, Tossonian HK, Duncan F, Singer J, John-Baptiste A, Krahn M, Fischer B and Conway B. Factors influencing willingness for and uptake of treatment for hepatitis C virus (HCV) infection in illicit drug users in urban care settings in British Columbia, Canada: the Hi-Lo Study.

Tyndall MW, Sadr A, Kellman C, Mority J, Tu D, Littlejohn D, **Grebely J**. A pilot project for Hepatitis C treatment using an intensive case management model in Vancouver, Canada.

■ 21st Australasian Society for HIV Medicine Conference (Brisbane, September)

Adam PCG, Murphy DA, Imrie J, Pitts M, **Prestage G**. MSM in Australia are willing to participate in a large scale online cohort study on sexuality and health.

Anderson J. Debate on Pre-exposure HIV Prophylaxis (PREP).

Anderson J. (How to set up an anal cancer screening program) Is it worth it?

Anderson J. Return on Investment cost effectiveness of needle syringe programs.

Babiker A, **Law M**, Seneviratne N, **Pett SL, Carey C, Courtney-Rodgers D, Kearney L, Lin E, Emery S, Cooper DA** for the INSIGHT ESPRIT Study Group and SILCAAT Scientific Committee. Combined analysis of the primary results of the evaluation of proleukin in a randomised international study (ESPRIT) and subcutaneous recombinant, human interleukin-2 in HIV-infected patients with low CD4+ counts

under active antiretroviral therapy (SILCAAT) studies.

Botes LP, **Cooper DA, Pett S**, Carr A, Carbone S, Hillman R J. High levels of anal cytological abnormalities in HIV-infected men who have sex with men in Sydney.

Bradley J. Love, Lust or Calculated Risk? Findings from the Online Seroconversion Study.

Carey C, Courtney-Rodgers D, Kelly M, D Wyman on behalf of the STALWART Protocol Team and the INSIGHT network. A study of aldesleukin with and without antiretroviral therapy (STALWART); what we've learnt.

Cooper DA. Introduction to a lifetime of HIV/AIDS. Opening plenary

Down I. Group sex among gay men: How many and how often?

Drummond FM, Neuhaus J, Hoy JF, **Emery S, Pett SL, Cooper DA** for the INSIGHT SMART Study Group Markers of Inflammation, Coagulation and Renal function in HIV-infected adults in Smart and in two large population-based studies, CARDIA and MESA.

Emery S for the INSIGHT ESPRIT Study Group. Effect of recombinant interleukin-2 (IL-2) on clinical outcomes in patients with a CD4+ T-cell count of >300/MM3: primary results of the ESPRIT study.

Emery S. Immune-based therapies for HIV infection: where might this be heading now?

Falster K, Wand H, Donovan B, Anderson J, Nolan D, Watson K, Watson J, **Law MG** on behalf of the Australian HIV Observational Database. Rates and predictors of hospital admissions among patients in HIV infection in New South Wales and Western Australia: The Australian HIV Observational Database hospital linkage study.

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 ME. Syphilis testing, diagnoses and reinfection in MSM in Victoria.

Gray R. Evaluation of the potential impact of the global economic crisis on HIV epidemics in south-east Asia.

Grulich AE. HPV-associated cancers in immune deficient populations

Guy R, Ward J, Rumbold A, Silver B, Skov S, Boffa J, Ah Chee D, **Donovan B, Law M, Maher L, McDermott R, Kaldor J**. The

evidence for primary health STI screening programs in remote Aboriginal communities.

Guy R. The role of voluntary counselling & testing (VCT) data in estimating HIV prevalence: a systematic review.

Haskelberg H. Immune reconstitution diseases in HIV-Infected, Antiretroviral Therapy-Naïve patients recruited into the Altair study.

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. **Huffam S.** Preventing loss to follow up at an HIV treatment service in Phnom Penh Cambodia.

Jin F, Prestage GP, Imrie J, Kippax S, Zablotska I, Kaldor JM, Grulich AE. HIV negative homosexual men in an HIV sero-discordant relationship in the Health in Men study.

Jin F, Prestage GP, Templeton DJ, Donovan B, Imrie J, Kippax S, Mindel A, Cunningham A, Cunningham P, Kaldor JM, Grulich AE. The impact of HIV risk reduction behaviours on sexually transmissible infections in HIV negative homosexual men.

Jin F, Prestage GP, Zablotska I, Rawstorne P, Imrie J, Kippax S, Donovan B, Templeton DJ, Kaldor JM, Grulich AE. High incidence of syphilis in HIV positive homosexual men: Data from two community-based cohort studies.

Kelly M. A Study of Aldesleukin with and without Antiretroviral Therapy (STALWART): What we've learnt (**Carey C, Kelly M, Courtney-Rodgers D**, Wyman N on behalf of the STALWART Protocol Team and the INSIGHT network)

Kaldor JM. Chair, Indigenous Sexual Health Symposium.

Kaldor JM. Chair, plenary sessions.

Kwon A. Estimating the past and future impact of NSPs in HIV and HCV transmissions among IDUs in Australia

Law M. Combined analysis of the primary results of the Evaluation of Proleukin in a Randomised International Study (ESPRIT) and Subcutaneous Recombinant, Human Interleukin-2 in HIV-infected Patients with Low CD4+ Counts Under Active Antiretroviral Therapy (SILCAAT) studies.

Matthews GV, Grebely J, Pham ST, Hellard M, Oon A, Marks P, Rawlinson W,

Kaldor JM, Lloyd A, White PA, Dore GJ. Epidemiology of recently acquired hepatitis C virus (HCV) infection in HCV and HCV/HIV infected participants in the ATAHc study.

McCann PD, Prestage GP, Bradley J, Hurley M. Desire, disinhibition and danger: how to pleasure and risk interact for gay and bisexual men (McCann PD, Prestage G, Bradley J, Hurley M) and What HIV positive and HIV negative gay men think about syphilis (McCann PD, Prestage G, Triffitt K, Down I).

McCann PD, Prestage GP, Triffitt K, Down I. What HIV positive and HIV negative gay men think about syphilis.

McDonald A. Monitoring HIV transmission using the bed assay.

McDonald A. Trends in age at HIV diagnosis in Australia, 1997 – 2008

Middleton M. The concentrated patterns of gonorrhoea transmission in Australia

Pedrana A, Hellard M, Wilson K, **Guy R, Prestage G, Best S, Dixon M, Stooë M.** Estimating HIV prevalence and unrecognised infection among men who have sex with men in Victoria.

Petoumenos K, Fontas E, Worm S, Weber R, De Wit S, Bruyand M, Reiss P, El-Sadr W, D'Arminio Monforte A, Friis-Møller N, Lundgren JD, Law MG on behalf of the D:A:D Study Group. Predicting the short term risk of diabetes in HIV infected patients: The D:A:D study group.

Pett SL, Emery S, Seneviratne N, Kearney L, Lin E, Carey C, Courtney-Rodgers D, Cooper DA and SILCAAT Scientific Committee. Effect of recombinant interleukin-2 (IL-2) on clinical outcomes in patients with CD4+ T-cell count 50 to 299/mm³ primary results of the SILCAAT study.

Pett SL, Lin E, Kearney L, Wentworth D, Carey C, Seneviratne N, Courtney-Rodgers D, Nelson R, Cooper DA, Emery S for the ESPRIT Research Group. Predictors of initial episode bacterial pneumonia in ESPRIT.

Prestage GP. Cohort studies: their role in HIV prevention among gay men in Australia.

Prestage GP. Risk, pleasure and sexual health.

Prestage GP, Zablotska I. Trends in drug use and sexual risk behaviour among gay men.

Puls RL on behalf of the Altair Study Group. Safety and Efficacy of Three Different Combination Antiretroviral Regimens as Initial Therapy for HIV Infection: Week 48 Data from a Randomised, Open-label Study.

Purcell DFJ, Reddy S, Suzuki K, Gorry P, **Cooper D, Kelleher A, Center R.** Construction and characterisation of recombinant envelope glycoproteins derived from HIV-1 pre-seroconversion strains as potential vaccine immunogens.

Suzuki K, Ishida T, Yamagishi M, **Lim H, Swaminathan S, Watanabe T, Cooper DA, Kelleher AD.** Retroviral delivery of promoter-targeted RNA induces specific, long silencing in HIV-1 replication.

Wand H, Wilson D, Gonnermann A, Yan P, McDonald A, Kaldor J, Law M. Past and current trends in HIV infection by birth-cohorts: results from a modified back-projection method.

Ward J. Issues associated with A&TSI surveillance data.

Ward J. Overview of STI epidemiology in Indigenous communities.

Ward J. Panel discussion: HPV-associated cancers in immune deficient populations

Wilson DP. Key findings from the HIV/AIDS, viral hepatitis and sexually transmissible infections Annual Surveillance Report 2009

Yan C, Hanafi I, **Kelleher AD, Carr A, McNally L, Cunningham P.** Lack of correlation at the lower limit of detection of three commercially available viral load assays for the quantitation of HIV-RNA.

Zablotska I, Prestage G. Trends in gay social engagement and its role in HIV prevention and research.

Zaunders J, Bailey M, Marks K, Seddiki N, Danta M, Boesecke C, Gelgor L, Murray J, Koelsch K, Amin J, Baker D, Finlayson R, Bloch M, Emery S, Cooper DA, Kelleher AD. CD4 cell numbers in endoscopic biopsy samples from patients with primary HIV-1 infection or chronic HIV-1 infection.

■ Australasian Sexual Health Conference (Brisbane, September)

Franklin N, Guy R, Grulich A, Regan DG, Fairley CK, Donovan B. Long-term national surveillance for genital warts through Australian sexual health services.

Franklin N, Guy R, Grulich A, Fairley CK,

Chen MY, Hellard M, Dickson B, O'Connor C, Marshall L, **Donovan B** on behalf of the ACCESS Collaboration. Chlamydia testing and prevalence at Australian sexual health clinics; the Australian collaboration for chlamydia enhanced sentinel surveillance (ACCESS) project.

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 ME. Syphilis testing, diagnoses and reinfection in MSM in Victoria.

Guy R, Ward J, Rumbold A, Silver B, Skov S, Boffa J, AhChee D, **Donovan B, Law M, Maher L**, McDermott R, **Kaldor J**. The evidence for primary health STI screening programs in remote aboriginal communities.

Kong FYS, **Guy R**, Bergeri I, Boyle D J, Hocking J, Merritt T, Britt H, Lau P, Pirotta MV, Heal C, Brett T, **Kaldor J, Donovan B**, Hellard ME. Chlamydia testing rates in general practices across Australia: the Australian collaboration for chlamydia enhanced sentinel Surveillance (ACCESS).

Hocking JS, Temple-Smith M, Low N, **Donovan B**, Gunn J, **Law M, Kaldor J, Guy R**, Poznanski S, Fairley CK, on behalf of the ACCEPt Consortium (2009) ACCEPt [Australian Chlamydia Control Effectiveness Pilot]: Design of the pilot evaluation.

