2011 was a year of achievements. We began the year as the National Centre in HIV Epidemiology and Clinical Research and ended it as The Kirby Institute for infection and immunity in society. At the launch, we welcomed and were honoured by University dignitaries including Chancellor David Gonski and Vice Chancellor and President Professor Fred Hilmer; the Hon. Malcolm Turnbull MP; present and past staff members, committee members, and many others who have contributed to our work over the 25 years since its inception. Another honoured guest was philanthropist and Kirby Institute benefactor Chuck Feeney. But the most fêted guest was Michael Kirby AC CMG, the former High Court judge whose long history as a warrior for health and human rights made him the ideal figurehead for our newly launched organisation. On the following pages are photographs of our launch on 4 April 2011 in UNSW’s Leighton Hall.

2011 was also marked by staff expansion, research advances, successful grant applications and also extensive planning for our impending move to the main UNSW campus in Kensington. We welcomed two new groups to the Kirby during 2011: in January we established the Justice Health Research Program, under Professor Tony Butler, and in April we welcomed on board the HIV Biology Group led by Professor Stuart Turville.

Through the year I was honoured with many requests to speak publicly. One of the most receptive audiences was at the UNSW Town and Gown event, which brings together the academic community with alumni and friends of the University.

We began 2011 with 170 staff and finished it with almost 200 staff, 285 publications and 211 separate ongoing studies. We face the future with a new name, optimism about our ongoing research program, plans for colocating our staff on the UNSW Kensington campus, and building a new outreach premises in Darlinghurst – a partnership with St Vincent’s Hospital to ensure continuation of research with the communities who form the bulk of our volunteers in clinical and epidemiological studies.

David Cooper
“Michael’s well known and enduring support for health and human rights, both at home and internationally, fits perfectly with our research focus on those vulnerable communities who make up our patient and client populations, the often disadvantaged groups most likely to suffer the infectious diseases which are the core of our work.”
In 2011, the Kirby Institute was relaunched after 25 years as the National Centre in HIV Epidemiology and Clinical Research, or NCHER. Over that time, the organisation moved from its early roots as a leader in HIV research to expand the range of work from the prevention and treatment of HIV/AIDS and viral hepatitis to a range of related sexually transmissible infections and blood-borne viruses. 2011 also saw the addition of a new group, the Justice Health Program, headed by Professor Tony Butler.

Led by Professor David Cooper, the Kirby Institute has a leading presence in Australia coupled with a strong and increasing presence in South East Asia. Australia’s national interest is served where it intervenes in health issues in its region by leading in developing and delivering solutions.

In 2011, the Kirby Institute served where it intervenes in health issues in its region by leading in developing and delivering solutions.

**The Therapeutic and Vaccine Research Program**

The Therapeutic and Vaccine Research Program (TVRP) conducts a range of clinical trials designed to assess the effectiveness of new HIV therapies or candidate vaccines. It also supports collaborative studies with other institutions and the development of international clinical data but also evidence of the impact of policy practice and therapeutic guidelines, in both resource-rich and resource-limited settings. TVRP staff provide leadership through the program’s role as an International Co-ordinating Centre for the INSIGHT network, a major international collaboration for the conduct of large clinical endpoint strategic trials in HIV disease which has more than 300 sites in 30 countries.

The SECOND-LINE study completed enrolment in September 2011. This clinical trial was designed to investigate the safety and efficacy of raltegravir-boosted lopinavir and 2-3N RTI backbone in participants virologically failing first-line therapy. The study is being conducted in 49 sites across 18 countries. At conclusion of the recruitment phase, 568 participants were randomised. An interim analysis performed when half the participants had completed 24 weeks of follow-up. The interim analysis was performed by an independent DSMB and their recommendation was to continue the study as planned. We are anticipating completion of the week 48 visit in September 2011.

The ENCORE1 study commenced in 2011, with all sites opening for recruitment in the period between August and December. Toward the end of the year, more than 60% of the required participant population had been reached with March 2012 estimated as the completion date for enrolment. Valuable subsites of dried blood spots for analysis of effector concentrations and HIV viral load, vitamin D monitoring and mid-interval monitoring of smoking behaviour and smoking status were included in the main protocol, intensive pharmacokinetics across the main protocol, intensive pharmacokinetics and CNS sub-studies have also commenced.

In addition, the MARCH study contracts between UNSW and Pfizer/ViiV Healthcare were finalised in April 2011 and a network of 63 clinical centres around the world commenced activities to start the trial. The first patient of the trial enrolled in September. This trial required the establishment of an international QA/QC programme to ensure execution of proviral testing of HIV DNA to determine virus tropism to the highest possible standards. TVRP personnel collaborated with colleagues from the Immunovirology and Pathogenesis Program and the National Reference Laboratory to establish and run this complex program. We anticipate completion of enrolment into this trial during the second quarter of 2012.

**The Biostatistical and Database Program**

The Biostatistics and Databases Program has a collaborative biostatistical research role across many of the Kirby Institute's programs and activities. A key activity in this area in 2011 has been extending the available database technologies to suit a range of needs, from the highest specification web-based databases through to highly cost-efficient stand-alone databases suitable for developing countries. This extension of database expertise will allow the program to service better the needs of the Kirby Institute into the future.

The program had important grant success this year with the renewal of five-year NHMRC funding through the International Epidemiological Databases to Evaluate AIDS (iDEA) program. This funding underpins much of the program's work in HIV-observational cohorts. Exciting developments include the collection of serious non-AIDS clinical endpoints, such as myocardial infarctions and AIDS cancers in adult HIV-positive patients in Asia. An expanded-access antiretroviral treatment scheme for Medicare-eligible patients in Australia, involving all seven pharmaceutical companies active in HIV care, was developed in collaboration with the National Association of People Living with HIV/AIDS (NAPWA), with patient follow-up and outcomes to be collected via the Australian HIV Observational Database.

2011 was an active year for research outputs. Mathematical modelling underpinned a submission to the Pharmaceutical Benefits Advisory Committee for public funding of HPV vaccination of boys. Statistical geospatial models identified high hot spots of HIV infection in South Africa. Linkage of HCV, HBV and HIV notifications in New South Wales with hospitalisation, cancer and death indices identified a growing burden of liver disease. Cohort data showed that HIV-positive patients who stopped smoking had a lower risk of cardiovascular disease. Statistical analyses of surveillance data showed that HIV-transmissions through injecting drug use had been effected less by combination treatment, and tended to be diagnosed later, than other HIV-exposures. Immunological responses in patients who started treatment at high CD4 counts were analysed, an issue highly relevant to current debates about when to start treatment.

**The Surveillance and Evaluation Program for Public Health**

Blood-borne viral and sexually transmitted infections (STIs) surveillance activities are conducted in collaboration with the Australian Commonwealth Government Department of Health and Ageing, State and Territory health authorities and collaborating networks. Analyses and interpretation of recent trends in new diagnoses of HIV, viral hepatitis and STIs, and estimates of prevalence and incidence in key population subgroups are published in our Annual Surveillance Report. Public release datasets on new HIV and AIDS diagnoses are also available for download. SEPPH is a collaborating unit of the Australian Institute of Health and Welfare, and in collaboration with the Australian Red Cross conducts surveillance of transfusion-transmissible infections among blood donors in Australia. In collaboration with the Office of Aboriginal and Torres Strait Islander Health of the Department of Health and Ageing and other Kirby Institute Programs, SEPPH coordinates national surveillance and reporting of trachoma among Aboriginal communities.

SEPPH carries out extensive mathematical modelling and economic research in order to evaluate public health programs, understand drivers of epidemic trends, project future epidemic trajectories, and assess the epidemiological and economic impact of public health prevention strategies. This research is focused on HIV, viral hepatitis, and sexually transmissible infections in Australian populations and on HIV/AIDS in Asia and Eastern Europe.

In 2011, SEPPH released a number of Surveillance Reports, including the fifteenth annual review of available surveillance data pertaining to the occurrence of HIV, viral hepatitis and sexually transmissible infections in Australia and the tenth annual ‘Blood-borne viral and sexually transmitted infections in Aboriginal and Torres Strait Islander people: Surveillance and Evaluation Report’. Surveillance activities and analyses of transfusion transmissible infections in Australia were conducted which led to the first Australian guidelines on blood testing for HIV, hepatitis and syphilis. SEPPH also released ‘SEPPH’s Surveillance and Evaluation Report’. Surveillance activities and analyses of transfusion transmissible infections in Australia 2011 Surveillance Report’. Cross-program contributions resulted in the establishment of the National Trachoma Surveillance and Reporting Unit at UNSW and the release of the first UNSW-produced trachoma report, the Australian Trachoma Surveillance and Reporting Project 2010. Further cross-program collaboration resulted in the release of the NSW modelling and acceptability report, and participation in the development of the National HIV and Monitoring Project, which is being followed by SEPPH’s production of a new report for monitoring progress against the latest blood-borne viral and STI National Strategies.

Internationally, SEPPH strengthened networks with the Vietnam Administration for AIDS Control and the Ministry of Health in China. SEPPH has also been developing country-specific models for Indonesia, Cambodia, Armenia and Papua New Guinea for the interpretation of public health surveillance data. Modelling and evaluation reports for Vietnam and Indonesia were produced with guidance for further in-country analysis. The program’s experience evaluating the cost-effectiveness of needle-syringe exchange programs in Australia has been applied to a collaboration with 13 countries in Eastern Europe and Central Asia through UNAIDS.

Drawing from data and experiences from eight countries in East Asia & Pacific, Europe and central Asia and the South Asia Region, SEPPH advanced its international expertise, working in collaboration with the World Bank Group, to commence a project to contribute to the improvement of the effectiveness and efficiency of HIV prevention responses in Asia’s concentrated HIV epidemic settings.
In addition, senior scientists and academics within the program have found that insights gained from these studies will hopefully impact on the conduct of clinical trials and natural history studies in Australia.

Further, the laboratory conducted extensive optimisation and for flagship Kirby studies such as SECOND-LINE, Encore, MARCH, and PC3 containment is the first of its kind in NSW and one of two facilities nation-wide.

A major boost for the program and the Institute in 2011 was the recruitment of Professor Stuart Turville and his HIV Biology Group. This group is primarily involved in basic HIV research, with specific projects on HIV entry, viral spread between key cell types of the immune system and the development of novel imaging techniques. While the work seeks to elucidate basic scientific mechanisms, the outcomes have potential for use in HIV transpositional research and gene therapy. To study such processes, the group has developed novel recombinant HIV virions that can package fluorescent proteins and/or enzymes (essentially microscopic tracking devices) in several key parts of the viral life cycle. This work includes the development of novel imaging techniques, while the group is presently focused on the design and development of novel assays, and the study of microRNAs, fine mapping of T cell fates, and the transcriptional gene silencing of HIV by RNA.

Professor Stuart Turville Dr Turville’s research career started with a IRC Mon (first-class and John Ellis Prize for Best Thesis in Animal Biology) and followed with an Australian Postgraduate Award for PhD studies at the University of Sydney on the mechanism of HIV transmission in dendritic cells.

The activities of the IPP during 2011 can be divided into three categories. All involve substantial, daily interaction with the Immunoviology group at St Vincent’s Centre for Applied Medical Research, which is collocated with IPP. In 2011 a substantial proportion of laboratory-based activity was directed towards providing routine or semi-routine laboratory support, essential for the successful conduct of clinical trials and epidemiological studies conducted by the Kirby. This included specimen processing and conduct of specialised immunological and virological assays. This aspect of the laboratory continued to perform well in external QA programs. Training materials and protocols for this section of the laboratory were adopted by the IVRN as part of their induction package for new staff at laboratories participating in their Australia-wide network. The laboratory also coordinated the global laboratory for flagship Kirby studies such as SECOND-LINE, Encore, MARCH, and ATAC II. New databases and collaborative strategies were developed to streamline the use of these large complex trials. Further, the laboratory conducted extensive optimisation and verification studies of RNA- and DNA-based viral tropism assays that were then successfully transferred to the NSW State HIV Reference Laboratory at St Vincent’s. During 2011 the RNA assay was used for routine care and in 2012 the DNA will be used both routinely and to screen patients for the MARCH protocol.

The second critical component of the program in 2011 was the conduct of clinical trials and natural history studies in pathogenetically informative populations of patients with HIV infection. Such research is the principal basis of our understanding of the infection. We have conducted a range of early studies in selected patient groups, and have developed novel recombinant HIV virions that can package fluorescent proteins and/or enzymes (essentially microscopic tracking devices) in several key parts of the viral life cycle. This work includes the development of novel imaging techniques, while the group is presently focused on the design and development of novel assays, and the study of microRNAs, fine mapping of T cell fates, and the transcriptional gene silencing of HIV by RNA.

The first in vivo trials of these compounds commenced with the conduct of small animal studies in Japan.

The HIV Epidemiology and Prevention Program (HEPP) conducts research into the transmission and prevention of HIV and sexually transmissible infections (STIs), and on the natural history of HIV. Our work is multidisciplinary and collaborative and conducted in partnership with communities most affected by HIV, particularly the virus community and those living with HIV. We derive our data from the spectrum of biomedical, behavioural and structural prevention, because effective HIV prevention acknowledges the complexities of everyday life for risk communities. We conduct high quality research, providing evidence to underpin the development of novel imaging techniques. While the group is presently focused on the design and development of novel assays, and the study of microRNAs, fine mapping of T cell fates, and the transcriptional gene silencing of HIV by RNA.

Professor Tony Kelleher head of the Immunoviology and Pathogenesis Program, and works closely at a laboratory level with colleagues from St Vincent’s. This program gives lab support across the organisation, as well as conducting world-class research. Additionally, the group was also recently the subject of a new study that predominantly focussed on MARCH protocol.

The viral hepatitis epidemiology and prevention program strives to conduct rigorous multidisciplinary research that is ethical, innovative and makes a difference. We are proud of, and committed to, working in partnership with communities in Australia and internationally to achieve our goals. Key aims of the program are to initiate and undertake epidemiological, social and behavioural research examining viral hepatitis and other blood-borne infections in vulnerable populations, including people who inject drugs (PWID) and female sex workers (FSW), design and implement evidence-based treatment and prevention interventions designed to prevent viral hepatitis and other infectious diseases in vulnerable populations, and support surveillance activities including monitoring trends in blood-borne virus incidence, prevalence and risk behaviour among PWID; translate research outcomes into evidence-based public health practice and build capacity for research, surveillance and harm reduction within Australia and the region through the provision of training and technical assistance.

Highlights of 2011 for HEPP included the publication of a special National Data Report marking 16 years of data from the Australian Needle and Syringe Program Survey (ANSSP), Australia’s internationally recognised surveillance system for monitoring the prevalence of anti HIV and HCV and associated risk factors among PWID. Other highlights included the award of a UQSC NBI subcontract for the International Collaboration of Incident HIV and hepatitis C in Injecting Cohorts (InC3) project. This multidisciplinary project combines data from cohorts of PWID around the world in order to elucidate the natural history of acute HIV and HCV infection. 2011 also saw the completion of HAAPIT, our NHMRC funded an award designed to assess the impact of hepatitis B immunisation completion in PWID. Intention-to-treat analyses indicated that a significantly higher proportion of participants allocated to the intervention group demonstrated hepatitis B immunisation completion. Also in 2011, recruitment and follow-up continued in 2011 for the Hepatitis Incidence and Transmission Study – community (HITS-c) with more than 150 anti-HCV negative PWID enrolled and 17 incident cases observed.

International projects in 2011 included ongoing studies of young FSWs in Cambodia with collaborators from UCSF, NCHADS and the Cambodian Women’s Development Association; a study examining the level of information on needle and syringe use and the provision of training and technical assistance. Other current studies have evaluated the effective of hepatitis C interventions designed to prevent infectious diseases in vulnerable populations, including people who inject drugs and female sex workers.

Professor Lisa Maher is head of the Viral Hepatitis Epidemiology and Prevention Program and an NHMRC senior research fellow. She conducts extensive epidemiological,扭转 research and clinical research with a focus on interventions designed to prevent infectious diseases in vulnerable populations, including people who inject drugs and female sex workers.
2011 has been an exciting year in hepatitis C research with the licensing of two new direct-acting antiviral (DAA) agents for the treatment of chronic hepatitis C infection and many more new antivirals reaching different stages of clinical development. The Viral Hepatitis Clinical Research Program, established in 2003, continues to demonstrate national and international leadership in hepatitis C research, particularly in key affected communities such as injecting drug users and HIV-coinfected populations.

The program has three main areas. Clinical research including clinical trials forms the main part of the program’s work. The second component is molecular virology and host genetics research using samples from HepBank, a recently established viral hepatitis sample repository. The third component is epidemiological research through data linkage studies and mathematical modelling.

In addition to chronic hepatitis C research, the program also has interest in the natural history of newly acquired hepatitis C (HCV) and treatment of acute and chronic HCV in particular in the setting of injecting drug use and a strong interest in HIV/ HBV coinfection. The program’s laboratory research focuses on superinfection/mixed infection, protective immunity, host genetics, phylodynamics and transmission dynamics and the incidence and prevalence of viral mutations that impact resistance to the new therapies. The Viral Hepatitis Clinical Research Program liaises with all aspects of research within the Kirby Institute, as well as with hepatologists, infectious disease physicians and primary care networks nationwide.

The program plans to continue to design and coordinate multicentre clinical trials in viral hepatitis and expand the research networks in Australia, Asia and internationally. Additionally, an expansion of the sample repository and molecular virological research capacity is planned. The program is also interested in developing and customising software applications that enhance both clinical and laboratory research.

Highlights of 2011 include two UNSW Major Research Infrastructure and Initiative grants, one to develop Labkey, an online database to enhance laboratory research and the second Infrastructure and Initiative grants, one to develop Labkey, an online database to enhance laboratory research and the second Infrastructure and Initiative grants, one to develop Labkey, an online database to enhance laboratory research.

The Sexual Health Program leads and participates in research into the epidemiology, surveillance, microbiology, clinical management and prevention of sexually transmitted infections (STIs), including, but not limited to, chlamydia, syphilis, gonorrhoea, human papillomavirus infection, complex virus infection, and HIV infection. Our program is also involved in research into the behaviour and sexual health of priority populations, including injecting drug users, sex workers, Aboriginal people, prisoners and travellers.

The Sexual Health Program works closely with several other programs within the Kirby Institute. The program also collaborates with a national network of 25 specialist sexual health services; research laboratories in Sydney, Melbourne, Brisbane and PNG; the School of Population Health at the University of Melbourne; the Burnet Institute in Melbourne; and the Menzies School of Health Research in Darwin. Methodologies used in the program’s research range from descriptive epidemiology with novel analytical techniques, molecular epidemiology, enhanced surveillance, social and behavioural research, test evaluations, detecting antimicrobial resistance through evaluating and understanding surveillance and policy research, anthropology, and biomedical prevention.

2011 was another busy and productive year for the sexual health program. We continue to steer the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS), which uses routine clinical data to evaluate clinical service strategies. Ninety one clinical sites participate in ACCESS, each providing a core set of routinely collected data in a defined list. The program has five main components: Patient Recruitment at emergency department and the second to purchase a portable FibreScan (non-invasive method for evaluating liver fibrosis) machine for research. The program was also interested in developing and customising software applications that enhance both clinical and laboratory research.

The Public Health Interventions Research Group undertakes a diverse range of projects that focus on the evaluation of strategies to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease. We collaborate extensively, both within the Kirby Institute and externally, and emphasise research to prevent infectious disease.
2011 saw the release of the fifth annual Bloodborne viral and sexually transmitted infections in Aboriginal and Torres Strait Islander people: Surveillance and Evaluation Report. In addition, two major studies began in Queensland: one of HBV in the Torres Strait Islands and the other designed to recruit 300 Aboriginal and Torres Strait Islander people who inject drugs. During 2011, Australia’s largest randomised cluster trial ever to be conducted in Aboriginal health, named STRIVE, completed baseline prevalence studies for bacterial STI in 67 remote communities and first-year sites were initiated to the intervention arm. Work progressed through 2011 on SHMMIR, a quality improvement project in Aboriginal Community Controlled Health Services in NSW, REACH, a Centre for Clinical Research Excellence in Aboriginal Community Controlled Health, and GOANNA, a national survey of young Aboriginal and Torres Strait Islander people regarding STI and BBV knowledge risk behaviour and health service access. The program was also awarded an NHMRC Project Grant to trial the use, effectiveness and feasibility of STI point of care tests in remote Aboriginal communities.

Mr James Ward, head of the Aboriginal and Torres Strait Islander Health Program, brings to this program many years of experience in indigenous health. His program works collaboratively across sectors to address the disparity in health outcomes for indigenous peoples in prevention and treatment of sexually transmitted infections and blood-borne viruses, through research, surveillance, capacity building and information dissemination.

The Justice Health Research Program was established at the Kirby Institute in January 2011. Designed to complement the KI approach to health and human rights, particularly among marginalised populations, the program has a particular focus on Australia’s offender population. The Justice Health Research Program undertakes research into a broad range of health issues affecting offender populations including communicable diseases, access to hepatitis C treatment in prison, Aboriginal health, mental health, tobacco smoking, impulsivity, and risk behaviours such as alcohol use.

Professor Tony Butler is the inaugural head of the Justice Health Research Program. He has researched health issues in the criminal justice system for more than a decade. Professor Butler’s research focus includes the surveillance of blood-borne viruses and sexually transmitted infection among prison entrants nationally, work on establishing the National Prisoner Health Indicator Project, conducting Australia’s largest epidemiological survey of prisoners’ mental health, research into traumatic brain injury among prisoners, and a key member of a group undertaking research into smoking cessation among prisoners.