Polis SJ, Bain P, Cain M, Dever R, Stevens R, Krillis S, Konecny P. Improving antiretroviral adherence in intellectually challenged people.

Regan DG, Wilson DP. Routine Chlamydia screening should lead to reduced reinfection rates in the medium to long term.

■ 49th Interscience Conference on Antimicrobial Agents and Chemotherapy (San Francisco, September)

Bloch M, Bodsworth N, Fidler M, Workman C, Balch A, **Byakwaga H**, Beelen A. Efficacy, safety and pharmacokinetics of MPC-4326 (bevirimat dimeglumine) 200mg BID and 300mg BID monotherapy administered for 14 days in subjects with HIV-1 infection.

■ 16th International Symposium on Hepatitis C and Related Viruses (Nice, France, October)

Flynn J, **Dore G**, Hellard M, **Yeung B**, White P, Lloyd A, and Ffrench R. Reciprocal relationship between IFN- γ and IL-10

production in acute hepatitis C virus infection.

Grebely J, Matthews GV, Petoumenos K, Pham ST, **Marks P**, Rawlinson W, Haber P, **Kaldor JM**, Lloyd A, Hellard M, Ffrench R, White PA and **Dore GJ**, on behalf of the ATAHc Study Group. Hepatitis C virus (HCV) superinfection and reinfection among treated and untreated participants with recently acquired HCV infection

Grebely J, Petoumenos K, Hellard M, **Matthews GV, Marks P**, Haber P, Rawlinson W, Lloyd A, White PA, **Kaldor JM, Dore GJ**, on behalf of the ATAHc Study Group. Virological patterns and predictors of spontaneous viral clearance during recent hepatitis C virus infection

Pham ST, **Grebely J**, Renkin M, Hellard M, Oon A, Bull R, Lloyd A, Ffrench R, **Matthews G**, Rawlinson W, **Dore G**, and White P. Hepatitis C virus superinfection and mixed infection in a community setting.

■ 60th Annual Meeting of the American Association for the Study of Liver Diseases (Boston, October)

Dore G, Matthews G, Grebely J, Haber PS, Hellard M, **Petoumenos K, Yeung B, Marks P**, van Beek I, McCaughan G, White P, Ffrench R, Rawlinson W, Lloyd, AR, and **Kaldor J**. Treatment of recent hepatitis C virus infection in a predominantly injection drug use cohort: the ATAHc Study.

Matthews GV, Grebely J, Pham ST, Hellard M, **Marks P**, Rawlinson W, **Kaldor JM**, Lloyd A, White PA, and **Dore G**. Epidemiology of recently acquired hepatitis C virus (HCV) infection in HCV and HCV/HIV infected participants in the ATAHc Study.

■ TREAT ASIA Annual Network Meeting (Bangkok, October)

Jiamsakul A. TASER Research Coordinator Session.

Jiamsakul A. TASER Study Update. TREAT ASIA Annual Network Meeting. Bangkok, 9-14 October 2009.

■ 11th international workshop on adverse drug reactions and co-morbidities in HIV (Philadelphia, October)

Richardson R, Sinn K, **Cooper DA, Pett S**, Carr A. Arterial stiffness and cardiovascular biomarkers in HIV-infected adults.

Puls RL, Srasuebku P, Petoumenos K, Emery S, Cooper DA on behalf of the Altair

Study Group, Anthropometric and metabolic outcomes in a 48 week randomized, open-label study of three different combination antiretroviral regimens as initial therapy for HIV infection.

■ Anex 09 Australian Drugs Conference (Melbourne, October)

Iversen J, Topp L, Nathani J, Poeder F, Maher L (on behalf of the collaboration of Australian NSPs). Prevalence of reuse and cleaning of needles and syringes: Results from the 2008 Australian NSP Survey.

Maher L, White B (on behalf of the UNSW HCV Vaccine Initiative). Hepatitis C vaccine trials in people who inject drugs: Challenges and opportunities.

White B, Donald A, Bates A, Enriquez J, Liao L, Pham S, Maher L. Low hepatitis B vaccine coverage in a cohort of people who inject drugs in Sydney.

■ Qualitative Health Research Conference (Vancouver, October)

Mooney-Somers J, Olsen A, Erick W, Scott R, Akee A, **Kaldor J, Maher L** (on behalf of the Indigenous Resiliency Project Australian Steering committee). Using Community-Based Participatory Research to examine Indigenous young people's resilience to blood borne and sexually transmitted infections.

■ 12th European AIDS Conference/EACS (Cologne, November)

Amin J, De Lazzari E, Emery S, Humphries A, Martinez E, Carr A, Gatell J, Cooper DA, on behalf of the BICOMBO and STEAL study teams. Simplification with fixed-dose tenofovir-emtricitabine or abacavir-lamivudine in treatment experienced, virologically suppressed adults with HIV infection: meta-analysis of two randomised, non-inferiority trials BICOMBO and STEAL.

Avihingsanon A., Kerr S, Komolmit P, Napissanan N, Mathews G, Dore G, Lewin S, Ruxrungtham K. Efficacy of tenofovir plus emtricitabine compared to emtricitabine alone in HIV/HBV coinfecting antiretroviral naïve individuals in Thailand: A randomised controlled trial.

■ Australasian Society for Immunology Annual Scientific Meeting (Brisbane, December)

Seddiki N, Phetsouphanh C, Swaminathan S, Juelich T, Denyer G, Xu Y, Rao S, Brown K, Alexander S, Cooper DA and Kelleher AD. The preferential expression of Blimp-1/*Prdm1* in a subset of human antigen-experienced regulatory T cells is regulated by micro RNA (miRNA)

■ **HEP DART 2009 Frontiers in Drug Development for Viral Hepatitis (Hawaii, December)**

Dore GJ. Public Health Challenges for HIV and Hepatitis C Coinfection.

Grebely J, Hellard M, Matthews GV, Haber P, Petoumenos K, Yeung B, Marks P, van Beek I, McCaughan G, White PA, French R, Rawlinson W, Lloyd AR, Kaldor JM and Dore GJ on behalf of the ATAHC Study Group. Treatment of Recent Hepatitis C Virus Infection in a Predominantly Injection Drug User Cohort: the ATAHC Study.

Publications

Peer-reviewed

A

Alcantara S, Reece J, Amarasena T, Rose RD, Manitta J, **Amin J**, Kent SJ. thrombocytopenia is strongly associated with simian AIDS in pigtail macaques. *J Acquir Immune Defic Syndr* 2009 Aug 1;51(4):374-9.

Anderson JS, Hoy J, Hillman R, Barnden M, Eu B, McKenzie A, Gittleson C. A randomized, placebo-controlled, dose-escalation study to determine the safety, tolerability, and immunogenicity of an HPV-16 therapeutic vaccine in HIV-positive participants with oncogenic HPV infection of the anus. *J Acquir Immune Defic Syndr* 2009;52:371-381.

Anderson JS, Wilson DP, Templeton DJ, Grulich AE, Carter R, Kaldor JM. Cost-effectiveness of adult circumcision for HIV prevention in men who have sex with men in a resource-rich setting. *J Infect Dis* 2009;200:1803-1812.

Avihingsanon A, van der Lugt J, **Kerr SJ**, Gorowara M, Chanmano S, Ohata P, Lange JMA, **Cooper DA**, Phanuphak P, Burger DM, Ruxrungtham K. A low dose of ritonavir-boosted atazanavir provides adequate pharmacokinetic parameters in HIV-1 infected Thai adults. *Clin Pharmacol Ther* 2009;85:402-408.

B

Babirye JN, Nuwaha F, **Grulich AE**. Adherence to feeding guidelines among HIV infected and HIV uninfected mothers in a rural district in Uganda. *East Afr Med J* 2009;86:7-13.

Berry M, **Boyd MA**. Infectious Diseases; in *Emergency Medicine: the Principles of Practice* 5th edition; Fulde GWO, editor; 2009

Boesecke C, Gelgor L. A review of raltegravir and its use in HIV-1 infection. *Clin Med Ther* 2009;1:1159-1171.

Bouvard V, Baan R, Straif K, Grosse Y, Secretan B, El Ghissassi F, Benbrahim-Tallaa L, Guha N, Freeman C, Galichet L, Coglianò V, on behalf of the WHO International Agency for Research on Cancer Monograph Working Group. (**Grulich A**, member of the working group). A review of human carcinogens—Part B: biological

agents. *Lancet Oncol* 2009;10:321-322.

Boyd M. Clinical research in low- and middle-income countries. *Virtual Mentor* 2009;11: 511-515.

Boyd MA, Emery S, **Cooper DA**. Antiretroviral roll-out: the problem of second-line therapy. *Lancet* 2009;374:185-186.

Boyd MA. Improvements in antiretroviral therapy outcomes over calendar time. *Curr Opin HIV AIDS* 2009;4:194-199.

Briggs D, Rhodes T, Marks D, **Kimber J**, Holloway G, Jones S. Injecting drug use and unstable housing: Scope for structural interventions in harm reduction. *Drugs: Education Prevention and Policy* 2009;16(5):436-450.

Byakwaga H, Boesecke C, Emery S. Inflammation and gut permeability. *J HIV Ther* 2009; 14: 57-60.

Byakwaga H, Murray JM, **Petoumenos K**, Kelleher AD, Law MG, **Boyd MA**, Emery S, Mallon PW, **Cooper DA**. Evolution of CD4+ T cell count in HIV-1-infected adults receiving antiretroviral therapy with sustained long-term virological suppression. *AIDS Res Hum Retroviruses* 2009;569-576.

Byakwaga H, Zhou J, **Petoumenos K**, Law MG, **Boyd MA**, Emery S, **Cooper DA**, Mallon PW. Effect of nucleoside reverse transcriptase inhibitors on CD4 T-cell recovery in HIV-1 infected individuals receiving long-term fully suppressive combination antiretroviral therapy. *HIV Med* 2009;10:143-151.

C

Calmy A, Fux CA, Norris R, Vallier N, Delhumeau C, Samaras K, Hesse K, Hirschel B, **Cooper DA**, Carr A. Low bone mineral density, renal dysfunction and fracture risk in HIV infection: a cross-sectional study. *J Infectious Dis* 2009;200:1746-1754

Calmy A, Gayet-Ageron A, Montecucco F, Nguyen A, Mach F, Burger F, Ubolyam S, Carr A, Ruxrungtham K, Hirschel B, Ananworanich J on behalf of the STACCATO Study Group (**Cooper DA** – member). HIV increases markers of cardiovascular risk: results from a randomized, treatment

interruption trial. *AIDS* 2009;23:929-939. Calmy A, Hirschel B, **Cooper DA**, Carr A. Review – A new era of antiretroviral drug toxicity. *Antivir Ther* 2009;14:165-179.