The Kirby Institute, providing the secretariat for the Justice Health Research Program, undertakes research into a broad range of health issues affecting marginalised populations, the program has a particular focus on indigenous peoples and the Indigenous Health Research Program. He has researched health issues in the criminal justice system for more than a decade. Professor Butler’s research focus includes the surveillance of blood-borne viruses and sexually transmitted infection among prison entrants nationally, work on establishing the National Prisoner Health Indicator Project, conducting Australia’s largest epidemiological survey of prisoners’ mental health, research into traumatic brain injury among prisoners, and a key member of a group undertaking research into smoking cessation among prisoners.

**SURVEILLANCE CO-ORDINATION AND INFORMATION DISSEMINATION**

**Support for national surveillance committees**

The National Blood-Borne Viruses and Sexually Transmissible Infectious Surveillance Committee, which had co-ordinated surveillance for HIV, viral hepatitis and sexually transmissible infections in Australia from 2007, was dissolved during 2011. A new committee, the National Blood-Borne Virus and Sexually Transmissible Infection Surveillance Sub-Committee of the Communicable Diseases Network Australia (CDNA) was established with Dr Christine Selvey as its chair and the Surveillance and Evaluation Program for Public Health at the Kirby Institute providing the secretariat function. The committee met for the first time in Canberra in September 2011, where the terms of reference of the new committee were reviewed. The Annual Surveillance Report Advisory Committee provided guidance on the content of the report including the new areas of surveillance and new analyses of previously available datasets. The Advisory Committee aims to meet at least two occasions during a calendar year, with proposals for new areas of surveillance or new analyses of data being discussed at the first meeting and progress towards the final report being reviewed at the second meeting.

**Status:** ongoing

**Personnel:**
- Ann McDonald, Melanie Middleton, Libby Tipp, David Wilson
- Collaborators: State and Territory health authorities; Australian Padiatic Surveillance Unit; Australian Institute of Health and Welfare; networks involved in surveillance for HIV, viral hepatitis and sexually transmitted infections

**Funding:** Commonwealth Department of Health and Ageing

**Location:** Surveillance and Evaluation Program for Public Health

**National Blood-borne Virus and Sexually Transmissible Infections Surveillance and Monitoring Report, 2011**

For the first time, the SEPPH produced the National Blood-borne Virus and Sexually Transmissible Infections Surveillance and Monitoring Report 2011, which measured progress toward the goals of the National Strategies for HIV, viral hepatitis and sexually transmitted infections.

**Personnel:**
- David Winter, Tony Butler, David Cooper, Basil Donovan, Gregory Dore, Sean Emery, Andrew Grulich, Rebecca Guy, John Kadlec, Lisa Maher, Ann McDonald, Joanne Micallef, Melanie Middleton, Kathy Petroumas, Garrett Prestage, Libby Tipp, James Ward

**Funding:** Commonwealth Department of Health and Ageing

**Location:** Surveillance and Evaluation Program for Public Health

**Australian HIV Surveillance Report**

The Australian HIV Surveillance Report provides quarterly updates on the number of new diagnoses of HIV infection 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

**Collaborators:**
- State and Territory health authorities; Australian Padiatic Surveillance Unit; Australian Institute of Health and Welfare; networks involved in surveillance for HIV, viral hepatitis and sexually transmitted infections

**Funding:** Commonwealth Department of Health and Ageing

**Location:** Surveillance and Evaluation Program for Public Health
Michael Doyle
Director and lead - Aboriginal public health

Michael Doyle is a researcher in the Justice Health Research Program and one of the five Aboriginal people in the country actively researching alcohol and drug rehabilitation for Indigenous men. He undertakes this work as a key team investigator on a National Health and Medical Research Council-funded Capacity Building Grant titled From Broome to Berrima. Building Capacity Australia wide in Indigenous Offender Health Research.

As a researcher and an Aboriginal man he is based in remote Broome, WA. Michael is acutely aware of the disproportionate level of imprisonment of Indigenous people in Australia. About a quarter of the Australian prison population is Indigenous although Indigenous people make up only two to three percent of the population. Aboriginal people comprise 40% of the prison population in his home state of Western Australia.

“A lot of these guys in prison are aged between 18 and 25,” Michael said. “At that age people are starting out at university or in their first workplace, but Aboriginal men are in prison – it’s not a good start as an adult.” While Michael is currently researching alcohol and drug issues, he is also interested in the lifetime effect that imprisonment has on Aboriginal people. “Almost all prisoners are released back to the community,” Michael said, “so what effect does imprisonment have during formative years in the individual, their family and the wider Aboriginal community.”

National Prison Entrants’ Bloodborne Virus Survey (NPEBBVS) 2010

This report provides the first ever national analysis and profiles of bloodborne viruses in Indigenous prison entrants. The report identifies patterns and trends in the incidence and prevalence of Indigenous prison entrants’ bloodborne viruses, including HIV, hepatitis, and syphilis. A short behavioural risk factor surveillance for newly acquired HIV infection is also provided.

Health
Michael Doyle
WA Corrective Services

Australians also bear the highest burden of non-communicable diseases in the world. Addressing these health issues is a key priority for the Australian government and Commonwealth Department of Health and Ageing.

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Australians also bear the highest burden of non-communicable diseases in the world. Addressing these health issues is a key priority for the Australian government and Commonwealth Department of Health and Ageing.

International partnerships are critical to maintaining our position at the forefront of monitoring and evaluating sexually transmitted infections. Australia has been a co-founder of the International Partnership on Microbicides.

Monitoring cases of newly diagnosed HIV infection

The pattern of HIV transmission is primarily in young men who have sex with men. Over the past decade there has been a significant rise in the number of new diagnoses of HIV in Australia, including those with evidence of newly acquired infection. Although the majority of individuals infected with HIV are men who have sex with men, the number of HIV diagnoses among heterosexual populations and women from CALD backgrounds has been increasing. The HIV epidemic in NSW is also experiencing a slowing of its progression, particularly among men who have sex with men. The number of new diagnoses among heterosexual populations and women from CALD backgrounds is not available. A recent analysis of national HIV surveillance data demonstrated that in NSW.

Monitoring HIV transmission through specialised tests for incident HIV infection

Surveillance for newly acquired HIV infection provides a lower bound to the extent of recent HIV transmission, partly due to the requirement for repeated testing with donor-matched laboratory tests for detecting incident HIV. Ongoing surveillance for HIV, viral hepatitis and sexually transmitted infections continues to provide a more complete indication of the pattern of recent HIV transmission.

Monitoring and evaluation of new cases of HIV infection

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the past ten years the largest numbers of HIV diagnoses were among people with sexual contact among people from CALD populations. This project will develop enhanced surveillance systems in order to support HIV/STI prevention programs and to provide a comprehensive response to the threat of HIV, especially in marginalized, at-risk populations.

**SEXUALLY TRANSMISSIBLE INFECTIONS**

**Monitoring HIV prevalence and incidence through sexual health clinics**

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

**Personnel:** Ann McDonald

**Collaborators:** Collaborative group on sentinel surveillance in sexual health clinics

**Location:** Surveillance and Evaluation Program for Public Health

**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 Middelton, Ann McDonald

**Collaborators:** State and Territory Departments of Corrections

**Location:** Surveillance and Evaluation Program for Public Health

**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 Middelton, Ann McDonald

**Collaborator:** Australian Red Cross Blood Service

**Location:** Surveillance and Evaluation Program for Public Health

**HEPATITIS ANALYSIS**

**Modelling and economic evaluation of hepatitis C epidemic mitigation strategies in Australia**

The modelled scenarios are the best available Australian demographic, epidemiological, sexual behaviour and injection behaviour; death and disease decrease in the scenario results is published in literature. Australian Census Data (2001 and 2006) from the Australian Bureau of Statistics are used to determine specific movement patterns across Statistical Local Areas (SLAs) to simulate geographical co-location of sexual behaviour and injection behaviour, blood borne virus transmission and mortality from 2007 to 2010.

**Collaborators:** Margaret Heald, Mark Stone, Stacey Berger, Jane Gilber, Fabian Kong, Anna Bording, Elizabeth Sullivan, Zhuangyong Wu, Lara Dimich, Marcus Chen, Christopher Fairley, Catherine O’Connor

**Funding:** NHMRC Program Grant, Victorian Cytogenetic Service

**Location:** Program for Public Health, Biostatistics and Databases Program

**Australian Collaboration on Chlamydia Enhanced Sentinel Surveillance (ACCESS) Program**

Chlamydia is the most common notified infection in Australia and is an important cause of adverse pregnancy outcomes, ectopic pregnancy and tubal infertility in women. Chlamydia notifications have been increasing over the past decade. However, the basis of the increase is not well understood.

**Status:** Ongoing

**Collaborator:** Australian Red Cross Blood Service

**Location:** Surveillance and Evaluation Program for Public Health

**SEROLOGICAL SURVEILLANCE PROGRAM**

**Monitoring and analysing serological survey data**

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 can only be prevented by quadrivalent vaccine that also covers HPV types 6 and 11. We established a network for enhanced sentinel surveillance of genital warts in eight larger sexual health clinics across Australia.

**Status:** The first major report was published online in Lancet Infectious Diseases in 2011. Data collection is ongoing.

**Personnel:** Rebecca Guy, Hammam Ali, David Regan, Andrew Gruulke, Anne Hocking

**Collaborator:** Christopher Fairley

**Funding:** CSI, Biotechnologies Ltd

Co-location: Sexual Health Program, Biostatistics and Databases Program and HPV Epidemiology and Prevention Program

**The Law and Sexworker Health (LASH) Project**

It has long been suspected that different legal climates have different health and wellness outcomes for sex workers. As its various jurisdictions have different prostitution laws, Australia is an ideal country to study the effects of those laws. Three capital cities were chosen for their different legal climates and two control areas. We expect sex work is only decriminalised in licensed brothels (licensing), otherwise it remains illegal. Perth, where sex work remains criminalised; and Sydney, where most form of adult sex work is decriminalised, without licensing.

Through legal research we determined the laws and the level of policing of those laws in each state. We have mapped the female brothel-based sex industry in each city. Brothels were chosen based on a survey of 200 sex workers in each city. Each brothel was approached individually until every sex worker consented to participate. Each participating sex worker completed a questionnaire that was available in 4 languages. Those women were then
LEI ZHANG

HIV public health in China

Chinese-born Lei Zhang is an epidemiologist working in HIV public health. He has trained in Australia and Germany but his work frequently takes him back to China, where he works with two very separate groups. "We have collaborations with various government officials, and our study results are being used to inform health policy to improve prevention and monitoring programs to people living with HIV (PLWH) in China," Zhang said. The second group are NGOs and communities. "One is high-level and one is grassroots," he said. "We need to know the real situation at that level and understand the difficulties and strategies of people living with HIV in China.”

Through this work, Dr Zhang has become a passionate advocate for a group known as AIDS orphans, who face a high level of discrimination and stigma, and who they are unable to reach. They are the children of people who became HIV-infected through the blood supply in two central provinces, Henan and Anhui, from unrelated blood donation schemes in the late 1990s. About a third of their children are HIV-positive. "This is a very special group," Dr Zhang said. "We have worked with local organisations to facilitate research, interventions and treatment needs. Our work with the AIDS orphans is still at the planning stage but we are committed to help them." Dr Zhang's work is currently being performed in China and South-East Asia. He has also had a role in the Surveillance and Evaluation Program's evaluation of antiretroviral programs (PAP) in Eastern Europe and Central Asia. HIV prevalence was very low in these areas before the break-up of the Soviet Union but it is now spreading rapidly, particularly among injection drug users. "We are seeing a delayed epidemic, but it's very fast," he said. "We would like to see if China is a very effective and cost-effective, and one country (Amnesty) has already incorporated our research into their health policy for HIV prevention.”

Lix Zhang (facing, left), Toshiya Miura, Anthony Maurelli, G. Myers, Peter Timms, Patrik Bavoil, Roger Rank, Jacques Ravel, and John Kaldor (bottom row, left) are all collaborators on this study. The project is being conducted with the aim of informing the design of effective public health interventions based on effective STI treatment. The results of this work are being applied to Australian Aboriginal and Torres Strait Islander communities, Australian men who have sex with men (MSM), and Papua New Guinean communities.

Status: A review of STI, IDU, and HIV in Aboriginal and Torres Strait Islanders is currently being performed. A paper on the relationship between syphilis and HIV in Aboriginal and Torres Strait Islanders has been developed and a model of HIV and STI transmission in Aboriginal populations is currently being developed.


Funding: NHMRC Project Grant, Victorian Department of Human Services

Co-location: Sexual Health Program, Public Health Interventions Research Group and Bioinformatics and Databases Program

Report on the sex industry in New South Wales

This is a state specific report of the Sex Industry in New South Wales that was commissioned by the NSW Ministry of Health.

Status: Final report submitted November 2011

Personnel: Basil Donovan, Chris Harcourt, Karen Schneider, Handan Wand, Lucy Watchirs Smith

Collaborators: Sandra Eggert, Christopher Fairley, Marcus Chen, Lewis Marshall, Sepho Taltatzis, Sexual Workers Outreach Project, Sydney; RHE, Melbourne; Magenta, Firth

Funding: NHMRC Project Grant, Victorian Department of Human Services

Co-location: Sexual Health Program, Public Health Interventions Research Group and Bioinformatics and Databases Program

Evaluation and cost effectiveness of HIV prevention in Asia

In Asia, the HIV epidemics are concentrated, driven by the prevalence of risky practices such as injecting drug use (IDU) and unprotected sex among sex workers and their sexual contacts. Drawing from data and experiences from countries in East Asia & Pacific, Europe & central Asia and the South Asia Region, this study will contribute to the improvement of the effectiveness and efficiency of HIV prevention responses in Asia's concentrated HIV epidemic setting.

HIV/AIDS effectiveness evaluation and cost assessment studies have become important analytical tools to understand how HIV investments have bought, whether the interventions arrested new infections and AIDS deaths, and at what cost. They can support decision-making and prioritisation of intervention strategies and target groups within the HIV/AIDS response with its overall goals of minimising the burden of disease and maximising health outcomes.

Personnel: David Wilson, Lei Zhang, Richard Gray, Cliff Kerr, Hla Hla (Rosie) Thin, Aria Hoare, Fakhrl Islam, Fred Wu, Zhe Xun Huang, Eric Wong, Chou Pf, Lam Iun (Caroline) J, Darn Ann Tran, Kel Helen Schneider, Charisse Fair, Andrew Craig, Kevin Yanie, Wai Lok Lau, Megan Taglia Collaborators: Public Health Intervention Research Group, University of Melbourne, (Melbourne Sexual Health Centre/University of Melbourne) Funding: NSW Health Location: Sexual Health Program

Clinical service delivery for HIV-positive people in Australia

Models of HIV clinical care in Australia vary substantially across jurisdictions. As a result, patients in different areas receive treatment from clinicians with highly variable levels of expertise in HIV clinical management. The current ability of HIV clinical care delivery to meet the needs of people living with HIV is unknown. To assess the potential to meet future service demands on existing health systems we need to ensure a workforce has the capacity to deliver models of care and understand the difficulties and struggles of people living with HIV.

The Australian Secretariat for HIV Medicine (ASHM) will use the results of this study to target specific locations where the population of people living with HIV is undersupplied with HIV expertise, and provide additional clinical training in these areas. A seven-question survey was sent to 270 hospital departments, sexual health services and general practices with expertise in HIV management Australia-wide. Data collection was completed in June 2011, and statistical analysis is currently being performed.

Staith Ward

Personnel: Kylie Mallett, David Wilson, Handan Wand, Levina Crooks, David McKeown

Collaborator: Australasian Society for HIV Medicine

Funding: Australian Research Council (ARC)

Co-location: Surveillance and Evaluation Program for Public Health

Systematic review and meta-analyses of HIV prevention conditions

Status: ongoing

Personnel: David Wilson, Jo Watson, James Jansson, Fakhrl Islam, Fred Wu

Funding: Australian Research Council (ARC), National Association of People Living with HIV/AIDS (NAPWA)

Location: Surveillance and Evaluation Program for Public Health

Status: Commenced 2011

Supervisors: James Jansson, David Wilson, Kathy Petousmoses

Funding: Australian Research Council (ARC)

Location: Surveillance and Evaluation Program for Public Health

Using mathematical models to assess implications of strategies for reducing sexually transmitted infections in Australia

Mathematical models that describe the transmission of STIs are powerful tools that can research inform our understanding of the transmission dynamics and the epidemiology of an STI in a population. Important questions that can be studied by the most effective interventions for lowering STI prevalence in a population. Interventions are usually expensive to implement and take time to evaluate, but mathematical models can provide an efficient means for policy makers to assess the impact of interventions before implementation, and design the most effective interventions. The output from these models can link with economic models to examine issues of allocative and technical efficiency (whether intervention is needed at all, and if so, how). In view of the marked increase in knowledge about sexual behaviour and STI transmission, and the increasing costs of successful treatment, there is an immediate need for tools to help explore the potential of and inform the design of interventions aimed at reducing STIs.

The findings from this project will inform the development of a national public health policy on the most cost-effective strategies for reducing the incidence of STIs and their sequelae in Australian populations. The work will also provide useful insight to researchers developing Chlamydia vaccines on the complex, natural environment of the female genital tract.

In vivo data and preliminary in vitro data have been collected. We are currently developing mathematical models to analyse in vivo data.

Status: ongoing

Personnel: David Wilson, Andrew Craig, Patrick Bavoil, Roger Rank, Jacques Ravelli, Annette Kelly, G. Myers, Peter Temmin, Ken Beagleby

Collaborators: University of Maryland, Baltimore, University of Pennsylvania, University of Technology, Arkansas Children's Hospital Research Institute

Funding: National Health and Medical Research Council (NHMRC)

Location: Surveillance and Evaluation Program for Public Health

Modelling the interaction between sexually transmitted infections and HIV

This project is investigating the interaction between STIs and HIV transmission using mathematical models to assess implications of strategies for reducing sexually transmitted infections in Australia. The transmission of STIs has been shown to be an important factor in the spread of HIV infection, especially in settings where there are limited opportunities for direct transmission of HIV. Various modelling techniques will be employed to simulate treatment pathways of individuals infected with HIV. These treatment pathways will be based on mathematical models to estimate the impact of interventions on the transmission dynamics of STIs and HIV. The project will also aim to understand the relative impact of different interventions on the transmission dynamics of STIs and HIV, and to evaluate the potential for cost-effective interventions to reduce the incidence of STIs.

Funding: National Health and Medical Research Council (NHMRC)

Location: Surveillance and Evaluation Program for Public Health
The results from this project provide a stronger evidence base for effective HIV policies and programs in NSW. By incorporating both modelling and social research to determine interventions which are both effective and acceptable, policies are more likely to be taken up in the community and result in larger epidemiological benefits. This project has now been completed with the launch of the NSW HIV Modelling & Acceptability report in February 2011. Electronic release expected in early 2012.

Status: Completed 2011.
Personnel: David Wilson, Garrett Prestage, Richard Gray, Ian Dows, Alex Hoare, Harris Ghaus, Jack Bradley
Collaborators: Australian Research Centre in Sex Health and Society, La Trobe University, Melbourne
Funding: NSW Health
Location: Surveillance and Evaluation Program for Public Health

HIV ATROVENT® THERAPY
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 32 or 48 weeks or not treating at all until CD4 declines to <350 cells. Enrollment ceased in June 2007, by which time 37 patients had been screened. 31 patients continue to be followed up.
Status: study completed, final manuscript with publishers.
Personnel: Anthony Kelleher, Pat Grey
Collaborators: Jonathan Weber, Sarah Fidler, Robert Finlayson, Mark Blinch, Robert McFarlane, Cassey Workman, Nick Doong, David Cooper, Mark Kelly, Norman Roth, Dr BK Tee, Richard Moore, Philip Cunningham, Kate McGeorge, Julie Young
Funding: Wellcome Trust
Location: Immunovirology and Pathogenesis Program

PINT
A study of the effects of the integrase inhibitor dolutegravir 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 15 remain in two-year extension phase which will be completed in 2011. All patients on FV/TP1 completed final visit. First 52 week data published. Extension phase results to be analysed.
Collaborators: Robert Finlayson, Mark Blinch, Robert McFarlane, John Zaudems, Kat Marks, Kate McGeorge, Julie Yeung, John Murray
Funding: Merck & Co Inc
Co-location: Therapeutic and Vaccine Research Program and Immunovirology and Pathogenesis

PHIVIDA 1a
A prospective epidemiological cohort study of HIV and viral-related co-infections in the South African National Defence Force (SANDF)
Sites: Six military medical sites in Republic of South Africa
Enrolled/target: 8,439/unlimited
Personnel: Sean Emery
Location: Therapeutic and Vaccine Research Program

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 to be published at week 144 follow-up visit.
Sites: 37 sites in 15 countries
Enrolled/target: 329/300
Personnel: Rebekah Puls, Carlo Daaz, Hila Haskelberg, Kathy Petoumenos
Funding: Gilead Sciences
Location: Therapeutic and Vaccine Research Program

ALTAIR MARS Sub-study
A randomised open-label study comparing the safety and efficacy of three different combination antiretroviral regimens as initial therapy for HIV infection. CNS/CNS-1 study arm: CNS dose efavirenz (600mg qd) as part of combination therapy in treatment naive individuals with HIV infection.
Status: recruitment commenced September 2011.
Sites: five sites in four countries
Target: approximately 40
Personnel: Rebekah Puls, Enmore Lin, Jessica Taylor, Carlo Daaz, Janaki Amin
Funding: Bill & Melinda Gates Foundation
Location: Therapeutic and Vaccine Research Program

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: recruitment open August 2011
Sites: 52
Target: 630
Personnel: Rebekah Puls, Mark Boyd, Dianne Carey, Enmore Lin, Jessica Taylor, Carlo Daaz, Anna Donaldson, Janaki Amin
Funding: Bill & Melinda Gates Foundation
Location: Therapeutic and Vaccine Research Program

ENCORE1 CNS Sub-study
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. EPV central nervous system exposure sub-study.
Status: recruitment commenced September 2011
Sites: five sites in four countries
Target: approximately 40
Personnel: Rebekah Puls, Enmore Lin, Jessica Taylor, Carlo Daaz, Janaki Amin
Funding: Bill & Melinda Gates Foundation
Location: Therapeutic and Vaccine Research Program

ENCORE1 Intensive Pharmacokinetics Sub-study
The development of safe and effective hepatitis C virus (HCV) vaccines will depend not only on identifying candidates but on the existence of suitable high-risk cohorts in which they can be tested. Australia is one of only four countries in the world known to have such cohorts. The Hepatitis C Incidence and Transmission Study – Community (HItS-c) is a prospective observational study designed to estimate the incidence of primary HCV infection and viral clearance; assess the impact of different strategies in recruiting at-risk people who inject drugs; identify factors associated with retention and continued adherence; examine the efficacy of a brief intervention designed to increase HCV vaccine awareness and develop plans to recruit the HItS-c cohort is part of a program of HCV vaccine preparedness studies being conducted by WHPP which is designed to lay the groundwork for Australian field trials of candidate HCV vaccines in people who inject drugs by answering key scientific questions, building community capacity, and establishing the necessary infrastructure to conduct future efficacy trials. We need to know that we can identify and successfully engage this group, in order to recruit them and retain them for future trials,” said Bethany, who has had six publications and two conference presentations from her work. “But to do it well will require a high level of resources and long-term commitment.” She hopes to submit her thesis in 2012.

Bethany White BA (Psych), MPH
Study Co-ordinator and PhD candidate, Viral Hepatitis Epidemiology and Prevention Program
Thesis title: Hepatitis C vaccine preparedness
Supervisors: Lisa Maher and Greg Davey

CLINICAL RESEARCH

RESEARCH PROGRAM
ENCORE2 Neurocognitive Sub-study
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 treatment in therapy naive individuals with HIV infection: the neurocognitive sub-study. Status: recruitment commenced September 2011 Sites: four sites in four countries Targets: approximately 40 Personnel: Rebekah Puls, Dianne Carey, Enmore Lin, Jessica Taylor, Carlo Dao, Janaki Amin Funding: UNSW Location: Therapeutic and Vaccine Research Program

ENCORE2 Pharmacokinetics of plasma lamivudine
A randomised, double-blind, placebo-controlled clinical trial to determine the effect of switching one component of combination antiretroviral therapy for another is equally effective in suppressing levels of virus in the blood. Status: recruitment of participants ongoing. Personnel: Dr Peter Leadt, an Australian team of three clinical co-ordinators, a database manager and an administrative assistant as well as six staff in co-ordinated centres in Latin America, Spain and Germany for MARCHE, which is being conducted at 60 sites in 13 countries. There are also three sub-studies, looking at the effects of switching to maraviroc-based regimens on neuropsychological and cardiovascular health. She also leads two ongoing studies of influenza. UNSW and FLU003 are international observational studies conducted through the INSIGHT network. Both begun in 2009 is ongoing. In the pilot phase (17 sites co-ordinated by the Kirby Institute), expanding in the definitive phase with a further 30 sites co-ordinated by KI in Argentina, Chile, Mexico, Israel, Thailand, Nigeria and South Africa. Target: pilot phase enrolment 1200 patients from 220 sites coordinated by the Kirby Institute. Personnel: Cate Carey, Megan Evans, Simon Jackson, Mark Boyd, Rebekah Puls, Dianne Carey, Location: Therapeutic and Vaccine Research Program

SECOND-LINE Dried Blood Spot sub-study
To test concordance between dried blood spots to assess viral load and genotypes as compared to centrally tested stored samples. Status: Closed to enrolment.

SECOND-LINE Bone Composition sub-study
To determine the difference in mean bone density in HIV-infected patients compared to uninfected participants. Personnel: Mark Boyd, Alfie Humphry, Nathan Espinosa, Saffy Padll, Jennifer Hoy, Waldo Belloso, Samuel Perrett Funding: UNSW, Merck, Abbott, amfAR Location: Therapeutic and Vaccine Research Program

SARAH PERTT
Balancing HIV, influenza and patients
Dr Sarah Prett is a physician who has undertaken her academic career at the Kirby Institute with her clinical work in infectious diseases at St Vincent’s Hospital since 2000. She is currently clinical project leader on three large-scale studies: START, MARCH and FLU003/005. The most recent study is MARCH, established this year and with the first patient enrolled in October 2011. MARCH is a switch study in HIV-1 infected patients. The study explores whether switching one component of combination antiretroviral therapy for another is equally effective in suppressing levels of virus in the blood. Status: recruitment of participants ongoing. Personnel: Dr Peter Leadt, an Australian team of three clinical co-ordinators, a database manager and an administrative assistant as well as six staff in co-ordinated centres in Latin America, Spain and Germany for MARCHE, which is being conducted at 60 sites in 13 countries. There are also three sub-studies, looking at the effects of switching to maraviroc-based regimens on neuropsychological and cardiovascular health. She also leads two ongoing studies of influenza. UNSW and FLU003 are international observational studies conducted through the INSIGHT network. Both begun in 2009 is ongoing. In the pilot phase (17 sites co-ordinated by the Kirby Institute), expanding in the definitive phase with a further 30 sites co-ordinated by KI in Argentina, Chile, Mexico, Israel, Thailand, Nigeria and South Africa. Target: pilot phase enrolment 1200 patients from 220 sites coordinated by the Kirby Institute. Personnel: Cate Carey, Megan Evans, Simon Jackson, Mark Boyd, Rebekah Puls, Dianne Carey, Location: Therapeutic and Vaccine Research Program

ART Intensification with raltegravir and dual nevirapine and tenofovir (cARTAL) (RALT)
A randomised, double-blind, placebo-controlled multi-site study to measure the effect on CD4+ outcomes of combining raltegravir 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: Analysis completed. All sites closed August 2010. Manuscript published J Infect Dis 2011 Sites: 20 Australian sites Enrolled/recruited: n=727 Personnel: Helen Byakawga, Hila Haskelberg, Rymme Courtney-Vega, Janaki Amin, Mark Boyd, Sean Emery Funding: UNSW Location: Therapeutic and Vaccine Research Program

HILA HASKELBERG
Bone loss during HIV disease
Antiretroviral treatments mean that people living with HIV no longer get sick or die from AIDS-related conditions. However, morbidity and mortality continue to exceed the levels expected in comparison with HIV-negative people. As survival continues to improve and the affected population enters middle age, new problems have emerged. The average HIV-positive man is losing about ten years from his life expectancy; people with HIV in developed countries are more likely to die of cardiovascular, liver and kidney disease and cancer. Hila Haskelberg’s work addresses aspects of bone loss in this population. The traditional risk factors for bone loss in the general population include age, low body weight, gender and race, history of smoking, exercise, smoking and alcohol behaviours. For HIV-infected people, the virus itself, the course of infection and the type of antiretroviral drugs they are also associated with differential bone morbidity. Low bone mineral density, osteoporosis and fractures appear more common in HIV-infected adults than in healthy adults. Hila’s first project, a substudy of the START study, addressed bone mineral density. The biochemical markers allow a specific assessment of new bone formation and bone/ligament removal from the HIV-infected patient. This approach appears to be unbalanced in the presence of HIV and the choice of ART may have a role. “At the current stage, correlations have been made with Department of Bioinformatics, The Clinical Centre (HIV), National Institute of Allergy and Infectious Diseases (NIAID), NIH, National Institute of Mental Health (NIMH), NIH, National Institute of Neurological Disorders and Stroke (NINDS), NIH, National Institute for Arthritis and Multiple Sclerosis (NIAMS), NIH Location: Therapeutic and Vaccine Research Program

Informed Consent Substudy: A substudy of Strategic Timing of Antiretroviral Treatment (START) (STARTs) This substudy is evaluating understanding of study information and satisfaction with the consent process among research participants of the START protocol, after receiving information from one of two different types of consent form: a standard or a concise consent. Status: Recruitment opened April 2009. To date 1297/4000 enrolled, with 274 in the Sydney region. Sites: 75 in the pilot phase with 15 sites in the Sydney region (sites coordinated by the Kirby Institute), expanding in the definitive phase (from site October 2010) with a further 19 sites in the Sydney region. Target: n=2000 Personnel: Cate Carey, Megan Evans, Simone Jackson, Sally Hough (maternity leave), Joseph Levitt, Sean Emery, Lara Cassar, Sarah Pett Funding: DAIDS, NHMRC, ANRS, France; BMGF, German AIDS Treatment Network; Department of Bioinformatics, The Clinical Centre, NIH Location: Therapeutic and Vaccine Research Program

Genomics: A substudy of Strategic Timing of Antiretroviral Treatment (START)
The purpose of this substudy is to obtain a whole blood sample from which DNA will be extracted to measure single nucleotide (present and future) genetic variants that determine the risk of the various primary and secondary outcomes assessed in START. Status: Since April 2009, 1156/4000 enrolled, with 1117 in the Sydney region. Sites: as many of the START sites as possible to be involved; to date 125 sites are registered with 104 sites participating in the Sydney region. Target: as many of the overall cohort of 4000 START patients as possible. Personnel: Cate Carey, Megan Evans, Simone Jackson, Sally Hough (maternity leave), Joseph Levitt, Sean Emery, Lara Cassar, Sarah Pett Funding: DAIDS, NHMRC, ANRS, France; BMGF, German - Europe AIDS Treatment Network, Division of Clinical Research, NHAI Location: Therapeutic and Vaccine Research Program

Neurology: A substudy of Strategic Timing of Antiretroviral Treatment (START)
The purpose of the substudy is to determine whether immediate initiation of antiretroviral therapy (ART) in HIV-naive persons with a CD4+ count > 500 cells/mm³ is superior, with respect to neurocognitive outcomes, to deferring ART initiation until CD4+ counts decline to 350 cells/mm³. Status: Recruitment opened April 2009. To date 468/609 enrolled, with 158 in the Sydney region. Sites: 30 in the pilot phase (11 in Sydney
Arterial Elasticity: A sub-study of Strategic Timing of Antiretroviral Treatment (START)
The arterial elasticity sub-study will determine if early initiation of ART is superior to deferred ART in regards to bone health as measured by annual bone mineral density.

Status: Recruitment opened September 2009. To date 142/300 enrolled, with 78 at sites co-ordinated by KI.

Target: n=300

Personnel: Sarah Pett, Sean Emery, Lara Cassar, Damien Cordery

Funding: Kirby Institute, UNSW

Location: Therapeutic and Vaccine Research Program

Bone Mineral Density: A sub-study of Strategic Timing of Antiretroviral Treatment (START)
The bone mineral density sub-study will determine if early initiation of ART is superior to deferred ART in regards to bone health as measured by annual bone mineral density.

Status: Recruitment opened March 2011. To date 13/400 enrolled, with 11 at sites co-ordinated by KI.

Target: n=400

Personnel: Simone Jacoby, Megan Evans, Sally Hough, Joseph Levitt, Sean Emery, Lara Cassar, Sarah Pett

Funding: Kirby Institute, NHMRC, ANRS, France; BMBF, Germany; NEAT - European AIDS Treatment Network; NINDS, NIH

Location: Therapeutic and Vaccine Research Program

FLUO02

International Observational Study to Characterize Adults With Influenza A (H1N1) and B (H3N2) (FLUO02)

Status: Manuscript accepted for publication

Target: n=999 (900 HIV mono-infected and 99 HIV/HCV co-infected)

Personnel: Sarah Pett, Sean Emery, Joseph Levitt, Lara Cassar, Damien Cordery

Funding: Kirby Institute, UNSW

Location: Therapeutic and Vaccine Research Program

MARCH

A randomised, controlled trial to evaluate the efficacy and safety of lower dose atazanavir/ritonavir (ATV/r 200/500 mg) versus efficacious dose (ATV/r 300/100 mg OD) in combination with a pair of antiretroviral drugs in HIV-positive patients taking their first N(t)RTI + PI/r regimen of combination antiretroviral therapy (cART) in the MARCH study.

Status: version 3.0 broadens inclusion to include all influenza subtypes not just H1N1 and the protocol has been renamed an International Observational Study to Characterize Adults Who Are Hospitalized with Complications of Influenza.

Target: v. 3.0-21.01.2011, open at sites with community transmission of influenza

Funding: Kirby Institute, NSW

Location: Therapeutic and Vaccine Research Program

JASON GREBELY

Enhancing diagnosis, assessment and treatment of hepatitis C

Hepatitis C virus (HCV) infection is a major public health problem associated with considerable morbidity and health-related costs. The majority of new (95%) and existing (80%) infections occur among people who inject drugs (PWID). Our knowledge of the epidemiology and natural history of HCV has been hampered because the majority of newly infected individuals are asymptomatic and the identification and follow-up of these people has been difficult. Treatment is effective, but strategies to enhance treatment uptake, particularly among PWID, are needed to reduce HCV-related morbidity and mortality. The Viral Hepatitis Clinical Research Program (VHCRP) is focused on viral hepatitis-related research in the areas of clinical trials, clinical epidemiology, and laboratory sciences. Dr Jason Grebely is a Senior Lecturer in VHCRP. His research focuses on better understanding the epidemiology and natural history of HCV, identifying barriers to assessment and treatment of HCV and developing novel therapeutic strategies to enhance treatment uptake, particularly among PWID, to include all influenza subtypes not just H1N1pdm09 and its second wave, a novel haemagglutinin (HA) variant in H1N1 influenza.

MARCH CNS sub-study

A CNS sub-study of randomised, open label study to evaluate the efficacy and safety of maraviroc (MVC) as a switch for either nucleoside or nucleotide analogues reverse transcriptase inhibitors (N(t)RTI) or boosted protease inhibitors (PI) in HIV-1 infected individuals with stable, well controlled plasma HIV RNA while taking their first N(t)RTI + PI/r regimen of combination antiretroviral therapy (cART). The MARCH CNS sub-study is ongoing.

Status: Protocol and documentation being prepared for site selection. Selection concluded to commence recruitment Q4 2011

Sites: 25 clinical centres in the Kirby international network. Sites located in Argentina, Australia, Brazil, Canada, Chile, France, Germany, Ireland, Israel, Japan, Mexico, Peru, Spain, UK.

Target: n=560


Funding: Kirby Institute

Location: Therapeutic and Vaccine Research Program

MARCH resistance sub-study

A study to explore the prevalence and evolution of HIV drug resistance using cell associated HIV DNA. The MARCH Resistance Sub-study version 4.0, 12 September 2011

Status: Protocol and documentation being prepared. Site selection concluded, recruitment commencing Q4 2011

Sites: All sites

Personnel: David Cooper, Sean Emery, Tony Kelleher, Lara Cassar, Elise Tu

Funding: Kirby Institute

Location: Therapeutic and Vaccine Research Program
MARCH – VE substudy
Maraviren Switch vascular endothelium substudy. To explore changes in VE as measured by wave pulse tonometry in the MARCH study.
Status: Protocol and documentation being prepared. Site selection concluded. Recruitment to commence Q2 2012
Sites: 11 clinical centres in the Kirby international network with access to a START study pulse tonometer. Sites located in Argentina (n=4), Australia (n=4), Germany (n=2), UK (n=1).
Target: 75
Personnel: Sarah Pett, David Silk, Rose Robson, and others (TBC)
Funding: Kirby Institute
Location: Therapeutic and Vaccine Research Program

MARCH renal substudy
A study to explore whether patients on experimental treatment will have lower rates of proteinuria than patients including the current standard care treatment.
Status: Protocol and documentation being prepared. Recruitment to commence Q2 2012.
Sites: site survey taking place
Target: 130
Personnel: Mark Kelly, Waldo Belloso, Sarah Pett and David Silk
Funding: Kirby Institute
Location: Therapeutic and Vaccine Research Program

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: 3378 patients recruited by 31 March 2011.
Personnel: Hamish McManus, Stephen Wright, Courtney Bendall, 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.
Location: Biostatistics and Databases Program

The Data Collection on the Adverse Events of Anti-HIV Drugs Study (IAD)
Large, international, collaborative study aimed at assessing the medium to long-term effects of antiretroviral treatment of people with HIV in terms of 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 2010.
Personnel: Hamish McManus, Stephen Wright, Kathy Petoumenos, Matthew Law
Collaborators: Network of clinical sites (GPs, hospitals and sexual health clinics) throughout Australia. CopenHIV Programme, Hvidovre University Hospital Foundation: European Agency for the Evaluation of Medicinal Products (EMEA)
Location: Biostatistics and Databases Program

Mycoplasmal infection, assessment of Antiretroviral and Genetic factors in Human Immunodeficiency virus infection: MAGNIFICENT
International collaborative project of 17 observational HIV cohort studies to validate 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.
Status: study closed in January 2011
Personnel: Courtney Bendall, Kathy Petoumenos
Collaborators: Network of clinical sites (GPs, hospitals and sexual health clinics) throughout Australia, Swiss HIV Cohort Study Group
Location: Biostatistics and Databases Program

The Australian HIV Observational Database Temporaroy Residence Access Study
An ARBSD sub-study recruiting 180 HIV-positive legal temporary residents who are ineligible for Medicare and providing free London, London Huntington Hospital, Nottingham, Downtown Infectious Diseases, New York, New York Presbyterian Columbia, St Luke Hospital, CHUM - Centre Hospitalier de l’Universite de Montreal, Montreal, Missouri, Baptist Hospital, Klamath, PA, New York, Harvard, Philadelphia, Partnership, South Riverdale Community Health Centre, Toronto
Funding: New York State Department and Dohme Location: Viral Hepatitis Clinical Research Program

VIRAL HEPATITIS

ACTIVE – Response Guided Treatment for Patients with Chronic HIV Infection and Ongoing Injection Drug Use
This is a phase IV, open-label, multicentre, international trial of response guided treatment with directly observed pegylated interferon alfa 2b and self-administered ribavirin for patients with chronic HCV genotype 2 or 3 infection and ongoing injection drug use. The primary endpoint is complete virological response at 24 weeks post end of treatment (SVR24) following directly observed pegylated interferon alfa 2b and self-administered ribavirin for 12 weeks in participants with sustained virological response at 24 weeks post end of treatment (SVR). The study will be conducted by a network of primary care clinics undertaking HCV assessment, treatment and monitoring.
Status: Initial ethics approval June 2010, amendment ethics approval July 2011.
Funding: Roche
Personnel: Greg Dore, Pip Marks, Amanda Erro
Collaborators: Australasian Society for HIV Medicine (ASHM); National Centre in HIV-Gerontology (BCHR); Enrolled: 120 subjects.
Location: Viral Hepatitis Clinical Research Program

Cancer Council STREP Grant
Understanding hepatic carcinoma in NSW
Status: Enrolment for NSW HCV and HCC 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 Central Cancer Registry and Admitted Patient Data Collection, Central Cancer Registry and deaths was completed by 30th September 2009. The linkage was carried out by the Centre for Health Record Linkage (CHeRL). Analyses on the epidemiology and natural history

VIRAL HEPATITIS

MARYAM ALAVI
Overcoming barriers to treatment for viral hepatitis
Maryam Alavi’s doctoral thesis concerns understanding barriers to the assessment and treatment in HIV patients who inject drugs.
"Rotes of Hepatitis C treatment among people who inject drugs are extremely low. Understanding barriers to assessment and treatment in this high risk marginalized population is crucial to address this inequity" Maryam said. "Given many people who inject drugs have been infected for more than two decades, the burden of HCV-related liver disease is escalating. Fortunately, a revolution in HCV treatment is fast approaching. Before the end of this decade, simple (once-daily combination oral therapy) treatments, short duration (6-24 weeks) therapy with extremely high efficacy (cure rates >90%) should be the norm. The implementation of such therapeutic regimens has the potential to produce one of the major turnarounds in disease burden seen in public health and clinical medicine. As "newer HCV therapies become available, the key issue moving forward will be the development of programs to enhance the delivery of care for patients with hepatitis C," Maryam said. "Given that infection is highly stigmatized, it is the majority of those infected, it will be important to understand barriers to assessment and treatment of hepatitis C in this population and design and implement programs to improve assessment and treatment."

MARYAM ALAVI
Enriching treatment of Hepatitis C in Opiate Substitution Settings (ETHOS)
The Kirby Institute was awarded an NHMRC Hepatitis C Opiate Substitution Program (organisations listed below) to address the issue of HCV treatment in the opiate pharmacotherapy setting. Among patients with a history of injection drug use, the specific objectives of this study are to:
1. Assessment and treatment of HCV in a prospective cohort study – the ETHOS Cohort.
2. Patient and provider attitudes and barriers to treatment of hepatitis C (HCV) among people who inject drugs.
3. Enhance treatment of Hepatitis C in Opiate Substitution Settings (ETHOS)
Status: This study commenced in May 2010. There are seven sites initiated on the study and 330 participants have been enrolled in the trial.

Target: 500

Personnel: Greg Dore, Jason Grebely, Pip Marks, Tanya Applegate, Amanda Erratt, Libby Topp, Lisa Maher

Collaborators: National Centre in HIV Social Research (NCIRS); NSW Department of Health, Sydney Local Health District; Hepatitis C Council of NSW; NSW Venues and Venues and Venues and Venues; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; NSW Health District; Hepatitis C Council of NSW; 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Uptake and outcomes of chlamydia or gonorrhoea disease in non-clinical settings: a systematic review and meta-analysis

Primary care plays an important role in the prevention and management of sexually transmissible infections (STIs). There are numerous large-scale programs in primary and primary care clinics each year for one reason or another and most chlamydial infections are diagnosed and treated in primary care settings. However, despite the central role of primary care in chlamydia management, the proportion of sexually active young people consulting these clinics who are offered screening at the time of their consultation is low in many developed countries. This systematic review aims to examine the participation rate and outcomes of chlamydia screening in primary care: a systematic review.