Calmy A, **Wand H**, Bloch M, Delhumeau C, Finlayson R, Rafferty M, Norris R, Hirschel B, **Cooper DA**, Carr A, for the URISTAT study group. No significant effect of uridine or pravastatin for HIV lipodystrophy in men who have ceased thymidine nucleoside analogue therapy: a randomized trial. *HIV Medicine* 2009; (in press)

Carey D, Baker D, **Petoumenos K**, Chuah J, Rogers GD, Watson J, **Cooper DA**, Emery S, Carr A. FLASH Investigators. Poly-L-lactic acid for HIV-1 facial lipodystrophy: 48-week follow-up. *HIV Med* 2009;10:163-172.

Carr A, **Amin J**. Efficacy and tolerability of initial antiretroviral therapy: a systematic review. *AIDS* 2009;23:343-353.

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 hepatitis B virus (HBV)-specific T-cell response in human immunodeficiency virus type 1-HBV coinfection. *J Virol* 2009;83:7649-7658.

Chen MY, Millwood IY, **Wand H**, Poynten M, **Law M**, **Kaldor JM**, Wesselingh S, Price CF, Clark LJ, Paull JRA, Fairley CK. A randomized controlled trial of the safety of candidate microbicide SPL7013 gel when applied to the penis. *J Acquir Immune Defic Syndr* 2009;50:375-380.

Chong CAKY, Li S, Nguyen GC, Sutton A, Levy M, Butler T, Krahn MD, **Thein HH**. Health-state utilities in a prisoner population: a cross-sectional survey. *Health Qual Life Outcomes* 2009;7:78.

Chute R, **Templeton DJ**. Management of abnormal vaginal discharge. *Med Today* 2009;10(4):59-62.

Conway B, Tossonian HK, Raffa JD, Storms M, Duncan F, **Grebely J**. Systematic approach to the treatment of hepatitis C virus infection in injection drug users: where are we now? *Future Virol* 2009;4:411-13 [editorial].

Coupland H, Day C, Levy MT, **Maher L**. Promoting equitable access to hepatitis C treatment for Indo-Chinese injecting drug users. *Health Promot J Austr* 2009;20:234-40.

Crane M, Oliver B, **Matthews G**, Avihingsanon A, Ubolyam S, Markovska S, Chang JJ, **Dore GJ**, Price P, Visvanathan K, French M, Ruxrungtham K, Lewin SR. Immunopathogenesis of hepatic flare in HIV-Hepatitis B Virus (HBV) coinfecting individuals after the initiation of HBV-active antiretroviral therapy. *J Infect Dis* 2009;199:974-981.

D

Dandri M, Petersen J, **Murray JM**. Reply: Hepatitis B virus clearance rate estimates. *Hepatology* 2009;49(5): 1780-1781 [letter]

Descamps D, Chazallon C, Loveday C, Bacheler L, Goodall R, Yéni P, **Cooper DA**, Babiker A, Aboulker J-P, Brun-Vézinet F on behalf of the INITIO Trial International Coordinating Committee. Resistance and virological response analyses in a three initial treatment strategy trial: A substudy of the INITIO Trial. *HIV Clin Trials* 2009;10:385-393.

Doab A, Day C, **Topp L**, **Dore G**, **Maher L**. Clinical trial literacy among injecting drug users. *Contemp Clin Trials* 2009;30:431-435.

Dunn M, **Topp L**, Degenhardt L. GHB in Sydney, Australia, 2000-2006: A case study of the EDRS as a strategic early warning system. *Int J Drug Policy* 2009;20: 413-417.

Duprez DA, Kuller LH, Tracy R, Otvos J, **Cooper DA**, Hoy J, Neuhaus J, Paton NI, Friis-Moller N, Lampe F, Liappis AP, Neaton JD for the INSIGHT SMART Study Group (**Emery S** Executive Committee member). Lipoprotein particle subclasses, cardiovascular disease and HIV infection. *Atherosclerosis* 2009;524-529.

Dwyer R, **Topp L**, **Maher L**, Power R, Hellard M, Walsh N, **Jauncey M**, Conroy 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 Alcohol Depend* 2009;100(1-2): 9-16.

E

Egger S, **Petoumenos K**, **Kamarulzaman A**, Hoy J, Sungkanuparph S, Chuah J, **Falster K**, **Zhou J**, **Law MG** on behalf of the Asia Pacific HIV Observational Database (APHOD) (**Cooper DA** - TAHOD Steering Committee member). Long-term patterns in CD4 response are determined by an interaction between baseline CD4 cell count, viral load, and time: The Asia Pacific

HIV Observational Database (APHOD). *J Acquir Immune Defic Syndr* 2009;50:513-520.

Elliott JH, Vohith K, Saramony S, Savuth C, Dara C, Sarim C, **Huffam S**, Oelrichs R, Sophea P, Saphonn V, **Kaldor J**, **Cooper DA**, Chhi Yun M, French M. Immunopathogenesis and diagnosis of tuberculosis and tuberculosis-associated immune reconstitution inflammatory syndrome during early antiretroviral therapy. *J Infect Dis* 2009;200:1736-1745
Emery S (editor), *Curr Opin HIV AIDS*, May 2009; 4(3).

Emery S, Winston A. Raltegravir: a new choice in HIV and new chances for research. *Lancet* 2009;374:764-5 [comment]

F

Fairley CK, Hocking JS, Gurrin LC, Chen MY, **Donovan B**, Bradshaw CS. Rapid decline in presentations of genital warts after the implementation of a national quadrivalent human papillomavirus vaccination programme for young women. *Sex Transm Infect* 2009;85:499-502.

Falster K, Choi JY, **Donovan B**, **Duncombe C**, Mulhall B, Sowden D, **Zhou J**, **Law MG** on behalf of the Australian HIV Observational Database, the TREAT Asia HIV Observational Database. AIDS-related and non-AIDS-related mortality in the Asia-Pacific region in the era of combination antiretroviral treatment. *AIDS* 2009;23:2323-2336.

Falster K, **Kaldor JM**, **Maher L** on behalf of the collaboration of Australian Needle and Syringe Programs. Hepatitis C virus acquisition among injecting drug users: a cohort analysis of a national repeated cross-sectional survey of needle and syringe program attendees in Australia, 1995-2004. *J Urban Health* 2009, 86: 106-118.

Falster K, **Petoumenos K**, **Chuah J**, Mijch A, Mulhall B, Kelly M, **Cooper DA** on behalf of the Australian HIV Observational Database. Poor baseline immune function predicts an incomplete immune response to combination antiretroviral treatment despite sustained viral suppression. *J Acquir Immune Defic Syndr* 2009;50:307-313.

G

Gidding H, **Topp L**, **Middleton M**, Robinson K, Hellard M, McCaughan G, **Maher L**, **Kaldor J**, **Dore G**, **Law M**. The epidemiology of hepatitis C in Australia: notifications, treatment uptake and liver transplantations, 199 -2006. *J Gastroenterol Hepatol* 2009;24:1648-1654.

Gidding HF, Wallace C, Lawrence GL, McIntyre PB. Australia's national Q fever vaccination

program. *Vaccine* 2009;27:2037-41.

Gray RT, Beagley KW, Timms P, **Wilson DP**. Modeling the Impact of Potential Vaccines on Sexually Transmitted Chlamydia Epidemics. *J Infect Dis* 2009;199:1680-1688.

Gray RT, Fung CKC, Robinson PA. Stability of small world brain networks. *Neurocomputing* 2009;1556-1574.

Gray RT, **Heymer KJ**, **Hoare A**, **Kwon JA**, **Thein HH**, Lote N, Siba P, Saramony S, Saphonn V, Worth H, **Kaldor JM**, **Wilson DP**. What impact might the economic crisis have on HIV epidemics in Southeast Asia? *Curr HIV Res* 2009;7:656-665.

Gray RT, Robinson PA. Stability and structural constraints of random brain networks with excitatory and inhibitory neural populations. *J Comput Neurosci* 2009;27:81-101.

Gray RT, Robinson PA. Stability of random brain networks with excitatory and inhibitory connections. *Neurocomputing* 2009;1849-1858.

Grebely J, Raffa JD, Lai C, Kraiden M, Kerr T, Fischer B, Tyndall MW. Low uptake of treatment for hepatitis C virus infection in a large community-based study of inner city residents. *J Viral Hepat* 2009;16, 352-358.

Grebely J, Thomas DL, **Dore GJ**. HCV reinfection studies and the door to vaccine development. *J Hepatology* 2009;51: 628-631. [invited editorial]

Grulich AE. Cancer: the effects of HIV and anti-retroviral therapy, and implications for early antiretroviral therapy initiation. *Curr Opin HIV AIDS* 2009;4:183-187.

Grulich AE. Living longer with HIV: what does it mean for cancer risk? *Curr Opin HIV AIDS* 2009;4:1-2. [editorial]

Grund B, Peng G, Gilbert CL, **Hoy JF**, Isaksson RL, Shlay JC, Martinez E, Reiss P, Visnegarwala F, Carr AD for the INSIGHT SMART Study Group (**Emery S** Executive Committee member). Continuous antiretroviral therapy decreases bone mineral density: a SMART substudy. *AIDS* 2009;23:1519-1529.

Guinot D, Ho MT, **Poynten IM**, McAllister J, Pierce A, Pell C, **Grulich AE**. Cost-effectiveness of HIV non-occupational post exposure prophylaxis in Australia. *HIV Med* 2009;10:199-208.

Guy R, Gold J, García Calleja JM, Kim A, Parekh B, Busch M, Rehle T, Hargrove J, Remis RS, **Kaldor J** on behalf of the WHO Working Group on HIV Incidence Assays. The accuracy of serological assays for detecting recently acquired HIV infection and estimating population incidence: A systematic review. *Lancet Infectious Diseases* 2009;9(12):747-759.

Guy R, Goller J, Leslie D, Thorpe R, Grierson J, Batrouney C, Kennedy M, Lewis J, Fairley C, Ginige S, **Zablotska I**, Hellard M. No increase in HIV or STI testing following a social marketing campaign among men who have sex with men in Australia. *J Epidemiology and Community Health* 2009; 63:391-396.

Guy RJ, Prybylski D, Fairley CK, Hellard ME, **Kaldor JM**. Can data from HIV voluntary counselling and testing be used to assess the impact of public health interventions? A literature review. *Int J STD AIDS* 2009;20:378-383.

H

Haylen BT, Yang V, Logan V, Husselbee S, **Law M**, **Zhou J**. Does the presenting bladder volume at urodynamics have any diagnostic relevance? *Int Urogynecol J Pelvic Floor Dysfunct* 2009 Mar;20:319-24.

Hemachandra A, **Duncombe C**. New antiretroviral therapy and its role in HIV treatment in Asia. *Asian Biomedicine* 2009;3:63-71.

Heyward AE, **Gidding HF**, Riddell MA, McIntyre PB, MacIntyre CR, Kelly HA. Elimination of endemic measles transmission in Australia. *Bull World Health Organ* 2009;87:64-71.

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. *Int J Drug Policy* 2009;20(4):340-346.