The Australian HIV Observational Database (AHOD) STI project

Sexual health clinics in AHOD contribute data on sexually transmissible infections and treatment in patients recruited to AHOD.

Clinical public health

Notable Diseases and Reproductive Health

This project uses data linkage in NSW to examine unprotected sex and common notified diseases including Sexually Transmitted Infections and Blood Borne Viruses on reproductive health outcomes in women. Status: Linked data obtained, analyses underway.

STI point-of-care test field study

To prepare for the large RCT, a range of point-of-care tests have undergone evaluation in a laboratory setting to assess performance and operational characteristics. Three of these tests (a POC test called the ‘gonoPlex’ and two traditional immunochromatographic lateral flow tests, called the ‘DIAGOCX CT’ and ‘Lateral Flow Gonorrhoea Card Test’) have been evaluated internationally on the use of face masks in the RCT. These tests will now be evaluated as a ‘real world’ test in Aboriginal communities in Queensland with participants in the RCT. The project has been completed at participating services, point-of-care tests results will be compared to the reference test results. All activities will be planned in consultation with health service staff, with the goal of integrating them into the community screening program, and avoiding minimal disruption. Trained study staff will perform the point-of-care tests for the RCT. The community screening program evaluation will inform test selection for the RCT, ensuring that the best available point-of-care test is selected for the RCT.

Sphylis point-of-care test multi-site laboratory evaluation

Real point-of-care (POC) tests offer a new approach to ensuring that diagnostic services are available and timely across the diverse geographic and social settings of PNG. Until recently, the world’s only RPPC tests for syphilis have been reconstituent treponemal assays, which are used in endemic settings. However, technological advances have led to the development of new RPOC tests which detect spirochaetes, as distinct from past treponemes. These newer tests will be evaluated in a multi-site clinical trial underpinning currently available syphilis POC tests and gold standard tests.

Status: Evaluation commenced May 2011; testing and data entry complete in Sydney, in progress in Melbourne and PNG.

Personnel: Rebecca Guy, Basil Donovan, John Kaldor, Louise Causer, Fraser Drummond, Philip Cunningham, Damian Conway

Collaborators: Claire Ryan, Tawarot Karapanagiotidis, Robert Robertson, David Leslie, Jennie Leydon, Theo Karapanagiotidis

STI point-of-care test field study

Funding: National Health and Medical Research Council, NHMRC; EMEA and pharmaceutical consortium

Location: Biostatistics and Databases Program
Chlamydia and gonorrhoea point-of-care test laboratory evaluation

Nucleic acid amplification tests (NAAT) are now the mainstay for laboratory-based screening of Chlamydia and gonorrhoea. While sensitive and highly suitable for screening, NAAT methods need to be performed in dedicated clinical laboratory facilities. The consequence of this is that the benefits of NAAT methods are lost when testing remote communities, as delays in result turnaround time and subsequent treatment of positive patients impinge upon disease control. For these reasons, there is renewed interest in point-of-care (POC) tests. In this pilot study, we examined the sensitivity of two Chlamydia POC assays. Twenty-eight Chlamydia NAAT-positive urine samples, representing a range of organism loads based on NAAT cycle threshold values (22 to 38 cycles), being a semi-quantitative marker of DNA load, were tested in two commercial POC methods. In addition, 10-fold dilutions of Chlamydia culture were tested by both POCs and a Chlamydia NAAT assay. Differences between the performances of the two POC methods were observed. Nevertheless, there was a clear relationship between the cycle threshold values of the NAAT and the results of the POC assays; only samples with cycle threshold values of 30 or less (ie higher organism loads) were readily detected by the POC assays. The results of this pilot study show that the main factor impacting upon the sensitivity of these Chlamydia POC assays is organism load.

Status: Validations are ongoing.


Funding: NHMRC project grant.

Prevention

TV vaccine preparedness cohort study (Health in Men study)

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

Status: During 2003-2004, 1,427 HIV-negative men were enrolled and active follow up ceased in 2007. More than 40 peer reviewed publications have resulted from this study, and in 2011, further data analysis and reporting took place.

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

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

Funding: NHMRC; NSW Health Department.

Location: HIV Epidemiology and Prevention Program.

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
acceptible such interventions would be to use mathematical modelling. Status: Data collection is completed: 2,306, gay men were recruited to answer specific questions about their knowledge of syphilis and their attitudes towards a range of possible interventions through an online survey and were then invited to participate in five focus groups in Sydney. Data from mathematical models were considered alongside the findings from the acceptability study.

Status: Data collection completed, data analysis and reporting is ongoing.

Personnel: Garrett Prestage, Jack Bradley, Ian Down, David Wilson, Richard Gray, Alex Hoare Collaborators: Australian Research Centre in Sex Health and Society Funding: Commonwealth Department of Health and Ageing, NSW Health Department, Victorian Department of Health Location: HIV Epidemiology and Prevention Program

Risk factors for syphilis reinfection (The Serocconversion Study) A study of risk factors for HIV infection among people recently diagnosed with HIV infection. Status: During 2011, online and direct enrolment continued in Queensland, Victoria, New South Wales, South Australia and Western Australia, Tasmania and the Australian Capital Territory. In total, 441 individuals with recent primary HIV infection were enrolled into the study by the second week of December 2011. Analysis and reporting has commenced and funding has been approved to continue the study through 2012 and extend to include women recently diagnosed with HIV. Data collection is currently being sought to continue data collection for a further three years.

Personnel: Garrett Prestage, Jack Bradley, Jeff Jin, Andrew Grulich Collaborators: National Centre in HIV Social Research, Centre in Sex Health and Society; Curtin University; State AIDS Councils, State Public Health Departments, and State Health Departments.

Funding: Queensland Health, Victorian Department of Health, ACT Department of Health, Western Australian Department of Health; Victorian Department of Health, Health Department of the ACT Location: HIV Epidemiology and Prevention Program

PEP users in Sydney, NS: pilot cohort A cohort of PEP users in Prince of Wales Hospital, Sydney, with quantitative behavioural data collection at enrolment when men request PEP, at the completion of PEP course and six months after completing the PEP course. Aims: to assess ability to enrol and maintain a cohort of PEP users and to compare sexual practices of participants before, during and after their PEP course.

Status: In 2011, the study protocol and data collection instrument were developed, and data collection started in June 2011. By the end of 2011, the cohort enrolled 18 participants and completed their first follow-up.

Personnel: Iryna Zablotska, John McAllister Collaborators: St Vincent’s Hospital PEP clinic

Funding: Kirby Institute Location: HIV Epidemiology and Prevention Program

Staging safe: How do long term injecting drug users avoid hepatitis C infection? Building on data collected from established longitudinal cohort of PWID this project is focused on developing a PEP and medical adherence prevention programs to assist both new and experienced PWID to develop and implement strategies to remain uninfected with HCV. Through collaborations with the Health Services Research Unit the Centre for Population Health at Burnet Institute, data collected from this project is also used to support the NHMRC Clinical Practice Guideline for PEP.

Status: Ongoing


Funding: NHMRC Training Fellowship, UNSW Faculty of Medicine Small Grant Scheme Location: Australia Epidemiology and Prevention Program

Australian Chlamydia control: effects of testing and treatment strategy Current national guidelines for general practitioners (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 and some 10% are being tested for chlamydia by their GP. ACEP involves a multifaceted intervention targeted at the GPs to maximise testing rates and annual testing in sexually active 15–29 year olds as well as increasing testing of chlamydia infections and its associated complications. ACEP is the first trial of this nature in Australia and is being led by the Centre for Women’s Health, Gender and Society at University of Melbourne in collaboration with a large consortium of experts including a number of researchers from the Kirby Institute. In addition, the Kirby Institute has been contracted to develop the protocol and materials to undertake Mathematical Modelling, and assist with implementation.

Status: Planning/site selection and planning/Co-location: Sexual Health Programs, Public Health Interventions Research Group

Chlamydia re-test trial Chlamydia re-test is common in women who are repeatedly infected. This infection increases the risk of chlamydia-related sequelae such as pelvic inflammatory disease (PID) and infertility, when compared to initial infection, and in men, chronic urethritis. This infection has been associated with an increased HIV seroconversion risk. Clinical guidelines in Australia recommend that PWID who have been treated for chlamydia a repeat test is conducted in 3 months. This randomised controlled trial will assess the effectiveness of a SMS reminder and home-based self-collected samples (home test kit). Further funding of patients re-tested after a chlamydia infection is compared to an SMS reminder and clinic test (group control). Approximately 600 patients diagnosed with chlamydia in the previous 6 months will be randomised to the home group or the clinic group. Status: Recruitment commenced in 2011.

Personnel: Kirsty Smith, Rebecca Guy, Handan Ward, Basil Donovan, John Kaldor Collaborators: Christopher Fairley, Marcus Chen, Catriona Bradshaw, Karen Worthungon, Jane Hocking, Anna McNulty, Philip Read, Simon Wright, Samantha Morgan, Sepheli Tabiri, Suzanne Garland, Bill Rawlinson, Marion Saville, Gary Rickard.

Funding: NHMRC STI Program Grant

Co-location: Sexual Health Programs, Public Health Interventions Research Group and Biostatistics and Databases Program

A randomised trial of rapid point-of-care antigen testing for gonorrhoea infections in remote Aboriginal communities A randomised controlled trial in Central Australia to determine the prevalence and incidence of gonorrhoea infection and its relationship to sexual activity in the local Aboriginal community. The trial will also assess the efficacy, acceptability and cost-effectiveness of point-of-care rapid gonorrhoea testing in remote communities in Australia. Status: Planning/site selection and implementation underway.

Personnel: Rebecca Guy, Denton Callander, Larissa Lewis, Handan Ward, John Kaldor, Basil Donovan Collaborators: Chris Bourne (Sydney Sexual Health Centre); Vijay Ramnanthan (Central Sydney GP Network); Jane Hocking (University of Melbourne); Mark Storee (Burrinjeri Network); Andrew Deere, (National Centre in HIV Social Research); Cathy Pell, (Taylor Square Private Clinic); Lisa Doyle, (Australasian Society for HIV Medicine); Geoff Honeon (ACON), Barry Edwards (NSW Health); Sonny Williams (Positive Life) Funding: NSW Health Co-location: Sexual Health Programs, Public Health Interventions Research Group

Chlamydia re-test trial Chlamydia re-infection is common in women who are repeatedly infected. This infection increases the risk of chlamydia-related sequelae such as pelvic inflammatory disease (PID) and infertility, when compared to initial infection, and in men, chronic urethritis. This infection has been associated with an increased HIV seroconversion risk. Clinical guidelines in Australia recommend that PWID who have been treated for chlamydia a repeat test is conducted in 3 months. This randomised controlled trial will assess the effectiveness of a SMS reminder and home-based self-collected samples (home test kit). Further funding of patients re-tested after a chlamydia infection is compared to an SMS reminder and clinic test (group control). Approximately 600 patients diagnosed with chlamydia in the previous 6 months will be randomised to the home group or the clinic group. Status: Recruitment commenced in 2011.

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Funding: NHMRC STI Program Grant

Co-location: Sexual Health Programs, Public Health Interventions Research Group and Biostatistics and Databases Program

GARRISON PRESTAGE Understanding risk behaviour

Associate Professor Garrison Prestage has been involved in research into the risk behaviours of gay men for three decades. In that time, he has worked on each generation of a major Kirby Institute study, commencing in 1992 with the Sydney Men and Sexual Health Study, or SMSASH. His most recent work is on the HIV Seroreactivity Study. Much of his work is conducted in collaboration with the Australian Research Centre in Sex Health and Society in Melbourne.

“Early versions of the Seroreactivity study have given us incredibly valuable data” Professor Prestage said. “We are talking to HIV-diagnosed people, the key people we want to know about.” This online qualitative and quantitative study, with the option of a face-to-face interview, is funded until 2012 but ongoing funding for this key study is being sought. “The data we collect and analyse is about individual experiences with HIV. It is very valuable in informing the response, particularly by educators in the development of further prevention efforts. People want to know how others have thought and felt about their experiences.”

Associate Professor garage Prestage BA, MA, PHD HIV Epidemiology, and Prevention Program

"GARRISON PRESTAGE" 35
Periodic surveys of HPV risk behaviour (The Gay Community Periodic Surveys) — A study of sexual risk behaviour, HPV and STI testing, and illicit drug use among gay men in Australia. In 2011, more than 9000 behavioural questionnaires were completed in Sydney, Melbourne, Adelaide, Perth, Canberra and Brisbane, as well as in certain regional areas of Queensland.

Status: Ongoing analysis and reporting continued in 2011.

Personnel: Garrett Prestage, Iryna Zablotska, Ian Down, Andrew Grulich
Co-located: Royal Women's Hospital
Collaborators: National Centre in HIV Social Research; State AIDS Councils; State PLWHIA organisations; State Health Departments
Funding: National Health and Medical Research Council
Location: HPV Epidemiology and Prevention Program

Defining risk and mechanisms of persistence and transmission of acute HPV infection within high-risk populations (RAMP-STAR) — A study of HPV transmission and its risk factors among homosexual men. HPV-positive gay men who were recently diagnosed with hepatitis C were recruited to answer specific questions about their knowledge of hepatitis C and their beliefs about its transmission.

Status: Data collection will continue with an overseas component (London). Australian data collection was completed in December 2011.

Personnel: Garrett Prestage, Ian Down, Jack Bradley, Mark Danta, Gail Matthews, Tanya Applegate
Funding: NHMRC
Location: HPV Epidemiology and Prevention Program

Out on the Reef — This is a study of the experiences of gay men living with and affected by HIV in North Queensland. Gay men living in North Queensland were invited to participate in three focus groups and in one-on-one key informant interviews in Cairns. Data collected through other studies that include men from this region are being reanalysed to identify specific issues among men in this region. A report of the findings was presented at a community forum in August, 2011.

Status: Data collection is completed. Data analysis is ongoing.

Personnel: Garrett Prestage, Ian Down
Co-located: Australian Research Centre in Sex, Health and Society
Collaborators: Australian National Health and Medical Research Council; South Australian Health and Medical Research Council; Queensland Department of Health
Funding: Victorian Department of Health; Victorian Department of Health; Victorian Department of Health and Human Services; Queensland Health
Location: HPV Epidemiology and Prevention Program

MONOGAM: meanings and practices among gay men — A study to document and record the work of the Sexually Adventurous Men’s Project of the Victorian AIDS Council and PLWHA Victoria, and in investigating the beliefs and behaviours among gay men in sexually adventurous networks in Melbourne.

Status: Processes and records keeping strategies for data documentation have been established, and data collection is ongoing. Interview schedules have been developed.

Personnel: Garrett Prestage
Co-located: Australian Research Centre in Sex Health and Society
Collaborators: Royal Women's Hospital, Melbourne; Royal Women's Hospital, Sydney; The University of Melbourne; University of New South Wales; National Health and Medical Research Council
Location: HPV Epidemiology and Prevention Program
The Sydney gay community. The protocol involved data collection over an extended period, with follow-up interviews conducted at different points in time to assess the influence of social and environmental contexts on drug use over time and place with the development of the software. Follow-up interviews focused on the potential for cash payments to precipitate drug use. In an effort to overcome perceived ethical drawbacks, some protocols instead reimburse participants with vouchers rather than cash. This study employs a consecutive, non-randomised, screening tool was developed and implemented in two clinical settings, KRC and a drug treatment clinic, the Langton Centre. This intervention comprises an outreach management training session for injectors and their carers, and the prescription of ‘take home’ naloxone packs. Dr Ivan’s evaluation of this intervention will assess its feasibility and acceptability, and will include a prospective observational study to assess knowledge and attitudes regarding overdose prevention, treatment and naloxone use.

### MHAELA IVAN
Between clinical practice and public health

Mhaela Ivan joined the Viral Hepatitis Epidemiology and Prevention Program in 2015 as part of a new initiative sponsored by the Kings Cross Road Centre (KRC) and the South Eastern Sydney Local Health District. Dr Ivan is a public health physician and medical epidemiologist. KRC is a primary health care centre providing services to marginalised populations in the Kings Cross area. Dr Ivan's research projects are focused on the interface between clinical practice and front line public health. One research project is the establishment and evaluation of a pilot opioid substitution treatment and engagement intervention. 'Overdose among people who inject drugs is associated with significant mortality—more than 300 deaths a year around Australia,' Dr Ivan said, 'and the morbidity can include brain damage and other organ failure.' Naloxone is an antagonist medication which reverses the effects of opioid overdose. The pilot program, to start in 2015, will be implemented in two clinical settings, KRC and a drug treatment clinic, the Langton Centre. This intervention comprises an outreach management training session for injectors and their carers, and the prescription of ‘take home’ naloxone packs. Dr Ivan’s evaluation of this intervention will assess its feasibility and acceptability, and will include a prospective observational study to assess knowledge and attitudes regarding overdose prevention, treatment and naloxone use.

### REBECCA GUY
Improved outcomes in sexual health

In the third year of a four-year NHMRC post-doctoral fellowship, Dr Rebecca Guy’s research program into the prevention of sexually transmitted infections (STIs) includes observational studies, systematic reviews, meta-analyses, short-term field trials and large scale randomised trials. Her motivation to achieve substantial improvements in sexual health among people at greatest risk of STIs: “We urgently need improved outcomes in sexual health for priority populations, particularly those who experience sexual health disparities.” Dr Guy said. “We must use a range of strategies including information technology and new laboratory developments, to ensure better patient outcomes.” Dr Guy’s research falls into four broad groups. The first is using available clinical data to evaluate sexual health clinical service strategies, through the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS) network. “ACCESS provided the first reliable means of monitoring STI transmission in this group. The second research focus is the evaluation of novel strategies to improve access to HIV/STI testing, potentially facilitated by a key control strategy for curable STIs. A third area of research concerns ways to support improved clinical practice to achieve a reduction in STI prevalence. “One approach is in a large-scale study with 67 remote communities due to receive a Sexual Health Quality Improvement Program (SHOP)”. Dr Guy said. “The primary outcome is STI prevalence, measured annually.” Other ongoing projects are designed to improve chlamydia testing and management in young people in general practice and to improve STI testing and management in men who have sex with men. Dr Guy’s fourth area of interest is to establish a cohort of adolescents to assess the impact of internet exposure to sexual material. “We know that earlier onset of sexual activity increases the chances of adverse health outcomes,” Dr Guy said. “There has been a massive increase in new media use among young adolescents. So this year I have started work developing a study in young adolescents, to investigate whether exposure to sexual content in new media leads to earlier sexual activity and to the chances of adverse health outcomes.” Dr Guy said.
Do SMS reminders improve retesting rates after chlamydia infection in heterosexuals?

Chlamydia re-infection is common in women and men. By 12 months re-infection rates after a positive test result can be as high as 22% in a chlamydia re-infection prospective cohort of young women in Australia and 4.2% in men. Effective follow up re-infection rates, clinical guidelines in Australia recommend that any people diagnosed with chlamydia should be re-tested in months to detect chlamydia re-infections. Despite this, a recent analysis of heterosexuals attending 19 sexual health clinics found that the proportion of women with chlamydia infection who were re-tested in 1 to 4 months was 11.9% in heterosexual males and 17.8% in heterosexual females. In large Sydney Sexual Health Centre implemented a SMS reminder system to improve the frequency of the re-testing within three months a chlamydia infection. We evaluated the impact of the SMS reminder system on chlamydia re-testing within 3 months of initial infection in heterosexuals attending Sydney Sexual Health Clinic and a controlled observational study design was used.

Status: Manuscript submitted to the STI journal

Personnel: Rebecca Guy, Handan Wand Collaborators: Phillip Read, Aurelie Knoopsberg, Vickie Knight, Anna McNulty (Sydney Sexual Health Centre)

Co-location: Sexual Health Program and Biostatistics and Databases Program

Do SMS reminders improve STI testing frequency in men who have sex with men (MSM)?

In 2008, Sydney Sexual Health Centre implemented a reminder system to improve retesting rates for HIV and STIs among MSMS. The SMS reminders were recommended to be high risk MSM. We evaluated the impact of the SMS reminder system on HIV/STI re-testing rates in MSM attending Sydney Sexual Health Centre. A controlled observational study design was used.

Status: paper drafted

Personnel: Handan Wand, Rebecca Guy Collaborators: Vickie Knight, Heng Lu, Anna McNulty (Sydney Sexual Health Centre)

Co-location: Sexual Health Program and Biostatistics and Databases Program

The use of SMS reminders to increase completion of Hepatitis A and B vaccination courses in a Sydney sexual health clinic

Hepatitis B virus (HBV) is a major public health problem worldwide. Prevention is widely acknowledged to be the most effective approach to the problem. A vaccine has been available since 1982, and the standard immunisation schedule consists of three injections, at zero, one and six months. There are also Hepatitis A/B combination vaccines, a follow the same schedule. Noncompliance with vaccination schedules undermines the potential benefits of immunisation. Despite this, the completion rates among sexual health clinic patients is thought to be suboptimal in many clinics. In 2008, Sydney Sexual Health Centre implemented a SMS reminder system to improve the completion rates of the vaccine.

Status: in progress

Personnel: Handan Wand, Rebecca Guy Collaborators: Phillip Read, Vickie Knight, Anna McNulty (Sydney Sexual Health Centre)

Co-location: Sexual Health Program and Biostatistics and Databases Program

Culturally and linguistically diverse MSMS: an epidemiologic and behavioral study

Cultural and linguistic diversity is associated with adverse health outcomes including pelvic inflammatory disease (PID), ectopic pregnancy, and sexual transmission of HIV. Collaborative projects of clinicians are important foundations for early detection and prevention of chlamydia and associated concerns. This study is to assess chlamydia testing, partner notification and retesting practices of clinicians at Family Planning clinics in Australia, to determine enabling and barriers to chlamydia testing, contact tracing and retesting, and to identify opportunities for training and support of clinicians and future interventions for chlamydia prevention. This study will be conducted at Family Planning Clinics in all states and territories of Australia and will involve an online survey of clinicians’ chlamydia testing and management practices. The survey will focus on groups among family planning clinic’s clinicians will be conducted to determine enabling factors and barriers of clinicians’ management for patients for chlamydia. Status: Ethics approved, roll out of survey early 2011

Personnel: Joanne Micallef, Rebecca Guy Collaborators: Phillip Read, Nick Hoggard, Vickie Knight, Anna McNulty (Sydney Sexual Health Centre)

Co-location: Sexual Health Program and Biostatistics and Databases Program

New Xpress STI screening clinic: improves patient journey and clinic capacity at a large sexual health clinic

In December 2010 a new ‘express’ testing service (Xpress) was implemented alongside routine clinics at a large sexual health clinic. Xpress involves a computer assisted self interview (CASI), self- collection specimen, and self-referral. A study was conducted to evaluate the demonstration the Xpress clinic improved the patient journey in regards to waiting times and length of stay at the clinic, and even though the Xpress clinic was not fully utilised more patients were seen overall in the clinic with minimal additional costs.

Status: paper drafted

Personnel: Handan Wand, Rebecca Guy Collaborators: Vickie Knight, Heng Lu, Anna McNulty (Sydney Sexual Health Centre)

Co-location: Sexual Health Program and Biostatistics and Databases Program

Unprotected oral sex and sexual workers at STI clinics: A cross sectional study

Unprotected fellatio at work may represent a risk for STI acquisition in the oropharynx, and subsequent onwards transmission. This study seeks to identify the determinants of unprotected fellatio, and focus on reducing the prevalence of STIs through targeted intervention.

Status: Results were presented at the ISSSTRD conference in July 2011 prior to publication

Personnel: Basil Donovan, Rebecca Guy, Handan Wand Collaborators: Phillip Read, Anna McNulty (Sydney Sexual Health Centre)

Co-location: Sexual Health Program and Biostatistics and Databases Program

Seasonal trends in STIs: A diagnosis investigation

Local, state-wide and national notification data for STIs shows apparent shifting variation at specific times during the year. The aim of this study is to identify seasonal trends in STI diagnoses, and to correlate this to trends in sexual behaviour, alcohol and drug use. The Sydney Sexual Health Centre database will be used for this analysis.

Status: Data analysis is ongoing

Project members: Handan Wand, Basil Donovan, Rebecca Guy Collaborators: Phillip Read, Anna McNulty (Sydney Sexual Health Centre)

Co-location: Sexual Health Program and Biostatistics and Databases Program

CLINICAL EPIDEMIOLOGY

HIV (Health in Men) study: Chlamydia serovars in Australian homosexual men

A study to examine the prevalence, incidence and risk factors for progression of human papillomavirus infection and anal cancer progression in HIV positive and negative homosexual men aged 35 and older.

Status: By the end of 2011, 190 participants were recruited. Initial analyses were performed on safety and adverse effects of anal cancer screening were presented.

Personnel: Andrew Grulich, Jeff Jin, David Templeton, Garrett Prestage Collaborators: St Vincent’s Hospital; Sexually Transmitted Infections Research Centre, Westmead Hospital; Melbourne Sexual Health Centre; Royal Women’s Hospital, Melbourne; Douglas Hardy Moor Pathology; School of Public Health, University of Sydney

Co-location: STI Program Grant

Location: HIV Epidemiology and Prevention Program

Infection-related cancer

The SPANC study (Study of the prevention of anal cancer)

Cohort study designed to examine the prevalence, incidence and risk factors for progression of human papillomavirus infection and anal cancer progression in HIV positive and negative homosexual men aged 35 and older.

Status: Serological studies of HPV in gay Australian men

A cross sectional study of the prevalence, incidence and predictors of infection with a number of different HPV types.

Status: In 2011, over 5000 serological samples from the Health in Men study were analysed for antibodies to 10 HPV types at the German Cancer Research Centre (DKFZ) in Heidelberg, Germany. Analyses of the data were compiled. One paper has been submitted and another is being drafted.

Personnel: Mary Poynten, Andrew Grulich, Jeffrey Jin, David Templeton, Garrett Prestage Collaborators: Feinberg School of Medicine; Columbia Cancer Registry; School of Public Health, University of Columbia Cancer Registry; School of Public Health, University of Southern California; German Cancer Research Centre; Feinberg School of Medicine, Northwestern University; Centre for Study of Prevention and Cure; Aviano Cancer Centre; Catalin Institute of Oncology, Cluj, Romania; San Francisco; David Gellen School of Medicine, University of California Los Angeles; University of York; British Columbia Cancer Registry; School of Public Health, University of Southern California

Funding: Leukaemia Foundation of Australia

Location: HIV Epidemiology and Prevention Program

INFECTION-RELATED CANCER

Serological studies of HPV in gay Australian men

A cross sectional study of the prevalence, incidence and predictors of infection with a number of different HPV types.

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Personnel: Mary Poynten, Andrew Grulich, Jeffrey Jin, David Templeton, Garrett Prestage Collaborators: Feinberg School of Medicine; Columbia Cancer Registry; School of Public Health, University of Columbia Cancer Registry; School of Public Health, University of Southern California; German Cancer Research Centre (DKFZ), Heidelberg, Germany

Funding: STI Program Grant, NHMRC Prevention Program

Location: HIV Epidemiology and Prevention Program

International pooled analysis of immune risk factors for lymphoma

A pooled analysis of case-control studies of human immunodeficiency virus for lymphoma. All twelve studies performed data on a pool of 12,925 cases and 16,441 controls, and results on auto-immune disease as a risk factor for non-Hodgkin lymphoma (NHL) were reported.

Status: Analyses on infectious conditions and NHL risk were reported.

Personnel: Andrew Grulich Collaborators: UNSW Cancer Research Centre; University of Southern California; German Cancer Research Centre; Feinberg School of Medicine, Northwestern University; Centre for Study of Prevention and Cure; Aviano Cancer Centre; Catalin Institute of Oncology, Cluj, Romania; San Francisco; David Gellen School of Medicine, University of California Los Angeles; University of York; British Columbia Cancer Registry; School of Public Health, University of Southern California

Funding: Leukaemia Foundation of Australia

Location: HIV Epidemiology and Prevention Program
A systematic mechanism to follow up the PHAEDRA and CoreO1 cohorts in Sydney and Melbourne with acute and early HIV-1 infection. Status: 137 patients were enrolled in this extension study by December 2011 and follow up is continuing. Personnel: Pat Grey, Ansari Shaik. Collaborators: Robert Finlayson, Mark Blund, Casey Workman, Robert McFarlane, De B.K. Tee, Norman Ruth, Phillip Cunningham, John Zaunders, Tim Reid, John Murray. School of Mathematics and Statistics: NSMRC Grant Program Location: Immunovirology and Pathogenesis Program

Aims: 1. Long-term non-progressor studies, 2. Viral Hepatitis Clinical Research Studies, 3. Clinical trials and natural history studies. The laboratory provides a service to other Kirby Institute investigators encompassing the separation of blood components including not limited to, plasma, serum, cells, and PBMC, archiving and on shipping of samples. The service also includes database management of the storage of these samples. Staff also have experience with the implementation of 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 Pipirigos, Bertha Fadini (St Vincent’s Hospital, Sydney)

Funding: NSMRC Location: Immunovirology and Pathogenesis Program

PHBANK Clinical Sample Repository & Open Access Substudy database (LabKey)

Establishment of a HIV sample repository that incorporates barcoding to facilitate patient sample and data management. This includes samples from ATAMC and CHART-0 and prospective trials including all samples collection for Prospective cohorts and trials including ATACI I recall / SEARCH-C / ACTIVATE II/ DAR/C - ETHOS. The web-based LabKey database will link existing clinical, sample repository and laboratory data sets to allow comprehensive analysis of clinical trial results.

Status: ongoing

Personnel: Sofia Bartlett, Inoke Shaw, Pip Marks, Trent Schaffer, Brendan Jacka, Tanya Applegate, Ansari Shaik, Tony Kelleher

Funding: NSMRC Grant Program + UNSW Major Equipment Research funding

Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunovirology and Pathogenesis Program

ASSAY DEVELOPMENT

Specimen receipt and processing for clinical trials and natural history studies. The laboratory provides a service to other Kirby Institute investigators encompassing the separation of blood components including not limited to, plasma, serum, cells, and PBMC, archiving and on shipping of samples. The service also includes database management of the storage of these samples. Staff also have experience with the implementation of assays which are not offered by local diagnostic laboratories. This service contributes to the overall smooth running of clinical trials and natural history studies. The assays included in the protocols of clinical trials and natural history studies carried out by the Kirby. Assays were performed as part of the PENT trial of therapy with the integrate inhibitor, Raltegravir and the Restore and PRIBUS studies in Bangalore and Sydney respectively. Other studies were conducted as part of the PHIDO observational study of primary HIV infection. These assays were validated in the context two clinical compared clinical studies assessing latent TB infection in Bangkok and Sydney; in a clinical study of CMV re-activation and Adenosivirus infection following paediatric bone marrow transplantation, and in a clinical study following immune responses with gluten induced flares of Coeliac disease. Assays were also conducted to elucidate the generation of CD4+ T cell responses during primary laboratory vaccination.

Status: Continued analysis of samples from PHAEDRA and the long-term non-progressor cohorts. TB studies completed, Studies of CMV disease to be completed in 2011 and coeliac study commenced.

Personnel: Susanna Ip, Laura Cook, Mee-Ling Munier, Michelle Bailey, Yin Xu, Chansavath Photsoiphahin, Celine Van, Anthony Kelleher, Denise Hau

Collaborators: John Zaunders, Mahinda Namvanayom, Tony Walls, John Zagger, Sridakshii Sankpal, Stephen Kent, Bob Anderson, Jason Tyee-Din, Jasmine Anaworananich, Sasiwimol Ubolyam, Anchalee Avihingsanon, Kiat Ruxrungtham, Prapeth Phamaphup, HIV NAT Bangkok

Funding: NSMRC, UNSW Location: Therapeutic and Vaccine Research Program

To develop affordable assays to support host genetic and pathogenic studies.

HePBank Clinical Sample Repository & Open Access Substudy database (LabKey)

Establishment of a HIV sample repository that incorporates barcoding to facilitate patient sample and data management. This includes samples from ATAMC and CHART-0 and prospective trials including all samples collection for Prospective cohorts and trials including ATACI I recall / SEARCH-C / ACTIVATE II/ DAR/C - ETHOS. The web-based LabKey database will link existing clinical, sample repository and laboratory data sets to allow comprehensive analysis of clinical trial results.

Status: ongoing

Personnel: Francisco Lamourey, Brendan Jacka, Sofia Bartlett, Tanya Applegate

Collaborators: Phillip Cunningham, Alex Carrera

Funding: NSMRC Program Grant Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunovirology and Pathogenesis Program

LabKey

INSIGHT NCWS for FIRST (CPCRA OSB) banked plasma samples

The effects of Protease Inhibitor and Non-Nucleoside Reverse Transcriptase Inhibitor based Highly Active Antiretroviral Therapy (HAART) on Biomarkers of – based Highly Active Antiretroviral Therapy (HAART) on Biomarkers of...
To characterise HCV adaptation to HLA-restricted immune responses, we analyse the influence of HLA alleles on HCV sequence evolution and escape mutations.

Status: Ongoing

Personnel: Greg Dore, Gail Matthews
Collaborators: Simon Malal and Silvana Gaudieri (CSLBehring, Perth) and Andrew Lloyd (UNSW)

Funding: National Institute of Health

Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunology and Pathogenesis Program

IP10, IL28B serum protein levels and T-cell responses in recently acquired HCV (ATAH)

This study is designed to evaluate serum IP10 and IL28B levels and the relationship between vitamin D and histologic disease severity in HCV genotype 1 patients with biopsy proven CHC from the CHARRIT study.

Status: Ongoing

Personnel: Greg Dore, Pip Marks, Sofia Barratt.
Collaborators: Stuart Roberts, Matthew Rixson.
Funding: The Alfred Hospital, Melbourne, Roche Products Pty Ltd
Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunology and Pathogenesis Program

Role of host genetics in chronic HCV combination treatment response

To identify a combination of baseline covariates, serum protein markers and host genetic markers to develop a treatment algorithm to predict the response rate of each patient considering treatment for CHC.

Status: Ongoing

Personnel: Jason Grebely, Tanya Applegate, Greg Dore, Gail Matthews
Collaborators: Jordan Feld (Toronto University, Canada), Andrew Lloyd (UNSW), Jacqueline Flynn and Rosemary Ffrench (Burnet Institute, Victoria)
Funding: National Institute of Health, NHMRC Program Grant Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunology and Pathogenesis Program

Investigation of the association between ITTP polymorphism, on-treatment anemia and treatment outcome in the CHARRIT cohort

This study is designed to evaluate the association between the ITTP polymorphism rs17273534 and rs17703931, and on-treatment anemia, RVW dose reduction and rate of SVR in the CHARRIT cohort.

Status: Ongoing

Personnel: Jason Grebely, Gail Matthews, Pip Marks, Sofia Barratt.
Collaborators: Alexander Thompson (St Vincent’s Hospital, Melbourne) and CHARRIT PSC.
Funding: St Vincent’s Hospital Sydney, Roche Products Pty Ltd
Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunology and Pathogenesis Program

ANU AGGARWAL AND TINA IEMMA
Improving sexual health management in Aboriginal health services

Professor Stuart Turville is the Senior Research Fellow who brought his HIV Biology Research Group to join the Kirby’s Immunology, and Pathogenesis Program in March 2013. The focus of the group is to improve understanding of HIV transmission between cell types through the use of advanced live cell microscopy. An important piece of technology for this process is a fluorescent microscope capable of live cell, multicellular, real-time imaging, located in P3 lab for Professor Turville’s work. This allows real-time analysis of the intracellular dynamics of HIV. “We are targeting a specific viral target because we hope that by attacking dimer-N it we may be able to reduce the potential for failure of the infection”. The dimer-N is a viral transcript in the human body, including regulating communication between nervous cells, but more recently it was discovered that dimer-N is also involved in HIV infection. In collaboration with the University of Sydney and University of Newcastle, Professor Turville and Tina are testing newly developed drugs against dimer-N for their ability to reduce HIV infection in addition to this, Tina uses fluorescent microscopy to track live HIV particles as they infect cells.

Dr Anupriya Aggarwal PhD, Research Assistant Tina Iemma BSc (Adv) (Hons) PhD candidate, Thesis title: The Role of Dimer-N in HIV Pathogenesis

Supervisors: Stuart Turville; Phillip Robinson
Institutions: University of Sydney, Roche Products Pty Ltd
HIV Biology Group, Immunology and Pathogenesis Program

RNA inducing viral latency

This project is related to siRNA gene silencing for HIV-1 and SVF infection, siRNAs targeting viral promoter DNA region induce transcriptional gene silencing of viral genes in infected cells. The study has been extended to two major objectives: delivery system of siRNA and mechanism of gene silencing. To develop and evaluate delivery systems including lentiviral and non-viral systems for use in a humanised mouse HIV-1 infection model, and to define the pathways by which dsRNAs on the promoter regions of HIV-1 and SVF. Silencing constructs are applicable for use in HIV-1 infection have been developed. These constructs have been incorporated into a lentiviral delivery system, which will be used to silence viral genes induced by siRNAs targeting HIV-LTR will also be defined. We also investigated the subcellular localisation of Argonaute proteins (Ago) during the TGS process and recently reported the presence of Ago1 in the nucleus and Ago2 in the nuclear membrane as demonstrated by confocal microscopic imaging using tagged Ago1/ Ago2 and Ago2 with changes induced by siRNAs targeting HIV-LTR will also be defined.

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Collaborators: Alexander Thompson (St Vincent’s Hospital, Melbourne) and CHARRIT PSC.
Funding: St Vincent’s Hospital Sydney, Roche Products Pty Ltd
Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunology and Pathogenesis Program

A study of the relationship between vitamin status and the severity of liver disease as assessed by histology in HIV-positive patients with Pregesteg interferon alfa 2A plus Ribavirin in Hepatitis C Genotype 1 infected patients

To characterise HCV adaptation to HLA-restricted immune responses, we analyse the influence of HLA alleles on HCV sequence evolution and escape mutations. 

Status: Ongoing

Personnel: Greg Dore, Gail Matthews
Collaborators: Simon Malal and Silvana Gaudieri (CSLBehring, Perth) and Andrew Lloyd (UNSW)

Funding: National Institute of Health

Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunology and Pathogenesis Program

In-vivo hepatitis C virus adaptation to host in recently acquired HCV (ATAH)

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Status: Ongoing

Personnel: Jason Grebely, Gail Matthews, Pip Marks, Sofia Barratt.
Collaborators: Alexander Thompson (St Vincent’s Hospital, Melbourne) and CHARRIT PSC.
Funding: St Vincent’s Hospital Sydney, Roche Products Pty Ltd
Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunology and Pathogenesis Program

ANJI AGGARWAL AND TINA IEMMA
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Dr Anupriya Aggarwal PhD, Research Assistant Tina Iemma BSc (Adv) (Hons) PhD candidate, Thesis title: The Role of Dimer-N in HIV Pathogenesis

Supervisors: Stuart Turville; Phillip Robinson
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HIV Biology Group, Immunology and Pathogenesis Program

TRANSLATIONAL RESEARCH: VIRAL

RADAR - Resistance Against Directly Activating Antivirals in Australian Trial in Acute Hepatitis C (RADAR)

Identification of the prevalence of pre-existing resistance mutations within the ATAC cohort in treatment naive patients, to Polymerase and Protease Inhibitors using Deep Sequencing analysis.

Status: Ongoing

Personnel: Gail Matthews, Tanya Applegate, Greg Dore
Collaborators: Silvana Gaudieri
Funding: NHMRC Project Grant, NHMRC Preclinical Grant
Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunology and Pathogenesis Program

Characterisation of reinfection/mixed HCV infection in recently acquired HCV (ATAH)

Analysis of the prevalence and impact of HCV reinfection and mixed infection using novel real time PCR (MNxA) technology, direct sequencing and genotype specific PCR.

Study population: Israeli injecting drug users

Personnel: Brendan Jacka, Tanya Applegate, Jason Grebely, Greg Dore, Gail Matthews
Collaborators: Sean Pirm & White Matthew (UNSW, Sydney), Alison Todd & Elisa Maloney (Specifics Pty Ltd, Sydney).
Funding: National Institute of Health, NHMRC Program Grant, Australian Postgraduate Award
Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunology and Pathogenesis Program

TRANSMISSION RESEARCH

ITHACA: Investigating Transmission Dynamics of Human Immunodeficiency virus in injecting drug users in Canada and Australia

Status: The goal of this project is to evaluate Transmission dynamics among injecting drug users (IDUs). First, we are interested in how HCV is transmitted from older to younger IDUs and whether public health initiatives have led to a reduction in transmission. Second, we are interested in understanding how frequently reinfection and mixed infections with HCV occur and what characteristics are associated with reinfection/mixed infections. We plan to conduct this study within well-established cohorts of IDUs in Vancouver, the Vancouver Injecting Drug Users Study (VIDUS) and the At-Risk Youth Study (ARYS). Study subjects will be recruited from the UBC Providence Health Care Ethics Committee in Canada during 2012. Eligible; Age 18+ injecting seeking work to be done in Australia.

Status: Ongoing
Transmission networks in recently acquired HCV in ATACH
Explore clinical and molecular epidemiology of HCV transmission networks in HIV+ population and assess if networks bridging into HIV-communities through phylogenetic and molecular clock analysis of HCV sequences.

Status: Ongoing
Personnel: Gail Mathews, Tanya Applegate, Greg Dore, Jason Grebely, Collin Semhal, Fabio Luciani, Peter White, Lei Zhang
Funding: National Institute of Health, NHMRC Project Grant
Co-located: Viral Hepatitis Clinical Research Program (laboratory program) and Immunovirology and Pathogenesis Program

Novel inhibitors of HIV entry
The site where HIV fuses to the cellular membrane has remained one of the most controversial areas in HIV biology. As HIV can fuse with cellular membranes in a pH independent manner, it is already known that the virus can directly fuse with the plasma membrane. However, recent studies knocking down both Dynamin and Clathrin proteins, has highlighted HIV may favour entry via endosomal membranes. Through a collaborative venture with Professor Philip Robinson at the Children’s Medical Research Institute, we are currently testing a portfolio of Dynamin and Clathrin specific set of compounds and their impact on HIV entry.

Status: We have developed an imaging platform of uniquely labelled viruses, to map the entry, fusion and uncoating of HIV-1 under normal conditions and in the presence of inhibitors. In conjunction with high throughput assays, we have developed a novel block to HIV entry using Dynamin and Clathrin specific compounds, but not at the level of viral fusion as expected.

Dynamic trafficking of HIV spread
A core concept in the transmission of HIV is the vulnerability to many attacks by the innate and acquired immune system. To get around these often hostile conditions, HIV predominantly spreads from one cell to the next when they are intimately contacting each other in a structure refer to as a ‘synapse’. Whilst the main objective for virus to move across a synapse is evasion, it may also be seen as a form of synchronised infection. For instance, once an infected cell makes contact with a future HIV target, the virus actively promotes release of many virions towards this neighbouring target. This effectively overwhelm the new cell with virus, making it difficult for natural defenses and also antiretroviral drugs to stop and/or control. This project represents a study only currently capable in a few laboratories worldwide, as it takes years to develop appropriate HIV constructs that could be used to visualise in primary infected cells. The major aim is to track live infectious HIV moving from cell to cell and delineate key cellular pathways the virus corrupts in this process.

Status: For the first time, we have identified HIV using long acting-based structures to co-ordinate spread to new targets. The virus does so by embedding in the tips of long finger-like projections called filopodia. In doing so, the virus has hijacked a probing structure that is otherwise used by cells of the immune system to initiate communications of the immune response.