Higgs P, Jordens J, **Maher L**, Dunlop A. Vietnamese-Australian heroin users' perspectives on the role of the family in drug treatment, Melbourne Australia. *Drugs: Education, Prevention and Policy* 2009;16(5): 409-421.

Higgs P, Yohannes K, Hellard M, **Maher L**. Factors influencing a self-limiting HIV outbreak among ethnic Vietnamese injecting drug users in Melbourne, Australia. *Qualitative Health Research* 2009;19(12): 1690-1701.

Horyniak D, **Higgs P**, Winter R, Lewis J, Dietze P, Aitken C. An evaluation of a heroin overdose prevention and education campaign. *Drug Alcohol Rev* 2009;29:5-11.

Horyniak D, Stooé M, Yohannes K, Breschkin A, Carter T, Hatch B, Tomnay J, Hellard M, **Guy R**. The impact of immigration on the burden of HIV infection in Victoria, Australia. *Sex Health* 2009;6:123-8.

Hurley M, **Prestage GP**. Intensive sex partying amongst gay men in Sydney. *Cult Health Sex* 2009;11(6):597-610.

I

INSIGHT-ESPRIT Study Group, SILCAAT Scientific Committee (Writing group: Abrams D, Lévy Y, Losso MH, Babiker A, Darbyshire J, Phillips A, Collins G, Neaton JD, Wentworth D, **Cooper DA**, **Emery S**, Fox L, Lane HC, Gordin F, Lundgren JD, Mitsuyasu R, Routy JP, Tambussi G). Interleukin-2 therapy in patients with HIV infection. *N Engl J Med* 2009;361:1548-1559.

J

John-Stewart GC, Mbori-Ngacha D, Payne BL, Farquhar C, Richardson BA, **Emery S**, Otieno P, Obimbo E, Dong T, Slyker J, Nduati R, Overbaugh J, Rowland-Jones S. HIV-1-specific cytotoxic T lymphocytes and breast milk HIV-1 transmission. *J Infect Dis* 2009;199:889-98.

Jin F, Crawford J, **Prestage GP**, **Zablotska I**, Imrie JC, Kippax SC, **Kaldor JM**, **Gulich AE**. Unprotected anal intercourse, risk reduction behaviours, and subsequent HIV infection in a cohort of homosexual men. *AIDS*. 2009;23: 243-252.

Jin F, **Prestage GP**, Imrie J, Kippax SC, **Donovan B**, **Templeton DJ**, Cunningham A, Mindel A, Cunningham PH, **Kaldor JM**, **Gulich AE**. Anal sexually transmitted infections and risk of HIV infection in homosexual men. *J Acquir Immune Defic Syndr* 2009;53:144-149.

Jin F, **Prestage GP**, **Zablotska I**, Rawstorne P, Imrie J, Kippax SC, **Donovan B**, **Templeton DJ**, **Kaldor JM**, **Gulich AE**. High incidence of syphilis in HIV positive homosexual men: Data from two community-based cohort studies. *Sex Health* 2009;6:281-284

K

Kaldor JM, Delpech V, **Guy RJ**. AIDS case reporting: Do we still need it? *Lancet*, 2009; 373:181-3.

Kerr S, Phanuphak P. As Asian perspective on HIV/AIDS. *Asian Biomedicine* 2009;3(1):9-14.

Klug GM, **Wand H**, Boyd A, **Law M**, Whyte S, **Kaldor J**, Masters CL, Collins S. Enhanced geographically restricted surveillance simulates sporadic Creutzfeldt-Jakob disease cluster. *Brain* 2009;132:493-501.

Koelsch KK, **Cooper DA**. Integrase inhibitors in salvage therapy for HIV-1 infection. *Curr Opin HIV AIDS* 2009;4:518-523.

Kwon JA, **Iversen J**, **Maher L**, **Law MG**, **Wilson DP**. The impact of needle and syringe programs on HIV and HCV transmissions in injecting drug users in Australia: a model-based analysis. *J Acquir Immune Defic Syndr* 2009;51:462-469.

L

Lan Q, Morton LM, Armstrong B, Hartge P, Menashe I, Zheng T, Purdue MP, Cerhan JR, Zhang Y, **Gulich A**, Cozen W, Yeager M, Holford TR, Vajdic CM, Schenk M, Leaderer B, Krickler A, Severson RK, Zahm SH, Chatterjee N, Chanock SJ, Rothman N, Wang SS. Genetic variation in caspase genes and risk of non-Hodgkin lymphoma: A pooled analysis of three population-based case-control studies. *Blood*. 2009;114:264-7.

Land S, Cunningham P, **Zhou J**, Frost K, Katzenstein D, Kantor R, Chen Y-MA, Oka S, DeLong A, Sayer D, Smith J, Dax EM, **Law M** on behalf of the TAQAS Laboratory Network. TREAT Asia Quality Assessment Scheme (TAQAS) to standardise the outcome of HIV genotypic resistance testing in a group of Asian laboratories. *J Virol Methods* 2009;159:185-193.

Law M. AIDS-related and non-AIDS-related mortality in the Asia Pacific region in the era of combination antiretroviral treatment. *AIDS* 2009;23:2323-2336.

Lay MDH, **Zhang L**, Ribeiro RM, Mueller SN, Belz GT, Davenport MP. Kinetics of major histocompatibility class I antigen presentation in acute infection. *J Immunol* 2009;182: 902-911.

Lemoh C, **Guy R**, Yohannes K, Lewis J, Street A, Biggs B, Hellard M. Delayed diagnosis of HIV infection in Victoria 1994 to 2006. *Sex Health* 2009;6(2) 117-122.

Leung KC, Xu A, Craig ME, **Martin A**, Lam KSL, O'Sullivan AJ. Adiponectin isoform distribution in women - relationship to female sex steroids and insulin sensitivity. *Metabolism Clinical and Experimental* 2009;58:239-245.

Lewin SR, Ribeiro RM, Avihingsanon A, Bowden S, **Matthews G**, **Marks P**, Locarnini SA, Ruxrungham K, Perelson AS, **Dore GJ**. Viral dynamics of hepatitis B virus DNA in human immunodeficiency virus-1-hepatitis B virus coinfecting individuals: similar effectiveness of lamivudine, tenofovir, or combination therapy. *Hepatology* 2009;49:1113-1121.

M

Maher L, Ho H. Overdose beliefs and management practices among ethnic Vietnamese heroin users in Sydney, Australia. *Harm Reduct J* 2009;6:doi:10.1186/1477-7517-6-6.

Maher L, **Iversen J**. Syringe exchange in the United States: Doing the simple things better? *Addiction* 2009;104(9):1448-1450

Mallet DG, **Heymer KJ**, Rank RG, **Wilson DP**. Chlamydial infection and spatial ascension of the female genital tract: a novel hybrid cellular automata and continuum mathematical model. *FEMS*

Immunology & Medical Microbiology 2009; 57:173-182.

Martin A, Bloch M, **Amin J**, Baker D, **Cooper DA**, **Emery S**, Carr A. Simplification of antiretroviral therapy with tenofovir-emtricitabine or abacavir-lamivudine: a randomized, 96-week trial. *Clin Infect Dis* 2009;49:1591-1601.

Martin A, **Emery S**. Metabolic disorders and cardiovascular consequences of HIV infection and antiretroviral therapy. *Expert Rev Clin Pharmacol* 2009;2(4):381-390.

Matthews GV, **Dore GJ**. HIV and hepatitis C coinfection. *Asian Biomedicine* 2009;3:29-37.

Matthews GV, Hellard M, **Dore GJ** for the Australian Trial in Acute hepatitis C Study. 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. *Clin Infect Dis* 2009;49:319 (letter).

Matthews GV, Hellard M, Haber P, **Yeung B**, **Marks P**, Baker D, McCaughan G, Sasadeusz J, White P, Rawlinson W, Lloyd A, **Kaldor J**, **Dore GJ** for the ATAC Study Group. Characteristics and treatment outcomes among HIV-infected individuals in the Australian Trial in Acute Hepatitis C. *Clin Infect Dis* 2009; 48:650-658.

Matthews GV, Seaberg E, **Dore GJ**, Bowden S, Lewin SR, Sasadeusz J, **Marks P**, Goodman Z, Philp FH, Tang Y, Locarnini S, Thio CL. Combination HBV therapy is linked to greater HBV DNA suppression in a cohort of lamivudine experienced HIV/HBV coinfecting individuals. *AIDS* 2009, 23:1707-15.

Matthews PC, Leslie AJ, Katzourakis A, Crawford H, Payne R, Prendergast A, Power K, **Kelleher AD**, Klenerman P, Carlson J, Heckerman D, Ndung'u T, Walker BD, Allen TM, Pybus OG, Goulder PJ. HLA Footprints on HIV-1 are Associated with Inter-Clade Polymorphisms and Intra-Clade Phylogenetic Clustering. *J Virol* 2009;83(9):4605-15.

Mattick RP, Breen C, **Kimber J**, Davoli M. Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database Systematic Review* 2009;8(3):CD002209.

McDonald AM, Zurynski YA, **Wand HC**, Giles ML, Elliott EJ, **Ziegler JB**, **Kaldor JM**. Perinatal exposure to HIV among children born in Australia, 1982-2006. *Med J Aust* 2009;190:416-420.

McInnes D, **Bradley J**, **Prestage GP**. The discourse of gay men's group sex: Masculinity. *Cult Health Sex* 2009, *Culture, Health and Sexuality* 11(6):641-54.

McIntyre GJ, Yu YH, Tran A, Jaramillo A, Arndt A, Millington M, **Boyd M**, Elliott F, Shen S, **Murray J**, **Applegate T**. Cassette deletion in multiple shRNA lentiviral vectors for HIV-1 and its impact on treatment success. *Virology Journal* 2009;6:184.

McIntyre G, Groneman J, Yu Y, Jaramillo A, Shen S, **Applegate T**. 96 shRNA designed for maximal coverage of HIV-1 variants. *Retrovirology* 2009;6(55).

Millington M, **Boyd M**, Arndt A, **Applegate T**, Shen S. Towards developing clinically relevant CD34+ gene therapeutic culture conditions. *PLoS One* 2009;4(7):e6461.

Mitsuyasu RT, Merigan TC, Carr A, Zack JA, Winters MA, Workman C, Block M, Lalezari J, Becker S, Thornton L, Akil B, Khanlou H, Finlayson R, McFarlane R, Smith DE, Garsia R, Ma D, **Law M**, **Murray JM**, von Kalle C, Ely JA, Patino SM, Knop AE, Wong P, Todd AV, Haughton M, Furey C, Macpherson JL, Symonds GP, Evans LA, Pond SM, **Cooper DA**. Phase 2 gene therapy trial of an anti-HIV ribozyme in autologous CD34+ cells. *Nat Med* 2009;15:285-292.

Mocroft A, Wyatt C, Szczech L, Neuhaus J, El-Sadr W, Tracy R, Kuller L, Shlipak M, Angus B, Klinker H, Ross M for the SMART study group (**Emery S** Executive Committee member). Interruption of antiretroviral therapy is associated with increased plasma cystatin C. *AIDS* 2009;23:71-82.

Mooney-Somers J, Erick W, Scott R, Akee A, **Kaldor J**, **Maher L** on behalf of the Indigenous Resiliency Project. Enhancing Aboriginal and Torres Strait Islander young people's resilience to blood borne and sexually transmitted infections: Findings from a community-based participatory research project. *Health Promot J Austr* 2009;20:195-201.

Mooney-Somers J, **Maher L**. The Indigenous Resiliency Project: a worked example of community-based participatory research. *NSW Public Health Bulletin* 2009;20:112-118.

Moore D, Green R, Hudson S, Jenkinson R, Siokou C, Dray A, Bammer G, Perez P, **Maher L**, Dietze P. Extending drug ethnology using agent-based modelling. *Addiction* 2009;104(12): 1991-1997.

Morton LM, Purdue MP, Zheng T, Wang SS, Armstrong B, Zhang Y, Menashe I, Chatterjee N, Davis S, Lan Q, Vajdic CM, Severson RK, Holford TR, Kricker A, Cerhan JR, Leaderer B, **Grulich A**, Yeager M, Cozen W, Zahm SH, Chanock SJ, Rothman N, Hartge P. Risk of non-Hodgkin lymphoma associated with germline variation in genes that regulate the cell cycle, apoptosis, and lymphocyte development. *Cancer Epidemiol Biomarkers Prev* 2009;18:1259-1270.

Munier CM-L, **Zaunders JJ**, **Ip S**, **Cooper DA**, **Kelleher AD**. A culture amplified multi-parametric intracellular cytokine assay (CAMP-ICC) for enhanced detection of antigen specific T-cell responses. *J Immunol Methods* 2009;30; 345:1-16.

Murray JM, Fanning GC, Macpherson JL, Evans LA, Pond SM, Symonds GP. Mathematical modelling of the impact of haematopoietic stem cell-delivered gene therapy for HIV. *The Journal of Gene Medicine*. 2009;11:1077-1086.

Murray JM, **McDonald AM**, **Law MG**. Rapidly ageing HIV epidemic among men who have sex with men in Australia. *Sexual Health* 2009;6:83-86.

Nakhaee F, Black D, **Wand H**, **McDonald A**, **Law M**. Changes in mortality following HIV and AIDS and estimation of the number of people living with diagnosed HIV/AIDS in Australia, 1981-2003. *Sex Health* 2009;6:129-134.

N

National Centre in HIV Epidemiology and Clinical Research. Australian HIV Observational Database Annual Report. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney NSW. Volume 9, Number 1: November 2009

Ngo DA, Schmidt L, **Higgs P**, Fischer A. Qualitative evaluation of a peer-based needle and syringe program in Vietnam. *Int J Drug Policy* 2009;20: 179-182.

Nguyen VT-T, **Amin J**, **Law MG**, **Dore GJ**. Predictors and survival in hepatitis B-related hepatocellular carcinoma in New South Wales, Australia. *J Gastroenterol Hepatol* 2009;24:436-442.

Nguyen VT-T, **Law MG**, **Dore GJ**. Hepatitis B-related hepatocellular carcinoma: epidemiological characteristics and disease burden. *J Viral Hepat* 2009;16:453-463.

O

Obimbo EM, Wamalwa D, Richardson B, Mbori-Ngacha D, Overbaugh J, **Emery S**, Otieno P, Farquhar C, Bosire R, Payne BL, John-Stewart G. Pediatric HIV-1 in Kenya: pattern and correlates of viral load and association with mortality. *J Acquir Immune Defic Syndr* 2009;51:209-15.

O'Connor MB, O'Connor C, Saunders JA, Sheehan C, Murphy E, Horgan M, Carr A, **Cooper DA**. HIV positive: who do they tell? *Int J STD AIDS* 2009;20:517.

P

- Pett SL**, McCarthy M, **Cooper DA**, MacRae K, Tendolkar A, Norris R, Tseng J, Williams KM, **Emery S**. A phase 1 study to explore the activity and safety of SCH 532076, a small molecule chemokine receptor-5 antagonist in HIV type-1-infected patients. *Antivir Ther* 2009;14:111-115.
- Pett SL**. Immunotherapies in HIV-1 infection. Review. *Curr Opin HIV AIDS* 2009; May;4(3):188-93.
- Phanuphak P, Lange J, **Cooper D**. HIV in Asia: the way forward. *Asian Biomedicine* 2009;1:3-7.
- Phillips AN, **Emery S**. Predicting the potential benefits of early initiation of ART: time to do a trial to find out. *Curr Opin HIV AIDS* 2009; 4(3): 165-6.
- Pourfazi F, Whelan A, **Kaldor J**. The role of diet and other environmental factors in the causation of gastric cancer in Iran; a population based study. *Int J Cancer* 2009;125(8):1953-60.
- Poynten IM**, Jin F, Mao L, **Prestage GP**, Kippax SC, **Kaldor JM**, Imrie J, **Grulich AE**. Non-occupational post-exposure prophylaxis, subsequent risk behaviour and HIV incidence in a cohort of Australian homosexual men. *AIDS* 2009;23:1119-26.
- Poynten IM**, Millwood IY, **Falster M**, **Law M**, Andresen, D, Van Damme L, **Kaldor J**. The safety of candidate vaginal microbicides since N-9: A systematic review of published studies. *AIDS* 2009; 23:1245-1254.
- Prestage G**, Grierson J, **Bradley J**, Hurley M, Hudson J. The role of drugs during group sex among gay men in Australia. *Sex Health* 2009;6:310-317.
- Prestage G**, Jin F, Kippax S, **Zablotska I**, Imrie J, **Grulich A**. Use of illicit drugs and erectile dysfunction medications and subsequent HIV infection among gay men in Sydney, Australia. *J Sex Med* 2009;6:2311-20.
- Prestage G**, Kippax S, Jin F, Frankland A, Imrie J, **Grulich A**, **Zablotska I**. Does age affect sexual behaviour among gay men in Sydney, Melbourne and Brisbane, Australia? *AIDS Care*. 2009;21:1098-1105.
- Prestage G**, Mao L, Kippax S, Jin F, Hurley M, **Grulich A**, Imrie J, **Kaldor J**, **Zablotska I**. Use of Viral Load to Negotiate Condom Use Among Gay Men in Sydney, Australia. *AIDS Behav* 2009;13:645-51.
- Prestage GP**, Hudson J, **Bradley J**, Corrigan N, Martin P, **Grulich A**, McInnes D. Testing for HIV and sexually transmissible infections within a mainly online sample of gay men who engage in group sex. *Sex Transm Infect* 2009;85:70-74.
- Prestage GP**, Hudson J, **Down I**, **Bradley J**, Corrigan N, Hurley M, **Grulich AE**, McInnes D. Gay men who engage in group sex are at increased risk of HIV infection and onward transmission. *AIDS Behav* 2009;13:724-730.
- Prestage GP**, Hudson J, **Down I**, **Bradley J**, Corrigan N, Hurley M, **Grulich AE**, McInnes D. Gay men who engage in group sex are at increased risk of HIV infection and onward transmission. *AIDS Behav* 2009,13(4):724-30
- Prestage GP**, Hudson J, **Jin F**, Corrigan N, Martin P, **Grulich AE**, McInnes D. Testing for HIV and sexually transmissible infections within a mainly online sample of gay men who engage in group sex. *Sex Transm Infect* 2009;85:70-74.
- Prestage GP**. Using drugs for sex: playing with risk? *Sex Health* 2009;6:175-77 (invited editorial).
- Purdue MP, Lan Q, Wang SS, Kricker A, Menashe I, Zheng T, Hartge P, **Grulich AE**, Zhang Y, Morton LM, Vajdic C, Holford TR, Severson RK, Leaderer B, Cerhan JR, Yeager M, Cozen W, Jacobs K, Davis S, Rothman N, Chanock SJ, Chatterjee N, Armstrong BK. A pooled investigation of toll-like receptor gene variants and risk of Non-Hodgkin Lymphoma. *Carcinogenesis* 2009;30:275-281.
- Puthanaki T, **Kerr SJ**, Ananworanich J, Bunupuradah T, Boonrak P, Sirisanthana V. Immunological recovery in children starting NNRTI-based highly active antiretroviral therapy in a resource limited setting. *Pediatr Infect Dis J* 2009;28(6):488-492.
- McCaughan GW, Sievert W, Cheng WS, Rawlinson W, Desmond PV, **Marks PS**, Yoshihara M, Rizkalla B, DePamphilis JK, **Dore GD** for the Chariot Study Group. Impact of High-Dose Peginterferon Alpha-2A on Virological Response Rates in Patients with Hepatitis C Genotype 1: a Randomized Controlled Trial. *Hepatology* 2009;50(4):1045-55.
- Robinson PA, Henderson JA, Matar E, Riley P, **Gray RT**. Dynamical Reconnection and Stability Constraints on Cortical Network Architecture. *Physical Review Letters* 103 (2009) 108104/1-4.
- Robotin MC, Kansil M, Howard K, George J, Tipper S, **Dore GJ**, Levy M, Penman AG. Antiviral therapy for hepatitis B-related liver cancer prevention is more cost-effective than cancer screening. *J Hepatol* 2009;50:990-998.
- Rodger AJ, Fox Z, Lundgren JD, Kuller LH, **Boesecke C**, Gey D, Skoutelis A, Goetz MD, Phillips AN for the INSIGHT Strategies for Management of Antiretroviral Therapy (SMART) Study Group (**Cooper DA** – member), Sydney International Coordinating Centre. Activation and coagulation biomarkers are independent predictors of the development of opportunistic disease in patients with HIV infection. *J Infect Dis* 2009;200:973-983
- Rosenthal S, Holmes W, **Maher L**. Australian men's experiences during a microbicide male tolerance study. *AIDS Care* 2009;21(1):125-130.
- Ryder N, **Donovan B**. The management and prevention of recurrent genital herpes (invited review). *Med Today* 2009; 10(6):71-74.
- Ryder N, Jin F, McNulty AM, **Grulich AE**, **Donovan B**. Increasing role of herpes simplex virus type-1 in first episode anogenital herpes in heterosexual women and younger men who have sex with men, 1992-2006. *Sex Transm Inf* 2009;85:416-9.

Q

Quinn HE, McIntyre PB, Backhouse JL, **Gidding HF**, Brotherton J, Gilbert GL. The utility of seroepidemiology for tracking trends in pertussis infection. *Epidemiol Infect* 2009;138:426-433.