Personnel: Stuart Turville, Anupriya Aggarwal, Tina Lemma, Ivy Shih
Collaborators: Thomas Hope, Timothy Newsome
Funding: NHMRC Project Grant 750917 and NHMRC CIA 632965
Location: Immunovirology and Pathogenesis Program

Australian Chlamydia control effort (ACCEP): effects study
Current national guidelines for general practitioners (GPs) recommend all sexually active people aged ≥15–29 years receive annual testing for chlamydia. More than 80% of ≥15–29 year olds attend a GP each year; however, fewer than 10% are tested for chlamydia by their GP. ACCEP involves a multifaceted intervention in the GP setting to maximise testing rates and annual testing in sexually active 16-29 year olds in an attempt to reduce the prevalence of chlamydia infections and associated complications such as PID. GP clinics and Aboriginal Community Controlled Health Services in about 50 towns or regions throughout Victoria, NSW and Queensland have been invited to partake in this study.

This is the first trial of this nature in Australia and is being led by the Centre for Women’s Health, Gender and Society, The University of Melbourne, in collaboration with a large consortium of experts including a number of researchers from the Kirby Institute. 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 is to assess the impact of a standardized program of chlamydia in the Australian population. Statistician: Nicholas Haber, University of Western Australia, NSW, and southern Queensland ongoing.

Personnel: John Kalder, Basil Donovan, David Regan, David Wilson, Matthew Law, Rebecca Guy, Rebecca Letch, Lisa Edward, James Ward
Collaborators: Jane Hocking, Meredith Happ, Bronwyn Silver, Janet Knox, Belinda Garton, Christopher Fairley, Linda Garton, Christopher Fairley, Bronwyn Silver, Janet Knox, Belinda Hengel, David Glance, Skye McGregor, Donna Ah Chee, John Boiff, Steven Skov, Debbie Taylor-Thomson
Funding: NHMRC Project Grant
Location: Aboriginal and Torres Strait Islander Health Program

TRAVE: Research Excellence in Aboriginal and Torres Strait Islander Health (REACH)
REACH brings together the leading Australian institution dedicated to clinical research on sexually transmitted and blood borne viral infections (the Kirby Institute), and the peak organisation for Aboriginal and Torres Strait Islander Health (NACCHO). Together, the Kirby Institute and NACCHO will develop and implement a clinical research program through five selected ACCHS in urban and regional areas that will use an approach of clinical practice and practice delivery in this sector.

Status: Research being undertaken in each of the partner organisation sites
Personnel: John Kalder, James Ward, Jane Hocking, Donna Ah Chee, Jane Gun, Christopher Fairley, Nicola Applegate, John Kaldor, Smith Donovan, Maria Mary, Bronwyn Silver, Janet Knox, Belinda Garton, Christopher Fairley, Bronwyn Silver, Janet Knox, Belinda Hengel, David Glance, Sky McGregor, Donna Ah Chee, John Boiff, Steven Skov, Debbie Taylor-Thomson
Funding: NHMRC Centre for Clinical Research Excellence (CREE) Project
Location: Aboriginal and Torres Strait Islander Health Program

GOANDA
The first Australian study assessing knowledge, risk behaviours and health service access in relation to sexually transmitted infections and blood borne viruses of young Indigenous people. This project will conduct the first-ever Australian study describing levels of knowledge, risk practice and access to health services to sexually transmitted infections (STIs) and blood borne viruses (BBVs) of young Aboriginal and Torres Strait Islander people aged 16 to 30 years.

Status: Currently underway; sixteen of 40 survey collections sites completed
Funding: NHMRC Project Grant
Location: Aboriginal and Torres Strait Islander Health Program

REACH: Research Excellence in Aboriginal and Torres Strait Islander Health Program
REACH brings together the leading Australian institution dedicated to clinical research on sexually transmitted and blood borne viral infections (the Kirby Institute), and the peak organisation for Aboriginal and Torres Strait Islander Health (NACCHO). Together, the Kirby Institute and NACCHO will develop and implement a clinical research program through five selected ACCHS in urban and regional areas that will use an approach of clinical practice and practice delivery in this sector.

Status: Research being undertaken in each of the partner organisation sites
Personnel: John Kalder, James Ward, Jane Hocking, Meredith Happ, Bronwyn Silver, Janet Knox, Belinda Garton, Christopher Fairley, Linda Garton, Christopher Fairley, Bronwyn Silver, Janet Knox, Belinda Hengel, David Glance, Skye McGregor, Donna Ah Chee, John Boiff, Steven Skov, Debbie Taylor-Thomson
Funding: NHMRC Centre for Clinical Research Excellence (CREE) Project
Location: Aboriginal and Torres Strait Islander Health Program

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sexually transmitted infections and HIV transmission to inform public health policy. This project will conduct quantitative analyses using epidemiology, mathematical modelling, and health economics to investigate the potential for sexual transmitted infections (STIs), and where applicable injecting drug use, on population health and the transmission of HIV.

Status: Literature review complete; models under development

Personnel: David Wilson, Richard Gray, James Ward, Jonathan Anderson, Rob Carter
Funding: NHMRC Project Grants
Location: Aboriginal and Torres Strait Islander Health Program

STI Modelling Grant

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

Status: Literature review and analysis underway

Personnel: Jane Hocking, David Regan, Rebecca Gilliland, Simon Guy, Andrew Grulich, James Ward
Funding: NHMRC Project Grants
Location: Aboriginal and Torres Strait Islander Health Program

SHIMMER NSW Aboriginal Health Research Program

This project will conduct a sexual health and quality improvement program designed to improve STI/BBV testing and management as four Aboriginal Community Controlled Health Services in NSW. The project aims to increase STI/BBV testing, re-testing and follow up. Another aim is to improve the clinical management of and ongoing monitoring of patients diagnosed with chronic hepatitis B and C and patients diagnosed with hepatitis C.

Status: Implementation of the sexual health program

Personnel: James Ward, Basil Donovan, Rebecca Gay, Simon Guy, Janet Knou, Handan Ward, John Kaldor
Funding: NSW Health
Location: Aboriginal and Torres Strait Islander Health Program

Increasing completeness of ‘Aboriginality’ in infectious diseases data through record linkage – a feasibility study

The aim of this project is to link notified infectious diseases data with birth data and provide availability and validity of epidemiological data on notifiable diseases in Aboriginal people in NSW. Observe how 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 Aboriginal status.

Status: Linkage complete; data analysis and interpretation underway

Personnel: Jeremy McNamly, James Ward, Amalie Dyda, Paula Spokes, Jenny Hunt, Mark Bartlett
Funding: NSW Health
Location: Aboriginal and Torres Strait Islander Health Program

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 genital 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: Completed in 2010

Personnel: Bronwyn Silver, Alice Rumbold, Janet Knou, James Ward, John Kaldor, Steven Skov
Funding: NHMRC Program Grant
Location: Aboriginal and Torres Strait Islander Health Program

A situational analysis of public health responses to chronic hepatitis B in the Torres Strait

This study is designed to identify priorities for an effective public health response to chronic hepatitis B in the Torres Strait through describing the impact of chronic hepatitis B infection on people and communities throughout the Torres Strait and to document how health service providers respond.

Status: Data collection underway

Personnel: Patricia Fagan, Cheryl Sendall, Voka Nakana, Marian Pitts, Jack Wallace, James Ward, Stephen McNally
Funding: Latrobe University
Location: Aboriginal and Torres Strait Islander Health Program

Pulmonary Inflammatory Disease in the primary health care setting: an investigation of clinical management

This project is a review of 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 pulmonary inflammatory disease and or urinary tract infection.

Status: Data collection complete, interpretation and analysis underway

Personnel: Bronwyn Silver, Alice Rumbold, Kinny Smith, Janet Knou, James Ward, John Kaldor, Jacqueline Boyle
Funding: NHMRC Program Grant
Location: Aboriginal and Torres Strait Islander Health Program

Indigenous injecting use in Queensland (IDU): a peer based research project

This research aims to explore the patterns of use, risks and outcomes of Indigenous injecting drug users (IDUs) in Queensland.

Status: Data collection complete, Analysis underway

Personnel: Robert Kemp, Jake Najman, Sidney Williams, James Ward
Funding: Queensland Health
Location: Aboriginal and Torres Strait Islander Health Program

Evaluation and monitoring of six Commonwealth-funded STI Youth Demonstration Projects

In partnership with the AIHW, the Kirby Institute evaluated six Department of Health and Ageing funded Aboriginal and Torres Strait Islander youth demonstration projects. The projects’ objectives were to improve sexual health service delivery in funded organisations.

Status: Completed in 2011

Personnel: James Ward, John Kaldor
Funding: Australian Institute of Health and Welfare (AIHW)
Location: Aboriginal and Torres Strait Islander Health Program

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 transmitted infections (STIs) in Indigenous communities.

Status: Completed in 2010

Personnel: Jane Hocking, Lisa Maher
Funding: NHMRC Training Fellowship
Location: Viral Hepatitis Epidemiology and Prevention Program

Liver Spots: A study of hepatitis B knowledge, treatment and health care among Australian Aboriginals

This project aims to engage Indigenous injecting drug users affected by hepatitis B, as well as health care providers and policy makers in Australia with a view to identifying gaps in management. The project seeks to identify factors that influence treatment, and provide capacity building opportunities for Indigenous Australians.

Status: Ongoing

Personnel: Anna Olsen, Lisa Maher
Funding: NHMRC Training Fellowship
Location: Viral Hepatitis Epidemiology and Prevention Program

Increasing completeness of ‘Aboriginality’ in infectious diseases data through record linkage – a
The International Collaboration of Observational Cohort Programs (TAP-HOM) is a program that includes TreAT Asia, TreAT Asia Hiv observational Database (TAhod), and TreAT Asia paediatric hiv observational Database (TAhod).

**TreAT Asia**
- **Objective**: To study the natural history of acute HIV infection and to develop strategies to prevent HIV transmission.
- **Participants**: Over 3000 individuals in Asia-Pacific region.
- **Data Collection**: Includes clinical, virological, and behavioral data.
- **Funding**: United Nations Development Program.

**TreAT Asia Hiv Observational Database (TAhod)**
- **Objective**: To study the natural history of acute HIV infection and to develop strategies to prevent HIV transmission.
- **Participants**: Over 3000 individuals in Asia-Pacific region.
- **Data Collection**: Includes clinical, virological, and behavioral data.
- **Funding**: United Nations Development Program.

**TreAT Asia Paediatric Hiv Observational Database (TAhod)**
- **Objective**: To study the natural history of acute HIV infection and to develop strategies to prevent HIV transmission.
- **Participants**: Over 3000 individuals in Asia-Pacific region.
- **Data Collection**: Includes clinical, virological, and behavioral data.
- **Funding**: United Nations Development Program.

**NEW HAZARDS FOR YOUNG WOMEN IN ASIA AND THE PACIFIC**

**Program**: TreAT Asia HIV Preventive Program (TAP-HPP) of the International Collaborative Incident-Reporting Cohorts (InC3) Collaborative Group

**Objective**: To study the natural history of acute HIV infection and to develop strategies to prevent HIV transmission.

**Participants**: Over 3000 individuals in Asia-Pacific region.

**Data Collection**: Includes clinical, virological, and behavioral data.

**Funding**: United Nations Development Program.

**Status**: Ongoing

**Personnel**: Skye McGregor, Jialun Zhou, Matthew Law

**Collaborators**: University of California, San Francisco (lead); Cambodian Women’s Development Association.

**Location**: Public Health Interventions Research Group

**Funding**: United Nations Development Program.

**Currently Hiring**
- **Program**: TreAT Asia Preventive Program (TAP-HPP)
- **Position**: Study Coordinator

**Description**: Responsible for managing the day-to-day operations of the study.

**Responsibilities**: Recruitment, data collection, and quality control.

**Requirements**: Experience in coordinated research and strong leadership skills.

**Deadline**: Ongoing

**Contact**: tapp@unsw.edu.au

**For More Information**: Visit the TreAT Asia website.
Women’s and men’s experiences of preventing mother-to-child transmission (PMTCT) in Papua New Guinea: a gendered-socio-cultural analysis of barriers and facilitators for program engagement

PMTCT is an emerging and complex HIV epidemic, placing an increasing number of newborns at risk of acquiring infection. This research seeks to understand the gendered-socio-cultural aspects influencing health-seeking and outcomes of PMTCT programs from the perspectives of antenatal women, their partners, and health care workers. It seeks to understand an assessment of PMTCT programs; examine knowledge, attitudes and decision-making processes regarding PMTCT; test enablers of return for safe delivery and post-natal care; examine experiences of consent, counselling and confidentiality; determine gender-specific barriers/ facilitators to accessing PMTCT programs; and develop recommendations for improved PMTCT programs.

Status: Completed late 2009

Collaborators: Heather Worth, Angela Kelly, Barbara Kepa, Martha Kapul, Grace Karigura, Mela Gona, Tarcisia Hunhoff, PNG Institute of Medical Research, University of Papua New Guinea, University of Queensland, Australia. An Australian consortium led by the PNG National AIDS Council

Research and education in HIV/AIDS for resource-poor countries: REACH Initiative
diagnosis of tuberculosis in HIV infected and uninfected children in Papua New Guinea: a tool-assisted case study

This program is investigating the potential of male circumcision for HIV prevention in Papua New Guinea. It is a four-year multi-disciplinary study with four principal components: ethnographic research; mathematical modelling; health systems research; and longitudinal clinical cohort studies. The study is being carried out among a combination of general and at-risk populations in multiple sites in PNG. A sub-study to investigate the role of the vaginal microbicidal surrogate for HIV prevention among women and men attending a sexual health clinic in Port Moresby was completed in 2010. MAICIS jointly organised a National Policy Forum on Male Circumcision for HIV Prevention in PNG, which was held in Port Moresby in November 2011 with the purpose of translating research evidence into public health policy and practice.

Status: To be completed December 2011

Collaborators: Peter Silva, Angela Kelly, Lisa Fitzgerald, Claire Ryan, James Neo, Martha Kapul, Herminius Taro, Tarcisia Hunhoff, Zure Kombati, John Millan, Greg Law, Joyce Sauk, Andrew Page, John Murray, David Wilson, Richard Gray Peter Hill, Anna Tyan

Collaborators: PNG Institute of Medical Research, Mt Hagen General Hospital, PNG HPW, PNG Institute of Medical Research, Australia, The Burnet Institute, Melbourne.

Funding: AusAID Australian Development Research Group, National AIDS Council, PNG Institute of Medical Research; Mt Hagen General Hospital, PNG; University of Papua New Guinea; The Burnet Institute, Melbourne.

Status: To be completed December 2011

Location: Public Health Interventions Research Group

Qualitative longitudinal study to investigate constructions of masculinity, sexuality and agency among male youth in Papua New Guinea (NACAS Masculinities Study, PNG)

This two-year multi-disciplinary community-based research program (ADRA) will investigate the role that individual, community and cultural constructs of masculinity, sexuality and sexual agency have in determining sexual behaviour among young men in PNG, and the social and cultural factors that shape these constructions. The program will investigate the social and cultural factors known to increase the risk of HIV and STIs among men and women. The study’s main aim is to understand the social, cultural and community factors driving the masculinities of young men in PNG and the social and cultural factors that contribute to the social constructions of masculinity. The study will be conducted through interviews and focus groups in four provinces in PNG. It will provide the first general population level estimates of HIV prevalence and is expected to inform future policy on HIV prevention and cervical cancer prevention in PNG.

Status: Fieldwork commencing December 2011

Collaborators: Andrew Vallely, Claire Ryan, John Kaldor, Zure Kombati, Peter Silva, Glen Mola, Lisa Valley, Suparat Phyuakhoompon, Peter Silva, Glen Mola, John Milian, Glenis Rie, Sepehr Tabrizi, Andrew Vallely, John Kaldor, Zure Kombati

Collaborators: PNG Institute of Medical Research, National Department of Health, PNG; PNG Institute of Medical Research, Royal Women’s Hospital, Melbourne.

Funding: PNG Partnership in Health Program
Human papillomavirus infection among women attending sexual health clinics in Mt Hagen, Goroka and Port Moresby, Papua New Guinea (HPV Study PNG)
This study will investigate the epidemiology of human papillomavirus (HPV) and other sexually transmitted infections among women attending sexual health clinics in three provinces in PNG. It will provide the first estimates of HPV type prevalence among women at increased risk of HIV/STI acquisition in PNG and is expected to inform future policy on cervical cancer screening and prevention.

Status: Fieldwork to commence February 2012
Personnel: Angela Kelly, Andrew Vallely, John Kaldor, Glen Mola, Antonia Kumbia, Benny Kombuk, Alex Golpak, Lisa Vallely, Primrose Homiehomie, Jane Jones, David Wood, Peter Siba
Collaborators: PNG Institute of Medical Research, National Department of Health, PNG, HoiP Worldwide, PNG, Mt Hagen General Hospital, Save the Children in PNG, The Burnet Institute, Melbourne, Royal Women’s Hospital, Melbourne
Funding: AusAID PNG
Location: Public Health Interventions Research Group

SOUTH AFRICA

Cervical cancer screening using visual inspection with acetic acid (VIA) and its relationship to cervical cytology and high-risk human papillomavirus (HR-HPV) infection among women attending Well Woman Clinics in Papua New Guinea (VIA Study PNG)
This study will investigate the prevalence of VIA-detectable cervical abnormalities; cervical intraepithelial dysplasia; high-risk human papillomavirus (HR-HPV) infection; and the behavioural and biological determinants associated with risk, among women attending Well Woman clinics in Eastern and Western Highlands Provinces, PNG. The study will determine the acceptability and operational feasibility of VIA plus cryotherapy (‘test and treat’) as an intervention for cervical cancer screening and treatment among urban and rural populations in PNG, and is being conducted in order to inform future national policy on cervical cancer screening.

Status: Participant enrolment to commence February 2012
Personnel: Andrew Vallely, Claire Ryan, John Kaldor, Glen Mola, Antonia Kumbia, Benny Kombuk, Handan Wand, Lisa Vallely, Angela Kelly, Joanne Guyen, Phillip Baird, Greg Law, Peter Siba
Collaborators: PNG Institute of Medical Research, National Department of Health, PNG, Mt Hagen General Hospital, Goroka General Hospital, MeriPath PNG; The Burnet Institute, Melbourne
Funding: AusAID PNG
Location: Public Health Interventions Research Group

Meanings and beliefs of cervical cancer, its causation, prevention and treatment in Papua New Guinea
This mixed-method qualitative study will investigate socio-cultural contexts of cervical cancer in Papua New Guinea in order to inform future national prevention and care strategies, including HPV vaccination and cervical screening programs.

Status: Fieldwork to commence February 2012
Personnel: Andrew Vallely, Claire Ryan, John Kaldor, Glen Mola, Antonia Kumbia, Benny Kombuk, Alex Golpak, Lisa Vallely, Primrose Homiehomie, Jane Jones, David Wood, Peter Siba
Collaborators: PNG Institute of Medical Research, National Department of Health, PNG, Mt Hagen General Hospital, Goroka General Hospital, Kimbo Hospital
Funding: AusAID PNG
Location: Public Health Interventions Research Group

Biostatistics and Database Support
Developing clinical trial databases, and providing biostatistical input to the design and analysis of all Kirby Institute projects.

Status: During 2011, members of the Program actively contributed to the design of, or analysed data from, the ALTAF, ENCORE, SMART, ESPRIT, SILCAAT, Second line, and MARCH studies (see Therapeutic and Vaccine Research Program); the ATAH and ATAH II studies (Viral Hepatitis Clinical Research Program); the ACCEPt study (Sexual Health Program); the STRIVE study (Aboriginal and Torres Strait Islander Program); the NSP survey (Viral Hepatitis Epidemiology and Prevention Program); and national surveillance activities (Surveillance and Evaluation Program for Public Health).