R

- Razali K, **Amin J**, **Dore GJ**, **Law MG** on behalf of the HCV Projections Working Group. Modelling and calibration of the hepatitis C epidemic in Australia. *Stat Methods Med Res* 2009;18:253-270.
- Read TRH, **Carey D**, Mallon P, Mijch A, Goodall R, Hudson F, **Wand H**, **Emery S**. Efavirenz plasma concentrations did not predict cessation of therapy due to neuropsychiatric symptoms in a large randomized trial. *AIDS* 2009;23:2222-2223.
- Regan DG**, Hocking JS, **Wilson DP**. Reply to Low et al: Use of mathematical modeling to inform chlamydia screening policy decisions. *J Infect Dis* 2009;199:768-769 (letter).
- Roberts SK, Weltman MD, Crawford DHG, Salmon AM, Dwyer R, **Jauncey M**, van Beek I, **Topp L**, **Maher L**. Injecting related injury and disease among clients of a Supervised Injecting Facility. *Drug Alcohol Depend* 2009;101:132-136.
- Salmon AM**, van Beek I, **Amin J**, **Grulich A**, **Maher L**. High HIV testing and low HIV prevalence among injecting drug users attending the Sydney Medically Supervised Injecting Centre (MSIC). *Aust NZ J Pub Health* 2009;33:280-3.
- Samaras K, **Wand H**, **Law M**, **Emery S**, **Cooper DA**, Carr A. Dietary intake in HIV-infected men with lipodystrophy: relationships with body composition,

S

visceral fat, lipid, glucose and adipokines metabolism. *Curr HIV Res* 2009;7:454-461.

Schneidewind A, Brumme ZL, Brumme CJ, Power KA, Reyor LL, O'Sullivan K, Gladden A, Hempel U, Kuntzen T, Wang YE, Oniangue-Ndza C, Jessen H, Markowitz M, Rosenberg ES, Sekaly RP, **Kelleher AD**, Walker BD, Allen TM. Transmission and Long-term Stability of Compensated CD8 Escape Mutations. *J Virol* 2009;83(8):3993-7.

Seddiki N, Sasson SC, Santner-Nanan B, **Munier ML, van Bockel D, Ip S, Marriott D, Pett S**, Nanan R, **Cooper DA, Zaunders JJ, Kelleher AD**. Proliferation of weakly suppressive regulatory CD4(+) T cells is associated with over-active CD4(+) T-cell responses in HIV-positive patients with mycobacterial immune restoration disease. *Eur J Immunol* 2009;39:391-403.

Srasuebku P, Lim PL, Lee MP, Kumarasamy N, **Zhou J**, Sirisanthana T, Li PCK, Kamarulzaman A, Oka S, Phanupak P, Vonthanak S, Merati TP, Chen Y-MA, Sungkanuparph S, Tau G, Zhang F, Lee CKC, Ditangco R, Pujari S, Choi JY, Smith J, **Law MG**. Short-term clinical disease progression in HIV-infected patients receiving combination antiretroviral therapy: results from the TREAT Asia HIV Observational Database. *Clin Infect Dis* 2009;48:940-50.

Srasuebku P, Sungkanuparph S, Lim PL, **Law MG** on behalf of the Therapeutics Research Education, and AIDS Training in Asia (TREAT Asia) Observational Database. Reply to DiNubile. *Clin Infect Dis* 2009;49:811-2 [letter]

Stewart J, Vajdic C, **van Leeuwen M, Amin J**, Webster A, Chapman J, McDonald S, **Gulich A**, McCredie M. The pattern of excess cancer in dialysis and transplantation. *Nephrol Dial Transplant*. 2009;24(10):3225-31.

Streeck H, Jolin JS, Qi J, Yassine-Dia B, Johnson RC, Kwon DS, Addo MM, Brumme C, Routy JP, Little S, Jessen HK, **Kelleher AD**, Hecht FM, Sekaly RP, Rosenberg SE, Walker BD, Carrington M, Altfeld M. HIV-1-specific CD8+ T cell responses during primary infection are major determinants of the viral set point and loss of CD4+ T cells. *J Virol* 2009;83(15):7641-8.

Sullivan PS, Hamouda O, Delpech V, Geduld JE, Prejean J, Semaille C, Kaldor J, Folch C, Op de Coul E, Marcus E, Hughes G, Archibald CP, Cazein F, **McDonald A**, Casabona J, van Sighem A, Fenton KA and the Annceny MSM Epidemiology Study Group. Re-emergence of the HIV epidemic among men who have sex with men in North America, Western Europe, and Australia, 1996 - 2005. *Ann Epidemiol* 2009;19:423-431.

Suppiah V, Moldovan M, Ahlenstiel G, Berg T, Weltman M, Abate ML, Bassendine M, Spengler U, **Dore GJ**, Powell E, Riordan S, Sheridan D, Fragomeli V, Müller T, Bahlo M, Stewart GJ, Booth DR, George J for the Hepatitis C Study. IL28B is associated with response to chronic hepatitis C interferon-alpha and ribavirin therapy. *Nat Genet* 2009;41:1100-1104.

Suzuki K, **Kelleher AD**. Transcriptional regulation by promoter targeted RNAs. *Current topics in Medicinal Chemistry* 2009;9(12):1079-87.

Swaminathan S, Zaunders J, Wilkinson J, Suzuki K, **Kelleher AD**. Does the presence of anti-HIV miRNAs in monocytes explain their resistance to HIV-1 infection? [letter] *Blood* 2009;14:113(20):5029-30; [author reply 5030-1].

T

Tabrizi SN, Stevens MO, **van Leeuwen MT**, Vajdic CM, Botes LP, Medley G, Hillman R, **Gulich A**, Garland SM. Effect of ThinPrep preparation on human papillomavirus detection and genotyping in rectal samples by polymerase chain reaction. *J Clin Microbiol* 2009;47:227-229.

Tan C, Hsia RC, Shou H, Haggerty C, Gaydos C, Dean D, Scurlock A, **Wilson DP**, Bavoil PM. Chlamydia-trachomatis-infected patients display variable antibody profiles against the nine-member polymorphic membrane protein family. *Infect Immun* 2009;77:3218-3226.

Templeton DJ. Post-exposure prophylaxis following sexual exposures. *Medicine Today* 2009;10(10):67-71.

Templeton DJ, Jin F, Mao L, **Prestage GP, Donovan B**, Imrie J, Kippax S, **Kaldor JM, Gulich AE**. Circumcision and risk of HIV in Australian homosexual men. *AIDS*. 2009;23:2347-51

Templeton DJ, Jin F, Prestage GP, Donovan B, Imrie JCG, Kippax SC, **Cunningham PH, Kaldor JM**, Mindel A, Cunningham AL, **Gulich A**. Circumcision and risk of sexually transmissible infections in a community-based cohort of HIV-negative homosexual men in Sydney, Australia. *J Infect Dis* 2009; 200:1813-19.

Templeton DJ, Williams A, Healey L, Odell M, Wells D. Male forensic physicians have an important role in sexual assault care. *J Forensic Leg Med* 2009;17:50-52. [letter]

Thein HH, Yi Q Heathcote, Krahn MD. Prognosis of hepatitis C virus-infected Canadian post-transfusion compensation claimant cohort. *J Viral Hepat* 2009;16:802-813.

Topp L, Day C, **Dore G, Maher L**. Poor criterion validity of self-reported hepatitis B infection and vaccination status among injecting drug users: a review. *Drug and Alcohol Review* 2009;28(6): 669-675(7).

Tossonian HK, Raffa JD, **Grebely J**, Rashidi B, Viljoen M, Mead A, Khara M, McLean M, Krishnamurthy A, DeVlaming S, Conway B. Primary drug resistance in chronically infected antiretroviral naive injection drug users. *Int J Infect Dis* 2009;13(5):577-583.

V

Vajdic CM, Falster MO, de Sanjose S, Martínez-Maza O, Becker N, Bracci PM, Melbye M, Ekström Smedby K, Engels EA, Turner J, Vineis P, Seniori Costantini A, Holly EA, Willett E, Spinelli JJ, La Vecchia C, Zheng T, Chiu BCH, Dal Maso L, Cocco P, Maynadié M, Foretova L, Staines A, Brennan P, Davis S, Severson R, Cerhan JR, Breen EC, Birmann B, Cozen W, **Gulich AE**. Atopic disease and risk of non-Hodgkin lymphoma: an InterLymph pooled analysis. *Cancer Res* 2009;69:6482-9.

Vajdic C, **van Leeuwen M, Gulich A**. A role for ageing and HIV infection in HIV-related cancer risk. *AIDS* 2009;23:1183-84.

Vajdic CM, **van Leeuwen MT, Jin F, Prestage G**, Medley G, Hillman RJ, Stevens MP, Botes LP, Tabrizi SN, **Gulich AE**. Anal HPV diversity and co-infection in a community-based sample of MSM. *Sex Transm Inf.* 2009;85:330-5.

Vajdic CM, **van Leeuwen MT**, Webster AC, McCredie MR, Stewart JH, Chapman JR, **Amin J**, McDonald SP, **Gulich AE**. Cutaneous melanoma is related to immune suppression in kidney transplant recipients. *Cancer Epidemiol Biomarkers Prev* 2009 Aug;18(8):2297-2303.

Vajdic CM, **van Leeuwen MT**. Cancer incidence and risk factors after solid organ transplantation. *Int J Cancer* 2009;125(8):1747-54.

Vajdic CM, **van Leeuwen MT**. What types of cancers are associated with immune suppression in HIV? Lessons from solid organ transplant recipient. *Curr Opin HIV AIDS* 2009;4:35-41.

van Albada SJ, **Gray RT**, Drysdale PM, Robinson PA. Mean-field modeling of the basal gangli-thalamocortical system II: Dynamics of Parkinsonian oscillations. *J Theoretical Biology* 257 2009;664-688.

van de Laar T, Pybus O, Bruisten S, Brown D, Nelson M, Bhagani S, Vogel M, Baumgarten A, Chaix M-L, Fisher M, GCetz H, **Matthews GV**, Neifer S, White P, Rawlinson W, Pol S, Rockstroh J, Coutinho R, **Dore GJ**, Dusheiko GM, Danta M.

Evidence of a large, international network of HCV transmission in HIV-positive men who have sex with men. *Gastroenterology* 2009;136:1609-1617.

van der Lugt J, Gorowara M, Avihingsanon A, Burger D, Ananworanich J, Sringam K, **Kerr S**, Wit F, Lange J, Ruxrungtham K. Reducing the boosting dose of ritonavir does not affect saquinavir levels in HIV-infected individuals. *AIDS* 2009;23:1176-1179

van Griensven F, van Wijngaarden JW, Baral S, **Grulich A**. The Global Epidemic of HIV Infection among Men who have Sex with Men. *Curr Opin HIV AIDS* 2009;4:300-307.

van Leeuwen MT, Grulich AG, McDonald SP, McCredie MRE, **Amin J**, Stewart JH, Webster AC, Chapman JR, Vajdic CM. Immunosuppression and other risk factors for lip cancer after kidney transplantation. *Cancer Epidemiol Biomarkers Prev* 2009;18:561-9.

van Leeuwen MT, Grulich AE, Webster AC, McCredie MRE, Stewart JH, McDonald SP, **Amin J, Kaldor JM**, Chapman JR, Vajdic CM. Immunosuppression and other risk factors for early and late non-Hodgkin lymphoma after kidney transplantation. *Blood* 2009;114:630-637.

van Leeuwen MT, Vajdic CM, Middleton MG, McDonald AM, Law M, Kaldor JM, Grulich AE. Continuing declines in some but not all HIV-associated cancers in Australia after widespread use of antiretroviral therapy. *AIDS* 2009;23:2183-90.

W

Wand H, Spiegelman D, **Law MG**, Jalaludin B, **Kaldor JM, Maher L**. Estimating population attributable risk for hepatitis C seroconversion in injecting drug users in Australia: implications for prevention policy and planning. *Addiction* 2009;104:2049-2056.

Wand H, Wilson DP, Yan P, Gonnermann A, **McDonald A, Kaldor J, Law M**. Characterizing trends in HIV infection among men who have sex with men in Australia by birth cohorts: results from a modified back-projection method. *J Int AIDS Soc* 2009;12:19.

Wang D, Larder B, Revell A, Montaner J, Harrigan R, De Wolf F, Lange J, Wegner S, Ruiz L, Pérez-Elías MJ, **Emery S**, Gatell J, D'Arminio Monforte A, Torti C, Zazzi M, Lane C. A comparison of three computational modelling methods for the prediction of virological response to combination HIV therapy. *Artif Intell Med* 2009;47:63-74.

Wang SS, Purdue MP, Cerhan JR, Zheng T, Menashe I, Armstrong BK, Lan Q, Hartge P, Krickler A, Zhang Y, Morton LM, Vajdic CM, Holford TR, Severson RK, **Grulich AE**,

Leaderer BP, Davis S, Cozen W, Yeager M, Chanock SJ, Chatterjee N, Rothman N. Common Genetic Variations in the Tumor Necrosis Factor (TNF) and TNF Receptor Superfamilies and Nuclear Factor Kappa Beta Transcription Factors and Risk of Non-Hodgkin Lymphoma. *PLoS ONE* 2009;4:e5360.

Wang YHJ, **Guy R**, Hellard M. The Victorian hepatitis C education program for GPs. An evaluation. *Aust Fam Physician* 2009 Sep;38:749-52.

Weatherall C, Kelleher AD, Cooper DA. Trials and tribulations of HIV vaccines. *HIV Ther* 2009;3(2):145-160.

WHO, UNAIDS and ANRS Conference Report. Considerations regarding efficacy endpoints in HIV vaccine trials: Executive summary and recommendations of an expert consultation jointly organized by WHO, UNAIDS and ANRS in support of the Global HIV Vaccine Enterprise. (**Cooper DA** Consultation Participant and Meeting Session Chair). *Vaccine* 2009;27:1898-1996.

Wilson DP, Bowlin AK, Bavoil PM, Rank RG. Ocular pathology elicited by Chlamydia and the predictive value of quantitative modelling. *J Infect Dis* 2009, 199:1780-1789.

Wilson DP, Hoare A, Regan DG, Law MG. Importance of promoting HIV testing for preventing secondary transmissions: modelling the Australian HIV epidemic among men who have sex with men. *Sex Health* 2009;6:19-33.

Wilson DP, Whittum-Hudson JA, Timms P, Bavoil PM. Kinematics of intracellular chlamydiae provide evidence for contact-dependent development. *J Bacteriol* 2009;191(18):5734-5742.

Wilson DP. Data are lacking for quantifying HIV transmission risk in the presence of effective antiretroviral therapy. *AIDS* 2009, 23:1431-1433.

Wilson DP. Mathematics is applied by everyone except applied mathematicians. *Appl Math Lett* 2009;22:636-637.

Wilson DP. Modelling based on Australia HIV notifications data suggests homosexual age-mixing is primarily assortative. *J Acquir Immune Defic Syndr* 2009;51:356-360.

Wilson DP. Promoting HIV screening and voluntary counselling and testing as important public health interventions. *International Journal of Infectious Diseases* 2009;13:S15.

Wilson DP. Universal voluntary HIV testing and immediate antiretroviral therapy. *Lancet* 2009;373:1077-1078. [letter]

Wood JG, **Gidding HF**, Heywood A, Macartney K, McIntyre PB, MacIntyre CR. Potential impacts of schedule changes,

waning immunity and vaccine uptake on measles elimination in Australia. *Vaccine* 2009;27:313-318.

Worm SW, De Wit S, Weber R, Sabin CA, Reiss P, El-Sadr W, D'Arminio Monforte A, Kirk O, Fontas E, Dabis F, **Law MG**, Lundgren JD, Friis-Moller N. Diabetes Mellitus pre-existing coronary heart disease, and the risk of subsequent coronary heart disease events in patients infected with Human Immunodeficiency Virus. The Data Collection on Adverse Events of Anti-HIV Drugs (D:A:D Study). *Circulation* 2009;119:805-811.

Worm SW, Sabin CA, Reiss P, El-Sadr W, d'Arminio Monforte A, Pradier C, Thiebaut R, **Law M**, Rickenbach M, de Wit S, Lundgren J, Friis-Moller N. Presence of the Metabolic Syndrome is not a better predictor of cardiovascular disease than the sum of its components in HIV-infected individuals. *Diabetes Care* 2009;32:474-480.

Y

Yamagishi M, Ishida T, Miyake A, **Cooper DA, Kelleher AD**, Suzuki K, Watanabe T. Retroviral delivery of Promoter-targeted shRNA induces long-term silencing of HIV-1 transcription. *Microbes Infect* 2009;11(4):500-508.

Z

Zablotska I, Frankland A, Imrie J, Adam P, Westacott R, Canavan P, **Prestage G**. Current issues in care and support for HIV-positive gay men in Sydney. *Int J STD AIDS* 2009 Sep;20(9):628-33.

Zablotska IB, Crawford J, Imrie J, **Prestage G, Jin F, Grulich A**, Kippax S. Increases in unprotected anal intercourse with serodiscordant casual partners among gay men in Sydney. *AIDS Behav* 2009;13:638-644.

Zablotska IB, Gray RH, Koenig MA, Serwadda D, Nalugoda F, Kigozi G, Sewankambo N, Lutalo T, Wabwire Mangu F, Wawer M. Alcohol use, intimate partner violence, sexual coercion and HIV among women aged 15-24 in Rakai, Uganda. *AIDS Behav* 2009;13:225-233.

Zablotska IB, Imrie J, **Prestage G**, Crawford J, Rawstorne P, **Grulich A, Jin F**, Kippax S. Gay Men's Current Practice of HIV Seroconcordant Unprotected Anal Intercourse: Serosorting or Seroguessing? *AIDS Care* 2009;21:501-510.

Zaunders JJ, Munier ML, Seddiki N, Pett S, Ip S, Bailey M, Xu Y, Brown K, Dyer WB, Kim M, de Rose R, Kent SJ, Jiang L, Breit SN, **Emery S**, Cunningham AL, **Cooper AD, Kelleher AD**. High levels of human antigen-specific CD4+ T cells in peripheral blood

revealed by stimulated co-expression of CD25 and CD134 (OX40). *J Immunol* 2009;183:2827.

Zheng H, Orsini N, **Amin J**, Wolk A, Nguyen VT, Ehrlich F. Quantifying the dose-response of walking in reducing coronary heart disease risk: meta-analysis. *Eur J Epidemiol* 2009;24:181-92.

Zhou J, Elliott J, Li PC, Lim PL, Kiertiburanakul S, Kumarasamy N, Merati TP, Pujari S, Chen YM, Phanuphak P, Vonthanak S, Sirisanthana T, Sungkanuparph S, Lee CK, Kamarulzaman A, Oka S, Zhang F, Tau G, Ditangco R. Risk and prognostic significance of tuberculosis in patients from The TREAT Asia HIV Observational Database. *BMC Infect Dis* 2009;9:46.

2009 E-publications*

Boesecke C, Dore GJ, Cooper DA AIDS: Clinical Manifestations. In: Encyclopedia Of Life Sciences. John Wiley & Sons, Ltd: Chichester <http://www.els.net/> Doi: 10.1002/9780470015902.a0002237.pub2

Boyd MA. Current and future management of treatment failure in low- and middle-income countries. *Curr Opin HIV AIDS* 2009; E-pub ahead of print 3 November 2009.

Bunupuradah T, Suntarattiwong P, Li A, Sirivichayakul S, Pancharoen C, Boonrak P, Puthanakit T, **Kerr SJ**, Ruxrungtham K, Chotpitayasunondh T, Hirschel B, Ananworanich J, on behalf of the HIV-NAT 013 study team. Antiretroviral treatment outcome following genotyping in Thai children who failed dual nucleoside reverse transcriptase inhibitors. *Int J Infectious Dis* 2009;doi:10.1016/j.ijid.2009.05.017

Byakwaga H, Zhou J, Petoumenos K, Law MG, Boyd MA, Emery S, Cooper DA, Mallon PW. Effect of nucleoside reverse transcriptase inhibitors on CD4 T-cell recovery in HIV-1-infected individuals receiving long-term fully suppressive combination antiretroviral therapy. *HIV Medicine* 2009; published online: Dec 22 2008.

Campillo-Gimenez L, Cumont MC, Fay M, Kared H, Monceaux V, Diop O, Müller-Trutwin M, Hurtrel B, Lévy Y, **Zaunders J**, Dy M, Leite-de-Moraes MC, Elbim C, Estaquier J. AIDS progression is associated with the emergence of IL-17 producing NKT cells early after SIV infection. *J Immunol* 2009;Epub 2009 Dec 16.

Campillo-Gimenez L, Laforge M, Fay M, Brusse A, Cumont MC, Monceaux V, Diop O, Lévy Y, Hurtrel B, **Zaunders J**, Corbeil J, Elbim C, and Estaquier J. Non pathogenesis of SIV infection is associated with reduced

inflammatory response and recruitment of plasmacytoid dendritic cells to lymph nodes during the acute phase. *J Virol* 2009; Epub 2009 Nov 25.

Fairley CK, Hocking J, Gurrin LC, Chen MY, **Donovan B**, Bradshaw C. Rapid decline in presentations for genital warts after the implementation of a national quadrivalent human papillomavirus vaccination program for young women. *Sex Transm Infect* 2009;doi:10.1136/sti.2009.037788

Gray RT, Wilson DP. Anal sex need not be highly prevalent to affect HIV incidence among heterosexual populations. STI Online, October 2009. <http://sti.bmj.com/cgi/eletters/85/6/411#987>.

Grebely J, Matthews G, Petoumenos K, Dore G. Spontaneous clearance and the beneficial impact of treatment on clearance during recent hepatitis C virus infection. [Letter.] *J Viral Hepatitis* 2009 Dec. DOI 10.1111/j.1365-2893.2009.01256.

Hamilton A, **Kelleher A**, Marriott D. Unusual association of diseases/symptoms: A case of severe visceral leishmaniasis resulting from travel to Greece. *BMJ Case Reports* 2009; doi:10.1136/bcr.06.2009.2036.