Personnel: Noorul Absar, Amit Achhra, Janaki Amin, Rossitza Chevkenova, Paul Fahery, Kathy Petoumenos, Handan Wand, Julian (Julian) Zhou
Collaborators: Other programs at the Kirby Institute
Funding: Project-specific grants
Location: Biostatistics and Databases Program
THE DIRECTOR’S UNIT
Director and Scientific Professor of Medicine
David Cooper AO FAA, BSc(Med), MB BS, MD, FACP, FAHMS

Research Associates
Andrew Grulich MBBS, MSc, PhD
Associate Professor
John Murray BSc(Hons), MSc, PhD

THE HIV/AIDS Legal Centre (HALC) Management Board (Iryna Zablotska-Manos)
The Salvation Army, Overdose Awareness Day Committee (Peter Higgins)

Therapeutic Goods Administration (TGA) expert advisory panel for influenza vaccine testing (Anthony Kelleher)

TREAT Asia HIV Observational Database Steering Committee (Matthew Law, Julian Zhou)

TREAT Asia Paediatric HIV Observational Database Steering Committee (Matthew Law, Azar Karminia)

TREAT Asia Quality Assurance Scheme Steering Committee (Matthew Law, Julian Zhou)

UNAIDS Estimation of Australia’s HIV/AIDS indicators (David Wilson)

The Data Collection on Adverse Events of Anti-HIV Drug Study (David Cooper, Sean Emery, July)

Associate Professor
Paul Fahey BSc, MMedStat (to April)

Assistant
Steve Frendo Dip Eng (Elec), Design Cert (to Nov)

Project Coordinator
Anchita Checkley BA (Hons) (from June)

Administrative Assistant
Ali Ayoubi (to May)

ABORIGINAL AND TORRES STRAIT ISLANDER PROGRAM

Head and Senior Lecturer
James Ward BA

Research Manager
Simon Graham BIS, MAppEpid

NationalCoordinator
Climir Arimondi BA, MED, PhD (to Dec)

ClinicalProject Leader
Mary Ellen Harrod BA, Dip Arts (EH1), M Prelin, PhD

Project Coordinator
Linda Garton RN, Grad Cert Adv Prac, Sex Hlth

Senior Research Officer
Amalie Dyda BHlthSci, MAE

Project Officer
Belinda Ford BSc, MPH

Administrative Assistants
Andrew Nakhla BComm, LBB
Lucy Watches-Smith

HIV EPIDEMIOLOGY AND PREVENTION PROGRAM

Head, Program and NHMRC Principal Research Fellow
Andrew Grulich MBBS, MSc, PhD, FAPPHM

Associate Professor
John Murray BSc(Hons), MSc, PhD (part time)

Senior Lecturer
Janaki Amin BSc(Hons), MPH(Hons), PhD

PhD Stephen Kerr BPharm(Hons), MIPH, PhD (based at HIV-NAT, Thailand)

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

David J.Templeton MBChB, DipVet

MFcMed, MDACM, MFcSHM

Iryna Zablotska-Manos PhD, MD, MPH

Associate Lecturers
Ben Bavinton BA (Hons), MPH

Ian Dow MPh

Michelle McKenzie Bmc-Sic(Hons), PhD

Research Assistants
Brian Acatram

Patrick McGrath BA, Dip Ed, Grad Dip

Matthew O’Dwyer BLHlthStrd, MPH(Hons) (from April)

Project Officer
Jack Bradley

Designer
Steve Frendo Dip Eng (Elec), Design Cert (to Nov)

Program Coordinator
Anchita Checkley BA (Hons) (from June)

Administrative Assistant
Ali Ayoubi (to May)

IMMUNOVIROLOGY AND PATHOGENESIS PROGRAM

Professor and Head
Anthony Kelleher BSc(Hons), MB

BSc(Hons), PhD, FRCP, FCPG

Senior Lecturer and NHMRC CDA Fellow
Stuart Turville Bsc (Hons) (PhD) LBB

Lecturers
Linda Gelgor PhD, MSc

Kirsten Koisch MBBS, MD

Clinical Project Co-ordinator
Patricia Grey BA, Post Grad Dip App Sci, CNS, Dip (Counselling)

Research Assistants
Amitya Aggarwal PhD

Michelle Bailey BSc(Hons)

Chantelle Hood PhD

Susanna Ip BSc

Chamaraw Phumisaphan BSc, MSc

Yin Xu MSc (Research), MSc

Data Administrator
Anna Checkley BA (Hons) (from June)

Administrative assistants
Tracey Barrett (from April)

Lucy Watches-Smith BA, MPH (to April)
**JUSTICE HEALTH RESEARCH PROGRAM**

**Head and Professor**

Tony Butler BSc (Quant methods) MSc (FT) PhD DipAppBio

**Research Fellow/ Assistant**

Michael Doyle Grad Dip (Indig H Promotion)

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**PUBLIC HEALTH INTERVENTIONS RESEARCH GROUP**

**Head and Professor of Epidemiology**

John Kaldor PhD

**Associate Professor**

Andrew Valley MBBS, MRCP, MSC, DTM&H, PhD

**Senior Lecturer**

Bette Lau MBiostat(Hons) MPH(Hons) PhD

**Lecturers**

Louise Causer BS, MSc, DTM&H, Joanne Macfarlane BMedSc (Hons), PhD

Bradley Muthers MSD, MBChb, BH

Program Manager

Skye McGourty RGN, BSc, MA

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**SURVEILLANCE AND EVALUATION PROGRAM FOR PUBLIC HEALTH**

**Head and Associate Professor**

David Courtney-Rodgers BAppSc, BAppSc(Hons), GradCert(Res) RGN, PhD

**Lecturers**

Richard Gray BSc(Hons), PhD

Lei Zhang BSc(Adv Hons), MSC, PhD, MPH

Visiting Academic

Xun Zhuang (from February)

Post Doctoral Research Fellows/ Associate Lecturers

Alexandre Digenis BSc(Hons), PhD

Josephine Reyes BS, MS, PhD

**Research Associate**

Cliff Kerr BSc(Hons), LMsA, DipArts, PhD

**HIV Surveillance Coordinator**

Ann McDonald BSc, MPH

**Senior Surveilliance Officer**

Carleigh Cowling BNRs, PDipDisM (from April)

**Surveillance Officer**

Melanie Middleton BMedSci, MPH

Tara Lucky MBBs, MPH

**Research Assistants**

Shamin Kinarali BS, Hons, BSc Enza Robinson BSc(Hons), MSc

Andrew Craig BSc (from April)

Gordana Popovic BEd, BSc(Hons), BS, MSc, BBS(Dev)

**Program Coordinator**

Katie Lennor NAS

**Program Manager**

Megan Brennan

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**SEXUAL HEALTH PROGRAM**

**Head and Professor of Sexual Health**

Basil Donovan MB MBBS, DipVim (Laud), MD, FAPPHM, FRCPCH, FACHSHM

**Senior Lecturer and NHMRC Post-doctoral Fellow**

Rebecca Guy BAppSc, MAppPld, PhD

**Lecturers**

Hamda Ali BSc, MBBS, MPH

Damian Conway, MB BC MMed(STD/ HIV) FallachSM NHMRC DRCGG DFF

**Project Co-directors**

Lisa Edwards BNRs MPH

Rebecca Lorch DipAdultNurs BSc(Hons)

**Research Assistants**

Larissa Lewis BA

Muhammad Shahid Jamil MBBS MPH

Denny Challander BA, BMT

**Visiting Research Fellow**

Hsin-Chun (Grace) Lee MD

Lucy Watkins Smith BA, MPH (from April)

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**THERAPEUTIC AND VACCINE RESEARCH PROGRAM**

**Head and Professor**

Sean Emory BSc(Hons), PhD

**Senior Lecturer**

Mark Boyko BA, BM, BS, DCTM&H, MBD, MD, FRACP

Sarah Pet BSc(Hons), MB BS(Hons), DTM&H, MRCP (UK), FRACP, PHD

**Lecturers**

Helen Byakwaga MB ChB,PHD

Dianne Casey BFham, MPhD, PhD

Rebekah Paul BSc(Hons), PhD

**Senior Clinical Project Co-directors**

Cate Carey RN, RA, MAppSc(School) Singh Humphries BSc, MSc (Med), Grad Dip PH

David Courtney-Rodgers

Emmonee Lin BA/Bsc (Hons) PhD

**Clinical Project Co-directors**

Maria Arriaga BSc, MScMed (STDO/HIV)

Carlo Dazo BMedSci (Hons)

Hila Haskell BSc

Simone Jacoby BSc, Dip Nutrition, Adv Dip Bot Med

Nisha Senevirante BMedSci, Bllus

Megan Evans Rappap GHP.

**Program Coordinator**

Simone Jacoby Bsc, Dip Nutrition, Advance Dip Bot Med

Sena Veneprasai BMedSci, MD, PhD

Michael Doyle Grad Dip (Indig H Promotion)

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**VIRAL HEPATITIS EPIDEMIOLOGY AND PREVENTION PROGRAM**

**Professor and Head**

Lisa Maher MD

**Senior Lecturer**

Libby Topp BSc(Psychol)(Hons), PhD

**Associate Lecturer**

Sarah Wright BSc, PGDip Sc, PhD (Physiology) (from October)

**Lecturer**

Mehdia MJ MSc FAPPHM (from July)

**Post Doctoral Research Fellows**

Peter Higgs PhD, MA, BSW

Joanne Kimber BSc, PhD

Anna Olsen PhD

Will Small PhD

**Study Co-directors**

Rachel Deacon BSc, PhD (to Sept)

Jenny Versos BAppSc

Bethany White BA (Psych), MPH

**Research Assistants**

Anna Bellew BSc, RA, MPH

Saman Chau BSc (Hons) (from May)

Juliene Enquez

Meduline Islam BSc(Hons), MSc(Med), MPH

Julie Park BSc(Hons) (to July)

Ashley Lin

**Program Coordinator**

Rachel McClean BA,Hons, BEd(Prim)

Fiona Campbell (April-Oct)

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**VIRAL HEPATITIS CLINICAL RESEARCH PROGRAM**

**Head and Professor**

Greg Davey MB BS, BSc, PhD, FRACP, MPH

**Senior Lecturers**

Gail Matthews MBChB, MRCP (UK), FRACP, BPhD

Tanya Applegate-BSc (Hons), PhD

Jason Grebely BSc, MD, FAHPM, FRCPI, FAChSHM

**Viral Hepatitis Clinical Research Fellow**

Rachel Ali BBMB, BMedSci(Hons), MRCPath(L) (to Dec)

**Lecturer**

Marianne Jaunary BMed, Grad Dip App Epi, MPh, FAPPHM (to Jun)

**Clinical Trials Manager**

Philip Read Bsc, MPH, FAPPHM, DFFP, DipHV, MPH, FACHSHM

**Research Assistants**

Linda Hankey BSc, Grad Dip Ed, Aus Dip Hlth Sc

Morgan Stewart BA(Hons)

**Administrative Officers**

Ian Brodie BSc, Grad Dip Ed, Aus Dip Hlth Sc

**Program Coordinator**

Emma Wright BA, MPH, DFFP, DipHV, MPH, FAPPHM

**Assistant Professor**

Michele McCaffrey PhD, BMMedSci (Hons) (from Feb)

John J Morrison, BSc (Hons), PhD, Cert Health Econ, Grad Cert Pharmacoecon, CCRA, CERT (from Aug)

Marianne Byrne B.S.C (Hons), Grad Cert ClinTrialsMan (from August)

**Senior Research Officer**

Francesca Lamonty Vietnam (Biology) (from Feb)

**Research Assistants**

Amanda Errant ADip (Med Record Admin)

Sofia Bartlett BSc (Hons) (from Feb)

**Data Manager**

Sharma Sriyantag BMedSci (from Feb)

**Labkey Database Developer**

Trena Schafer BA BT (to Oct)

**Administrative Assistants**

Jennifer Moore (to Dec)

Sarah Field (Feb to Aug)

Deb Payne (Aug to Dec)

Shelley Timworth (from Feb)

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**OPERATIONS GROUP**

**Operations Manager**

David Draganic BSc(Hons)

**Business Manager**

Annette Tong MPA

**Manager Finance**

Gina Lam BA(Hons), MBA

**Manager Human Resources**

Jenice Osemam

**Manager IT**

Phillip Read BSc, MPH, FAPPHM, DFFP, DipHV, MPH, FACHSHM

**Program Coordinator**

Joanne Micallef BMedSc (Hons), PhD

**Data Manager**

Sofia Bartlett BSc (Hons) (from Feb)

**Senior Data Manager**

Barbara Yeung RN, BHSC (Nursing), MPH

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**ASSOCIATES AFFILIATED TO NCEHR**

**Visiting Professor**

Michael Mccaffrey PhD, BMMedSci (Hons) (from Feb)

**Senior Visiting Fellow**

Andrew Vallely MBBS, MRCP, MSC, DipGUM, DFFP, DipHV, MPH, FACHSHM

**Senior Visiting Fellow**

Carolei Kronenberg BA, Dip IM Lib, AALIA

**IT Specialist**

Sergio Sandler MSc, IE, RD, Ed

**System Computers Officers**

Lisa Howard Dip IT

**Manager, Human Relations**

Brigitte Sharp BA(Hons), MAppSc

**Manager, Administration**

Mick Stott

**Administrative Officers**

Ian Brodie BSc, Grad Dip Ed, Aus Dip Hlth Sc

**Program Coordinator**

Ran He

**Receptionist**

Raphael Joseph

**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

Visit bond 7572, Professor of Medicine

Medical Director, St Vincent’s Hospital, Sydney

Nick Croft MB BS, MPH, FAPPHM

Director and Professor

Turn Point Alcohol and Drug Centre, Melbourne

**Senior Lecturer**

Karen Read MB BS, MM FACHSHM

Sexual Health Physician

Taylor Square Private Clinic, Sydney

**Research Fellow**

Philip Read BSc, MBBS, MRCP, DipGUM, DFFP, DipHV, MPH, FACHSHM

**Post-graduate Fellow, Sydney Sexual Health Centre, Sydney Hospital**

**Associate Professor, Infectious Disease Physician**

Medical Director, Sydney Hospital

**Professor and Director**

University of Sydney

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

St Vincent’s Hospital, Sydney

**Post-graduate Fellow, Sydney Sexual Health Centre, Sydney Hospital**

**Associate Professor**

University of Sydney

**Professor**

St Vincent’s Hospital, Sydney

**Associate Professor**

University of Sydney

**Assistant Professor**

University of Sydney

**Professor**

University of Sydney
DOCTORATES AWARDED

Antiretroviral therapy and the management of HIV/AIDS
Supervisors: Sean Emery; David Cooper; Mark Boyd
Dianne Carey
Optimising therapeutic outcomes in HIV-infected subjects
Supervisors: Sean Emery; David Cooper
Hepatitis C-related morbidity and treatment in Australia
Supervisors: Matthew Law; Greg Dore; Janaki Amin
Sanjay Apte
Aspects of HIV-1 treatment: an exploration of the positive and negative physiological aspects of host-directed treatments for HIV-1 infection
Supervisors: David Cooper; Tony Kelleher; Shao Emei
Sanjay Swaminathan
Role of mRNAs in HIV-1 pathogenesis
Supervisors: Tony Kelleher
Elizabeth Sullivan (University of New South Wales), MD (Research)
PhD thesis: Australian perspectives on injecting drug users’ health: The impact of targeted primary health care services on injecting drug users’ health
Supervisors: David Cooper; Tony Kelleher; Nabila Seddiki

PHD CANDIDATES AT THE KIRBY INSTITUTE
Amit G. Achhera
Bio-markers and other predictors of AIDS and non-AIDS diseases in HIV infected (cohort) studies
Supervisors: David Cooper; Janaki Amin; Matthew Law
Daryll Lane
Toni Alavi
Barriers to the assessment and treatment of hepatitis C virus infection in injecting drug users
Supervisors: Greg Dore; Jason Grebely
Hamdam Ali
Characterising the incidence and trends in Chlamydia infection in Australia
Supervisors: Rebecca Guy; Basil Donovan; David Wilson
Jonathan Anderson
The role of coeliac disease in evaluation in decision-making about HIV
Supervisors: David Cooper; Sean Emery; Kathy Persuomos
Maria Arriaga
Aspects of Human Immunodeficiency Virus (HIV) management
Supervisors: Sarah Pett; Mark Boyd
Anchalae Arhinganons
Non AIDS complications and treatment optimizations for HIV-1 infected Thai adult patients with and without TB or Hepatitis B infection
Supervisors: Gail Matthews
Ben Bavinton
HIV viral load and transmission in serodiscordant male homosexual couples
Supervisors: Andrew Grulich; Garrett Drummond
Louise Causer
STI rapid point-of-care tests
Supervisors: John Kaldor; Rebecca Guy; Geert van Eijkeren
William Casey
Understanding the past, forecasting the future – investigating the epidemiology of HIV/AIDS in China
Supervisors: Lei Zhang; David Wilson
Paul Clark
Genomics to predict the complications of chronic hepatitis C and its treatment
Supervisors: Greg Dore; Alex Thompson (St Vincent’s Hospital, Melbourne); Gail Matthews
Damian Conway
Novel approaches to HIV testing for men who have sex with men
Supervisors: Rebecca Guy; Martin Holt (NCBH); Andrew Grulich
Laura Cook
Characterisation of T regulatory cells
Supervisors: Tony Kelleher; Nabila Seddiki
Ian Down
Meanings of HIV and ‘safe-sex’ among a sample of recently diagnosed gay men in Australia
Supervisors: Garret Prestage; Jeanne Ellard
Fraser Drummond
Chemophoresis for syphilis in MSM - a trial of systemic chemophoresis for syphilis in HIV positive men who have sex with men
Supervisors: Basil Donovan; John Kaldor; Rebecca Guy; Jef Krausner
Simon Graham
An intervention to improve sexually transmitted infection management in selected Aboriginal Community Controlled Health Services in New South Wales
Supervisors: Basil Donovan; Rebecca Guy; Handan Wand
Behzad Hajarizadeh
Diagnosis and natural history of acute hepatitis C virus infection
Supervisors: Greg Dore; Jason Grebely; Tanya Applegate
Hila Haskelberg
Antiretroviral toxicity in HIV-infected patients
Supervisors: Sean Emery; Andrew Carr (St Vincent’s Hospital); Janaki Amin
William Hey-Cunningham
Delineation of the latent HIV reservoir with subpopulations of Memory CD4 T cells
Supervisors: Tony Kelleher; Kersten Koehl, John Zinziere (SIVH)
Kelly Jean Heymer
Using modelling to evaluate drivers and predict trajectories of HIV and STI epidemics in South East Asia and Australia
Supervisors: David Wilson, Philip O’Neill (University of Nottingham)
Denise Chen Hou
Using novel biomarkers to define the role of TB specific effector T cell and TB specific regulatory T cell in patients with Mycobacterium tuberculosis (TB) and HIV coinfection
Supervisors: David Cooper; Jintanat Ananworanich (HIVNAT); Tony Kelleher
Tina Iemma
The role of Dynamin-1 in HIV Pathogenesis
Supervisors: Stuart Turville; Philip Robinson (University of Sydney)
Mofizul Islam
The impact of targeted primary health care on injecting drug users’ health
Co-supervisor: Libby Topp
Jennifer Iverson
Enhanced sentinel surveillance among people who inject in drugs in Australia
Supervisors: Lisa Maher; Libby Topp; Handan Wand
Brendan Jacka
Viral epidemiology of multiple Hep C infections in international high risk populations
Supervisors: Tanya Applegate; Jason Grebely; Greg Dore
James Janssens
Mapping HIV outcomes: geographical and clinical forecasts of people living with HIV in Australia
Supervisors: David Wilson; Richard Gray
Amy Kwon
Mathematical modelling of viral epidemics among injecting drug users in the Asia-Pacific region
Supervisors: David Wilson; Rosie Thein; Cliff Kerr
Linh-Ke Le
HIV incidence and predictors of sexual and drug injecting behavioural risk among female sex workers/men who have sex with men in Vietnam
Supervisors: John Kaldor; Lisa Maher; Keith Sahin (WHO, Hanoi)
Scott Ledger
The effects of anti-attachment and fusion inhibitors on transmission in the protection of HIV susceptible cells
Supervisors: Geoff Symonds, John Murray
Dorothy Mathela
The natural history of anal human papillomavirus infection and anal cellular abnormalities in mature aged homosexual men
Supervisors: Andrew Grulich, Jeff Jin; Mary Pyoiento
Kyle-Anne Malliot
Geometric model of HIV Transmission
Supervisors: Handan Wand; David Wilson
Allison Martin (Humphries)
Investigations associated with antiretroviral treatment of HIV-1 antiretroviral treatment effects on HIV infected subjects
Supervisors: Sean Emery; Janaki Amin; Andrew Carr (St Vincent’s Hospital)
Samantha McEllery (University of Sydney)
Proteomics of True de novo HIV in the Context of Produgic Infection
Supervisor: Stuart Turville
Emma Miambo
Developing enhanced surveillance and evaluating available data for monitoring HIV among culturally and linguistically diverse (CALD) populations living in Australia
Supervisors: David Wilson; Handan Wand
Suzanne Polis
Adherence to hepatitis B antiviral therapies
Supervisors: Lisa Maher; Armany Zekry (St George Hospital)
Karen Schneider
Mathematical modelling of HIV epidemiology, treatment and drug resistance in Thailand
Supervisors: David Wilson; Matthew Law; Basil Donovan
Ivy Shih
HIV incidence and predictors of sexual and drug injecting behavioural risk among female sex workers/men who have sex with men in Vietnam
Supervisors: John Kaldor; Lisa Maher; Keith Sahin (WHO, Hanoi)
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Adherence to hepatitis B antiviral therapies
Supervisors: Lisa Maher; Armany Zekry (St George Hospital)
Karen Schneider
Mathematical modelling of HIV epidemiology, treatment and drug resistance in Thailand
Supervisors: David Wilson; Matthew Law; Basil Donovan
Ivy Shih (University of Sydney)
Characterisation of Human Immunodeficiency Virus (HIV) spread with geographically relevant cell targets of the immune system
Supervisor: Stuart Turville; N Naar (University of Sydney)
Sowbhagya Somadathan
Influence of civil society on HIV policies and services in India and the participation of people living with HIV/AIDS
Supervisors: Lisa Maher; Anthony Zwi (UNSW)
Tom Craig
Cost effectiveness of antiretroviral treatment in Vietnam
Supervisors: Le Zhang; Anthony Shakeshaft (NDARC), David Wilson; Chris Doran (University of Newcastle)
Winnie Wing Yin Tong
Measurment of immune responses to clinically significant viral pathogens in immunocompromised adults
Supervisors: Andrew Carr (St Vincent’s Hospital); Tony Kelleher
Edvard ( Ned) Waters
The antigenic and implications of HPV variants in HPV related cancers
Supervisors: David Regan; David Philp (SPHCM); Andrew Grulich, Anthony Smith
Chris Weatherall
Characterisation of β-lymphocyte responses in primary HIV infection- neutralising antibodies and immune tolerance
Supervisors: Tony Kelleher; David Cooper
Bernathy White
Hepatitis C vaccine preparedness
Supervisors: Lisa Maher; Greg Dore
Stephen Wright
Antiretroviral therapies and immunological outcomes in HIV-positive patients
Supervisors: Kathy Petoumenos; Matthew Law
Masters of Research by Publication Supervisors: David Wilson
Belinda Heng
What works? Improving Primary Health Care Centre access and STI amongst young people in remote Aboriginal and Torres Strait blander communities in Australia
Supervisors: John Kaldor; Rebecca Guy; Lisa Maher
Rebecca Sedar
Role of the Practice Nurse in chlamydia testing in general practice
Supervisors: Andrew Carr (UNSW); Jane Hocking; Meredith Temple-Smith (both University of Melbourne)
Tatiana Lucky Pui Fung Chow
Developing enhanced surveillance and evaluating available data for monitoring HPV among culturally and linguistically diverse (CALD) populations living in Australia
Supervisors: David Wilson; Rebecca Guy
Quang Duy Pham
Modelling the emergence of drug-resistant strains of HCV in Vietnam
Supervisors: Le Zhang; David Wilson
Chansavath Phetsouphanh
On-chip detection of HPV in cervical cells to identify high-grade precursors
Co-supervisor: David Regan; Tanya Applegate

MASTERS STUDENTS AT THE KIRBY INSTITUTE
Anna Charisse Farr
Evaluation of HIV in the Philippines
(Masters by Research) Supervisors: David Wilson
Belinda Heng
What works? Improving Primary Health Care Centre access and STI amongst young people in remote Aboriginal and Torres Strait blander communities in Australia
Supervisors: John Kaldor; Rebecca Guy; Lisa Maher
Rebecca Sedar
Role of the Practice Nurse in chlamydia testing in general practice
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Chansavath Phetsouphanh
On-chip detection of HPV in cervical cells to identify high-grade precursors
Co-supervisor: David Regan; Tanya Applegate
The following list describes the actual funding that was provided to the Kirby Institute in the 2011 year.