Horyniak D, **Higgs P**, Winter R, Lewis J, Dietze P, Aitken C. An evaluation of a heroin overdose prevention and education campaign. *Drug and Alcohol Review* 2009; DOI 10.1111/j.1465-3362.2009.00083.x

Kariminia A, Chokephaibulkit K, Pang J, Lumbiganon p, Hansudewechakul R, **Amin J**, Kumarasamy N, Puthanakit T, Kurniati T, Khairulddin N, Saphonn V, Fong S, Razali K, Nallusamy R, Sohn A, Sirisanthana V. Cohort Profile: The TREAT Asia Pediatric HIV Observational Database. *International Journal of Epidemiology* 2009; doi:10.1093/IJE/dyp358

Maher L, White B, Bates A, Donald A, Enriquez J, Liao L, Pham S. Using ethnographic fieldwork to inform hepatitis C vaccine preparedness studies with people who inject drugs in community settings. *Int J Drug Policy* 2009; doi:10.1016/j.drugpo.2009.04.004

Martinez E, et al (**Emery S** Executive Committee member). The effects of intermittent CD4-guided antiretroviral therapy on body composition and metabolic parameters. *AIDS* 2009; doi: 10.1097/QAD.0b013e3283333666

McInnes D, **Bradley J, Prestage GP** (2009) The discourse of gay men's group sex: Masculinity. *Culture, Health and Sexuality* 2009;11(6):641-54. DOI: 10.1080/13691050902850009

Poynten IM, Jin F, Prestage GP, Kaldor JM, Imrie J, **Grulich AE**. Attitudes towards new HIV biomedical prevention technologies

among a cohort of HIV negative gay men in Sydney, Australia. *HIV Medicine* 2009; DOI 10.1111/j.1468-1293.2009.00777.

Prasitsuebsai W, Bowen AC, Pang J, Hesp C, **Kariminia A**, Sohn AH. Pediatric HIV Clinical Care Resources and Management Practices in Asia: A Regional Survey of the TREAT Asia Pediatric Network. *AIDS patient Care STDS* 2009;

Pujari S, Srasuebku P, Sungkanuparph S, Lim PL, Kumarasamy N, Chuah J, Kumar RN, Chen Y-MA, Oka S, Choi JY, Lee MP, Phanuphak P, Kamarulzaman A, Lee C, Fujie Z, Ditangco R, Saphonn V, Sirisanthana T, Merati TP, Smith J, **Law MG**. Patient characteristics and treatment outcome associated with Protease Inhibitor (PI) use in the Asia-Pacific region. *Antiviral Therapy* 2009; doi:10.4172/jaa.1000004.

Quinn HE, McIntyre PB, Backhouse JL, **Gidding HF**, Brotherton J, Gilbert GL. The utility of seroepidemiology for tracking trends in pertussis infection. *Epidemiol Infect.* 2009; doi: 10.1017/S0950268809990707

Templeton DJ, Jin F, McNally LP, Imrie J, **Prestage GP, Donovan B**, Cunningham PH, **Kaldor JM**, Kippax SC, **Grulich AE**. Prevalence, incidence and risk factors for pharyngeal gonorrhoea in the community-based HIM cohort of homosexual men in Sydney, Australia. *Sex Transm Infect* 2009 doi: 10.1136/sti.2009.036814.

Templeton DJ, Williams A, Healey L, Odell M, Wells DL. Male forensic physicians have an important role in sexual assault care. *J Forensic Leg Med* 2009; Epub 2009 Aug 15.

Templeton DJ. Sexual Assault. Certificate Course in Reproductive and Sexual Health (Distance Learning Module). *FPA Health* 2009, Sydney, Australia (*in press*)

Vajdic C, **Prestage GP, van Leeuwen M**, Hillman R, **Jin F**, Medley G, Stevens M, **Zablotska I**, Tabrizi S, **Grulich AE**. Anal human papillomavirus genotype diversity and co-infection in a community based sample of homosexual men. *Sex Transm Infect* 2009;doi:10.1136/sti.2008.034744.

Wand H, Wilson DP, Yan P, Gonnermann A, **McDonald A, Kaldor JM, Law MG**. Characterizing trends in HIV infection among men who have sex with men in Australia by birth cohorts: results from a modified back-projection method. *J Int AIDS Soc* 2009; 12:19 (18 September)

Wilson DP, Heymer K-J, Anderson J, O'Connor J, Harcourt C, **Donovan B**. Sex workers can be screened too often: a cost-effectiveness analysis in Victoria, Australia. *Sex Transm Infect* 2009, doi:10.1136/sti.2009.036673.

*These publications will appear in the 2010 annual report with a print citation.

Non-peer reviewed

Alford J, **Kelleher AD**. The Immunocompromised Patient. In: Fulde G, editor. *Emergency Medicine: the Principles of Practice*. Sydney: Elsevier; 2009. p. 665-686.

Boyd MA, Cooper DA. 'Antiretroviral agents' in *Antibiotic and Chemotherapy: anti-infective agents and their use in therapy* (9th edition).

Boyd MA, Crowe S. Indinavir, in Kucers et al, *The Use of Antibiotics* (6th edition)

Dore G, Temple-Smith M, Lloyd A. Future challenges for hepatitis C. In: *Hepatitis C: An Expanding Perspective*. East Hawthorn: IP Communications, 2009:433-452.

Dore G. Initial assessment and clinical monitoring of people with hepatitis C. In: *Hepatitis C: An Expanding Perspective*. East Hawthorn: IP Communications, 2009:156-169.

Dore G. Therapy decision-making for people with chronic hepatitis C. In: *Hepatitis C: An Expanding Perspective*. East Hawthorn: IP Communications, 2009:181-191.

Grebely J, Dore G. Acute hepatitis C infection. In: *Hepatitis C: An Expanding Perspective*. East Hawthorn: IP Communications, 2009:230-253.

Heymer KJ, Wilson D. Cost-effectiveness analysis for free ART in South Australia. In: *Free access to antiretrovirals for people with HIV in South Australia*. South Australian Health Steering Committee on HIV and Hepatitis C (SAHSCHAHC), 2009.

Higgs P. Working with young homeless people (book review). *Aust Social Work* 2009;62(3):414-5.

Iversen J, Shying K, Maher L. Drug injection trends among participants in the Australian Needle and Syringe Program Survey, 2004-2008. IDRS Drug Trends Bulletin, July 2009. Sydney: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales.

Kelleher AD, Kelly M. Immune Restoration Diseases. In: Hoy J, Lewin S, Post JJ, Street A, editors. *HIV Management in Australasia: a guide for clinical care*. Sydney: Australasian Society for HIV Medicine; 2009. P. 287-294.

Loveday S, **Dore G**. Improving quality of life for people with hepatitis C. In: *Hepatitis C: An Expanding Perspective*. East Hawthorn: IP Communications, 2009:172-180.

Matthews G, Dore G. HIV and hepatitis C co-infection. In: *Hepatitis C: An Expanding Perspective*. East Hawthorn: IP Communications, 2009:308-329.

National Centre in HIV Epidemiology and Clinical Research (2009). Australian NSP Survey: Prevalence of HIV, HCV and injecting and sexual behaviour among IDUs at needle and syringe programs - National data report 2004-2008. Sydney: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales. National Centre in HIV Epidemiology and Clinical Research. (2009). *Sexual health through the eyes of Indigenous youth: Community-based participatory research with young Indigenous people in Townsville*. Sydney: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales. ISBN: 978 0 7334 2834 0.

National Centre in HIV Epidemiology and Clinical Research. *Return on investment 2: Evaluating the cost-effectiveness of needle and syringe programs in Australia* 2009. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW; Department of Health and Aging, Canberra ACT, 2009. Available at: <http://www.nchechr.unsw.edu.au>

Thein HH, Dore GJ. Natural history of hepatitis C virus infection. In: *Hepatitis C: An Expanding Perspective*. East Hawthorn: IP Communications, 2009:76-89.

Thein HH, Dore GJ. Trends in chronic viral hepatitis: notifications, treatment uptake and advanced disease burden. *Cancer Forum* 2009; 33:(2):97-105.

Topp L, Maher L, Kaldor J. Transmission of hepatitis C virus. In: *Hepatitis C: An Expanding Perspective*. East Hawthorn: IP Communications, 2009:115-141.

Wilson D, Gray R, Heymer KJ, Hoare A, Kwon A, Thein HH, Worth H, Kaldor J. *Evaluation of the potential impact of the global economic crisis on HIV epidemics in Southeast Asia*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW, 2009. Available at: <http://www.nchechr.unsw.edu.au>

Zhang L. *Building a better infectious disease surveillance system for China: An evaluation from a political perspective*. Berlin: VDM Verlag, 2009. ISBN 978-3-6391-9654-2

About NCHECR

The National Centre in HIV Epidemiology and Clinical Research (NCHECR) was established in 1986 by the Australian Government to fulfil a number of key roles in Australia's fight against HIV/AIDS. Located on the campus of St Vincent's Hospital in Sydney, NCHECR is affiliated with the Faculty of Medicine, University of New South Wales.

NCHECR's primary functions relate to the co-ordination of national surveillance programs, clinical research and clinical trials. While its original focus was exclusively on HIV/AIDS, NCHECR's work has expanded to encompass hepatitis B and C, and sexually transmissible infections. NCHECR also conducts research into the transmission, prevention and natural history of these infections.

NCHECR's research program has increasingly taken on a regional focus, with major collaborative programs in Thailand and Cambodia. NCHECR conducts research through nine programs.

Dissemination of NCHECR's research output is undertaken through publication in scientific journals and a range of surveillance reports.

This publication was funded by the Australian Government Department of Health and Ageing. The views expressed in this publication do not necessarily represent the position of the Australian Government.

ISSN No. 1441-2640

National Centre in HIV Epidemiology and Clinical Research has four locations:

Director's Unit and the Immunovirology and Pathogenesis Program:
Level 4, 405 Liverpool Street, Darlinghurst NSW 2010 Australia

TVRP; Biostatistics and Databases Program; Sexual Health Program; Aboriginal and Torres Strait Islander Health Program, and John Kaldor:
UNSW Cliffbrook Campus, 45 Beach Street, Coogee NSW 2034

Viral Hepatitis Clinical Research Program:
12 Leichhardt Street, Darlinghurst NSW 2010

HIV Epidemiology and Prevention Program; Viral Hepatitis Epidemiology and Prevention Program; Surveillance and Evaluation Program for Public Health; Administration, and Finance:
The CFI Building, Corner Boundary and West Streets, Darlinghurst NSW 2010

Postal address: The CFI Building, Corner Boundary and West Streets, Darlinghurst NSW 2010
Telephone +61 (2) 9385 0900 Web: <http://www.nchechr.unsw.edu.au/>
Fax +61 (2) 9385 0920 Email: recept@nchechr.unsw.edu.au

National Centre in HIV Epidemiology and Clinical Research Annual Report 2009

Editor: Louisa Wright

Design: Luke Gover/Gadfly

Images: Louisa Wright