**Australian Government Department of Health and Ageing**

- Research activities for blood borne virus and sexually transmissible infections 3,879,917
- Establishment and maintenance of a trachoma surveillance and reporting unit

**Other grants and contracts from public sources**

- American Foundation for AIDS Research: A randomised open-label study of second-line combination ART
- nhmrc - program grant subcontract
- nsw health department
- other state health department
- Training Fellowship for Peter Higgs
- PRF - Andrew Grulich
- SPRF - John Kaldor
- SPRF - Lisa Maher
- Training Fellowship for Anna Olsen
- Training Fellowship for Andrew Vallely
- Training Fellowship for David Templeton

**NHMRC - Program Grant Subcontract**

- University of Sydney: Building research capacity for health interventions to improve Aboriginal health 56,750
- University of Melbourne: Using mathematical models to assess impact of interventions to reduce sexually transmitted infections in Australia 120,000

**NSW Health Department**

- Australian Chlamydia Hepatitis C Observational Study (ACHOS) 141,088
- Chlamydia Literature Review 75,000
- Mapping of the community networks and groups among men who have sex with men in NSW (The Mapping Study) 25,000
- NHGCR HIV Surveillance and Epidemiology Support 125,000
- NPA-H HIV Hepatitis C Project 25,000
- NPA-HEC Aboriginal Sexual/Reproductive Health Project 25,000
- NSW Aboriginal Sexual Health and BV Research Study - Stage One (SHIMMER) 49,960
- The ETTEST Project: An initiative to enhance STI testing in gay men 223,669
- The HIV Serocconversion Study 53,853

**Sexual health and relationships in young Indigenous People (ARC Linkage Partner)**

- NSW Department of Health/NHMRC Partnership Project Partner Contribution – Evaluation of a model for assessment and treatment of hepatitis C virus among injecting drug users in the opiate pharmacotherapy setting (ETHOS) 350,000

**Other State Health Department**

- ACT Health: Sexual health and relationships in young Indigenous People (ARC Linkage Partner) 2,000
- Queensland Health: Sexual health and relationships in young Indigenous People (ARC Linkage Partner) 25,000
- Queensland Health: Study of risk factors for HIV seroconversion 46,477
- Tasmania Health & Human Services: Sexual health and relationships in young Indigenous People (ARC Linkage Partner) 15,000
- Victoria Health: Sexual health and relationships in young Indigenous People (ARC Linkage Partner) 31,000
- Western Australia Health: Sexual health and relationships in young Indigenous People (ARC Linkage Partner) 3,000
- Western Australian Health: Study of risk and HIV among men who have sex with men in Western Australia 6,915

**Queensland University of Technology/Department of Employment: Economic Development and Innovation – National and International Research Alliance Program Shared Grant/Subcontract Australia-Canada-India Chlamydia Research Alliance: Improved detection treatment and control of chlamydial infections 35,000

- Schering-Plough Research Foundation: Health Liver Campaign 360,368
- 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) 242,393
- UNAIDS: Evaluating the effectiveness of needle and syringe programs in Eastern Europe 33,681

**US National Institutes of Health Subcontract**

- University of Basel: Swiss HIV Cohort Study - Myocardial infarction, assessment of antiretroviral and genetic factors in human immunodeficiency virus infection MAGNIFICENT
- US National Institutes of Health: Treatment of recently acquired hepatitis C virus infection (ATAHC 2) 327,642
- University of California, San Francisco Institute for Global Health: Culture and HIV Prevention in Cambodia 16,458
- University of Minnesota: INSIGHT - Leadership 323,543
- University of Minnesota: INSIGHT - COLLABORATIVE FUND 309,637
- University of Minnesota: START Study 424,871
- University of Minnesota: STALWART Study 48,092
- Subcontract Agreement with University of Maryland, Baltimore: Ero-Pathogenomics of Chlamydia Trachomatosis React Infection 33,097
- World Bank (USA): Evaluation of HIV Epidemics and Programs in Asia 180,658

**Pharmaceutical Industry Funding**

- CSL Limited 92,967
- Gilead Sciences Pty Ltd 20,000
- Janssen-Cilag Pty Ltd 14,820
- Merck Sharp & Dohme 1,194,863
- Pfizer Inc 3,489,555
- Pfizer Inc via Quintiles Pty Ltd 49,960
- Tabeer Pharmaceuticals Ltd via Quintiles Pty Ltd 3,871
- Total 25,925,287
### RESEARCH GRANTS

The following list describes grants that were awarded to Kirby Institute researchers commencing in 2011.

| Butler T. | From Broome to Berrima: Building Australia-wide research capacity in Indigenous offender health and health care delivery. NHMRC Capacity Building Grant. NHMRC 2011-2014 | $3,578,004 |
| Butler T. | ARC Future Fellowship. Improvement in criminal justice outcomes among Australia's offender population using a multi-disciplinary, all of government approach. 2011-2013. | $437,672 |
| Butler T. | Hepatitis C, Prisons and Treatment Opportunities (HePPTO). NHMRC Project Grant. 2011 | $198,929 |
| Butler T. | Improving health and criminal justice outcomes among Australia’s offender population using a multi-disciplinary, all of government approach (infrastructure). ARC Future Fellowship. 2011-2013. | $98,308 |
| Butler T. | National prison entrants’ bloodstream infection (BBV) and risk behaviour survey. Curtin University of Technology. 2011 | $59,446 |
| Cooper DA, Hsu D. | Using a new test that detects antigen specific recall immune response to further understand the process of immune recovery in patients on treatment for HIV and in the diagnosis of latent TB. NHMRC Postgraduate Research Scholarship. 2011-2013 | $45,186 |
| Donelan B. | Long-term national surveillance for genital warts through Australian sexual health services. CSL Limited 2011-2012 | $136,364 |
Developing and implementing a feasibility pilot on hepatitis B within a remote Aboriginal Australian community.

Conducting simple epidemic analyses.

Wilson Moldova, (Chisinau economic NSP Central Asia coinfection in resource limited settings.

Matthews AD and Layout.

Biennial Medicine on hepatitis B within a remote Indigenous communities.

Developing and implementing a feasibility on hepatitis B within a remote Indigenous communities.

Grebely HCV treatment in marginalized settings.

Acceptability.

Gray STIs HIV and Committee on Ministerial Issue.

and why it spreads.

and viral characteristics associated with chlamydia infections.

modelled and experimental data deciphering how and why it spreads.


Pre-exposure Prophylaxis Modelling and Experimental Data.


Ministerial Advisory Committee on HIV and STIs – Health Promotion Sub-Committee (Sydney, March)

Wilson DP. NSW HIV modelling and acceptability study findings.

Dissemination meeting evaluation of epidemiological impact of harm reduction programs on HIV in Vietnam (Hoain, April)


Wilson DP. Improving data collection in high CD4 cell counts.

12th International Workshop on Clinical Pharmacology of HIV Therapy (Miami, April)

Elie LJ, Jackson A, Puls R, Hill A, Fahey P, Lin E, Amara A, Sacarni M, Tja J, Emery S, Kho S, Back DJ, Ruffino M. Pharmacokinetics of plasma lamivudine (3TC), and its active intracellular anabolite 3TC-riphosphate (3TC-TP) over a 24 hour dosing interval following administration of 3TC 300 mg and 150 mg once daily (od) to HIV-negative healthy volunteers. The ENCORE2 Study.

46th Annual Meeting of the European Association for the Study of the Liver (EASL) (Berlin, March-April)

Dore GJ. Liver disease mortality in substance users eases EASL/zhish workshop: Every-day problems in substance users infected with hepatitis C viral infection.

22nd International Conference on International Harm Reduction Association (IHRA) (Beirut, April)

Harris M, Rhodos T, Tleisah C, Maher L. Venous access and track mark avoidance: Harnessing pragmatic concerns in HCV prevention interventions.

Holland M, Sacks-Davis R, Higgs P.

Sources of infections and National Interventions (Montreux, Switzerland, April)

Wilson DP. What decision-makers need to know about drug use and HIV.

EUROGIN Conference (Lisbon, May)

Donovan B. Real life impact: quadrivalent HPV vaccination and genital warts in Australia.

4th International In Sex & In Health Conference (Odense, Denmark, May)

Grotowski M, Taylor S, Ward J, Croker A. It’s ‘OK for some’. What happens when patients don’t fit the directed model of care?

1st International Congress on Controversies in Viral Hepatitis (Barcelona, May)

Dore GJ. Hepatitis B: any controversies left?

Papua New Guinea HIV Modelling Meeting (Port Moresby, May)

Gray RT. Overview of the PNG HIV Model.

Gray RT. Calibration of the PNG HIV Model.

Gray RT. PNG HIV Model Preliminary Results.

Papua New Guinea HIV Stakeholder Conference (Port Moresby, May)

Wilson DP. Use of a public health HIV epidemic model for PNG.

3rd CRASH Aboriginal Health Research Conference (Sydney, May)


Graham S, Guy R, Koo A, Wund H, Kaldor J, Ward J. Sexual Health Quality Improvement Program in Aboriginal Community Controlled Health Services in NSW.


Impact on treatment outcome within hepatitis C virus transmission clusters in HIV positive individuals with recently acquired HCV.


Australian Centre for HIV and Hepatitis Virology had research (AHC2) 7th annual workshop (Sunshine Coast, June)


Impact of host and viral characteristics associated with chlamydia infections.

and develop the treatment guidelines.

Significant resistance mutations to directly acting antiviral agents occur at low prevalence in treatment naïve subjects with recently acquired HCV.


First International HIV Social Science and Humanities Conference (Durban, June)


40th Annual Scientific Meeting of the Society for Adolescent Primary Care (Bristol, June)


Australian Federation of AIDS Organisations National Forum (Sydney, June)


2nd International Nanomedicine Conference (Sydney, July)

Murray JM. Can an anti-HIV gene therapy trial reduce transmission and avoid the outbreak of resistant virus?

13th International Workshop on Adverse Drug Reactions and Co-morbidities in HIV (Rome, July)

Haskellberg H, Hoy J, Amin J, Ebeling PH, Emery S. Carr on behalf of the STEAL Study Group. Lower fat mass and lower bone formation predict greater bone loss with treatment in HIV infected adults.

Mt Sinai Adolescent Health Unit (New York, July)

Fairley C, A national workshop on quadrivalent HPV vaccination and genital warts in Australia, 2004-2010.


vulnerability of freelancing sex workers. Kalkan, M, Back D, Boffito M, Khoo S, Back D, Boffito M. “Hepatitis – it’s a dirty word sounding wrong.” “Alcohol in the lives of people living with hepatitis.”


National Institute on Drug Abuse (NIDA) International Forum (Miami, June 2014)


20th World Congress for Sexual Health (Glasgow, June 2014)


40th Annual Scientific Meeting of the Society of Academic Primary Care (Rome, July 2014)


International HIV and Hepatitis Virus Drug Resistance Workshop (Los Cabos, Mexico, March 2014)


6th IAS Conference on HIV pathogenesis, treatment and prevention (Rome, Italy, July 2014)

Couture MC, Sansoonthorn N, Stein E, Sichan X, Kaldor J, Palefsky J, Page K, Maher L (on behalf of the Young Women’s Health Study Collaborative. Human papillomavirus infection prevalence and associations with HIV among young women engaged in sex work in Phnom Penh, Cambodia.

Australian Injection and Illicit Drug Users League (AIVL) forum on Older Opiate Users & Hepatitis (Cannabinra, July 2014)


10th International Congress on AIDS (ISCAID) (Shanghai and the Pacific, (Busan, Korea, August 2014)


2nd International Workshop on HIV Pediatrics (Rome, July 2014)


3rd International Workshop on HIV Pediatrics (Rome, July 2014)


Australian Injection and Illicit Drug Users League (AIVL) forum on Older Opiate Users & Hepatitis (Cannibarris, July 2014)


10th International Congress on AIDS (ISCAID) (Shanghai and the Pacific, (Busan, Korea, August 2014)


2nd International Symposium on Hepatitis C and Related Viruses (Seattle, August 2014)


51st International Conference on Antimicrobial Agents and Chemotherapy (Chicago, Illinois, August 2011)


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ANNUAL REPORT 2011

Dore GJ, Matthews GV. Drug resistance mutations to directly acting antiviral agents in treatment naïve subjects with recently acquired hepatitis C infection. Fabey P, Pin E, Amara A, Sicardi M, Emanuel J. Hepatitis users at an annual report 2011 annual report 2011 young Australian women.}

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ANNUAL REPORT 2011

Page 87

ANNUAL REPORT 2011
27th International Papillomavirus Conference and Clinical Workshop (Berlin, September) - Poynten IM, Bavinton BR, Cooper K, MacRae K, Beileiter K, Ray J, McDonald AE. Community: preliminary findings about ML in the Asia-Pacific region.


Annual Meeting of the NIAID STI Cooperative Immunology/Translational Research (Koloa, Hawaii, November) - Craig A, Rank RG, Bowlin AK, Wang Y, Poynten IM. Mathematical modelling of the in vivo competition between chlamydial variants.


Annual report 2011 - Poynten IM, Bavinton BR, Zablotska IB. Modelling the impact of the quadrivalent human papillomavirus (HPV) vaccination on genital warts under different assumptions about HPV ecology.


International Conference in AIDS and STIs in Africa (ICASAS) (Addis Adaba, Ethiopia, December)


PEER-REVIEWED

A


Boulware DR, Huppert Hallik K, Purunen CR, Papert A, Baker JV, French MA, Bohlanen PR, Nayak RM, Neaton JD, Serot J for the INSIGHT Study Group, (Cooper DA, Emery S, Drummond FM members of the SMART study group, Emery S, Cooper D, Pett S, Drummond F INSIGHT collaborators). Higher levels of CRP, D-dimer, IL-6, and hyaluronic acid before initiation of antiretroviral therapy (ART) are associated with increased risk of AIDS or death. J Infect Dis 2011; 203: 1637-1646.


Kelsoch K, Kelleher AD. Integrated HIV-1 DNA reflects the accumulation of the latent pool prior to antiretroviral therapy while episomal HIV DNA records ongoing transmission. AIDS. 2011;26:543-550.


Sall et al. (editorial).


Sall et al. (editorial).


Sall et al. (editorial).


Sall et al. (editorial).


Development of research tools to assess host and viral genetic variation
Do SMS reminders improve retained rates after chlamydia infection in homosexuals?
Dynamic trafficking of HIV spread
Economic, social and cross cultural issues in non-pharmaceutical protection of front line responders to pandemic influenza and emerging infections
Efficacy of interventions to increase the uptake of chlamydia screening in primary care: a systematic review
Enhancing Treatment of Hepatitis C in Opiate Substitution Settings (ETHOS)
Epidemiology of sexually transmitted infections, including human papillomavirus, among pregnant women attending antenatal clinics at four sites in Papua New Guinea (STIs in Pregnancy Study, PNG)
eSTET An initiative to enhance STI Testing in gay men
Ethno-epidemiological investigation of social and environmental correlates of HIV vulnerability among injection drug users, An
ETHOS: Enhancing Treatment of Hepatitis C in Opiate Substitution Settings
Evaluation and cost effectiveness of HIV prevention in Asia
Evaluation and monitoring of six Commonwealth-funded STI Youth Demonstration Projects
Evaluation of sexual health services for men who have sex with men in Perth
Examination of intervention drug use life course and estimating prevalence and health consequences of a dynamic population
Exploring the natural history of injection drug use: A qualitative study of social and environmental influences in the VDDS cohort
Extensive duration of unplanned antiretroviral treatment interruption in HIV-infected adults: a systematic review
FLU002
FLUX
Gay Community Periodic Surveys: Periodic surveys of HIV risk behaviour
Gay Community Periodic Surveys: Predictors of PEP awareness and use in Australian Gay Community
Gay Community Periodic Surveys: Review of the history and methodology of the Australian behavioural surveillance and its implications for policy and prevention
Gay Community Periodic Surveys: Study of gay community attachment among Australian gay men and its implications for behavioural surveillance and research
Genital chlamydia infection in young people: a review of the evidence
Geographic variation in anal cancer incidence in New South Wales
GOADNA
GP Pilot-Enhanced Treatment for Hepatitis C in Primary Care Settings
HAAIT: Hepatitis acceptability and vaccination incentives trial
Healthy Liver Campaign, The
Hepatitis acceptability and vaccination incentives trial (HAAIT)
Hepatitis C vaccine preparedness studies
HepBANK Clinical Sample Repository & Open Access Substudy database (LabKey)
HIV, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report
How quickly are results returned from conventional testing in clinical and laboratory settings, and what factors influence the timing?
HPV Study PNG: Human papillomavirus infection among women attending sexual health clinics in Mt Hagen, Goroka and Port Moresby, Papua New Guinea
HSV-2 / HIV Epidemiology Study, PNG
Human papillomavirus infection among women attending sexual health clinics in Mt Hagen, Goroka and Port Moresby, Papua New Guinea
ICTAC
HIV drug resistance and viral tropism
HIV Modelling Grant
HIV vaccine preparedness cohort study (Health in Men study)
HIV, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report
How quickly are results returned from conventional testing in clinical and laboratory settings, and what factors influence the timing?
HPV Study PNG: Human papillomavirus infection among women attending sexual health clinics in Mt Hagen, Goroka and Port Moresby, Papua New Guinea
HSV-2 / HIV Epidemiology Study, PNG
Human papillomavirus infection among women attending sexual health clinics in Mt Hagen, Goroka and Port Moresby, Papua New Guinea
Identifying predisposing factors for, and the consequences of, common and emerging infectious diseases
InC3: International collaboration of incident HIV and hepatitis C in injecting cohorts, The Collaborative Group
Increasing completeness of ‘Aboriginality’ in infectious diseases data through record linkage – a feasibility study
Indigenous injecting use in Queensland (IIDU): a peer based research project
International Collaboration of Incident HIV and hepatitis C in Injecting Cohorts (InC3)
International pooled analysis of immune risk factors for lymphoma
Investigating sexual behaviours among male/female adults and youth in Papua New Guinea
Investigating Transmission Dynamics of HCV Among injecting drug users in Canada and Australia (ITHACA)
Investigating the association between ITTA polymorphism, on treatment anemia and treatment outcome in the CHAReIT cohort
Investigation of CHAReIT cohort
Investigation of the association between ITTA polymorphism, on treatment anemia and treatment outcome in the CHAReIT cohort
Investigation of ITTA polymorphism and viral envelope gene sequences in CHAReIT cohort
Inviting the CHAReIT cohort
Is azithromycin adequate treatment for asymptomatic rectal chlamydia? an audit
Is urogenital and ano-genital chlamydia infection in men and women more common than previously thought?
Is the Law and Sexworker Health Project (LASH) feasible?
Is there an informed consent pathway for research in human studies and the implications for international research?
LASH: The Law and Sexworker Health Project
Law and Sexworker Health (LASH) Project, The
Lentiviral vectors and gene therapy
Liver Spots: A study of hepatitis B knowledge, treatment and health care among Indigenous Australians
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ABOUT THE KIRBY INSTITUTE

The Kirby Institute was launched in 2011. It was formerly known as the National Centre in HIV Epidemiology and Clinical Research (NCHECR), which was established in 1986 by the Australian Government to fulfil a number of key roles in Australia’s fight against HIV/AIDS. The Kirby Institute is affiliated with the Faculty of Medicine, University of New South Wales.

The Kirby Institute’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, the Kirby Institute’s work has expanded to encompass hepatitis B and C, and sexually transmissible infections. The Kirby Institute also conducts research into the transmission, prevention and natural history of these infections.

The Kirby Institute’s research program has increasingly taken on a regional focus, with major collaborative programs in Thailand and Cambodia. The Kirby Institute conducts research through eleven programs. Dissemination of the Kirby Institute’s research output is undertaken through publication in scientific journals and a range of surveillance reports.

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The Kirby Institute has four locations:

Director’s Unit and the Immunovirology and Pathogenesis Program:
Level 4, 405 Liverpool Street, Darlinghurst NSW 2010 Australia

The Therapeutic Vaccine Research Program; Biostatistics and Databases Program; Sexual Health Program; Aboriginal and Torres Strait Islander Health Program; Justice Health Research Program and the Public Health Interventions Research Group:
UNSW Cliffbrook Campus, 45 Beach Street, Coogee NSW 2034

The HIV Epidemiology and Prevention Program; Viral Hepatitis Epidemiology and Prevention Program; Viral Hepatitis Clinical Research 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: www.kirby.unsw.edu.au/
Fax +61 (2) 9385 0920 Email: recpt@kirby.unsw.edu.au